

The Bricoleur and the Possibility of Rescue: First-Responders to the Flooding of New Orleans

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In this paper, we interviewed first-responders to the 2005 flooding of New Orleans to discern and make sense of what they thought and how they acted in a protracted moment of terror. Viewed from a certain angle, the behavior of first-responders is a window onto a self stripped of convention and the mundane protocols of proper conduct. First-responders, we argue, often employ a cleverness that does not recognize itself as such. Measured against the principles and standards of official training manuals and tests, “clever” first-responders might appear to be reckless or incompetent. A shape-shifter, assuming whatever forms are necessary to accomplish the tasks at hand, the first-responder resembles in action and character the bricoleur, that person who alters and transforms ideas and materials to create new and innovative approaches to the world (Levi-Strauss 1966). It is not rationality per se that guides the bricoleur, but neither is his or her behavior irrational, though it may at times appear something other than reasonable. A grounded imagination operates through an admixture of disposition, intuition, emotion, intellect, and the acumen of the body. Neither rational nor irrational, the bricoleur behaves in, what Dreyfus and Dreyfus call, an “arational” manner (1988, 35-36).

“Education is what remains after one has forgotten everything he learned in school.”

Albert Einstein (1951, 17)

Monday morning, August 29, Hurricane Katrina came ashore near the village of Buras, not an hour's drive from New Orleans. Laying waste to lower Plaquemines parish, the storm veered a bit east, sparing the city a direct hit. It appeared, for a brief while, like another near-miss. But as the winds blew eastward, the water surged to the west, racing through Breton Sound to Lake Pontchartrain and that devilish U.S. Army Corps project known locally as MRGO, the Mississippi River Gulf Outlet. As the storm scoured the bottoms of levees, laying them over like so many dominoes or literally submerging them in walls of water, the saucer that is New Orleans quickly filled.

Without pumps the water in the saucer had nowhere to go. It stayed for the better part of two weeks. Probably less than 80% of New Orleans' roughly 460,000 residents evacuated to higher ground. While many more people evacuated than stayed in town, approximately 100,000 residents remained in harm's way. A massive rescue effort ensued.

This paper focuses on the actions taken by a variety of personnel who acted in their official capacities as first-responders to the flooding of the city. The Department of Homeland Security offers this definition of the official first-responder:

(T)hose individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations (www.dhs.gov/xfrstres).

Sociologists of disaster and other applied science-oriented people have conducted dozens of studies on what are called "first-responders," people who enter these voids to rescue other people who are trapped in this unscheduled moment of terror (see, for example, Quarantelli and Gray 1986; Mileti and Fitzpatrick 1992; Drabek 2002; Kendra and Wachtendorf 2003). Rescuing another life at some risk to oneself is counted among humanity's most exemplary acts. This paper is an effort to unpack the experiences of first-responders to the flooding of New Orleans, to examine their decisions, behaviors, thoughts, and feelings.

It is not our intention, however, to catalogue, analyze, and evaluate the behaviors of first-responders. We are not writing to assess or improve what these people do; to the contrary, at stake here is what we can learn from them. Viewed from a certain angle, the behavior of first-responders is a window onto a self stripped of convention and the mundane protocols of proper conduct.

First-responders, we argue, often employ a cleverness that does not recognize itself as such. Measured against the principles and standards of official training manuals and tests, "clever" first-responders might appear to be reckless or incompetent. But as they recall what they did, what they thought and felt, in their words we can discern, if only faintly, that in those uncharacteristic moments when humans and calamities collide, a first-responder can often count on only one thing: his or her imaginative ability to spot

the bits and pieces of the material world—the heterogeneous repertoire of a disaster landscape—that might serve the purpose of rescue. A shape-shifter, assuming whatever forms are necessary to accomplish the tasks at hand, the first-responder resembles in action and character the bricoleur, that person who alters and transforms ideas and materials to create new and innovative approaches to the world (Levi-Strauss 1966).

We begin with two examples that juxtapose the expertise of the official first-responder encoded in precepts, protocols and certificates with the *in situ* intellectual, emotional, and bodily experiences of first-responders. Informed by these two examples, we make a case for complementing the more typical role-centered approach to first-responders with an approach that attends to the responder as a self, a peculiar admixture of intelligence, emotion, and creativity. A short section on methods is followed by an extended discussion of the flood’s impact period as a “liminal” moment (Van Gennep 1961). A key to this moment, as we show through the stories and commentaries of first-responders, is the failure of a vertical or hierarchical stream of communication. More remembrances, details, and accounts of first-responders help us see how some were able to assume the unusual form of the bricoleur while others found this more insouciant and protean self more difficult, if not impossible, to achieve. A final word takes us to a broader plane where the actions of first-responders challenge us to re-imagine the rational-irrational divide that appears to explain so much of human behavior.

Protocols and Virtuosos: Setting Out the Problem

The good news is that disasters are comparatively rare occurrences. The bad news is that disasters do not occur with sufficient frequency to insure that people will develop durable and purposeful ways of thinking and behaving in response to calamity. The essence of disaster is its non-routine, unscheduled occurrence. It is, by definition, extra-ordinary, outside the pale of the quotidian.

In spite of the often spectacular and unexpected quality of disasters, we plan for them. Indeed, we seek to impose some order on chaos guided by countless messages, checklists, guides, videos, online and in-class courses, and related media. There is even a “Disaster for Dummies” video now available to assist families in preparing and responding to catastrophe.

Our propensity for planning reasonable, rational responses to a capricious and violent natural event, human malfeasance, or an accident is perhaps most visible in the training and certification of first-responders. The official first-responder, that person assigned the task of entering the impact area to lend assistance, mitigate the danger, and save lives, is a good starting point for an inquiry into the inevitable disjuncture between codified practices, protocols, lists, and other media of governing by rationality. More specifically, we seek to explore that disjuncture between the instructions, exercises, and exams that are designed to create competent human performers and the chaotic, anarchic moment in disasters when intuition and instinct are often a first responder’s only resources. Two examples will help to illustrate and affirm the significance of this inquiry.

CPR and Expertise

We begin by describing a novel experiment that encourages us to ask the kind questions posed in this paper. Some years ago in the United States, an experiment was conducted on a group of paramedics. Video films were made of six persons administering cardiopulmonary resuscitation (CPR) to victims of acute heart failure. Five of the six

were inexperienced trainees just learning CPR, while the sixth was a paramedic with long experience in emergency life-saving techniques. The films were shown to three groups of subjects: paramedics with practical experience, students being trained in this field, and instructors in life-saving techniques. Each subject was asked the following question: “Who of the six persons shown in the films would you choose to resuscitate you if you were the victim of such an accident?” Among the group of experienced paramedics, 90% chose the one experienced paramedic from the films. The students chose ‘correctly’ in only 50% of the cases. Finally, and perhaps surprisingly, the instructors in resuscitation had poorer results than either the experienced paramedics or the students, choosing the experienced paramedic in only 30% of the cases (Flyvbjerg 2001, 10).

In other words, of the three groups of paramedics, the least likely to “see” the person with the most skill in administering CPR were the instructors. What habits of mind and body would make instructors in CPR the least likely to recognize the most skilled version of this maneuver? On the other hand, what bodily involvement, ways of knowing, and strategies for recognizing made those paramedics with field experience far more likely than their teachers to identify the skilled version? We return to these questions in our closing remarks. For the moment, however, they are invitations for further inquiry.

FEMA Training, the Flooding of New Orleans, and a Police Officer

Now, consider this example drawn, in part, from our interviews with first-responders to the flooding of New Orleans. We begin with a first-responder training manual prepared by the Federal Emergency Management Agency or FEMA. Immediately following an excerpt from the manual is a short narrative account of a police officer responding to the catastrophic flooding.

FEMA Training

Training for first responders is often rigorous, guided by the wisdom of past experience written into protocols, strategies, and codes of behavior. The Federal Emergency Management Administration issues the following in its training manual:

All levels...must have a clear understanding of the functional actions required to manage the incident. Management by objectives is an approach used to communicate functional actions throughout the entire incident command system organization. It can be accomplished through the incident action planning process, which includes the following steps:

- Step 1: Understand agency policy and direction.
 - Step 2: Assess incident situation.
 - Step 3: Establish incident objectives.
 - Step 4: Select appropriate strategy or strategies to achieve objectives.
 - Step 5: Perform tactical direction (applying tactics).
- (<http://training.fema.gov/EMIWeb/IS/IS100CM/ICS01summary.htm>).

A Police Officer's Story¹

By the Sunday afternoon before the storm hit, it was clear that certain areas of the city were more vulnerable than others. Through a chance encounter, members of one unit found their way to a hotel in the city's central business district. This officer moved his unit to the hotel on Sunday night. Eventually, several units would move to this hotel during the week. At this point, he did not notify the department of his move. Squad cars were parked in the hotel garage and other emergency measures were put in place. Note the contingency in this move from the headquarters to the hotel. This was not planned. It was not procedure. It was simply done in part because of some offhand comment by the manager of the hotel to an officer who worked a detail shift there. Once this strategic move was made, the unit was positioned to place officers on the streets in some organized fashion. By Monday morning, most communication was down. The officer told us, "I had no contact with the outside world." He would not really regain communication until Wednesday.

Between Sunday and contact with command staff on Wednesday, it was clear the city was in serious trouble. As one of the few units that had access to boats, it sent teams into the Ninth Ward, Lakeview, and Gentilly neighborhoods. The unit was not trained in boat rescue. The officers simply learned on the job. "Every house we came to was a rescue operation."

From these two quite different examples, one a procedural the other an actual emergency, we might conclude that intelligent action can issue from something other than calculated, analytical rationality. Risking hyperbole, we might go so far as to say, paraphrasing Hubert and Stuart Dreyfus (1988), that human cleverness and ingenuity are more likely to occur in places devoid of rules. Rules of some kind, of course, are always in play. Foreshadowed in these two examples, however, is our attempt to situate first-responders between their calculated, step-wise training and the anomic, disordered, and chaotic time of disaster impact. In carving out this time betwixt and between the classroom and chaos we hope to throw some light on the situated, historical work of the first-responder.

From a more expansive stance, we will also consider the behavior of human beings struggling against unexpected, violent, and massive derangements of their ordinary life-worlds. Specifically, a study of first-responders to the flooding of New Orleans provides an occasion to comment on the often-assumed distinction between rational, calculated action, on the one hand, and irrational, faulty action, on the other. The action of many first-responders to the flooding of New Orleans suggests a third or middle way of being in the world.

The First-Responder as Bricoleur: From Role to Self

There is a growing body of literature on "role improvising" and creativity among first-responders (Webb 2004; Kendra and Wachtendorf 2003; Mendonca 2004). This emergent literature is based in part on the foundational work of Kreps (1973) and Dynes and Quarantelli (1986), among others, who argued for the necessity of flexibility

¹ We were not permitted to tape our initial interviews with law enforcement in the area. All law enforcement was under intense scrutiny and no one wanted to "go on tape." Further, we thought that taping after the storm in these initial interviews was an intrusion.

and a willingness to suspend institutional rules, at least temporarily, during an extreme event.

Common to this varied literature is the idea of social role. A key concept in American functional sociology of the 1950s through the 1970s, it made sense in examining the role-based characteristics of first-responding; and it remains an important idea today, evident in the recent work of Webb (2004). Role analysis helps us understand specific activities and behaviors as they morph from one prescribed mode to another. From the vantage point of role, the primary unit of analysis is prescribed behavior.

At the periphery of role studies is the more social-psychological idea of the self. Self is a concept that takes us closer to the flesh, bone, and psyche of the person than the more abstract compilation of types of behavior. Self and role are no doubt related, but they stand far enough apart to warrant a separate inquiry into the first-responder as a self. The self is more closely tied to person and personhood. It invites inquiry into the social and psychological character of the first-responder. Just what sort of person, or what part of a person, is in play during the volatile and protean moment of catastrophe? The idea of role will continue to be paramount in the study of first-responders. But rather than move as if by reflex to the idea of social role, we move somewhat away from this more social abstraction to a concept that begs an eye towards individual body, emotion, reason, and place.

Imagining the Self

The idea of role is rooted in functional and in structural sociology; it exists in a comparatively confined conceptual ecology. Self, on the other hand, is a cross-pollinating concept that grows equally well in diverse theoretical fields. It can be found in both structuralism and post-structuralism, in the discursive emphasis of symbolic interactionism and the material interests of environmental sociology. Self, in short, is decidedly adaptable. Consider the several conceptual fields we visit to construe a version of self capable of making reasonable sense of that complex person, the first-responder.

In important ways, Ralph Turner anticipated our interest in those parts of the person that fall outside the institutional and pre-figured boundaries of everyday life. More than 30 years ago, Turner observed that the self is, by nature, a more fluid, protean, less predictable part of the person (1976).² Recalling Dennis Wrong's earlier reflection on sociology's penchant for over-socializing the person, while anticipating the postmodern turn to passion and desire as motive forces in history, Turner counseled sociologists to pay attention to the unpredictable, impulsive part of the self. Turner admits that he is not the first to direct our attention to the significance of urge and compulsion in human beings. Freud, after all, made impulse a central part of his work. But it is the post-modernists that deploy the rich vocabulary of emotion to counter the modernist obsession with rational, first this, then that, ways of being in the world (Lacan 1968; Foucault 1970; Baudrillard 1981).

Turner's impulsive self comes close to our conception of the first-responder, but does not quite capture it. In addition to being spontaneous, the first-responders we

² The authors would like to thank Professor Gary Webb for pointing out Turner's work and its possible application to this project.

interviewed were also thoughtful. There was, in short, a method to their madness. The evocative idea of the self as bricoleur is useful here for helping us join the precipitous to the reflective. The more this person believes that good outcomes depend on his ability to imagine or intuit a course of action, transforming what is at hand into purposeful tools, the more he approximates the bricoleur, that character Levi-Strauss (1966, 35) created to help us understand how thinking and acting take place outside the boundaries of order and convention, amid the oddments of material and symbolic culture. Implicit in Levi-Strauss's idea of the bricoleur is the importance of context or environment for making sense of this impulsive, pensive person.

The self, after all, does not exist in a vacuum. It takes its shape—at least in part—from society, culture, and environment. Survey the psychologists and sociologists interested in self and it becomes quickly apparent that self is contextual. From “the empty self” to “the saturated self,” “the quantum self” to “the reflexive self,” to name a few of the more prominent, self is found in the analysts' interpretations of the symbolic and physical worlds we moderns inhabit. The idea that self is interdependent with what we might call the “ecological-symbolic” milieu of everyday life (Kroll-Smith and Couch 1993) suggests the need to carefully consider the specific character of the extreme environment within which a person labors to help or save another.

If we have anything approaching a proposition in this paper it might be stated in this way: The more extreme and ambiguous the environment facing a first-responder the more opportunity this person will have to navigate among the rules, play with all possibilities, and adapt what is at hand—in short, to make do. We develop our argument in three interrelated ways. First, we examine the flooding of New Orleans as a protracted liminal moment that created a seemingly endless period of shock and, important to our argument, an exaggerated period of social disorder approaching chaos. Violent disasters open, if only momentarily, a space and time where a person is left to act in the world without the comfort of habit, routine, and day planner.

We want to know how first-responders encountered and experienced this liminal moment. For example, several people we interviewed reported feeling isolated and unable to see the bigger disaster picture. For them, their once-expansive world had now become a delimited and constricted space. Others felt the shift from a nine-hour workday to a seemingly endless demand for both rescue and personal survival. Almost everyone reported a marked change in the quality and quantity of communication during this period of betwixt and between.

Mead (1934 [1972], 1) proposed that dramatic alterations in a communicative culture may provide an occasion to observe a novel variant of the creative self. Disasters, almost by definition, alter or obliterate routine and conventional patterns of communication. Predictably, they destroy, at least temporarily, vital vertical communications between first-responders and their administrators while simultaneously reinforcing the need for horizontal transmission among first-responders. Without the oversight of vertical communication, many Katrina first-responders experienced both heightened stress and added degrees of freedom to jerry-rig responses, to innovate on the spot. As we will see, the early absence of a vertical line of communication probably helped to save lives.

Not every first-responder, as the interviews demonstrate, was able to assume the distinctive character of the bricoleur. It is neither possible nor desirable to offer a psychological profile of those professionals who shifted into bricoleurs determined to

rescue others and those who, for a variety of reasons, were unable to make that shift. Some simply evacuated when their neighbors did, choosing to rescue themselves from what, by all accounts, would be an overwhelming disaster. Others stayed but found themselves trapped and unable to assume the mantle of the first-responder. Still others reported for duty but were unable to act in the peculiar manner of the bricoleur.

A better understanding of the contexts that impede and encourage the emergence of the first-responder as bricoleur is worth cultivating further. If the violent urban maelstrom that gripped New Orleans portends the future, as a growing number of climatologists predict, we will increasingly need this protean, flexible, imaginative professional. Mindful of this need, we consider what hinders and promotes the emergence of the bricoleur towards the end of our discussion.

By way of a coda to this discussion, we encourage readers to approach the concepts in this paper as we do—to wit, as sensitizing abstractions. Our interest is not to make a case for the alteration of language and theory of the self to study disasters. Rather, we find the ideas of the bricoleur and liminality useful in making some reasonable sense of the complexities of human responses to a major urban catastrophe.

A Word on Methods

We approached the men and women we interviewed as informants. As trained first-responders, these individuals possessed a rich knowledge of the complex demands of crises and how to properly respond after the floodwaters swamped the city. Using a snowball sample we interviewed 18 individuals: 10 men, 8 women, 6 African-Americans and 12 Caucasians.

By design, we interviewed only people who had some prior connection to the area before Katrina. Experience in their respective fields ranged from a few months to more than 40 years. Interviews ranged from one to one and a half hours each.

Importantly, we did not tape the interviews. The political firestorm following the alleged breakdown of the infrastructure made law enforcement and many others wary of being taped. We compensated for this problem by making sure that two researchers were present and taking notes at each interview. Each researcher then typed his or her notes for each interview.

The chaotic condition of New Orleans immediately following the flood required that we interview people wherever we could find a dry, safe spot. Although we interviewed some non-traditional first-responders, this paper focuses on official first-responders. They equally include law enforcement personnel, a variety of city employees (e.g., homeland security, emergency staff), nurses and other medical staff, ambulance drivers, military and Coast Guard personnel, and relief agency professionals.

The interview schedule, for the most part, consisted of a set of questions that allowed the respondent to tell a portion of his or her Katrina story. We would often begin with only one phrase, “Tell us what it was like for you right before the storm.” For a number of respondents, this one phrase took us through nearly the entire interview, with only an occasional prompt required like, “What happened next?” Toward the end of each interview, we asked each respondent to talk to us about how he or she thought about the experience now—had it changed their view of themselves or their life choices. After the first set of interviews we focused subsequent interviews on how the respondents ‘made do’ during the storm. However, we found that even with the focused questions,

respondents nearly always started from the beginning (on Saturday, August 27) and continued talking about their experience of the storm until they could not talk anymore.

The analysis began with a review of the data, inductively searching for emergent themes. We each reviewed the transcripts separately and then met to compare our understanding of the interviews. As the interviews were done over time, each new interview was used to refine and alter our understanding of first-responders.

A Protracted Liminal Moment: The Flooding of New Orleans

What makes a moment cataclysmic is in part the dreadful apprehension that what is routinely there to guide and inform us has disappeared, at least temporarily. It is this moment, betwixt and between the ordinary, which interests us. It is a moment marked by separation, openness, ambiguity, and indeterminacy: almost the antithesis of structure. Van Gennep's (1909) idea of the liminal moment captures this unique time. As we recount the stories of first-responders in the liminal time of the flooding of the city we will begin to see the outlines of a unique kind of person.

One can debate when Katrina plunged New Orleans into its betwixt and between moment. More than a few first-responders entered that liminal period before the onset of the storm. A police officer recalls a meeting with the command staff on Saturday, two days before the storm. Command staff announced the likelihood that New Orleans would be hit by a major hurricane. The officer in charge ordered each unit to marshal its resources. "Do what you need to do" was his only counsel. "The leadership," he confessed, "underestimated the problem." In a related remark, a consultant for the City of New Orleans observed that the city and state had a disaster plan, but "nobody paid any attention to" it. Disaster plans, as Lee Clarke notes somewhat cynically, are often little more than 'fantasy documents' (2001) fashioned more to ease the anxieties of impending doom than to provide practical blueprints for constructive responses.

Most first responders were at their posts by Sunday evening, August 28. By 8:00 a.m. Monday, water was rising quickly on both sides of the Industrial Canal. By 9:00 a.m., there was six to eight feet of water in the Lower Ninth Ward, and roughly two hours later St. Bernard Parish was under 10 feet of water. On the same day, the 17th Street Canal and London Avenue Canal were reported breached and flooding the Lakeview and Gentilly neighborhoods. By Tuesday afternoon, 80% of the city was flooded. It would take two additional weeks for the water to drain from the shallow bowls that describes the topography of New Orleans.

A nurse remembered the "rising water contributed to a surreal atmosphere" as she watched people float into the hospital on exercise balls and inflatable rings. A similar experience of "amazement" was reported by a police officer forced to wade out of a flooded barracks. Another nurse who watched the waters rise observed, "It was disassociation. I had no feeling. I knew it was bad but had an overwhelming amazement. Then [I] had to go back and take care of patients." Yet another nurse recalled, "[I] lost my timeline" on Tuesday morning.

Add the days that New Orleans was in that liminal moment, from August 27 through the second week of September, and the unusual nature of this flooding event becomes more apparent. Consider the horrific maritime disaster in Halifax, Nova Scotia on December 6, 1917: "At 9:06 a.m. precisely the Mont Blanc blew up" (Bird 1962, 62). Rescue commenced for four days following the explosion. Or, recall the tornado that devastated Xenia, Ohio on April 4, 1974: "It touched down at 4:30 p.m. nine miles

southwest of Xenia and entered town at 4:40 p.m.” The city was leveled in minutes (<http://worldmc.ohiolink.edu/OMP/YourScrapbook?scrapid=3619>).

Unique to the 2005 flooding of New Orleans is the seemingly endless period of ambiguity, openness, and indeterminacy, the hallmarks of liminality. “It was the unknowing...it was the uncertainty...,” a nurse remembered. “We rolled all these people up to the roof and nobody came.” Many first-responders quickly realized their organizational units were impaired and incapable of providing assistance. Indeed, the scope and duration of the flooding insured that organizations dedicated to disaster response reached their functional limits before the water finished rising. By Monday evening, August 29, law enforcement, fire companies, and charitable organizations such as the Red Cross (not immediately stationed in New Orleans) were unable to respond to the scope or magnitude of the flooding.

The spectacular failure of FEMA in response to a disaster of historic proportions magnified feelings of separation and solitariness among responders. That FEMA was unable to muster the needed resources and support to be of immediate assistance to the region is captured plainly in the words of Jefferson Parish President Aaron Broussard.³ Barely able to contain his rage, Broussard told NBC’s *Meet the Press*, “Every single day (we were told) the cavalry’s coming, the cavalry’s coming, the cavalry’s coming. The cavalry’s still not here yet. I’ve begun to hear hoofs, and we’re almost a week out” (Elliston 2006, 13).

One consequence of the severed connections between first-responders and their organizations is the palpable sense of detachment and isolation experienced by the men and women charged with rescue. First-responders talked about a mounting sense of isolation, a feeling of being disconnected from important social ties. In particular, they talked about separation from their command centers, families, and news or information about the events unfolding in their city. The absence of communicative ties between responders and command centers was a pivotal factor in the emergence of the bricoleur.

From Vertical to Horizontal Communication

A local official working with Orleans Parish identified four types of electronic emergency communication: electronic centralized, electronic localized, line-of-sight, and face-to-face. He reasoned that the less centralized and digitized the communication, the more demand for an emergent mid- to low-level leadership and the more likely first responders would, in his word, “innovate.” Effective command centers require electronic, indeed digital, centralized communication capacity. New Orleans lost \$500 million worth of telecom capacity to hurricane winds and unprecedented flooding. Fiber optics and copper wire connections disintegrated or were buried under rubble. Although the city could boast an emergency operations center with a super fast T1 line, within hours of the storm it was useless. The city’s operations center, the brains of the rescue effort, was reduced to a cobbled-together voice-over Internet communications system made from salvaged out-of-date computers. Other local centers were also quickly disabled by the wind and rain.

As the city flooded, several hospital administrators quickly lost communication

³ Jefferson Parish is adjacent to Orleans Parish, a short distance from New Orleans.

with their corporate headquarters. According to one nurse, “We were not getting any information from management...We were getting our information from security [and] maintenance people...It was like the parent company did not know the hospital was there.”

Pursuing rescue and recovery during the impact of disaster is most effective, one might think, when it is coordinated from a command center. Command centers provide first-responders with information on the status of utilities, power lines, sewerage, the location of other responders, and other data essential for effective rescue work. Command centers also embody the chain of command. First-responders are responsible to command administrators who can order them to evacuate, stay in the area, change duties, and so on. Command structures designed to communicate with first responders, and importantly, with other command operations, lost much of their communications capabilities by Monday afternoon.

Ironically, but perhaps not surprisingly, several responders discovered they could do their best work when links with supervisors broke down. Without vertical communication and isolated from those higher in the chain of command, several informants reported feeling a degree of autonomy to make decisions on the spot, to manoeuvre in response to the moment. We suspect this ambivalent attitude towards command centers is shared among first-responders.

A Red Cross administrator reported losing the ability to communicate with her local command unit shortly after Katrina whirled over the city. She was forced to communicate directly with the office in Baton Rouge and even with national Red Cross headquarters. Communication, even in this first phase of the disaster, was too fragile to trust to ordinary rules for speaking. This informant described at some length how she quickly mastered the fine art of “Katrina talk,” a dialect essential to getting messages to Baton Rouge or to National Headquarters. “Katrina talk” was the ability to “state your name, rank, and location in a nanosecond or less and make your request or ask your question in a determined and unrelenting manner.” Within a relatively short time, however, the capacity to “speak Katrina” was rendered moot. Lines of communication that existed at the onset of the flooding were quickly disabled.

She interpreted this disconnect as both a “headache” and an “opportunity.” It was a trouble in so far as she could not get word quickly to Red Cross administrators regarding her local situation and needs. It was a chance, on the other hand, to fashion a unique and purposeful response to the crisis. As she put it, “With no chance to contact Baton Rouge I did not need to seek permission.”

In the muddled patterns of vertical and horizontal communication following the flooding of New Orleans we highlight the liminal characteristics of a city filled with water. In addition, we point to the specific conditions likely to underwrite the emergence of the bricoleur. Indeed, in a few of the sketches already provided we can discern the outlines of this unusual character. It is time, however, to flesh out the work of the first-responder as bricoleur.

The Bricoleur and the Possibility of Rescue: Doing “the right thing anyway”

In his effort to grasp the distinction between modern and pre-modern ways of conceiving and thinking, Levi-Strauss pointed to the engineer as the embodiment of the modern mind. The engineer imagines what is not there. She creates drawings, blueprints,

and designs—the simulacra of the mind. But her mind is nothing if not rational, driven by precept, proper principles of geometry and calculus.

Against this numeric, calculating style of thought, Levi-Strauss describes another kind of imagination, one we might call grounded. Grounded imagination begins and ends with the world that is in reach: the immediate, concrete, and tangible world whose objects might be moved about, combined, recombined, defined, redefined and so on to accomplish a concrete and pressing task. Poking a bit of fun at the modern mind, Levi-Strauss called this kind of thinking “the science of the concrete” and its practitioner the bricoleur (1966, 22).

The bricoleur deploys his or her imaginative ability to spot the bits and pieces of the material world, the heterogeneous repertoire of an urban landscape, for example. She is forced to use this repertoire, whatever the task at hand, because she has nothing else at her disposal. The bricoleur is more likely to use concept than precept to guide his or her actions. Precept, remember, is a rule or principle prescribing a particular way of building or behaving. The instruction manual for CPR is based on precept. Concept, on the other hand, is an abstraction from the concrete, a bit of a synthesis or combinative way of thinking.

A number of first-responders described re-inventing themselves in response to the extreme environment created by the flooding of New Orleans. Other responders were unable, for a variety of reasons, to become bricoleurs. This distinction is captured graphically in the words of one informant who observed, “Some people would do the wrong thing the right way [and other people were] committed to doing the right thing any way.” Some responders, in other words, simply followed procedure, even though it was the “wrong thing” to do if rescue was the mission. Others, however, adopted any means necessary to rescue the endangered.

Consider a striking illustration of the difference between a first-responder who navigated among and outside the rules and a first-responder who followed procedure. The scene is the St. Claude Bridge shortly after the flooding of the Ninth Ward. Evacuees of all ages sought refuge on the high ground of the bridge. Between the sun, lack of food and water, and trauma of the flooding, it was essential to move those people from the bridge to a shelter. A police officer recognized the danger and also spotted several National Guard buses near the bridge. As he remembered it, “I went to find the guy in charge [of the buses]. That was a mistake!” He found a colonel and asked him to get his buses onto the bridge and get those people to safety. The colonel told the officer he would have to ask his superior officer, a general, whose whereabouts were not known. The police officer stated that he should have asked someone lower down the chain of command, or just taken the buses himself. By having to go up the chain of command, they lost the opportunity to secure the buses.

“You have this plan,” reckoned one responder, “and when it happens, all you have is what you remember about the plan.”

In a communicative vacuum, the Red Cross administrator responded quickly to the demand that she think outside the organizational arrangements of the Red Cross. Due to a critical shortage of staff and an unexpected surge in evacuees, she was forced to put young volunteers in considerably trying roles. For example, a 21-year-old and a 23-year-old were put in charge of an evacuation center. Each young adult was placed in a leadership position responsible for 200 or more evacuees. The administrator pointedly

told them, “You are the Red Cross. You make the decisions.” Running dangerously low on food, one volunteer created a food regime to provide limited sustenance for everyone sheltered: half a sandwich and one glass of water in the morning, and half a sandwich and one glass of water in the evening. When they were able to re-establish contact with the Red Cross, an official told her he would send someone to assist her. Her reply to his offer: “Send me someone who can throw out the rule book.” Following orders, at least for this protracted liminal moment, interfered with the real work of rescue.

“We just have to get people out of here,” concluded one emergency medical technician. The owner of a private ambulance service reported “being too crazy to be afraid.” Able to maintain horizontal communication among units, drivers loaned vans to nursing homes and law enforcement personnel. Others simply entered flooded hospitals and took people to higher ground. One ambulance driver reports carrying 42 people in one “square box ambulance.” Protocol and paperwork were abandoned as medical technicians and drivers worked feverishly to get people out of the water.

To highlight the grounded imagination of the bricoleur, we heard several informants use some variation of the phrase “just making do.” What each of them intended to convey by such talk was the need to scan the immediate landscape, select from the available pieces, parts, gadgets, and objects lying about, and make them work somehow to keep themselves and others alive. A law enforcement officer was part of a group that commandeered a refrigerator truck, kept it running with siphoned diesel fuel, and fed more than 100 people daily for several days. A staff nurse in a neo-natal unit decided to evacuate babies, family members, and staff. She used private cars to drive them to safety. “There was not much of anyone to ask,” she reported, “and it seemed like the right thing to do.” A Red Cross employee salvaged medicines from flooded drug stores. Police officers formed ad hoc units, jerry-rigged grid maps, and systematically searched the city for survivors. A city consultant working feverishly to coordinate helicopters carrying bags of sand to prevent water from crashing over a toppled levee decided to ignore a federal directive to cease flying. It seems the President was flying over the ravaged city. Protocol demanded that airspace be cleared when the President’s airplane was in the vicinity, but the consultant ordered the helicopters to continue delivering bags of sand to the breach in the hope that the flow of water could be stopped.

While it is impossible to impose a uniform social psychological state on each of the first-responders we interviewed, it is possible to observe in many of them a unique way of being in the world, one in which the normal limits of thought, conduct, and self-understanding are relaxed, opening the way to something new. It is a curious moment, however, when we are at our best without society, or at least that version of society we routinely inhabit. It is not surprising, therefore, that a few people we interviewed, and many of their colleagues, were not always able to respond creatively to disaster, to become the bricoleur.

Besieged and Fixed on Protocol

Some first-responders had no opportunity to become a protean, shape-shifting person. Some simply failed to show up for work or left their posts as soon as the water began to rise. One nurse made this comment about the uneven commitment of some fellow staff members: “It’s all about me in a crisis.” Other first-responders were trapped by protocol inscribed in the command and control structure and were unable to innovate or respond effectively under the extreme circumstances. Finally, a few first-responders

worked heroically but were disappointed when they “shut down” and could not continue to respond creatively to this extraordinary occasion.

New Orleans Police Department officials acknowledge that over 240 (of 1,700) officers left their posts during or immediately after Hurricane Katrina. Our informants at The Red Cross recalled that the agency “was hemorrhaging employees” during and after the storm. More than 20 staff members at one hospital failed to report to work before the storm while many others left soon after the storm, telling one of our informants, “We’re out of here, you don’t mind do you?”

A half a dozen police officers (most young and inexperienced) walked off the job at one precinct, profoundly troubled by the rising water and uncertainty about family and home. Their concern is understandable. On Monday, August 29, those present heard a radio conversation with a fellow police officer who was trapped in his house by rising water. As he fought for his life, officers listened, “transfixed by the conversation.” A major source of anxiety was a fear that other officers would “lose it” and begin firing off their guns. “Everybody was watching everybody because people were afraid someone would start shooting,” recalled an officer at the scene.

In this atmosphere a few young officers left their posts while others relied on the familiar vertical command and control structure to provide them a sense of order and predictability. They waited for orders that never came. One unit, seeking the assurance that comes from vertical authority, literally drove to State Police Headquarters in Baton Rouge looking for orders.

A final category of responses revolves around the difficulty of continuously taking creative action without much direction under very stressful circumstances. Several respondents performed well and provided innovative solutions to problems of transportation, food supply, and care of the sick, but several days into the disaster some respondents “started fussing,” “hit the wall,” or “shut down” due to exhaustion, anxiety, and stress. One nurse told us that when her unit was evacuated from her flooded hospital to high ground on Interstate 10 on Wednesday, September 1, she found herself wandering around, unable to function, unable to make anymore decisions: “I was just shut down, totally shut down. I was disappointed in myself: I was supposed to know what to do.” In a particularly poignant example of shut down, one nurse who worked tirelessly for many hours finally surrendered to her fear and exhaustion. Painting a large C, for “casualty,” on her forehead, she boarded a bus bound for higher ground.

Why does this person respond as a bricoleur to a catastrophic moment? Why does that person fail to deploy a grounded imagination and a certain cleverness in the face of disaster? We make a case, by way of a conclusion, for the need to rethink how people are taught the valuable skills of first-responding.

Conclusion

Peculiar to the first-responder as bricoleur is her readiness to rummage through the oddments left about, find some admixture, and cobble together a reasonable solution to a chaotic moment. The imagination of the bricoleur as first-responder is grounded in the physical and social topographies of disaster, in that chaotic, almost mythical time of impact. It is not rationality per se that guides the bricoleur; but nor is his or her behavior irrational, though it may at times appear something other than reasonable. A grounded imagination operates through an admixture of disposition, intuition, emotion, intellect,

and the acumen of the body. Neither rational nor irrational, the bricoleur behaves in what Dreyfus and Dreyfus call an “arational” manner (1988, 35-36).

In their exhaustive work on human creativity, Dreyfus and Dreyfus distinguish between the competent performer, the proficient performer, and the virtuoso performer (1988, 36). Competency is equated with rationality. Proficiency is a transitional capacity between competency and virtuosity. The virtuoso, they argue, is singular in his or her ability to deploy a range of sensate, emotive, intuitive, and cognitive resources in place of the more common analytical and categorical reasoning of the competent performer. It is worth noting that Levi-Strauss’s bricoleur is akin to the Dreyfus’s virtuoso. Each is more likely to use a concept than a precept.

The flooding of New Orleans created an opportunity (a necessity?) for the emergence of the first-responder as bricoleur. Not all responders were able to shift into this protean, shape-shifting self. Among the many obstacles to assuming this unusual and transitional self is, perhaps, the training offered first-responders. The word training itself implies a type of instruction based on formulas and protocols. We would suggest that “training” represents something qualitatively different than “education.” If training is learning through precept, education is acquiring the capacity to think through concepts. Education, in other words, is designed to alter the way we view ourselves and the world. In his far too formal prose, Talcott Parsons saw education as changing our “object orientation” (1951, 239-240)—changing, in other words, our capacity to feel, sense, see and act in the world.

In thinking through the practical applications of our inquiry we would suggest balancing the training of first-responders with education. While precepts will remain a key resource in accomplishing the difficult work of first-responding, the capacity to employ a grounded imagination is also worth teaching. Imagine a curriculum for first-responders that matched the knowledge of protocols, rules, and practices with an emphasis on how to, among other arational skills:

- Navigate among the rules
- Play with all the possibilities
- Make use of any possibility that works
- Compensate for a failed prescribed possibility by substituting another option, perhaps your own...

The goal, we propose, is to develop curricula for first-responders that combine both rational skills and arational inventiveness.

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