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Disasters are not natural. Natural events such as earthquakes, floods, hurricanes, etc. become disasters because of the fragile relations that exist between the natural, human and built environments. Sadly, major disasters will always occur in towns and cities in the developing world where resources are limited, people are vulnerable and needs are particularly great. The prevailing state of emergency challenges thoughtful and sustainable planning and construction. Yet it is possible, in theory and in practice, to construct them in a way that provides a sustainable environment and improved conditions for current and future generations. Rebuilding After Disasters emphasizes the role of the built environment in the re-establishment of lives and sustainable livelihoods after disasters. Expert contributors explain the principal challenges facing professionals and practitioners in the building industry. This book will be of great value to decision makers, students and researchers in the fields of architecture, social sciences, engineering, planning, geography, and disaster recovery. The book is a comprehensive volume on multi-hazards and their management for a sustainable built environment. It focuses on the role of civil engineering in building disaster resilient society. This book brings together all diverse disciplines of civil engineering and related areas (for example, geotechnical engineering, water resources engineering, environmental engineering, transportation engineering, construction management, GIS, and remote sensing) towards a common goal of disaster resilience through an interdisciplinary approach. It contains methods and case studies focusing on civil engineering solutions to reduce the disaster risk. The book contents are aligned in line with the priorities set by UN-Sendai Framework for Disaster Risk Reduction and UN-SDGs to promote a global culture of risk-awareness and disaster reduction. The book will be a useful comprehensive reference for disaster risk reduction beneficial for engineering students, teaching faculty, researchers, industry professionals and policymakers. "Conference proceedings are a collection of technical papers presented at the First National Conference on Sustainability in Built Environment (NCSBE-2018) hosted by Aurora Group of Architecture Colleges Hyderabad, Telangana" Water management is a key environmental issue in controlling offloods and reducing droughts. This book provides analysis of themain issues, offering solutions and describing good practice. Water Resources for the Built Environment: management issuesand solutions develops an appreciation of the diverse, complexand current themes of the water resources debate across the builtenvironment, urban development and management continuum. Theintegration of physical and environmental sciences, combined withsocial, economic and political sciences, provide a unique resource,useful to policy experts, scientists, engineers and subjectenthusiasts. By taking an interdisciplinary approach, waterresources issues and impacts on the built environment are presentedin the inventive and strategic setting of considering theconstraints of delivering potable water to an ever-demandingsociety who, at the same time, are increasingly aware of living inan urban landscape where excessive surface water creates a floodthreatened environment – hence, the need to portray a balancebetween ‘too little vs. too much’. This unique approach to the water resources debate presents amultifaceted collection of chapters that address the contemporaryconcomitant issues of water shortage and urban flooding andproffers solutions specifically for the built environment. The book is structured into three parts: the first part(Sections 2, 3 and 4) addresses management issues and solutions tominimise water shortages and provide water security for society;whilst the second part of the book (Sections 5 and 6) addressesmanagement issues and solutions to control excessive rainfall andminimise flooding impacts. The third part (Section 7)contextualises the issues of the earlier sections withininternational case studies from the developing world. As a vital human need, water has been absolutely critical to decisions as to where cities originate, how much they grow and the standard of living of the inhabitants. The relationship is complex however; we need both continual availability and protection from its potential impacts. Over recent decades flooding and scarcity episodes have become commonplace in even the most advanced countries – and these events cannot be dissociated from the socio-economic context within which they occur; being directly related to how we live, where we live and how we govern. This book draws together information on a host of connected subjects from population growth to water scarcity to the relationship between humanity and nature, then demonstrates how utilizing notions of risk and resilience could help improve the relationship between the city and its most precious resource. Combining discussions of risk, water and spatial planning it provides an invaluable text for planning, geography and urban studies students on how to address urban water problems within a rapidly changing world. Disasters cause economic as well as human losses, and the magnitude of this is ever increasing. This can largely be attributed to climate-related disasters, which intensify vulnerability in the poorest areas of the world. In this book, approaches to disaster risk management in developing countries are discussed, with particular focus on Costa Rica. This book deepens the understanding of the broader processes that shape and mediate the responses to climate change of poor urban households and communities in Asia, Africa and Latin America. Representing an important contribution to the evolution of more effective pro-poor climate change policies in urban areas by local governments, national governments and international organisations, this book is invaluable reading to students and scholars of environment and development studies. The evidence-based Translational Design of Universities forensically researches hybrid - or blended - learning environments. Ten of the 14 Chapters are based on doctoral dissertations providing a rare insight into the effectiveness of HE learning spaces, both virtual and physical. From the Foreword by Rob Smith, Director of Estates andFacilities (NHS England), Department of Health ‘The built environment for the delivery of Healthcare willcontinue to change as it responds to new technologies andmodalities of care, different expectations and requirements ofproviders and consumers of care. It is vital that built environmentstudents and practitioners alike avail themselves of the bestpossible information to guide them in their studies, continuingprofessional development and the delivery of their tasks. The rangeis enormous from the assessment of need, planning the servicedelivery to design, construction, commissioning, maintenance andoperation of the healthcare environment. The book that follows addresses these areas from a blend ofcontributions of experienced practitioners to the descriptions ofthe output from recent research that moves forward the frontiers ofknowledge and practice in the many areas of the healthcare builtenvironment. I happily commend this book to all engaged in the excitingfields of planning, delivering, maintaining and operatinghealthcare environments. When we get it right, we are able to doimmeasurable good.’ This book helps academic researchers as well as practitioners tounderstand how the healthcare infrastructure sector works byaddressing the crucial issue of healthcare delivery from a builtenvironment perspective. It explains the trends in healthcare, models of healthcaredelivery; healthcare planning; the NHS building and investmentprogrammes; the procurement process; and facilities management;financial models – including PFI and LIFT; risk allocationand partnering. Past investigations in the area of healthcare delivery haveconcentrated on either the medical aspects or the design issues ofbuildings but Improving Healthcare through Built EnvironmentInfrastructure is unique in considering the ‘meetingspace’ of built environment technologies and modern methods of procurement with the medical and operational needs of healthcaresettings. The authors have brought together key industrialists andacademics, all heavily involved in the formulation and delivery ofnew practices. Case studies illustrate how policies and healthcaredesigns are implemented in practice and help identify the keychallenges for the future. Resilience is increasingly discussed as a key concept across many fields of international policymaking from sustainable development and climate change, insecurity, conflict and terrorism to urban and rural planning, international aid provision and the prevention of and responses to natural and man-made disasters. Edited by leading academic authorities from a number of disciplines, this is the first handbook to deal with resilience as a new conceptual approach to understanding and addressing a range of interdependent global challenges. The Handbook is divided into nine sections: Introduction: contested paradigms of resilience; the challenges of resilience; governing uncertainty; resilience and neoliberalism; environmental concerns and climate change adaptation; urban planning; disaster risk reduction and response; international security and insecurity; the policy and practices of international development. Highlighting how resilience-thinking is increasingly transforming international policy-making and government and institutional practices, this book will be an indispensable source of information for students, academics and the wider public interested in resilience, international relations and international security. Tackling the questions raised by twenty-first century urbanization, this handbook engages with contemporary debates and contributions to policy as well as looking at recent empirical and methodological shifts in the area "This book is essential reading for a wide range of undergraduate and postgraduate students, managers and practitioners involved with the way buildings and infrastructure are planned, designed, built, managed and operated." --BOOK JACKET. Cities are responsible for three-quarters of the world s energy consumption. If we are to reduce our demands on the planet s resources how can we make our urban areas more energy efficient? One way is to refit existing buildings with more thermally efficient building materials. But such retrofiting involves significant issues of social acceptance and public participation. Retrofitting the City provides an important corrective to the assumptions that have been made concerning the ability of people and places to cope with such residential transformation. Drawing upon case studies from a number of European cities that have undergone far-reaching change in their built environments, the author shows that supposedly inadaptable people and places show a strong, if often hidden, degree of flexibility in responding to economic change and building transformation." This book comprises select proceedings of the International Conference on Smart Cities: Opportunities and Challenges (ICSC 2019). The book contains chapters based on urban planning and design, policies and financial management, environment, energy, transportation, smart materials, sustainable development, information technologies, data management and urban sociology reflecting the major themes of the conference. The contents focus on current research towards improved governance and efficient management of infrastructure such as water, energy, transportation and housing for sustainable development, economic growth, and improved quality of life, especially for developing nations. This book will be useful for academicians, researchers, and policy makers interested in designing, developing, planning, managing, and maintaining smart cities. Future Challenges in Sustainable Development within the Built Environment stimulates and reinterprets the demands of Responsible and Sustainable Development in the Built Environment for future action and development. It examines the methods of evaluation, the use of technology, the creation of new models and the role of human factors for examining and developing the subject over the next twenty years. The present work will discuss relevant theoretical frameworks and applications pertaining to enabling resilience within the risk, crisis and disaster management domain. The contributions to this book focus on resilience thinking along 4 broad themes: Urban Domain; Cyber Domain; Organizational/Social domain; and Socio-ecological domain. This book would serve as a valuable reference for courses on risk, crisis and disaster management, international development, social innovation and resilience. This will be of particular interest to those working in the risk, crisis and disaster management domain as it will provide valuable insights into enabling resilience. This book will be well positioned to inform disaster management professionals, policy makers and academics on strategies and perspectives regarding disaster resilience. As a specialist in disaster preparation, you have huge responsibilities: a failure to prepare for natural and human-induced disasters costs lives and money. When a natural or human-induced disaster hits a built-up area the amount of damage it does will depend largely on the extent to which the built assets in the area were developed to withstand it. To fail in this respect is therefore both ethically and financially negligent. What kinds of structural and non-structural alterations can be made to protect buildings from large-scale disasters? How can we reduce the threat of these disasters, as well as the damage they cause? Presenting seven guiding principles, drawn from a broad range of disciplines and approaches, this book tackles the difficult questions about what can be done to attain built-in resilience. With contributions from many renowned experts and upcoming researchers in the fields concerned, it comprehensively assesses the wide range of issues faced by practitioners. Whether you're studying construction management, researching hazard resilience issues or working on construction projects in hazardous regions, this book is for you. With the UK government's 2016 BIM threshold approaching, support for small organisations on interpreting, filtering and applying BIM protocols and standards is urgently required. Many small UK construction industry supply chain firms are uncertain about what Level 2 BIM involves and are unsure about taking first steps towards having BIM capability. As digitisation, increasingly impacts on work practices, Getting to Grips with BIM offers an insight into an industry in change supplemented by practical guidance on managing the transition towards more widespread and integrated use of digital tools to manage the design, construction and whole life use of buildings. A 360-degree view of the response to flood riskAs major flooding events around the world show, the impact of flooding on the built environment can cause widespread chaos. These flood events form part of a wider pattern of increasing flood frequency coupled with increased vulnerability of the built environment to flood hazard. Flood risk can unite o Climate Adaptation and Resilience Across Scales provides professionals with guidance on adapting the built environment to a changing climate. This edited volume brings together practitioners and researchers to discuss climate-related resilience from the building to the city scale. This book highlights North American cases that deal with issues such as climate projections, public health, adaptive capacity of vulnerable populations, and design interventions for floodplains, making the content applicable to many locations around the world. The contributors in this book discuss topics ranging from how built environment professionals respond to a changing climate, to how the building stock may need to adapt to climate change, to how resilience is currently being addressed in the design, construction, and operations communities. The purpose of this book is to provide a better understanding of climate change impacts, vulnerability, and resilience across scales of the built environment. Architects, urban designers, planners, landscape architects, and engineers will find this a useful resource for adapting buildings and cities to a changing climate. Urban Design the American Experience Jon Lang Urban Design: The American Experience places social and environmental concerns within the context of American history. It returns the focus of urban design to the creation of a better world. It evaluates the efforts of designers who apply knowledge about the environment and people to the creation of livable, enjoyable, and even inspiring built worlds. Urban Design: The American Experience emphasizes that urban design must take a user-oriented approach to achieve a higher quality of life in human settlements. All the keys to this approach are spelled out in chapters that address: Urban design as both a product and process of communal decision-making Types of knowledge required as a base for urban design action How to apply recent environmental and behavioral research to professional design How human needs are fulfilled through design The true role of functionalism in design Urban design efforts of the twentieth century in the United States are examined within their socio-political context. Jon Lang reviews the urban design experience from the beginning of the "City Beautiful" movement, paying particular attention to developments since World War II. He explores how the twentieth-century city has developed, as well as discusses the attitudes that have driven major movements in urban design. Readers learn a neo-Modernist approach that builds on the successes and failures of Rationalism and Empiricism, the two major streams of Modernist thought in architecture and urban design. They also gain an understanding of how the environment is experienced by people, and the implications of this experiencing for architectural and urban design. Numerous illustrations throughout demonstrate how various design schemes can be used. Urban Design: The American Experience provides architects, designers, city planners, and students in these fields with a model for their own future development as professionals. It is a valuable guide to design methodology (procedural theory) and other issues related to creating optimal urban environments. The exhibition offers insights into the development process of the traveling exhibition on architecture in Vorarlberg, which shall first be opened to the public in September at the Werkraum Bregenzerald before visiting Austrian cultural venues all over the world. The volume contains the guiding principles, the isometrics of exhibition architecture as well as interviews with Renate Breuß, Christian Schützinger, Verena Konrad and Robert Fabach. Enhancing Disaster Preparedness: From Humanitarian Architecture to Community Resilience relates to the fourth priority of the UNDRR's Sendai Framework for Disaster Risk Reduction 2015–2030. Taking a wide understanding of disaster preparedness, the book deals with resilient responses and building capacities related to hazardous events, bringing some practical experiences and theoretical insights in this regard. Mostly based on field research conducted in the Global South by architects and other built-environment professionals, the book covers both post-disaster interventions (rebuilding and recovery) and development-related processes. Its three parts address the interlinkages between humanitarian design, community resilience, and inclusive governance, which are crucial for fostering effective disaster preparedness. Part I discusses the changing roles of architects and urban designers involved in the humanitarian sphere. Part II concentrates on resilience as a socioecological capacity to enhance preparedness within community-based spatial processes. Focused on global dynamics, Part III covers topics emphasizing the link between the management of crises, whether political or economic, at different levels of governance, and the vulnerability of communities and structures on the national and local scales. As such, the book approaches rising global priorities and brings timely lessons to support building a more equitable, safe, and resilient environment in a rapidly urbanized world. Explores Sendai's fourth priority through a spatial lens Examines the role of humanitarian design in building resilience Critically revisits concepts such as incremental housing and building back better Provides examples of methodological tools for community engagement in resilience-building processes Describes all aspects of sustainable conversion adaptation of existing buildings and provides solutions for making urban settlements resilient to climate change This comprehensive book explores the potential to change the character of cities with residential conversion of office space in order to withstand the negative effects of climate change. It investigates the nature and extent of sustainable conversion in a number of global cities, as well as the political, economic, social, technological, environmental, and legal drivers and barriers to successful conversion. The book also identifies the key lessons learned through international comparisons with cases in the UK, US, Australia, and the Netherlands. Building Urban Resilience

Through Change of Use covers the benefits and aspects of sustainable conversion adaptation through the whole lifecycle from inception, planning, and design, to procurement, construction, and management and operational issues. It illustrates and quantifies, through empirical research, the changes that have been achieved or delivered in sustainable conversion adaptation. The book gives an overview of all aspects of performance characteristics and the conversion adaptation of existing buildings. In the end, it enables planners to make more informed decisions about whether conversion adaptation is a good choice—and if so, which types of sustainability measures are best suited for projects. Provides detailed, empirical knowledge based on real-world research undertaken in five countries over three continents on both a citywide scale and on individual buildings Case studies and exemplars demonstrate the application of the knowledge in North and South America, Canada, Australia, New Zealand, and in Europe Addresses the key themes of technology, finance and procurement, and the regulatory framework The first research-based book to examine how to improve resilience to climate change through sustainable reuse of buildings, Building Urban Resilience Through Change of Use is a welcome book for researchers and academics involved in building surveying, urban development, and sustainability planning. Cost-Effective Energy Efficient Building Retrofitting:Materials, Technologies, Optimization and Case Studies provides essential knowledge for civil engineers, architects, and other professionals working in the field of cost-effective energy efficient building retrofitting. The building sector is responsible for high energy consumption and its global demand is expected to grow as each day there are approximately 200,000 new inhabitants on planet Earth. The majority of electric energy will continue to be generated from the combustion of fossil fuels releasing not only carbon dioxide, but also methane and nitrous oxide. Energy efficiency measures are therefore crucial to reduce greenhouse gas emissions of the building sector. Energy efficient building retrofitting needs to not only be technically feasible, but also economically viable. New building materials and advanced technologies already exist, but the knowledge to integrate all active components is still scarce and far from being widespread among building industry stakeholders. Emphasizes cost-effective methods for the refurbishment of existing buildings, presenting state-of-the-art technologies Includes detailed case studies that explain various methods and Net Zero Energy Explains optimal analysis and prioritization of cost effective strategies This innovative introduction to environmental planning is designed for an international readership. Each of the book's chapters focuses on a key question in environmental planning and works through principles which are appropriate in any national context. Case studies from around the world show how the principles apply in practice. Historical disaster research is still a young field. This book discusses the experiences of natural disasters in different cultures, from Europe across the Near East to Asia. It focuses on the pre-industrial era and on the question of similarities, differences and transcultural dynamics in the cultural handling of natural disasters. Which long-lasting cultural patterns of perception, interpretation and handling of disasters can be determined? Have specific types of disasters changed the affected societies? What have people learned from disasters and what not? What adaptation and coping strategies existed? Which natural, societal and economic parameters play a part? The book not only reveals the historical depth of present practices, but also reveals possible comparisons that show globalization processes, entanglements and exchanges of ideas and practices in pre-modern times. This book presents practical guidelines and recommendations for the design in seismic-prone regions. It is based on extensive research and it includes original drawings and sketches at the macro and micro levels. It is the first time that an attempt has been made to publish a book on urban design in the seismic-prone regions, covering the needs of government officials, planners, economists, architects, engineers and scientists, with the purpose of planning for seismic risk reduction and the practical implementation of methodologies and findings in earthquake affected regions. The guidelines presented are expected to be immensely beneficial to all countries in the earthquake prone regions, particularly in the developing world. Safety, Reliability, Risk and Life-Cycle Performance of Structures and Infrastructures contains the plenary lectures and papers presented at the 11th International Conference on STRUCTURAL SAFETY AND RELIABILITY (ICOSSAR2013, New York, NY, USA, 16-20 June 2013), and covers major aspects of safety, reliability, risk and life-cycle performance of str The main focus of this book is to help better understand the multidimensionality and complexity of population displacement and the role that reconstruction and recovery knowledge and practice play in this regard. According to the UN Refugee Agency (UNHCR), the total number of people forcibly displaced due to wars and conflicts, disasters, and climate change worldwide, exceeded 66 million in 2016. Many of these displaced populations may never be able to go back and rebuild their houses, communities, and businesses. This text brings together recovery and reconstruction professionals, researchers, and policy makers to examine how displaced populations can rebuild their lives in new locations and recover from disasters that have impacted their livelihoods, and communities. This book provides readers with an understanding of how disaster recovery and reconstruction knowledge and practice can contribute to the recovery and reconstruction of displaced and refugee populations. This book will appeal to students, researchers, and professionals working in the field. As the cities of the world increasingly come under threat from crisis and disaster, planners are searching for ways to build resilience into the foundations of modern urban centres. This important book provides a comprehensive account of the theory and practice of urban resilience in response to a range of disruptions, including terrorism, climate change and economic crises. It examines how the concepts and principles of resilience exert increasing significant influence over the form and function of planning. Discussing a 'politics of resilience' in which fundamental questions of social and spatial justice are posed, this book examines how urban planners are increasingly tasked with the responsibility of safeguarding the future of urbanised centres and those that live in them. Drawing on international examples and detailed case-studies, this book provides a nuanced account of the uses, and misuses, of resilience and points a way forward for planning activity, from an approach that is too often narrowly technical in focus towards an integrated and adaptable model for coping with risk, crisis and uncertainty. It will make essential reading for students of urban planning and researchers alike. Contemporary cities face phenomenal risks, and they face particularly high levels of mounting social and environmental risks, including social polarization, urban conflicts, riots, terror, and climate change threats. This book suggests that climate change and its resulting uncertainties challenge the concepts, procedures, and scope of conventional approaches to planning, creating a need to rethink and revise current planning methods. Therefore, this book suggests a paradigm shift in our thinking, interrogation, and planning of our cities. Based on the contemporary conditions of risk at cities, this book conceptualizes the risk city as a construct of three interlinked concepts of risk, trust, and practice. It is a construct of risk and its new evolving conditions and knowledge of uncertainties stem from climate change and other risks and uncertainties. As a construct of practices, the risk city produces social and political institutional framework and promotes practices accordingly in order to reduce risk and risk possibilities and to increase trust. In light of the complex challenges and risks to the human habitat that have emerged in recent years, many cities have prepared various types of plans aimed at addressing the challenges posed by climate change. Nonetheless, despite the importance of these plans and the major public resources invested in their formulation, we still know little about them and have yet to begin studying them and assessing their contributions. From the innovative perspective of the risk city, this book asks critical questions about the nature, vision, practices, and potential impact of the recent climate change-oriented plans. What kinds of risks do they attempt to address, what types of practices do they institute, and what types of approaches do they apply? Do they adequately address the risks and uncertainties posed? How do they contribute to the worldwide effort to reduce greenhouse gas emissions? This book uses the methodologically innovative Risk City framework to examine the nature, vision, outcomes, practices, and impact of these crucial plans, as well as their contribution to the resilience of our cities and to global efforts toward reducing greenhouse gas emissions. With the UK government's 2016 BIM threshold approaching, support for small organisations on interpreting, filtering and applying BIM protocols and standards is urgently required. Many small UK construction industry supply chain firms are uncertain about what Level 2 BIM involves and are unsure about taking first steps towards having BIM capability. As digitisation, increasingly impacts on work practices, Getting to Grips with BIM offers an insight into an industry in change supplemented by practical guidance on managing the transition towards more widespread and integrated use of digital tools to manage the design, construction and whole life use of buildings. The drive towards environmentally friendly buildings and infrastructure has led to a growing interest in providing design solutions underpinned by the core principles of sustainability to balance economic, social and environmental factors. Design Economics for the Built Environment: Impact of sustainability on project evaluation presents new directions, reflecting the need to recognise the impact of climate change and the importance of sustainability in project evaluation. The aim is to provide a new approach to understanding design economics in the context of the changing policy environment, legislative and regulatory framework, and increasing economic, environmental and social pressure as result of the sustainability agenda. The book follows a structured approach from theories and principles in the earlier chapters, to the practical applications and emerging techniques focusing on value and social, economic and environmental considerations in making design decisions. It starts with the policy context, building on various theories and principles such as, capital cost, value of design and resource-based theories, the new rules of measurement (NRM) to explore cost planning, the relationship between height and costs, key socio-economic and environmental variables for design appraisal, eco-cost/value ratio (EVR), whole life theory and the treatment of carbon emission as external costs, productivity and efficiency, fiscal drivers and legal framework for carbon reduction, procurement and allocation of risks in contracts. Case studies, practical examples and frameworks throughout reinforce theories and principles and relate them to current practice. The book is essential reading for postgraduate students in architecture, building and quantity surveying and is also a valuable resource for academics, consultants and policy-makers in the built environment. This book examines energy efficiency in the Australian built environment and presents current developments with a particular focus on the temperate setting of Victoria state. It is divided into four main parts discussing policies, climate, and carbon footprint and presenting case studies on the energy performance and indoor environmental quality of various building types. The book is intended for readers wanting to understand the various policies related to different buildings types and their energy performance. Disaster Risk Reduction for the Built Environment provides a multi-faceted introduction to how a wide range of risk reduction options can be mainstreamed into formal and informal construction decision making processes, so that Disaster Risk Reduction (DRR) can become part of the 'developmental DNA'. The contents highlight the positive roles that practitioners such as civil and structural engineers, urban planners and designers, and architects (to name just a few) can undertake to ensure that disaster risk is addressed when (re)developing the built environment. The book does not set out prescriptive ('context blind') solutions to complex problems because such solutions can invariably generate new problems. Instead it raises awareness, and in doing so, inspires a broad range of people to consider DRR in their work or everyday practices. This highly-illustrated text book provides a broad range of examples, case studies and thinking points that can help the reader to consider how DRR approaches might be adapted for differing contexts. Today architecture and other fields in the built environment face the steep task of answering complex questions pertaining to sustainability, performance, and adaptability. How are these disciplines to accomplish these difficult tasks at such an immense pace? How might architectural practice renovate itself accordingly? Worldwide it is becoming increasingly clear that different modes of research are emerging which are triggered directly by the need to renovate practice. One significant prevailing mode is what has come to be known as 'research by design'. This book delivers an overview of this pluralistic domain. Bringing together a range of leading architects, architectural theorists, and designers, it outlines the developments in current practice from leading individuals based in the USA, UK, Australia, Japan and Europe. Edited by a recognized expert, this book exposes the undercurrent of research, which is taking place and how this will contribute to the renovation of architectural practice. This edited volume provides a fresh perspective on the important yet often neglected relationship between environmental justice and urban resilience. Many scholars have argued that resilient cities are more just cities. But what if the process of increasing the resilience of the city as a whole happens at the expense of the rights of certain groups? If urban resilience focuses on the degree to which cities are able to reorganise in creative ways and adapt to shocks, do pervasive inequalities in access to environmental services have an effect on this ability? This book brings together an interdisciplinary and intergeneration group of scholars to examine the contradictions and tensions that develop as they play out in cities of the Global South through a series of empirically grounded case studies spanning cities of Asia, Latin America, Africa and Eastern Europe. Disasters threaten all parts of the world and they appear to be increasing in frequency, scale and intensity. Despite huge improvements in the emergency response, permanent reconstruction is often uncoordinated, inefficiently managed and slow to begin. International agencies are geared to an efficient response in terms of humanitarian relief, but they are not well versed in the requirements of long-term reconstruction, which is often constrained by lack of planning and poorly coordinated management. The construction industry is typically engaged in a range of critical activities after a disaster, including provision of temporary shelter in the immediate aftermath and restoration of permanent shelter and public infrastructure once the immediate humanitarian needs have been attended to. Post-Disaster Reconstruction of the Built Environment identifies the challenges that face the industry and highlights best practice to enable the construction industry to address those problems which make an effective response to these unexpected events difficult. Written by an international team of experts, this book will help researchers and advanced students of construction understand the problems faced by communities and the construction industry when faced with a natural or man-made disaster, and identify the planning and management processes required by the industry to mount an effective response. Flooding is a global phenomenon that claims countless lives worldwide each year. Beginning in 2008 at the Institution of Civil Engineers in London this book contains papers presented at the 5th conference in the successful series on Flood Recovery, Innovation and Response. When flooding occurs in populated areas, it can cause substantial damage to property as well as threatening human life. Apart from the physical damage to buildings, contents and loss of life, which are the most obvious impacts of floods upon households, indirect losses are often overlooked. These indirect and intangible impacts are generally associated with disruption to normal life as well as longer term health issues including stress related illness. In many parts of the developing world, flooding can represent a major barrier to the alleviation of poverty as vulnerable communities are often exposed to sudden and life threatening events. How we respond and adapt to the challenges of flooding is key to developing our long term resilience. This book provides a platform for the work of researchers, academics and practitioners actively involved in improving our understanding of flood events and our approaches to response, recovery and resilience. A wide range of technical and management topics related to flooding and its impact are included: Flood management; Flood warning; Flood risk adaptation Flood protection - products and processes; Flood risk modelling; Flood forecasting; Flood vulnerability; Urban flood modelling; Flood risk assessment and recovery; Climate change impact; Socio and economic impact; Flood case studies; Flood damage assessment; Storm water control.

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