1. Introduction: Uncertainty and discovery in a post-disaster context

Emily Chamlee-Wright and Virgil Henry Storr

Long after the popular media have stopped investigating and retelling the stories of Hurricane Katrina and its aftermath, students of the social order will still consider it to be among the most significant events of the past 100 years of American history. The scale of physical destruction, the poor record of government response and the frustrating road to recovery provide social scientists with a broad opportunity to shed light on social dynamics that often remain cloaked in the course of day-to-day existence. Consequently, since the storm, a broad spectrum of scholars drawn from anthropology, sociology, political science, history and urban studies have considered the implications that the storm and subsequent flooding of New Orleans have had for their respective disciplines.¹

Peter Boettke, Vice President for Research at the Mercatus Center and Professor of Economics at George Mason University, agreed. For all the devastation it wrought, Katrina offered an unparalleled opportunity to learn. In February 2006 the Mercatus Center launched the Gulf Coast Recovery Project under Boettke's direction. The project brought together a team of researchers – primarily economists – to address the following question: what affords societies the ability to respond to and recover from catastrophic disaster, and what forces undermine that capacity? The team members knew that as we pursued our work the particular form this question would take would vary and new questions would emerge. But it was this central puzzle that would ground the team and our investigations.

While we understood that economics would not provide answers to all the questions the Katrina catastrophe posed, the members of the team shared a concern that without the insight an economics perspective would bring, the discourse would be missing a critical dimension. But in directing the economist's gaze upon the question of what promotes or inhibits post-disaster response and recovery, our goal was not to focus only upon narrowly defined economic issues. To the contrary, we believed that by invoking the economic imagination, we would be in a better position to address the broader questions Katrina presented – the systemic questions

of what makes complex societies work and why they sometimes fail to work – with which much of the emerging Katrina literature seemed to be struggling.

The social systems perspective the researchers brought to this project stems from a grounding in the Austrian and Virginia schools of political economy.² This particular brand of the economic imagination puts questions like ‘what makes complex social coordination possible?’ at the forefront of the analysis. Economists within these traditions are trained to recognize how particular institutional environments shape individual decisions and the social patterns that emerge from them. This institutional lens, which acknowledges the importance of both formal legal constraints and informal cultural norms in determining behavior in political, economic and civic life, allows the researcher to identify causal connections that can otherwise remain hidden from view. As a specialist in the history and transition of soviet-type economies, for example, Boettke recognized that many of the political economy dynamics unfolding in the aftermath of Hurricane Katrina mirrored those in former soviet-type systems (Boettke et al. 2007). Similarly, public choice economists Russell Sobel and Peter Leeson recognized that the failure of government agencies to deliver effective relief in the wake of the storm was more likely to be a problem of perverse political incentives than a technical matter of logistics or incompetence (Leeson and Sobel 2006, 2008). And the editors of this volume – Emily Chamlee-Wright and Virgil Storr – having spent their careers researching the intersection between cultural and economic processes in the developing world, saw the post-disaster environment as one in which entrepreneurs would be cultivating, reconfiguring and deploying both material and socially embedded resources in their efforts to rebuild their lives and communities (see Chamlee-Wright 2007, 2008, 2010, as well as Chamlee-Wright and Storr 2009a, 2009b, 2009c, 2010).

In short, a grounding within the Austrian and Virginia schools of political economy and the variety of contexts in which the members of the research team have applied this perspective have cultivated a predisposition to analyse the post-disaster context as a complex social system where institutional and cultural contexts significantly impact social outcomes. In describing the social systems perspective that defines the project, we often employ the metaphor of a three-legged bar stool, with one leg representing the economic and financial institutions, another leg representing the political and legal institutions, and the third leg representing the social and cultural institutions (Boettke et al. 2007). The metaphor is useful as it suggests that with all three legs in place, the social system has integrity and can withstand the pressure of weight placed upon it, for example, the ‘weight’ of a devastating hurricane or catastrophic flood; but if any of

the three legs is weak, the social system has less ability to withstand such weight.

The metaphor is also useful if we consider how the structural elements that foster social order connect to one another – the ‘struts’ between the legs, if you will – either succeeding or failing to convey greater resilience. The entrepreneurial impulse to respond to the needs of disaster victims might be robust, for example, but if the economic regulatory environment is prohibitive, such help from would-be entrepreneurs may never materialize. The impulse of some disaster victims to take on the significant hardships of an early return to advance a community’s recovery is dulled if it is unclear whether the members of the community will still hold property rights in their houses once the redevelopment planning process is completed. Identifying both enabling and inhibiting factors in the process of post-disaster response and recovery and informing policy debates to promote more robust recovery into the future requires us to understand how the political, economic and cultural institutional elements work (or fail to work) with one another.

In our empirical investigations, we have deployed research methods that are familiar to the mainstream of the economics profession, yet we have also deployed qualitative research methods that are not commonly found in the economist’s toolkit. Given our interest in understanding how individuals, organizations and communities responded in the context of a particular institutional environment, what frustrations they met in cultivating effective strategies, and what natural and man-made barriers they faced in executing those strategies, we needed to get beyond aggregate analysis. Empirical aggregates can tell us that particular patterns are emerging, but a more finely grained analysis is required if we are to understand why these patterns are emerging; how particular successes have been won; and what barriers stand in the way of individuals, organizations and communities that have failed to rebound.

Over the course of the three years following the storm, the team conducted in-depth interviews with 300 residents and a wide variety of stakeholders in Orleans and St Bernard Parishes, Louisiana and an additional 103 in-depth interviews and/or shorter surveys with former New Orleans’ residents who had evacuated to Houston, Texas following the storm and were still residing in Houston three years later. Once a round of interviews was completed, the recorded interviews were transcribed and the transcripts were then coded for themes and patterns central to the relief effort and the recovery process. Chamlee-Wright (2010) and Chamlee-Wright and Storr (2009b, 2009c, 2010) provide detailed analyses of these data. Additionally, these interviews often sparked new lines of inquiry that inform many of the chapters in this volume.

Understanding the processes of post-disaster response and recovery through the Austrian-Virginia political economy lens has generated a wide range of theoretical and empirical research but the common themes to emerge from this project suggest the potential for a paradigm shift – a shift in how we understand the post-disaster context, the nature of the problems to be solved, and the public policy necessary to foster a robust response and recovery. In both the popular media and in much of the various academic literatures to emerge following Katrina, the underlying paradigm at work seems to be that large-scale disaster causes inordinate uncertainty and it is government's role to at least mitigate, if not eliminate, this uncertainty. Indeed, it is surely the case that a catastrophic disaster introduces new and often deeply unsettling forms of uncertainty. But the analysis conducted in the course of our investigations suggests that far from eliminating uncertainty, government action in the wake of the storm more often than not exacerbated the uncertainty (Chamlee-Wright 2007). Our investigations suggest that it is not incompetence or disregard within government agencies that are the source of the problem. It is not the case that if political leaders were more conscientious and government agencies were better organized they could overcome the uncertainty problems created by a disaster. Rather, our investigations suggest that the nature of the post-disaster context is such that only a decentralized process of trial and error or, in other words, an entrepreneurial process of engaged discovery, has the potential to address on any detailed level the uncertainty a disaster presents.

By entrepreneurial discovery, we include, of course, profit-seeking entrepreneurs, but also 'social entrepreneurs', that is, those who are alert to the ways in which resources could be recombined to leverage a better outcome, even if that outcome is not captured in the form of monetary profits.

Here we are not suggesting that post-disaster contexts are somehow different in a fundamental sense than ordinary contexts. On the contrary, the paradigm shift our investigations suggest highlights the important ways in which a post-disaster context (for all its unpleasant novelty) is much like ordinary life, at least in the following sense. The social systems that order our lives and communities on a daily basis, that enable us to coordinate our actions with countless (mostly unknown) others are so complex in terms of the knowledge systems they represent that there is no way that political and government actors could possibly step in to provide superior social coordination. In normal life, it is the decentralized process of entrepreneurial search that enables us to navigate (though never completely overcome) the uncertainty that shrouds social life. While large-scale disasters introduce new forms of uncertainty, governments possess no greater

capacity to control the social coordination process than they do under normal circumstances. In fact, as is argued within some of the chapters presented in this volume, it is still ultimately entrepreneurial discovery that will provide the best chance of an effective response.

This is not to suggest that government can not play a productive role. If guided by the appropriate paradigm, government policy would cease attempting to solve all the problems presented by the disaster and instead would focus on what it can do well, such as providing basic municipal services, enforcing contracts and, above all, ensuring that the basic institutional rules that allow society to function on a day-to-day basis are upheld and enforced. Further, if guided by the appropriate paradigm, government would craft its post-disaster policy in such a way that entrepreneurial discovery and response was encouraged rather than impeded. But as long as government action is guided by a paradigm that suggests that its role is to solve the social coordination problems created by disaster, government is paradoxically more likely to create greater uncertainty than reduce it (Chamlee-Wright 2010). To add insult to injury, the type of uncertainty created by misguided public policy is often the sort that arrests rather than inspires entrepreneurial discovery and creative response.

The contributions within the first part of this volume address the paradigm shift discussed above. In Chapter 2 Adam Martin deploys Frank Knight's (1921) concept of uncertainty, in which circumstances are novel enough that the range of possible outcomes cannot be known in advance, requiring a process of entrepreneurial discovery if social coordination is to be obtained. Knight's point was that this kind of uncertainty is ever present in the course of ordinary life, but Martin points to the heightened degree to which Knightian uncertainty defines the post-disaster context. However, rather than mitigating this kind of uncertainty, Martin argues, government action following Katrina has tended to exacerbate it, making it much more difficult for the average citizen to make informed and effective decisions in their attempts to engage in the recovery process.

In Chapter 3 Russell Sobel and Peter Leeson apply these lessons in the context of immediate disaster relief in the moment of crisis. Rather than viewing the circumstances of the immediate crisis as fundamentally different from ordinary contexts requiring a command and control solution to social coordination, Sobel and Leeson argue that the nature of the problem is, as F.A. Hayek described (1945 [1948]) 'the utilization of knowledge not given to anyone in its totality'. The ability to rapidly adjust to changing circumstances is an essential feature of a functioning economy; so too in effective delivery of disaster relief. Sobel and Leeson argue that decentralized systems of disaster relief in which private actors can deploy and respond to local (often tacit) knowledge systematically tend to outperform

centralized processes of command and control characteristic of government disaster relief management.

In Chapter 4 Steven Horwitz examines the reasons why some organizations, such as Wal-Mart and the US Coast Guard were able to outperform FEMA and other relief agencies in the swift and effective delivery of relief services. Like Sobel and Leeson, Horwitz argues that it was a decentralized system of authority in which on-the-spot actors could make use of the local knowledge they possessed to make swift and appropriate decisions. In his analysis of the effects of occupational licensing in Chapter 5, David Skarbek argues that regulations designed to protect homeowners eager to repair the damage to their properties often make circumstances even worse by unnecessarily inhibiting the entrepreneurial process.

The contributions in Part II examine a different sort of entrepreneurial discovery that must take place if communities are to recover after a disaster: the discovery that takes place within the context of social networks. Following a large-scale disaster the resources embedded within social networks can be among the most valuable (Chamlee-Wright 2008). In Chapter 6 Chamlee-Wright and Storr examine the role of entrepreneurial discovery in the context of non-profit action. We argue that social entrepreneurs play a critical role in recovery, such as helping to solve the collective action problem characteristic of post-disaster contexts. Rather than helping social entrepreneurs perform services vital to the recovery process, we argue, government action has created barriers to effective social action. In Chapter 7 Petrik Runst examines the ways in which entrepreneurs deployed pre-existing social networks, reconfigured these networks to respond to the circumstances following Katrina and forged new ties. This chapter makes an important contribution to the literature on social ties in the context of post-disaster recovery. In Chapter 8 Daniel D'Amico describes how sub-cultures can deploy the resources embedded within social networks and foster more widespread recovery. The particular case D'Amico examines is the vibrant 'garage band' sub-culture within the New Orleans' musician community. An essential point found in the chapters by Runst and D'Amico is that private civil society contains many of the most valuable resources and knowledge systems required for a robust recovery – resources and knowledge that cannot be duplicated through a top-down process of disaster management.

Part III revisits the lessons of how communities can address the physical demands and social coordination problems of disaster through comparative analysis with other large-scale disasters. In Chapter 9 Leonid Krasnozhan and Daniel Rothschild compare the citywide recovery efforts in Prague following the 'Flood of the Millennium' in 2002 and in New Orleans following Katrina. Krasnozhan and Rothschild argue that the

relative success experienced following the Prague flood presents lessons favoring a minimalist approach of redeveloping critical public goods over ambitious efforts to completely redesign the urban landscape. In Chapter 10 Emily Schaeffer and Andrew Kashdan compare the role of citizens groups and local political leaders in disaster response following the Chicago fire of 1871, the San Francisco earthquake of 1906 and the New Orleans' flood of 2005. Schaeffer and Kashdan argue that the incentives to provide effective disaster relief are reduced as responsibility is increasingly centralized under federal oversight.

In the months and years following Hurricane Katrina several major policy initiatives were advanced, including the introduction of the Louisiana Road Home program and a far-reaching set of reforms designed to improve New Orleans' public schools. Part IV examines these post-Katrina initiatives. In Chapter 11 Eileen Norcross and Anthony Skriba examine the reasons why Mississippi's Homeowners Assistance program fostered a far more robust recovery relative to the delays and frustrations associated with Louisiana's Road Home program. One of the principal lessons to be learned, Norcross and Skriba argue, is that it is far better to allow private decision makers to deploy the assistance funds in a manner they deem appropriate rather than attempt to centrally engineer a particular set of outcomes at the state or federal level. In Chapter 12 Jeb Bleckley and Joshua Hall discuss the reforms that introduced charter schools in New Orleans' public schools following the storm. Bleckley and Hall argue that while far from perfect, such reforms introduced elements of competition into public education and represent an important movement in the direction of improving school quality and have the potential to play an important role in New Orleans' recovery. Relying on interviews she conducted with stakeholders in several of the new charter schools that were created after Katrina, Erin Agemy, in Chapter 13, offers a similar account to Bleckley and Hall but highlights some of the policies and practices that have hampered the effectiveness of these new charter schools.

Taken together, the chapters collected in this volume suggest that disaster response and recovery are best understood as complex social systems that defy top-down control. When disaster is understood in these terms, calls for more careful top-down management and orchestrated planning, like those frequently heard in the aftermath of Katrina, seem wrong-headed. While aspects of the government's response to a crisis will inevitably be hierarchically driven, in the context of Hurricane Katrina, the relatively few success stories of government response that did emerge came from patterns of decentralized, bottom-up decision making, in which first responders were given the discretion they needed (or took it upon

themselves to exercise) to discover on-the-spot solutions to challenges the immediate context presented.

Further, building upon the insight that disaster recovery is a complex process of bottom-up social coordination, the chapters contained within this volume suggest that government can play a critical and positive role in fostering a robust response, but only if it understands its primary role as minimizing uncertainty regarding the basic ‘rules of the game’ – the rules of the social order that allow private citizens, such as residents, business owners, non-profit directors, artists, musicians, members of the clergy and so on, to tap their capacity to respond from the bottom up. While many of the chapters assembled here detail the problems associated with government’s response to the disaster, the lessons to be learned are hopeful ones. For example, the fact that government is not very good at orchestrating long-term recovery does not have to be a crushing blow to the prospects of community rebound, as private citizens do possess the capacity to foster community rebound.

NOTES

1. See, for example, edited volumes Brunsma et al. (2007), Hartman and Squires (2006), Natural Hazards Center (2006), and special issues of *Du Bois Review*, 3 (1) and *Cultural Anthropology*, 21 (3).
2. Among the distinctive features of the Austrian school are its critique of socialism (Mises 1922 [1981]), the emphasis on the decentralized (and often tacit) nature of the knowledge within social systems (Hayek 1945 [1948], 1960, 1973) and the central roles played by uncertainty and entrepreneurial discovery in the market process (Kirzner 1978, 1979). The Virginia school of political economy is distinguished by its emphasis on public choice analysis (see Buchanan and Tullock 1962) and comparative institutional analysis (see Coase 1960; see also Acemoglu 2003).

REFERENCES

- Acemoglu, Daron (2003), ‘Why not a political Coase theorem? Social conflict, commitment and politics’, *Journal of Corporate Economics*, 31, 620–52.
- Boettke, Peter, Emily Chamlee-Wright, Peter Gordon, Sanford Ikeda, Peter Leeson and Russell Sobel (2007), ‘The political, economic, and social aspects of Katrina’, *Southern Economic Journal*, 74(2), 363–76.
- Buchanan, James and Gordon Tullock (1962), *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, Ann Arbor, MI: University of Michigan Press.
- Brunsma, David, David Overfelt and Steve Picou (eds) (2007), *The Sociology of Katrina: Perspectives on a Modern Catastrophe*, Lanham, MD: Rowman & Littlefield Publishers.
- Chamlee-Wright, Emily (2007), ‘The long road back: signal noise in the post-Katrina context’, *Independent Review*, 12(2), 235–59.

- Chamlee-Wright, Emily (2008), 'Signaling effects of commercial and civil society in post-Katrina reconstruction', *International Journal of Social Economics*, **35**(7/8), 615–26.
- Chamlee-Wright, Emily (2010), *The Cultural and Political Economy of Recovery: Social learning in a post-Disaster Environment*, London: Routledge.
- Chamlee-Wright, Emily and Virgil Henry Storr (2009a), 'Filling the civil society vacuum: post disaster policy and community response', *Mercatus Center Policy Comment* no. 22.
- Chamlee-Wright, Emily and Virgil Henry Storr (2009b), 'Club goods and post-disaster community return', *Rationality and Society*, **21**(4), 429–58.
- Chamlee-Wright, Emily and Virgil Henry Storr (2009c), "'There's no place like New Orleans": sense of place and community recovery in the Ninth Ward after Hurricane Katrina', *Journal of Urban Affairs*, **31**(5), 615–34.
- Chamlee-Wright, Emily and Virgil Henry Storr (2010), 'Expectations of government's response to disaster', *Public Choice*, **144**(1–2), 253–74.
- Coase, Ronald (1960), 'The problem of social cost', *Journal of Law and Economics*, **3**, 1–44.
- Hartman, Chester and Gregory D. Squires (eds) (2006), *There is No Such Thing as a Natural Disaster*, New York: Routledge.
- Hayek, Friedrich A. (1945), *The Use of Knowledge in Society*, reprinted in F.A. Hayek (1948), *Individualism and Economic Order*, Chicago, IL: University of Chicago Press, pp. 77–91.
- Hayek, Friedrich A. (1960), *The Constitution of Liberty*, Chicago, IL: University of Chicago Press.
- Hayek, Friedrich A. (1973), *Law, Legislation and Liberty, Volume I: Rules and Order*, Chicago, IL: University of Chicago Press.
- Kirzner, Israel M. (1978), *Competition and Entrepreneurship*, Chicago, IL: University of Chicago Press.
- Kirzner, Israel M. (1979), *Perception, Opportunity and Profit*, Chicago, IL: University of Chicago Press.
- Knight, Frank H. (1921), *Risk, Uncertainty, and Profit*, Boston, MA: Houghton Mifflin.
- Leeson, Peter and Russell Sobel (2006), 'Government's response to Hurricane Katrina: a public choice analysis', *Public Choice*, **127**, 55–73.
- Leeson, Peter and Russell Sobel (2008), 'Weathering Corruption', *Journal of Law and Economics*, **51**(4), 667–81.
- Mises, Ludwig (1922), *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus*, reprinted in Ludwig Mises (1981), *Socialism: An economic and Sociological Analysis*, Indianapolis, IN: Liberty Fund.
- Natural Hazards Center (2006), *Learning from Catastrophe: Quick Response Research in the Wake of Hurricane Katrina*, Boulder, CO: Natural Hazards Center.