CHAPTER 2

DISASTER MANAGEMENT AND THEORIES OF PUBLIC POLICY AND MANAGEMENT
SCHOLARS HAVE DEVELOPED THEORIES AND CONCEPTS TO HELP them and us understand and explain governance and public policy generally. Theories and concepts have also been used to help understand and explain specific domains of public policy, such as health care, social welfare, environment, defense, and education. Disaster policy, although a relatively new domain of public policy, is also amenable to analysis through the development and application of theories and concepts. Theories and concepts often serve as tools one can apply to the study of specific subjects or problems.

As emergency management is evolving into a profession, we must rely on theories, concepts, and abstract knowledge as well as experiential learning and experimental research. Emergency management as an occupation increasingly demands the mastery of a body of professional knowledge, although it also depends on the skills and abilities of generalist managers. To understand their role in the policy process and to establish their profession, emergency managers need to grasp the significance of political and managerial theories relevant to their work. They need to appreciate that government embodies actors and structures intended to facilitate the effective operation of democracy and political accountability.

This chapter provides a sampling of theories and concepts, many produced by political scientists, public administrationists, sociologists, and economists, applicable to the domain of disaster policy and to the field of emergency management. It also provides an overview of how and where theory knowledge fits in the evolution of emergency management as a profession and supplies some insight about how people new to the field can use theories and concepts to independently analyze disaster policy as a domain of public policy.

The chapter begins with a discussion of three relatively simple normative theories: Jeffersonian, Hamiltonian, and Jacksonian. Matters of bureaucratic politics and administrative culture are then considered. From there it moves on to a look at the role of “best practice” contributions to the field. Intergovernmental relations theory is touched upon, followed by a brief examination of the relevance of principal-agent theory in disaster policy implementation. Included as well is a brief introduction of network theory, a longer examination of disaster recovery theory, and finally a short summary of complexity theory. After this is a special topics review of the new public administration approach and a brief discussion about how emergency management knowledge is produced and how it is learned by others.
CHAPTER 2   DISASTER MANAGEMENT AND THEORIES OF PUBLIC POLICY AND MANAGEMENT

NORMATIVE POLITICAL THEORIES

Consider three simple normative political theories that emanate from the political contributions of three important U.S. forefathers: Thomas Jefferson, Alexander Hamilton, and Andrew Jackson.2

The Jeffersonian Model

Jefferson, the major author of the Declaration of Independence and the nation’s third president, has been generally understood to insist that the job of public managers was to try to obtain “popular and stakeholder guidance” through political consultation or public deliberation before the fact. In other words, public managers should make their decisions as the product of grassroots public consultation and the consensus of interest group recommendations. This gives a public manager’s decisions greater legitimacy for public purposes.

This so-called Jeffersonian approach requires that public managers possess not only skill in consultation, negotiation, and communication but also deftness in probing for public understanding and consent. Good Jeffersonian public managers are educated generalists (gentlemen [or gentlewomen], as Jefferson might put it) who know and understand personal relationships that exist between agents (workers) and their assigned tasks (their duties). Jeffersonian public managers are strictly accountable to the public and to their elected overseers. As communities bear the effects of a disaster, Jeffersonian managers must use their sociotechnical skills to meet the expressed needs of those in their communities. Strong community participation would be a hallmark of emergency preparedness and planning for Jeffersonian emergency managers.

Recent thinking about emergency management indirectly stresses the importance of Jeffersonian behavior at the local government level. One scholar’s explanation of what emergency managers do captures the Jeffersonian approach superbly well:

Emergency managers are public servants who help communities prevent and prepare for disasters. They issue warnings, oversee evacuation, and communicate with responders. They also assemble statistics on damages, share disaster knowledge with citizens through the media, and work with those in charge of shelters. Emergency managers also acquire resources. They make sure that departments are working together to address response and recovery challenges. They gather information about expenses. They help determine response and recovery priorities. Their contributions are crucial to post-disaster operations.3

Local emergency managers must serve local executives and at the same time respond to the needs of people in their jurisdiction. Should they fail badly on either or both counts, they risk losing their posts and they risk harming the reputation and welfare of their agencies. However, to most elected and appointed officials who control budgets and staffing allocations, emergency management is a low priority. One study quotes a police chief emergency manager as saying the following:

My number one priority is getting the uniforms out to response calls. The public judges me on that performance, not whether I’m planning for an earthquake that may never happen. If left alone, disaster planning would get even less attention from my office. It requires that the executive clearly make this a priority.4
Thus, for Jeffersonian emergency managers, their work and the success of their agencies reside in maintaining community support from senior elected and appointed officials, the news media, and the public. Local emergency managers often rely on local emergency management committees (LEMCS) or local stakeholder groups. An LEMC is a disaster-planning network that increases coordination among local agencies. LEMCs succeed when they effectively receive and respond to community information requests, when they establish and maintain good working relationships with people of the news media, when they earn and maintain local support, and when they retain the confidence and backing of local officials.

LEMCs are often composed of volunteers from municipal agencies representing organizations relevant to public safety or people from organizations vulnerable to certain hazards. Besides the customary police, fire, and emergency services organizations, LEMCs as consultative bodies frequently include representatives from hospitals, public works, nursing homes, land-use departments, schools, building inspection agencies, environmental organizations, public health agencies, and local industries, to name a few. The reason for this broad inclusiveness stems from the need for local emergency managers both to consult with representatives of these stakeholder organizations as they draft emergency plans and proposals and to win the broad pluralistic consent and support they need to secure political or administrative approval of their plans and proposals. Such is the essence of Jeffersonian emergency management at the local level.

Jeffersonian principles apply at the state government level as well but less so than at the local level. Successful state emergency management depends on the active and sustained interest and support of the governor. However, state emergency management is conducted more in a world of bureaucratic politics, state legislative oversight, and intergovernmental relations such that this work is often far removed from direct public interaction. In federal emergency management, detachment from the general public is even greater and public participation in emergency management at that level is very circumscribed and frequently heavily co-opted. In federal emergency management, presidential support is vital, and the collective public perception of emergency management is of great political and managerial importance.

The Hamiltonian Model

Alexander Hamilton, who was a Revolutionary War hero, a major architect of the U.S. Constitution through The Federalist Papers, and the first secretary of the U.S. Treasury, believed that public managers must put emphasis on getting results. In a Hamiltonian approach, public managers expect others, especially strong elected executives, to judge them by whether or not their efforts produce the desired results. They work under after-the-fact accountability, and their concerns are performance and evaluation under public law. Hamiltonian public managers must be expert decision makers, must be students of organization, and must possess executive talents in formulating plans and carrying out duties. Hamiltonian public managers know the substance, tools, and processes of their work.

A Hamiltonian public manager is in many ways a technocrat who possesses special knowledge and expertise most average citizens do not have and who works under norms of objectivity and political neutrality. The rise of a professionalized U.S. civil service system of government employment in the 1930s and its perpetuation today demands well-educated public managers. Moreover, the complexity and vast array of public problems and governmental responsibilities demands that managers possess specialized knowledge and technical abilities. Emergency management is time and knowledge sensitive. Thus, Hamiltonian emergency managers can be trusted to act independently and with dispatch. Time pressures raised by the acute needs of emergencies and disasters often make it difficult and inefficient for Hamiltonian managers to work
exclusively through a community- or public-participation model of consultation and decision making. One proponent of Hamiltonian-style emergency management wrote the following:

In order to design and deliver such a sophisticated learning management system, it means tapping into the greatest minds in the fields of emergency management, disaster research, public health, community development, computer technologies, distance learning education, multimedia, virtual community building and facilitation, and simulation gaming.⁹

Hamiltonian forces have over the past thirty or more years converted emergency management into an intellectual and scientific enterprise. Significant advances in hazards research—most particularly in meteorology, seismologic studies, and physical geography, as well as in the building sciences, climate change research, and environmental studies—gave further credibility to disaster research.¹⁰ These advances coincided with, and often were made possible by, major technological innovations: the emergence of the Internet and the World Wide Web advances in high-speed computing; broadband fiber-optic and Wi-Fi communications; a massive increase in data storage; the development of personal computers, laptops, and smartphones; sophisticated computer software; civilian use of satellite telemetry of data about the atmosphere and surface of the earth; social media; and geographic information system (GIS) technology.

The new technologies automate emergency planning, response, recovery, and mitigation. The combination of GIS software and global positioning system tools, including remote sensing, empowered emergency managers to do things they could only imagine a decade before.¹¹ Advances in communications technology and the rise of social media means that in merely seconds countless people have the capacity to use their iPhones and tablets to produce and disseminate to the web pictures, video, and audio of what they are witnessing or experiencing. No longer must emergency managers rely exclusively on their in-house communications resources or the news media to provide them with a stream of disaster information.¹²

The social sciences also made major contributions to the field through the work of disaster sociologists, political scientists, economists, social geographers, demographers, and urban planners. Sociologists expanded knowledge about how people behave in disaster circumstances. They helped identify “mythological” and incorrect assumptions many people had about how individuals and groups behave before, during, and after disasters. They advanced understanding about how people receive, comprehend, and respond to warnings and alerts. Political scientists explained how disaster was emerging as a new domain of public policy, flush with major political actors, interest groups, and a political process. They demonstrated how emergency management involves politics, law, and governance. Economists took on the daunting task of studying and measuring the economic effects of disasters. They produced a copious body of work on how insurance may or may not be used as a tool of disaster mitigation. They explored emergency management and disaster preparedness in terms of public finance and public budgeting as well. Social geographers, demographers, and urban planners produced many studies that promoted practical knowledge of emergency management. Owing to their contributions, new communities and residential developments could be better designed and built to be more disaster resistant and better able to keep people from occupying unsafe areas.¹³

Emergency management advanced as a Hamiltonian-style area of expertise in other ways too. In the 1990s, the Federal Emergency Management Agency (FEMA) developed Hazards U.S. (HAZUS), an earthquake simulation applicable and adaptable to most of the nation, and Hazards U.S.-Multi-Hazard (HAZUS-MH),
a powerful risk-assessment software program for analyzing potential losses from earthquake, hurricanes, and more. FEMA distributed it free of charge on the Internet, thus making a huge contribution to seismic engineering science and disaster loss estimation. HAZUS-MH also models loss from wind and flood.14

Modern emergency managers are expected to be well educated and professional. They are expected to manifest knowledge, skills, and abilities that average citizens could not be expected to have. Moreover, they are often expected to make independent judgments and decisions drawing on their authority of expertise. This is the epitome of Hamiltonian-style emergency management.

However, emergency managers in the course of their work cannot easily behave as both a good Jeffersonian and a good Hamiltonian simultaneously. The two theories point to two fundamentally different ways to approach public management work. Although the two theories may be compatible in some rare circumstances, they ordinarily stand in basic counterpoise to one another. In his pioneering work of 1948, Dwight Waldo argued in his book, The Administrative State, that public administration scholarship revolved around a core set of beliefs, one of which was that “efficiency and democracy were compatible.”15 In many respects they are not. Jeffersonians press for making public administration advance democracy. Hamiltonians advocate a public administration that rests on efficiency, or in modern parlance, state-of-the-art professional expertise. Also criticized in the 1948 book were those who would advance a science of administration geared to maximizing efficiency. A “science of administration,” the author said, tends to overlook and ignore the political ramifications of public administrative work.16

Emergency managers have much to learn from these two management approaches. Sometimes they need to behave in a Jeffersonian manner and at other times they must perform as a Hamiltonian. If managers understand these theories, they may be able to make more informed decisions in the course of their work. They also may be better able to cope with the competing demands of their work. The key is to know when each behavior, Jeffersonian or Hamiltonian, is called for. However, today a third model of public management may be emerging in U.S. emergency management.

The Jacksonian Model

Andrew Jackson17 was a military hero of the War of 1812 and a two-term U.S. president first elected in 1828. Born in Tennessee, he was the first president whose birth state was outside the original thirteen states. He is known for founding the Democratic Party (which actually left the then-Republican Party), and he was dubbed the “people’s president” because of his respect for the common man.18 Jackson's preferred type of government organization was one of loose federal structure with power concentrated at the state and local level. Jackson’s vision of America was, indeed, a continental empire of autonomous local communities suggesting that simple and direct governance achieves better results.19 The Jacksonian tradition was also to promote a strong executive. Jackson distrusted Congress and believed most entrenched politicians were untrustworthy and likely to produce corruption and inefficiency.

Jackson respected the political and moral instincts of the common man, and he advocated allowing the average citizen greater political participation.20 He is also known for abiding by the adage “To the victor go the spoils.” Jackson sought to replace as many government workers as possible with people loyal to himself and his political party. This practice was not uncommon in the era, but it was carried to an extreme by Jackson and many of his successor presidents until the Progressive Era and twentieth-century civil service reform. In sum, the Jacksonian approach is highly populist, advocates decentralization, which grants local governments greater autonomy with direct governance, concentrates authority in elected executives,
minimizes legislative interference in public management, and allows elected executives to appoint their political partisans and allies to many government jobs.

**Jacksonian public managers** are self-reliant, courageous, individualistic, and entrepreneurial. Modern Jacksonian public managers construct their own destiny despite once working within the patronage system of placing political supporters into appointed government offices. Courageous Jacksonian public managers present themselves as prominent figures and assert their personality with zeal while siding unconditionally with their beliefs. They articulate public desires sometimes in defiance of political elites to whom they are profoundly suspicious. Individualistic and entrepreneurial, the Jacksonian public manager will take the initiative and pursue new directions in light of government perversion or inefficiency.

Jacksonian emergency managers do well as intermediaries between state and local governments and responders who must carry out the modern Incident Command System (ICS). Jacksonian emergency managers address state and local level concerns while managing friction among officials and agencies at the federal level even as they advocate for greater public participation. Jacksonian public managers accomplish this because of their generally daring and entrepreneurial spirit, their strong belief in public participation, and their impatience with federal-level delay or inaction. Though they possess political and public media savvy serving them well in public relations, their ability to assert public desires—even if this is in conflict with the wishes of organizational elites—is what is needed as they interact with ICS-compliant responders at the state and local level.

The Jacksonian model overlaps but is not identical to the Jeffersonian model. Jackson, like Jefferson, touts the benefits of state and local government though Jackson provides for a state government role that is at least as important as the local government role. Jackson, unlike Jefferson, views government employment as requiring political, partisan, and public commitment more so than education and refinement. If anything, Jackson views government workers of previous administrations as effete and indifferent to the public they were expected to serve. Jackson, unlike Jefferson or Hamilton, thinks corruption and inefficiency flow from legislative interference in administration. For Jackson, emergency managers should work to both represent common people and to aid elected or appointed executives they work under. Jackson and Hamilton

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**TABLE 2-1**

<table>
<thead>
<tr>
<th>Public Management Models</th>
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<tr>
<th>Character profile</th>
<th>Focused on...</th>
<th>Key constituency</th>
<th>Animating principle</th>
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<tbody>
<tr>
<td>Jeffersonian model</td>
<td>Educated generalists adept at tuning in to public concerns</td>
<td>Management at the local level</td>
<td>The grassroots public and their elected officials</td>
</tr>
<tr>
<td>Hamiltonian model</td>
<td>Technocrats with executive skills and understanding of the bureaucracy</td>
<td>Management at the state and federal level</td>
<td>The elected officials who hold them accountable <em>ex post facto</em></td>
</tr>
<tr>
<td>Jacksonian model</td>
<td>Strong, charismatic executives with an orientation toward the public and a practitioner background</td>
<td>Management that is concentrated at state and local level</td>
<td>The common public and in aid of appointed executives they work under</td>
</tr>
</tbody>
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*Note: The author would like to thank Elise Frasier for her development of this table.*

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both favor strong executives; however, Jackson would despise Hamiltonian federal technocrats who impose their practices and approaches on state and local officials (see Table 2-1).

In an era when government financial problems have undercut portions of emergency management capability at all levels and at a time when disasters have been perceived by many as more political and partisan than in the past, the Jacksonian model may today have a place between the Jeffersonian and Hamiltonian models of emergency management. In some respects, Jacksonian emergency managers are charismatic figures intensely loyal to their executive supervisors but who champion the cause of their agencies in a very public way. They would be well attuned to public sentiments and today probably avid users of social media. They would be more politically motivated than their Hamiltonian or Jeffersonian counterparts, in part because they would recognize how disaster management has become immensely more political. Top Jacksonian emergency managers, though very likely politically appointed to their posts, would be highly capable generalists or former practitioners in the field able to perform well under pressure.

THE ROLE OF THEORY IN EMERGENCY MANAGEMENT

Another good way to explore how political theory may contribute to the study and application of emergency management is to consider its contributions to organization studies and theories of public management.

But before considering these theories, first think about what defines something as a profession. A profession is an occupation that is esoteric, complex, and discretionary. It requires theoretical knowledge, skill, and judgment that others may not possess or cannot easily comprehend. Theory-grounded knowledge is the basis of most professions and it is acquired through higher education. A profession embodies self-directing work. A profession occupies a position of legal or political privilege, or both, that protects it from competing professions. Professions sanction theory and application, something emergency managers must fully appreciate. Furthermore, a profession is regulated by a professional body that sets examinations of competence, acts as licensing authority for practitioners, and enforces adherence to an ethical code.

Regulation enforced by statute distinguishes professions from occupations represented by technocratic groups that aspire to collective bargaining or professional status for their members. For example, medical doctors in the United States and elsewhere work in a profession that requires them to master a vast body of complex knowledge, to train and practice the application of that knowledge, to pass licensure examinations, to agree to uphold an ethical code, and to submit to oversight by professional boards of their profession in the course of their medical practice.

To enter a profession, one needs education and training in a professional program in order to achieve mastery of the necessary abstract concepts. Professions often rely on universities and colleges, since people at these institutions are expert at imparting and creating abstract knowledge. Almost every profession survives competition and encroachment by other professions through special knowledge systems governed by abstractions and accepted methodologies. A profession is able to distinguish itself from other professions by the content and characteristics of its knowledge system. Once people master a profession's abstractions those people enjoy more autonomy in the work they do. People in most professions must be suitably credentialed, and universities or colleges are often able to convey these credentials. Many people find it worthwhile to become a member of a profession, because along with greater freedom of action, they come to assume high-paying, high-status, and often socially or politically powerful positions.

If those working in the field of emergency management want to establish their work as a profession, they have to do so by building and enriching theoretical knowledge of the field of emergency management.
Lack of theory or weak theory undercuts emergency management’s authority of expertise and contributes to its marginalization: something dangerous in an era of occupational competition within the realm of competing homeland security-related professions. The longer it takes for emergency management to evolve into a bona fide profession, the greater the probability that it will be suffused within an established or more aggressive management-related profession, as perhaps national security, law enforcement, or military professions.

Why is abstraction important in a profession? Abstract reasoning helps produce testable propositions and knowledge that is generalizable and applicable in many contexts. Generalized knowledge furnishes reasoning tools or conceptual lenses. In other words, the generalized knowledge has explanatory power within or across a wide variety of cases and circumstances.

Abstraction and generalized knowledge help individual researchers transcend the world of single case studies. Disaster research is rife with case studies. Many case studies provide extraordinary historical information about specific events in time. However, many case studies imply that each disaster is a relatively unique event. Abstract reasoning and theory developed from the study of many cases provides disaster researchers and managers with some degree of predictive power about future disaster events. Such broad-gauged work also advances hazard risk and vulnerability analysis. However, case studies should not be the sole engine of disaster research and professional development.

**HOW THINGS WORK**

**TO BE OR NOT TO BE A PROFESSION**

Some tend to judge emergency management as a body of unsophisticated skill sets imparted to others through simplified, one-directional training. Worse still is that some might assume “anyone could do emergency management because the field is so ill-defined, diffuse, or based on easily learned behaviors.” People might then conclude that emergency managers are interchangeable functionaries who carry out relatively simple tasks with clerklike efficiency during episodic periods officially defined as disasters or emergencies.

This conceptualization may appeal to Jeffersonians because it rests on simplification, facilitates mobilization and participation of unskilled volunteers, and maximizes political control and grassroots political responsiveness. However, there is not much use for Jeffersonian emergency managers between disasters. Jeffersonian emergency managers have little or no role in mitigating disasters or reducing hazard vulnerabilities in any sophisticated way; and these emergency managers are neither well suited to address the causes of disaster nor likely to understand the complex, multifaceted ramifications of disasters and emergencies.

It would be reasonable to expect the recommendations of professional emergency managers to top political officials, including the president and White House officials, to be respected and taken seriously, owing to the substantive and technical merit of the recommendations themselves and because the recommendations were conceived by those with acknowledged expertise (extensive education, training, and experience). If political officials do not consider emergency
Abstraction enhances the value of experiential learning and case studies by enabling those with field experience to collect empirical evidence amenable to analysis by themselves and by others, most particularly those experts working to add predictive power to the theories they are developing and testing. Abstraction provides a basis for improved qualitative and quantitative examinations of social and physical phenomena; this includes disaster phenomena. The logic and rationalism supporting abstract reasoning facilitates the co-production and exchange of knowledge between people of different scientific disciplines, something essential in emergency management work.

Emergency management as a field achieves greater academic legitimacy when its core theories and concepts have currency in the physical and social sciences. Conversely, physical and social scientists are likely to contribute to the theory and conceptual growth of emergency management and disaster studies if they conclude that emergency management is a knowledge-driven, research supportive realm.

The outcome of disputes regarding who may officially accredit emergency management education programs and who may certify people as qualified emergency managers will profoundly affect whether and how emergency management evolves as a profession. Theories and concepts are engines of knowledge creation, but in emergency management the matters of developing and testing theories and deciding what constitutes knowledge may well be determined by the authorities and interests that win accreditation and certification powers (see the “How Things Work” box).

A caveat is in order. One scholar of disaster research has written the following:

Disaster is a term, which has been defined, understood and packaged by the so-called “experts” to an extent that disaster reduction has become merely a problem solving exercise. The definers declare what they perceive as a problem and how they intend to solve it. He adds, “There needs to be a strong interface between ‘reality’ of disaster constructed by us ‘the experts’ and the one created by the victims based on their worldviews.” This is fair warning for those who seek to become professional emergency managers. Jacksonian and Jeffersonian emergency managers would agree.
Bureaucratic Politics Theories and Emergency Management

In a nutshell, the bureaucratic politics model and its theories strive to explain why public officials do the things they do. These theories suggest that the desire of public officials to protect or promote their own agency’s special interests (as they compete with other agencies) forms a major motivating factor in shaping the timing and the content of their decisions. “Bureaucratic politics are conducted quietly, behind the scenes, in skillful ways, with strategic reversals possible, caution, and contentment with sharing credit for good results. A person needs these attributes in order to exhibit good statecraft.”30 The statecraft of political administration is how effectively people fulfill the obligations of the office they hold and how much they advance the welfare of the entire polity and state from the official position they hold.31 Statecraft is defined as “using and risking political power through action.”32 It is political leadership multiplied by bureaucratic power.

In other words, each government division, program, or office leader continually strives to maximize her or his budget and authorized workforce, as well as protects or extends his or her operating autonomy and discretion in decision making in the area of their assigned responsibilities. Often this can be most readily accomplished by lobbying for an expansion of their unit’s responsibilities. The policies and policy recommendations generated in the executive branch of the government and passed on to both the chief executive and the legislature are often better understood as the by-product of bureaucratic turf battles, interoffice competition, and expedient compromises between administrative chieftains rather than as the product of reasoned analysis about how to most effectively and efficiently to carry out the law and policy commitments of the elected chief executive so as to serve the public interest.

HOW THINGS WORK

THE CUBAN MISSILE CRISIS
AND BUREAUCRATIC POLITICS THEORY

The political scientist Graham Allison used the Cuban missile crisis as a case example to demonstrate that there were analyzable alternative explanations for political events. Allison’s work had a dramatic effect in clarifying and differentiating a bureaucratic politics conceptualization.

Each of Allison’s models can be adapted to help explain presidential decisions to declare disasters in a different way. For example, the rational actor explanation holds that the president decides largely on his or her own, as a unitary actor, on behalf of the entire federal government. It also assumes that individual rationality surrounds that decision making. The rational actor model would assume that each president decides whether to approve or reject a governor’s request for a presidential declaration of major disaster or emergency independently, perhaps after consultation with various advisers.

The governmental or bureaucratic politics model explains presidential decisions on disaster declarations as the outcome of negotiations between senior political appointees (agency heads, cabinet-level secretaries, state emergency management leaders, and so forth) and elected executives (governors, mayors, and the like). Allison refers to these players as elites. Their bargaining and negotiation activities culminate in persuading the chief executive to take some course of action or to make some type of decision. The bureaucratic politics model assumes that whether or not a president issues a declaration of major disaster or emergency is largely based on the recommendations of a combination of these major political actors. Certainly, in asking, a governor presses the
Applying the study of bureaucratic politics allows us to think about emergency management theory. Let’s think about emergency management by way of three models of bureaucratic politics: a rational actor model, in which the president independently makes his or her own decision; a bureaucratic politics model, in which the president follows the recommendations of senior political appointees and other elites; and an organizational process model, in which the decision largely rests with various lower-level disaster management officials (see the “How Things Work” box).33

Much of the world of emergency managers is made up of bureaucratic politics. Often emergency managers must work with elected executives (as a rational actor), must bargain and negotiate with very senior political or merit-appointed administrative officials (an organization process), and must be responsive to legislators (governmental or bureaucratic politics). To succeed, they must demonstrate technical competence as well as lead or manage the coordination of people working in their own agency or department and bring about the coordination of work by other departments or agencies. Theirs is a world of high-tension intergovernmental relations and intense media coverage.

Public Management Theory

Remember, the essence of modern emergency management is “management.” More precisely, it is “management” that is based on contemporary principles of organization theory and administration. The ethos of U.S. emergency management in a nutshell is as follows:

the executive has either largely delegated decision authority to someone else or rubber-stamps the official recommendation of his or her emergency management functionaries.

One would expect presidents to decide and act on very major, even catastrophic, disasters as a rational actor. One might also expect that disasters or emergencies that pose unusual or unanticipated political and management problems would encourage the bureaucratic model type of decision making. Finally, very routine disasters and emergencies (seasonal flooding, winter storms, metropolitan power outages, minor earthquakes in seismically active zones, and the like) that are neither major nor catastrophic and that involve few political costs or benefits for a president, would, one would think, elicit an organizational process model decision.
• emphasis on grassroots local emergency management in emergencies and disasters with overhead
governments providing help but not taking command or control of local emergency response and
recovery operations
• emphasis on the four-phased cycle of emergency management: mitigation, preparedness, response,
and recovery
• emphasis on contracting out services and eschewing direct delivery of services where possible
• emphasis on best practices, after-action reports, and continual reform
• emphasis on deregulated activity and a high tolerance for risk taking and adaptation (note: U.S.
emergency management is a policy domain with very little regulation, and those regulations that do
apply usually come through rules and conditions specified in federal grants to state and local govern-
ments. An exception is the case of local land-use and building regulation.)
• emphasis on leadership that is entrepreneurial and adept at drawing in free or inexpensive help
through coproduction efforts and public-private partnerships
• emphasis on facilitating change and creating public value, most particularly through disaster mitiga-
tion and preparedness activity

Best-Practices Approaches

At the intersection of public management and bureaucratic politics, we find what is referred to as best
practices. The best-practices approach is a method of producing knowledge by observing (or recount-
ing) field experience and then creating applicable principles. This is often described as “practice as the
basis for scholarship,” not scholarship as the basis for practice, and reflective practitioners are needed
to make the best-practices approach work. Here, public management study becomes a kind of art
form. The practitioner draws the picture for the observer. Rudolph Giuliani, former New York City
mayor, and James Lee Witt, David Paulison, and Craig Fugate, all former or current FEMA leaders,
stand as good examples of users of best-practice knowledge and emergency management reflective
practitioners.

Another best-practices approach is to create knowledge based on empirical validations of useful proposi-
tions derived from models—in other words, building practice wisdom as a social scientific approach to
scholarship and as a basis for professional practice. This is the applied heuristics approach. Such analyti-
cal approaches help public managers deal with a messy reality. These approaches and models allow for
experimentation, trial, and error; they were the early basis of policy analysis. For public managers, heuristics
are verbal explanatory sketches or conceptual frameworks, which help them to produce adequate explana-
tions for puzzling things. Heuristics embody propositions subject to confirmation or disconfirmation; in
other words, one can test the utility of the proposition. For example, one can test the proposition that
increased federal funding to a state's terrorism preparedness program will improve its terrorism response
capability. This can be measured in part by evaluating the performance of state emergency managers via
unannounced terrorism drills and exercises.

Detailed studies alleged to represent best practices in public management have been criticized because
they are often not good guides to scholarship, teaching, or practice. However, some open-minded studies
of cases, especially those showing how public executives shape the institutional frameworks for policymak-
ing and execution, have been praised for their contributions to theory knowledge. Government executives
are the molders of contexts that will affect public policy in both the short and long runs. Best practice
research flows from a broad perspective on public executive leadership—one that draws from classic works on executive leadership inspired by practice.

Analytical Approaches versus Social Constructivist Theories

Within subfields of various physical and social scientific disciplines, there is an incredible range of analytical approaches to the study of disaster (e.g., meteorology, climate science, seismology, volcanology, sociology, policy studies, economics, physical geography, epidemiology, emergency medicine, engineering). Those advancing the analytical approach to the study of disaster have benefited from advances in high-powered computing and the development of sophisticated software programs (computer-based data analysis, GIS, HAZUS, and others). Emergency managers and students of emergency management must embrace analytic approaches and tools in order to advance disaster study and research.

However, the generalization sought in analytical approaches dismisses the assumption, “Reality is a social construction rather than an objective construct that is the same for all observers.” Those following social constructivism might argue that it is the actions and persuasiveness of people, perhaps amplified through mass communications, that defines what is or is not a disaster. In other words, the “reality” of some disaster phenomenon may be more an issue of how people have conceived of and conveyed the “idea” that a disaster has occurred. Consider the following claim: “Whether an event constitutes a disaster, how probable and how damaging disasters are, and what can be done to reduce their impacts, are socially produced through organized claims-making activities.”

Some social constructivist scholars working in the disciplines of sociology or political philosophy maintain that organizations (including government organizations) are systems of socially constructed and cognitively ordered meanings. I once listened to a respected and brilliant economics professor glibly inquire, “So FEMA makes disasters?” What he was inferring was that the mere fact that the government has established FEMA, presumably composed of disaster management experts, suggests that those experts will look for opportunities to apply their skills and expertise. As FEMA officials they would have great incentive to find more and more phenomena they could persuade the president to declare as disasters or emergencies so their agency could prove its worth, serve public needs, and win more authority and larger budgets.

In contrast, empiricism is the collection of information about the physical and social “real” (existential) world, which is so essential to analytical approaches. Empirical research loses out if the social constructivist approach to disaster research dominates. This is because social constructivists are likely to routinely discount empirical information and scientific “facts” as mere products of individual or group constructions of social “reality” and personal belief systems. “A constructivist theory of social problems explains problems and policy issues by focusing on people’s actions rather than on the putative ‘conditions’ that are the object of those actions.” “Conditions” are alleged to exist and to have harmful qualities owing to issue advocates and claims makers. For example, television news reporters disclose certain important human needs that they allege or infer must be addressed by government. Also, political actors representing what they perceive to be the needs of various individual people or aggregations of people and interests issue clarion calls for action. Some of these people may be elected government officials, some may be officials representing an interest group, and some may be independent social advocates. Social media have added yet another mammoth layer of perceivers, constructivists, and claims makers. The concern here is how issue advocates and claims makers define problems and their policy solutions and how they are able to persuade others to take their concerns seriously, even to the point of getting them to act on those problems.
Today, constructivist theory is widely popular in many academic realms, including disaster sociology and political study. Social constructivist research has an important place in the intellectual sphere of emergency management. There is a growing body of scholarship, international in scope, predicated on social constructions of the disaster phenomenon. Much of it is insightful and much of it is relevant to political officials and their advisers. Political officials need to understand how people comprehend safety and danger, how they formulate judgments of risk and vulnerability, and how they gauge the effectiveness of disaster management (particularly given their role in the situation: disaster victim, unaffected observer, emergency responder, and so forth).

Social constructivism and its variants, however, do not represent the only intellectual paradigm through which to conduct disaster research. Several alternative theories and paradigms—such as scientific rationalism, empirical study, management theories, institutional studies, public policy analysis, and some interdisciplinary theories that link the physical and social sciences—offer more instrumental and application usefulness for emergency managers than does social constructivism.

Network Theory

The modern world of organization, including the world of government public organizations, is increasingly built and maintained through networked intelligence. Network theory is a field of computer science and network sciences and is also part of graph theory (the study of graphs and mathematical structures). It is often deployed to examine the method of characterizing and modeling complex networks. Many complex networks share some common features. Network theory is also applied to logistic networks, gene regularity networks, metabolic networks, the World Wide Web, ecological networks, epistemological networks, and social networks. It is applied in multiple disciplines, including biology, computer science, business, economics, particle physics, operations research, and, most commonly, in sociology. The use of networked information systems is critical in modern emergency management. As Gareth Morgan observes, “Information systems that can be accessed from multiple points of view create a potential for individuals throughout an enterprise, even those in remote locations, to become full participants in an evolving system of organizational memory and intelligence.” Networking through organizational information systems creates the possibility of achieving a shared organizational mind.

Extensive “between disaster” emergency management work involves preparedness activities including planning, simulations, and exercises. Facilitated by the Internet and the World Wide Web, government emergency managers have established immensely rich, and sometimes unnecessarily complicated, emergency plans and preparedness tools devised through elaborate networked intelligence exchanges among themselves and with others, including nongovernmental nonprofit and private sector partners and to a lesser degree the general public. Networked intelligence was championed to a great degree by advocates of the New Public Management of the 1990s.

Networked intelligence in disaster management is both a blessing and a curse. It makes needs more obvious and does so relatively quickly, it facilitates interorganizational coordination, it helps mobilize aid providers in a more coordinated and sensible fashion, and it expands the pool of participants in ways that may well serve the needs of disaster-stricken citizens and subnational governments. Conversely, networked intelligence is extremely difficult for organizational leaders to manage. Elected government executives and lawmakers are often hard-pressed to hold networked organizations and people accountable for failures. Networked organizations rely on technical resources (e.g., uninterrupted electricity flows, undamaged...
telecommunications infrastructure or infrastructure that can sustain colossal usage demands in emergencies, durable software, interoperability) that may not always be available when needed. Moreover, disaster victims may be unable to access the Internet for long periods or they may lack the ability to use modern computer-based information technologies required to make application for help.

Yet sometimes the failure of one communications technology may be addressed with another one. After the Moore, Oklahoma, tornado disaster in May 2013, FEMA dispatched to the damage zone a set of trained volunteers, as a Disaster Survivor Assistance Team, equipped with tablet computers. These people aided the tornado damage victims they encountered by helping them make online application for aid using prestored forms that, once completed, could be e-mailed immediately to the appropriate government disaster assistance offices. “FEMA officials are registering individuals on site with iPads.”

For better or worse, networked intelligence will be a dominant feature of public administrative organizations for many years to come. A great many deficiencies of networked emergency management were revealed in the slow and incompetent U.S. federal, state, and local governmental response to Hurricane Katrina in 2005. Dozens of post-Katrina investigations document the problems surrounding situational awareness, communications difficulties, and dependence on a massive and largely untested National Response Plan (NRP) (itself a manifestation of networked intelligence).

Principal-Agent Theory

Principal-agent theory assumes that managers function in an environment in which they cannot observe whether their agents in fact carried out the instructions they issued as principals. In addition, it assumes that agents hide information from principals and that agents may use the information to act in ways contrary to what principals intended. Principal-agent theory gives rise to performance-based government contracting studies.

For example, the study and use of principal-agent theory would not only help government emergency managers better understand the realm of contracting and grants management but would also press elected and appointed officials to work jointly toward achieving legal and policy goals. Thus, they would better be able to oversee and steer contractors to do what they are expected to do. Principal-agent theory may also help them oversee and influence the behavior of their grantees working in state and local emergency management organizations.

Principal-agent theory helps integrate normative noneconomic concerns with structured economic analysis. This approach involves refining situational logic. Principal-agent theory seems quite appropriate in the world of emergency management. Government emergency managers work in a universe of federal, state, local, and private sector agencies. An immense amount of government emergency management work is contract management, involving private contractors and nonprofit volunteer organizations. In a sense, government officials are principals who retain agents, in this case contractors, who in turn carry out various duties, functions, and tasks. Information flows among agents and principals. This information is used by policymakers and government officials and influences their decisions in matters of fund distribution, budgeting, planning, program administration, and management in general. Emergency manager principals might be well served by using normative factors (i.e., Was the public happy with the job the contractor performed? How quickly was work completed and how satisfied were clients or customers with the products and services they received from the contractor?) They may use structured economic analysis to help ensure that contractor agents addressing disaster-related needs are better guided toward achieving the goals emergency manager principals are legally and officially obligated to meet.
“Working the seams” is part of principal-agent theory. Public managers must know how to work the edges of administrative-legislative interaction, intergovernmental relations, agencies, and interest groups. They are gray zones. They are areas in which there is legal and administrative flexibility. Disasters and emergencies often require that emergency managers behave adaptively, bend or ignore rules that confound or delay their work, and establish new and often unusual modes of interaction with people and organizations they do not often encounter in normal periods. They need technical and analytical knowledge to do this. Their world is composed of agents, seams, and a technical core.

Intergovernmental Relations Theory

Three models have commonly classified intergovernmental relations: inclusive authority, overlapping authority, and coordinate authority. Although those relations in emergency management at one time more resembled a coordinate-authority model, they have moved through an overlapping-authority model finally to become an inclusive-authority model.

The coordinate-authority model assumes a sharp and distinct boundary between separate national and state governments. National and state governments appear to operate independently and autonomously, and they are linked only tangentially. Moreover, in the coordinate-authority model, local governments are somewhat dependent on their respective state governments.

Before 1950, disaster management in the United States conformed to the coordinate-authority model of federalism and dual federalism. The Stanford Encyclopedia of Philosophy defines federalism in the following way:

Federalism is the theory or advocacy of federal political orders, where final authority is divided between sub-units and a center. Unlike a unitary state [system], [in a federal system] sovereignty is constitutionally split between at least two territorial levels so that units at each level have final authority and can act independently of the others in some area. Citizens thus have political obligations to two authorities. The allocation of authority between the sub-unit and center may vary, typically the center has powers regarding defense and foreign policy, but sub-units may also have international roles. The sub-units may also participate in central decision-making bodies.

The period from 1789 to 1901 has been called the era of dual federalism, “characterized as an era during which there was little collaboration between the national and state governments.” However, in the period from 1865 to 1901, the national government began to move into several policy areas that had previously been the purview of the states.

In the coordinate-authority model, local governments often handled major disasters and emergencies on their own with only intermittent state government help and with very little federal help. When local governments could not cope, they sought state government help, usually petitioning the governor or state legislature. State governments coped with disasters and emergencies that largely affected state government assets, infrastructure, and interests. United States policy has long assigned the responsibility for disaster management to the government jurisdiction(s) that experienced the disaster. As Clinton-era FEMA director James Lee Witt used to say, “All disasters are local.” The responsibility for public safety is a local government role under American federalism.

From 1950 to about 2003, U.S. disaster management could be categorized as an overlapping-authority model. In the overlapping-authority model, substantial areas of governmental operations involve national,
state, and local governments simultaneously. In the overlapping model, areas of autonomy or single-jurisdiction independence and full discretion are relatively small. Power and influence for any one jurisdiction is substantially limited and authority patterns involve heavy bargaining.\footnote{61}

From a disaster studies viewpoint, if a disaster or emergency exceeded the response and recovery capacity of the local government, the local government executive officer (mayor, city manager, county executive, or the like) and the city or county council declared a “local disaster.” This was often followed by a local request for state and federal assistance. The governor may respond to the request by issuing a state declaration of disaster or emergency. Once the governor declares a state of emergency, the local government may then receive personnel, goods, services, and funding from the state to deal with the disaster. If the governor believes that the disaster may overwhelm the capacity of the state to manage the emergency effectively, the governor then sends the president a request for a presidential declaration of major disaster or emergency. A presidential declaration of major disaster mobilizes a multi-departmental, multi-program federal response conducted in coordination with state and local officials and agencies.

This overlapping, layered approach to local, state, and federal relations correlates with the overlapping-authority model. In this model, no one level of government is dominant, and no level intervenes in the affairs of another without the permission of that government.

The era of overlapping authority in U.S. disaster policy came to an end after the 9/11 terrorist attacks and with the ensuing enactment of the Homeland Security Act of 2002, the establishment of the U.S. Department of Homeland Security (DHS) in early 2003, and a succession of Bush administration presidential homeland security directives.

These changes—including the creation of a National Response Framework (NRF) and National Incident Management System (NIMS)—brought on an era of inclusive authority. Under the inclusive-authority model, each level of government has a diminishing proportion of responsibilities, from the national to the state to the local government level.\footnote{62} Under the inclusive-authority model the federal government plays a key coordinating role as the states and federal government cooperate and interact in certain critical areas. The inclusive-authority model assumes the sharing of power and responsibility, with the various participants working toward shared goals.\footnote{63} The model also conveys the essential hierarchical nature of authority. In some respects, the new homeland security paradigm has made states and localities “mere minions of the national government.” The role of the state as the “service delivery arm” continues as it has since 1950. However, the federal government provides “its vast resources” as a new backstop for state and local governments.

In the inclusive-authority George W. Bush era, homeland security presidential directives, several new federal laws, and a battery of new federal grant programs were introduced. Collectively, these measures dictated to local governments the exact steps they were expected to take in emergency management. These measures placed terrorism preparedness above preparedness for all other types of disaster agents. The effect of these reforms was to move both emergency management and homeland security toward “nation-centered” federal dominance within an inclusive-authority model. DHS authorities told states and localities that they would be heavily consulted and welcomed “partners.” Yet the profusion of “top-down” directives and the vast sums of federal money used to steer states and localities in various directions have left little space for state codetermination and even less local freedom of action.\footnote{64} In the Barack Obama era, the inclusive-authority model remains paramount, though tempered by extensive efforts to include state and local interests in formulating disaster mitigation and disaster recovery frameworks (DRFs) for emergency management. As in the previous administration, federal pre- and post-conditional disaster assistance has a major impact on how state and local government participates.
COMPLEXITY THEORY, THE COMPLEXITY PARADIGM, AND SELF-ORGANIZATION

Complexity theory is a possible and evolving framework for understanding the nature of “wicked” problems. Social systems, including the public policy process, are complex. From a complexity theory perspective, public policy is “a self-organizational and dynamic complex system.” Complexity theory illustrates that policy problems are dynamic, that the policy process has multiple interacting components, and that multiple actors have conceptually unique mental models of policy problems. Core concepts of complexity theory—self-organization and system dynamics—can inform our mental models of social systems to help us understand and solve wicked problems. There is as yet no unified complexity theory. Moreover, complexity theory embodies models and methodologies of many other theories. Some consider it a descendant of systems theory. Morcol’s work is mentioned here because it represents an early effort to develop a framework for complexity theory in the realm of public policy. He employs terms such as nonlinearity, systems, complexity, emergence, self-organization, system dynamics, and coevolution.

The complexity paradigm differs from complexity theory. A paradigm refers to how groups, particularly academic groups, go about determining and sanctioning what constitutes knowledge in their respective disciplines or fields. Paradigmatic theory holds that what constitutes knowledge is subject to possible dramatic or comprehensive change over time as a function of new breakthrough information or inventions, or change in the collective thinking of experts in a field. This change tends to undermine, refute, and delegitimize what was once “conventional” and accepted ways of studying and conceiving of a subject.

K. Smith maintains that “Most successful paradigms capture best practice from the past and absorb that experience into a fresh approach.” In brief, Smith’s complexity paradigm is in a formative stage; is informed by many different disciplines and fields; emphasizes disaster mitigation and long-term recovery rather than predominantly preparedness and emergency response; and incorporates vulnerability study, resilience, well-engineered public works, sound land-use planning, plus effective humanitarian assistance. The complexity paradigm assumes that humans are not simply victims of disaster, but that humans themselves “contribute to hazardous processes and to disaster outcomes.” The complexity paradigm makes a good case for interdisciplinary knowledge sharing and collaborative research in the disaster field generally. It also advocates ratcheting up the scale of research to consider global environmental change.

Self-organization is a possible basis of democratic management processes. It incorporates egalitarian ideals such as decentralization and democracy participatory schemes. Self-organization is a type of thinking that imbues spontaneity and autonomy. Also, under certain conditions of self-organization, internal and external influences may bring about systemic change. However, a self-organizing system may reorganize its internal structures spontaneously and adaptively to cope with or manipulate its environment. Moreover, a self-organizing system may react to outside forces by transforming itself even as it affects change in its environment. The evolution of self-organizing systems can take two paths: one in which system properties begin to break down or one in which new system properties emerge.

ANALYSIS OF COMPLEXITY THEORY

Emergency managers use the Incident Command System (ICS) to help them organize people and resources during a response. The ICS self-organizes, coevolves, and reorganizes in response to external stimuli stemming from incident demands and does so as a way to cope with a constantly changing situation. For example, if news media people show interest in reporting the incident, emergency managers may assign a
Public Information Officer to interact with the media. If numerous other jurisdictions and interested governmental organizations become involved, the emergency manager may establish a Liaison Officer function to coordinate stakeholder concerns and address them through the operational planning process and within an incident action plan.

Public participation as a self-organizing system emerges in two forms. One, individuals with common interests can emerge independently and aggregate as a community of interest (COI), or two, COI can emerge already organized. In the first case, individuals generally emerge spontaneously. Most are unaffiliated with any group or formal organization working with response organizations. Second, in emergency management, these are generally associated with nonprofit organizations impelled by a mission that overlaps that of government response organizations. For example, in some disasters the Audubon Society has a network of volunteers who observe and record wildlife over time to assess ecosystem change. During oil spill responses, those same volunteers mobilize to monitor oil spill impacts and observe for oiled wildlife. Regardless of form, individuals and communities with combined capabilities can take independent action serving typical official government functions. Sometimes they may respond faster than official government emergency responders.

The ICS includes a procedure designed to facilitate official responder interaction with individuals or COIs seeking to participate in the response. The mechanism evolves in scale and scope given the demand for public participation. However, regardless of the form public participation takes, ICS cannot produce new system properties and it eventually breaks down. Though ICS is designed to include a volunteer coordination unit if necessary, often emergent individuals and COIs come to conclude that they have not done enough to encourage or make the best use of emergent volunteers. The public is frequently dissatisfied because they believe self-organization of people in the response phase does not adequately consider local citizen concerns, especially their desire to participate, control their own destiny, achieve legitimacy, and build community capacity.

Although the spontaneity of public reaction is uncontrollable, the conditions leading to it are controllable. Morcol suggests that a dissipating or dispersive social structure takes one of two paths to cope with and manipulate its environment: one in which the system properties break down or one in which new system properties emerge. Federal emergency managers are encouraged to look toward state and local governments to avoid system breakdown. State and local governments understand the unique needs and behaviors of their citizens better than the federal government. State and local governments have rapport with individuals as well as affiliated volunteer groups and know best how to use their collective efforts to achieve larger goals of the response. State and local governments should lead and facilitate public participation even when part of a federal response system.

A challenge for federal emergency managers is the lack of a theory they can use to help them model governance of public participation. Complexity theory solutions may help them manage through structural evolution and chaos. Also, some normative political theory solutions, such as Jeffersonian, Hamiltonian, and Jacksonian theories presented earlier, may help them find ways to accommodate, nurture, and include public participation. The relationships between citizens desiring to participate, the official management structure, and the leadership paradigm are perpetually dynamic. These relationships embody interacting components. All of this takes place in an environment characterized by uncertainty and incomplete information. The goal of the emergency manager is to recognize the forms of public participation that emerge and to adapt the response structure and leadership paradigm in a way that enables people to meaningfully participate.

The core concepts of complexity theory help explain why there are public participation problems. The theory does so by taking into account the influence of self-organization and system dynamics within social
systems. Social systems of public participation and governance are comprised of, and influenced by, individual and organizational actors. Moreover, these systems have internal and external environments. Volunteers, whether individuals or COIs, have internal motives and goals as well as external motives and goals. Internal forces may affect external interactions and vice versa. A self-organizing governance structure should maintain dynamic instability. This helps it to achieve new structures or forms in an environment that is increasingly complex. Self-organization of participation involves constant renewal and openness to feedback from internal and external sources.

Emergency managers, regardless of the level of government they work on, should bring their response organization closer to the community and allow citizens in various ways to participate in decision making. This goes against the standard management assumption that managers are core, unilateral decision makers who seek to remove uncertainty and add clarity when information is incomplete. Managers should abandon the notion that they can control public participation centrally. Instead, through collaboration and close coordination, they should allow state and local authorities and the public to consensually decide how to organize during disasters. Disaster managers at the state and local levels should not surrender to federal control but they should instead organize in partnership with federal authorities.

Complexity theory is advancing a reconceptualization of public policy that seeks to integrate social constructivism and rational-scientific positivism. The reason it is included here is because complexity theory may make major contributions to the field of disaster study and management in the near future. It seeks to make policy study more natural, physical, and biologically scientific while at the same time accommodating postmodern assumptions about human individual and collective behavior. Whether or not complexity theory will provide new illumination for emergency managers remains an open question.

**TOWARD A THEORY OF DISASTER RECOVERY**

Disaster researchers over several generations have been challenged to research a phenomenon that defies simple definition. Disasters are by definition episodic and therefore information about them tends to be highly perishable. They are often outside the realm of whatever defines “normalcy” (itself a controversial subject) and disasters are experienced differently by different individual people, be they as individuals, in families or groups (be they social, political, or economic in nature), or as formal elected or administrative officials of some type. Disasters transpire in several different environments or contexts: natural, personal, familial, community/social, political/governmental, economic, cultural, ecological, geographical, physical/structural, news/communication, and more. It is not possible to examine all of these environments here, but the political and governmental environment represents a start and the problem of disaster recovery is a worthy target.

There are many theoretical approaches from which to examine disaster recovery. However, it is arguably difficult to set forth common “principles” of disaster recovery, elucidate ways to measure recovery and the course it takes, and chart ways to model future recovery. However, it is possible to build theories that help those on the “public management and public policy side” of the disaster phenomena. Over many months, FEMA established in consultation with a great many state and local stakeholder groups a National Disaster Recovery Framework (NDRF) (see the “How Things Work” box). The NDRF promotes management and consultation schemes by which FEMA and its stakeholders can plan disaster recovery long before disasters occur. Officials leading this effort may have considered theories of public participation of the type examined here. If so, they may succeed in facilitating, improving, and refining pre-disaster recovery planning work of
TOWARD A THEORY OF DISASTER RECOVERY

people residing in local governments, communities, and neighborhoods across the nation. This work may produce conceptual tools, variables, and data sets that may allow for broad development and application of disaster recovery theory. Such theory creation may help emergency managers and disaster researchers better measure, model, and generalize about how local people as individuals or as part of a COI plan and make possible their disaster recovery.

Theory tools in the realm of disaster recovery are in high demand for several reasons. First, as mentioned before, they help transcend the case study realm by positing that all disasters are “not unique.” In other words, disasters and disaster recovery often embody certain identifiable commonalities. If these commonalities are understood such that generalizations are possible, a worthwhile disaster recovery tool may be forged that will allow for improved disaster recovery planning and eventual implementation. Second, theories manifesting broad explanatory power often facilitate knowledge creation and application that is less ethnocentric or single-nation centered and more international, culturally sensitive and diverse, and teachable. Third, they provide a bridge for the healthy interchange of academic knowledge and practice knowledge.

Exploring What Recovery Might Mean

Let’s begin by asking whether disaster recovery is an “end state” or a “dynamic.” At the risk of stating the obvious, for a nation manifesting in whole or in part features of democratic governance, disaster recovery is a dynamic which, for that respective nation, can succeed in varying degrees or fail in varying degrees, subject in part to public judgment and political opinion. The notion of an “end state” for disaster recovery is arbitrary because to identify a fixed “end state” is to form individual value judgments in subjective ways about a condition of finality. Also, governments and subgovernments of virtually every nation are constantly undergoing change, sometimes gradually and subtly or other times comprehensively and dramatically. Consequently, it makes sense from a governmental perspective to approach disaster recovery as if it were a dynamic and evolutionary phenomenon. Governments in nations with established systems of emergency management tend to form and implement disaster recovery in accord with pre-disaster adaptable plans and processes. However, it would be a mistake to categorize any government’s disaster recovery approach or condition as merely composed of organized processes. Also, the “recovery process” should not be the exclusive focus of those who build disaster recovery theory.

Is recovery “replacement of a rapid loss in a defined area?” Is it a matter of addressing needs, distributing resources, or reducing conflict? Is “recuperation” a matter of correcting an imbalance? These are all excellent questions to which the general answer is affirmative.

Is there such a thing as “holistic recovery”? Holistic recovery, or in federal emergency management parlance “whole community” recovery, may be a worthwhile and even admirable social and political goal in the sense that such recovery seeks to address the needs, and sometimes losses (see chapter 9), of those negatively affected by a disaster in a broadly equitable, fair, democratically responsive, and compassionate way. However, holistic recovery is something that is not yet accepted public policy in nations of the world, and this includes the United States. Equity, fairness, and compassion are in the language of international relations “soft norms” subject to interpretation that varies by one’s personal and cultural values.

Should a theory or theories of disaster recovery be customized for specific forms of hazard? From a governmental perspective the answer is “arguably” affirmative. While an all-hazards approach to governmental emergency management has many attractive features, different types of hazards require different (though
According to FEMA, the NDRF is a guide that enables effective recovery support to disaster-impacted states, tribes, and territorial and local jurisdictions. It provides a flexible structure that allows disaster recovery managers to operate in a unified and collaborative manner. It also focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of disaster-stricken communities, cumulatively making the nation more disaster resilient.

The NDRF represents substantial fulfillment of a portion of Presidential Policy Directive 8 (PPD-8): National Preparedness, which directs FEMA to work with interagency partners to publish a recovery framework. It is the first framework published under PPD-8, and it advances core recovery capabilities by supporting operational plans as an integral element of a National Preparedness System. As PPD-8 requires, the NDRF seeks a shared understanding and a common, integrated perspective across all mission areas—prevention, protection, mitigation, response, and recovery—so as to achieve unity of effort and to make the most effective use of the nation’s limited resources. The NDRF is also the product of efforts to meet requirements of the Post-Katrina Emergency Management Reform Act (PKEMRA) of 2006, which called for FEMA to develop a National Disaster Recovery Strategy.

The NDRF creates three positions that provide focal points for incorporating recovery considerations into the decision-making process. People in these posts monitor the need for adjustments in assistance where necessary and feasible during the recovery process. Those positions are as follows:

- Federal Disaster Recovery Coordinator (FDRC)
- State or Tribal Disaster Recovery Coordinator (SDRC or TDRC)
- Local Disaster Recovery Manager (LDRM)

People holding these new positions will have the flexibility to be assigned to some of the hardest hit areas as a result of large-scale and catastrophic disasters so that as a community and a team, the federal government and its partners can ensure a speedy and smooth recovery process.

FEMA calls the NDRF a conceptual guide designed to promote coordination and recovery planning at all levels of government “before a disaster transpires.” It defines how six federal agencies will work together, following a disaster, to best meet the needs of states, local and tribal governments and communities, and individuals during their respective recoveries. People using the framework establish coordination structures, define leadership roles and responsibilities, and endeavor to guide coordination and recovery planning across all levels of government before a disaster occurs. It aims for better use of existing resources; faster and trouble-free application for government assistance; local
TOWARD A THEORY OF DISASTER RECOVERY

Consensus about how, what, and where a community will rebuild after a future disaster; and pre-disaster consultation with all COIs and stakeholders.

Recovery Support Functions

NDRF introduces six Recovery Support Functions (RSFs) that are led by designated federal coordinating agencies. The RSFs comprise the coordinating structure for key functional areas of assistance. Their purpose is to help support local governments by facilitating problem solving; improving access to resources; and fostering coordination among state and federal agencies, nongovernmental partners, and stakeholders. The RSFs and six designated federal coordinating agencies are as follows:

- Community planning and capacity building: FEMA
- Economic: U.S. Department of Commerce
- Health and social services: U.S. Department of Health and Human Services (HHS)
- Housing: HUD
- Infrastructure systems: U.S. Army Corps of Engineers (USACE)
- Natural and cultural resources: U.S. Department of Interior

The NDRF was developed in partnership, and through extensive outreach, with federal, state, local, tribal, private, and nonprofit partners who have a stake in the immediate and ongoing recovery following a disaster. Outreach sessions began in the fall of 2009 led by the Long-Term Disaster Recovery Working Group. This generated thousands of comments and recommendations from more than 600 stakeholders representing federal, tribal, state and local governments, public and private organizations, including communities recovering from disasters.

The NDRF, for the first time, defines how, as a nation, the United States will approach disaster recovery. The framework establishes coordination structures, leadership roles, and responsibilities and also guides recovery planning at all levels of government well in advance of possible disaster.

The NDRF introduces RSFs that are led by designated federal coordinating agencies. These coordinating federal agencies support state, local, tribal, and private sector groups with community planning and capacity building and also regaining economic stability, rebuilding infrastructure, restoring health and social services as well as natural and cultural resources, and meeting the housing needs of residents displaced by disasters.

In addition, the NDRF recommends and identifies key recovery leadership positions designed to allow for more concentrated focus on community recovery. These include SDRCs or TDRCs and LDRMs, as well as a FDRC when needed for large-scale and catastrophic disasters.

The effective implementation of the NDRF, whether or not in the context of a presidential disaster declaration, requires interagency cooperation and engagement across all levels of government and support from NGOs, COIs, and the private sector. NDRF concepts also present an opportunity for emergency managers and others to increase collaboration and coordination of recovery resources.

The NDRF sets forth a clear structure for interagency and nongovernmental partners to align resources and work together to support recovery in a holistic, coordinated manner.
perhaps often overlapping) types of theory. There are different sets of rational/scientific theories used to study various types of disaster agents (i.e., the geosciences for seismology, and meteorology for atmospheric phenomena). To draw from these theories in disaster recovery studies requires differentiation by type of hazard.

We exist in a world of complex systems. There are social, economic, and political systems, as well as engineered systems, to name a few. Even our domiciles represent systems. Buckminster Fuller long ago sought “a house that would function like a machine to improve the quality of life for its inhabitants,” as well as to maintain the health and safety of the occupants. Many such systems are joined or interlinked. A theory is a “relational statement.” Perhaps the best we can do is to fashion a “framework,” which is perhaps the thinking behind the NDRF. Also, we cannot overlook the need for state and local input on matters of disaster recovery.

This being said, it is also true that different types of hazards have different sets of political clientele. Theory about disaster recovery might well be shaped by the interests and motives of those preoccupied with the nature of the hazard that may be imputed to have caused the disaster. From the perspective of government and governance, theories of disaster recovery should take into account the type of hazard and the type of damage associated with that hazard. Birkland has demonstrated that certain types of hazards have identifiable sets of political interests. Few who work the emergency management field would dispute the claim that in the United States there is an “earthquake” COI. More precisely, certain types of hazards have their own communities of practice (CoPs). These are groups of people who share a concern or a passion for something they do, and they learn how to do it better as they interact regularly. The difference between a COI and a CoP is that members of a CoP are practitioners.

COI has a social rather than spatial definition:

A community of interest is a gathering of people assembled around a topic of common interest. Its members take part in the community to exchange information, to obtain answers to personal questions or problems, to improve their understanding of a subject, to share common passions, or to play. Their synergy cannot be assimilated into that of a formal group motivated by a common goal. Communities of interest have a variable lifespan. Some appear and disappear at soon after their creation, while others thrive for years. Often they divide into smaller communities.

This stems from fragmentation of the membership owing to people’s interest in various specialized topics. COIs form in both the in-person world and the virtual world, sometimes simultaneously. For example, a COI that formed around the issue of safe room protection for children while at school in the aftermath of the Moore, Oklahoma, area tornado in 2013.

There is a “hurricane” COI, a “flood” COI, and a “tornado” COI, to name a few. Likewise, each of these has a CoP. Moreover, for human-caused hazard agents there are “nuclear,” “hazardous material,” and “terrorism” COIs and CoPs (and terrorism itself is fragmented into a variety of subinterest communities—border security, immigration control, bioterror, cyberterror, intelligence gathering, infrastructure protection, etc.), as well as several more.

Conversely, some existing theories, risk analysis theory for example, may be appropriate and applicable regardless of hazard type. Some theories from economics, including public finance, public budgeting, and welfare economics, may have suitable applicability regardless of the type of hazard agent that caused or initiated the disaster. Certain sociological and communications theories may have all-hazard utility as well.
Regardless, some differentiation of type of hazard and location of damaging effects seems necessary in order that recovery theory break out appropriate categories of intermediate theory. These may become nested theories within a broader master theory or they may stand independent. There are different social scientific theories, either positivist (scientifically objective and behavioral) or normative (incorporating values), which offer varying degrees of explanatory power when applied to different types of hazards that carry disaster potential. Democratic, bureaucratic politics, social choice, principal-agent, network, and complexity theories may all have a place.

What are the barriers to recovery? There are an immense number of barriers in disaster recovery: government versus private sector disputes over property rights versus the public interest, legal liability issues, cost incidence (to whom will the costs of recovery ultimately be shifted and ultimately absorbed and what recourse do other parties have in escaping these costs?), migration of individuals and families away from the zone of damage, the permitting required to undertake major capital reconstruction whether public or private, and so on.

Disaster Recovery Theory and Local Economics

There are both formal and informal economies in communities. These are affected by disasters and often deserve reconstitution in some form in the wake of disaster. Also, social conditions may shape economic recovery. Not to be overlooked is that informal economies may be an essential part of a local community.

Disasters affect household economics, sometimes in profound ways. Those who provide disaster relief to households must understand how household economics were managed before the disaster, as well as how they are managed, or were managed, after the disaster. It is important in the sequencing of aid that the correct form of relief is offered at the correct time. Recovery is a measurement of household losses and disaster costs. Recovery involves planning of, and appropriate design and application of policy instruments that equitably and fairly facilitate household recovery.

Disaster recovery researchers often overlook “quality of life issues” for those affected by disasters. What does it mean when a neighborhood loses a beloved public school, recreation center, or library? Disaster recovery theory also needs to grapple with the issue of valuing the services that the environment produces in natural ways for humankind. Major damage to the natural environment may affect local livelihoods, flood abatement, agriculture, forestry, potable water sources, as well as local plant and animal life.

Recovery resources and activities inside an impacted community must be harmonized and reconciled with the recovery resources and activities introduced to the impacted community from the outside.

There is also the matter of “public economics.” Governments affect the climate or environment of business by providing incentives and disincentives for various types of business activity. Governments establish laws and rules that regulate business and trade. Governments use taxes as much as direct public spending to encourage or discourage various business behaviors as well as to regulate private markets on behalf of both consumers and business in general. All of this is directly relevant to a theory of disaster recovery for households. Taxation, particularly through broad gauged measures like property, sales, and income taxes, is a way in which “the many may subsidize the few.” Ideally, the economic sacrifice imposed on the many should be light while the benefits disbursed to the few (say those in disaster-ravaged communities) may be substantial. However, economic recovery within any governmental jurisdiction depends on willingness-to-pay and ability-to-pay questions. Many states lack willingness to pay for and create state disaster relief programs that parallel those of FEMA—even when those states have the means to do so. Yet it is also true that many states
and localities lack ability to pay for pre-disaster mitigation endeavors that would serve a public interest owing to their chronic economic conditions.

In these economic terms, what is a successful disaster recovery, and will we know it when we see it? A successful disaster recovery may be one that redresses historical issues. Consider the Tennessee Valley in the United States. Before the 1930s, the valley was long vulnerable to repeated major flooding. The Tennessee Valley Authority (TVA), a federal regional agency, engineered and built flood control projects, through fundamentally structural flood mitigation solutions, which helped advance the entire regional economy of the valley. Construction of the massive system of flood works and hydroelectric generation stimulated local businesses and created tens of thousands of jobs in a region then economically depressed. Economic revival was one of President Franklin D. Roosevelt’s express purposes: the TVA projects produced major public goods and foremost improved flood abatement and hydroelectric power that generated low cost electricity in abundance and new recreational lakes from water impoundments created by the dams.

Disasters create economic winners and losers. Some economic sectors lose while others gain. Disasters often redistribute wealth such that impacted communities are poorer while nearby unaffected communities gain at the damaged community’s expense. In another sense, the economic stimulation that outside funding, investment, and in-kind contributions provide often has a beneficial economic multiplier effect for the recovering locality.

Yet government officials are challenged to appropriately read market signals. In certain periods, outside direct cash and in-kind assistance is essential in both response and short-term recovery. However, it is also true that sometimes outside cash and in-kind assistance offered for too long seriously slows the revival of the local economy as people will tend to prefer the “free” goods offered as disaster relief over paying for locally produced products as they did before the disaster. Government disaster recovery needs to be adept at gradual scale-down and disengagement.

Local (and sometimes even regional and national) economics are affected by public perception. People want reassurance that public safety is being maintained.

Few businesses are more interlaced with matters of disaster and disaster recovery than is the business of private insurance. Almost every line of insurance involves risk from disaster-induced loss at primary, secondary, or tertiary levels. However, insurance involves matters of valuation and indemnification. How much is a life worth? How much insurance does one need to purchase to be adequately covered against exigencies; remember that “adequately covered” relates significantly to the ability to recover from disaster economically, whether a large or small business, a public entity, a nonprofit, or a family.

Disasters may entice businesses to relocate from a damage zone. Another dilemma for businesspeople in disaster recovery is deciding whether or not to let a business fail after a disaster. Often if the business was already failing “before” the disaster, the decision to cut losses via shutdown or relocation may seem appropriate. Some businesses are too marginal to properly insure themselves against the costs and losses a disaster can impose. Perhaps a theory of disaster recovery needs to imbed a triage system in which the following occurs:

- Businesses that would have most likely failed and that have little chance of recovery regardless of financial assistance, should be left to declare bankruptcy if they so choose.
- Businesses that were “not failing” before the disaster but that would surely fail without post-disaster financial aid would deserve and receive public assistance.
- Businesses that were healthy, adequately insured, and likely to rebound without financial aid should receive little or no public financial aid.
The scale of the disaster needs to be compared to and contrasted with the scale of the firm affected. Government post-disaster aid to business is often conditional: it may come in the form of loans, loan guarantees, tax abatement, etc. Insurance claims filed for physical loss, business interruption, workmen’s compensation, and so forth, may assist firms that were covered by these policies before the disaster.

Few would contest that for-profit firms play major roles in disaster economic recovery but so, too, do nonprofit organizations (see chapter 6). To what extent do results and findings of disaster recovery hypotheses testing reveal unmet needs of disaster recovery? Because NGOs often work to address unmet needs created by gaps in conditions of governmental disaster relief, a sound theory of disaster recovery should examine the record of NGO performance in disaster recovery.

Sound recoveries involve hazard risk management and hazard risk reduction. Resilience in economic terms involves pre-disaster surpluses and shortages. Resilience also relates to actions taken during recovery.

Several variables are key in developing metrics of disaster recovery, including rules, systems, values, scales, interest, time frames, infrastructure, and process. These involve a variety of dimensions and contexts. A sound theory of disaster recovery would be one that compiles information on these variables in an integrated way. If disaster recovery is very much a matter of correcting imbalances, what barriers affect the variables important in disaster recovery? How can the identified imbalances be corrected? Did a recovery succeed because it was conducted rapidly (time, time frames)? Was the recovery well conceived methodologically (process, scaling)? Was recovery made possible by properly engineering rebuilding (infrastructure)? Was the recovery achieved because it manifested sustainability features (systems, process, values)? Did it succeed because it was not obstructed by regulation (rules)? Or did it triumph owing to its responsiveness to the needs of disaster victims of all types and circumstances (values, interests)?

Is disaster recovery radical and transformative, or is it inherently conservative, as determined by insurance payouts and relief aid that returns disaster zones to their near exact pre-disaster economic conditions? Disaster recovery in some places may rest on a conservation strategy of “pick up the pieces” and let's figure out how to keep going. Deciding whether a recovery is radical, transformative, conservative, or minimalist is a matter best left to local people and local authorities in a damage zone.

The work invested in developing a worthwhile theory, or set of theories, about disaster recovery promises important long-term payoffs. The NDRF provides a platform for potential disaster recovery stakeholders to advance plan customized recovery. It also creates a realm of analysis for disaster researchers contributing to disaster recovery theory building.

Disaster Victims and Clients as Customers

This chapter opened with a review of Jeffersonian-oriented emergency management. Owing to the professionalization of emergency management, the Hamiltonian perspective was shown to be gaining ascendance over the Jeffersonian approach. Regardless, the rise of the *reinventing government movement* in the 1990s and the modern management consultant conclusion that organizations need to rediscover the importance of customer satisfaction, have given Jeffersonian and Jacksonian emergency management reinvigoration.

Increasingly, customer satisfaction has become a focus of emergency management. The Clinton-era reinventing government effort offered low-level administrators more power. However, low-level administrators must have the training and experience necessary to assume more responsibility. Under James Lee Witt, FEMA assiduously embraced the reinvention movement. Customer satisfaction in government work has a ring of Jeffersonianism and is something relished by Jacksonian emergency managers as well. Clearly, no agency or
profession can afford to ignore customer satisfaction very long without losing credibility, clients, and positive public reputation. However, although customers may help professionals identify unmet needs, in no profession do customers actually define the nature of professional work.

Still, if emergency managers are judged to have failed in meeting the legitimate needs of people seeking post-disaster government aid, then they have also failed in the criterion of customer satisfaction. Policy analysts have been slow to recognize the utility of customer satisfaction studies in measuring the effectiveness of government disaster assistance programs. The failures of FEMA and a host of other state and local emergency management organizations in the days and weeks after Hurricane Katrina struck in 2005 impelled Congress to launch a host of investigations about why victims’ needs were not addressed faster and more effectively. One lesson relearned by emergency managers after the Katrina debacle is the importance of public responsiveness and customer satisfaction. Catastrophic disasters produce a vast array of citizen (and subnational government) needs. Meeting those needs expeditiously and competently is a daunting challenge to emergency managers.

**KNOWLEDGE CODIFICATION AND KNOWLEDGE DIFFUSION ISSUES**

The experience and actions of any organization are based on a blend of tacit, or uncodified (unwritten), knowledge and structured, or codified, knowledge. Tacit knowledge (acquired by observation, practice, experience, mentoring, etc.) is vague and ambiguous and depends on sharing expectations and values through social relationships. Codified knowledge, meaning written knowledge, is impersonal and learned through thinking and reasoning, not social relationships. To manage well, do emergency managers need to operate in face-to-face forums (that are consensual, democratic, Jeffersonian, and based on tacit knowledge)? Or might they achieve their goals by imparting technocratic knowledge, which is produced from data analysis, repeated experimentation, scientific study, Hamiltonian behavior, and codified knowledge? This may depend on whether codified knowledge is diffused or undiffused knowledge. Diffused codified knowledge is written down and openly available so that audiences outside government can use it. If knowledge is codified but not diffused, it sits contained within the bureaucracies. Someone could master this knowledge only if he or she worked inside the bureaucracy and learned internal rules and unique types of information. If knowledge is diffused but not codified, those entering public management positions from the outside stand little chance of coordinating the work of others, unless they receive help from those inside or they have the time to learn the uncodified information as government employees. To succeed under conditions of diffused, tacit knowledge, a public manager needs to “learn the agency.” Managers would have to learn from mentors.

Unfortunately, a considerable share of federal emergency management knowledge, if recorded at all, is partially codified but not sufficiently diffused beyond the agency. The *U.S. Code of Federal Regulations* sets forth the core rules of federal emergency management, but it does not elucidate the essence of what emergencies and disasters are and it does not explain how to actually do emergency management work.

Some federal emergency managers have codified their expertise, but much of this information resides within the bowels of various agency offices; a possible exception is the National Emergency Training Center within DHS-FEMA, which disseminates codified emergency management knowledge and trains state and local authorities and managers. However, according to former FEMA attorney William Cumming, “the real disaster tradition was oral, not in writing, and ad hoc rather than procedural.” Moreover, FEMA and its progenitor agencies lacked “history divisions” (common at the Department of the Army, U.S. Department
of Energy [DOE], Nuclear Regulatory Commission [NRC], the National Aeronautics and Space Administration [NASA], and other departments and agencies) or institutional memories that were more than merely the recollections of employees who have worked there.

A fiefdom or cult of personality results when management knowledge is both uncodified and undiffused (inaccessible) or kept secret by government classification. Such may have been the case in J. Edgar Hoover’s Federal Bureau of Investigation (FBI) many years ago. Management control then becomes highly personal-ized, unreviewable, and not appealable. Some fear that the advancement of emergency management largely depends on high-profile, charismatic figures chosen to lead agencies like FEMA or state and local emergency management agencies. If emergency management know-how depends heavily on a cult of personality, there is little hope emergency management will be professionalized.

In uncodified but diffused situations, clans are the norm and people learn by being socialized. Those selected to join the U.S. Diplomatic Corps face this type of situation. Diplomatic histories are many but inadequate to train potential diplomats. Before they are officially entrusted to do U.S. diplomatic work, new diplomats must be socialized to the State Department’s way of doing things. Certain first responder emergency management occupational specialties (fire services and law enforcement), too, put great emphasis on socialization and mastery of tacit knowledge and of codified knowledge not widely diffused to those outside the occupational specialty.

If emergency management is basically learned through apprenticeships within emergency management agencies, few in the academic profession will be drawn to the field. If that is the case, the growth of the field of emergency management will be a function of in-house training, not of broadly based advancement of emergency management education and published research.

SUMMARY

This chapter furnished an overview regarding how and where theory knowledge might contribute in the evolution of emergency management as a profession. It also demonstrated how people new to the field can draw from this chapter’s theories and concepts to independently analyze disaster policy as a domain of public policy.

The chapter began by summarizing three simple normative theories: Jeffersonian, Hamiltonian, and Jacksonian. Hamiltonian theory and assumptions hold out the best prospect for professionalizing the work of emergency management. However, Hamiltonian emergency management embodies an authority of expertise for emergency managers. They must learn and apply a growing body of knowledge—some of it practical knowledge and some of it academic knowledge. Jeffersonian theory has many laudatory features in that it rests on public participation, public assent, democratic principles, and local priorities. Jacksonian theory has a place insomuch as it applies well to the current politicized environment of disaster policy, emphasizes state and local control, and demands a new order and style of emergency management leadership.

Bureaucratic politics and matters of administrative culture permeate emergency management and disaster policy in the United States. Understanding models and concepts of bureaucratic politics helps one analyze power relationships in disaster policy and management. Also hugely important is intergovernmental relations theory. Owing to the U.S. system of relations between federal, state, and local governments and because other parties outside of government are heavily involved in “governance” of this policy domain (for example, non-profit organizations active in disasters, corporately owned utilities, special district governments, and armies
of trained volunteers), intergovernmental relations is one of the most critical components of disaster policy. This is true both in the formulation and implementation of that policy.

Principal-agent theory, network theory, and complexity theory were briefly examined as potential worthwhile theory tools for both analyzing and conducting emergency management. The chapter also included a review of topics ranging from customer satisfaction to a commentary about how emergency management knowledge is produced and how it is learned by others.

**KEY TERMS**

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