CHAPTER 11

Resolving Identities: Successive Crises in a Trading Room After 9/11

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SO ACCUSTOMED have we grown to the image of the facades of the World Trade Center (WTC)—two tall rectangles cut against the skyline of Manhattan—that we seldom give any thought to what went on inside the towers. Although we have seen photographs of the victims of the 9/11 terrorist attack and learned about their personal lives, even now we rarely hear about the work that was done behind that curtain wall of concrete and tinted glass.

The World Trade Center was above all a place of finance—not retail banking, but types of financial activity that involved trading. If, before September 11, you had chosen a floor at random for exploration, you would more likely than not have ended up in a trading room, one of those vast open spaces where traders, salespeople, and analysts buy and sell stocks and bonds. Cantor Fitzgerald, for example, the bond trading company that suffered most in the attack, was a trading room. Morgan Stanley, the largest tenant of the towers with twenty-three floors, had several trading rooms.

In this chapter, we examine one such trading room and the experiences of its occupants by studying traders at a large investment bank located in the World Financial Center directly adjacent to the WTC. The collapse of the twin towers destroyed the trading room of the pseudonymous International Securities, along with its computers, connections, facilities, and data. The traders survived, but the attack forced them to relocate to a makeshift trading room in New Jersey. There they spent six long months exiled from the city. During that time they confronted anxieties and uncertainties that they had never faced in their typically young lifetimes: an inescapable sense of vulnerability, the difficulties of trading securities outside of Wall Street, and dramatic lines of fissure in their organization. One year later, however, the bank had restored its trading technology and returned to its original Wall Street office, and all of the original traders who relocated to New Jersey had remained in the company. The case of International Securities thus provides a privileged entry point into an understanding of organizational resilience. In this chapter, we document the unfolding processes of organizational sensemaking that let the traders cope with extreme uncertainty and allowed the organization to survive.

Confronting uncertainty, even extraordinary uncertainty, was not at all unusual for the traders at International Securities. Prior to September 11, the company's bread and butter was its demonstrable ability not simply to cope with but quite literally to thrive on volatility. Finding profit opportunities in an informationally efficient market such as Wall Street required that the bank specialize in complex and ambiguous cases and generate innovative interpretations of the economic environment. We elaborate later on how the trading room was organized to exploit market uncertainty. Briefly here, a trading desk is like a well-trained submarine crew, with finely tuned instrumentation and intricate patterns of interaction to execute complex maneuvers within rapidly changing markets. Traders sit in front of Bloomberg screens with their colorful waterfalls of data. The screens may be flat, but the informational world is rich and deep, and the actual experience is more like flying through the data than simply sitting in front of it. The speed is tremendous. At the extreme, the future is only two seconds away, and traders refer to price information that is fifteen minutes old as "historical data." To navigate successfully is to recognize patterns in the data, patterns remarkable for their complexity and elegance. The biggest challenge and the biggest money lie in successfully exploring uncharted territory—recognizing patterns in the terra incognita.

The terrorist attack destroyed the pillars of this delicate organization, posing a fundamental threat to its continuity. In the traders' journey of exploration, September 11 was like a terrible shipwreck. The story we tell here is less about the destruction of the vessel, for that is well known (see, for example, Salgado 2002; Wrzesniewski 2002; Bartel 2002; Kendra and Wachtendorf 2003), than about the six-month-long journey of recovery afterward. The 160 traders at International Securities were a surviving crew. The question was whether they could navigate their life rafts to safe harbor. To do so, they would need to define themselves not simply as survivors but as sailors who could apply their collective seafaring skills to a primitive technology. Some familiar routines could be modified, but the crippled equipment would require a restructuring of roles. And the intensity of the social life on the life raft would bring new uncertainties, new threats to the organization, and new challenges for leadership. Would their chances be improved by letting the separate life rafts take different courses, or should they navigate the life rafts in a coordinated manner so that the entire crew would arrive safely all together?

We are fortunate that we can approach this question on the basis of close familiarity with International Securities. Two years before September 11, we began ethnographic field research to study the social organization of trading. We benefited from the bank's generosity in providing us with a trader's pass to the World Financial Center, a desk, a computer terminal, a telephone extension, and, most importantly, the opportunity to interact with the traders and observe them directly at work. As a result of this rapport and trust, six days after the attack, amid chaos and confusion, the traders invited us to continue our fieldwork in their makeshift trading room in New Jersey. This is, to our knowledge, the only ethnographic study of an organization directly affected by September 11 that benefited from the presence of the researchers at the firm prior to the attack.

To understand how the traders at International Securities navigated the uncertainties of the post-9/11 crisis, we first sketch the organizational context of the trading room prior to the attack. We summarize the organization of trading at the bank, the bank's social character, and the ways in which it exploited financial uncertainty by developing multiple and rivalrous systems of interpreting markets. After sketching our orienting framework about sensemaking in times of crisis, we describe the devastating blow to the firm of September 11 and follow the traders across the Hudson River in their escape from Wall Street to New Jersey. We introduce the successive crises that flooded the lives of the traders: existential anxiety, questions of professional identity, uncertainty about the future of the firm, and ambiguities about the future location of the trading room. The trading room faced not one crisis—the immediate aftermath of September 11—but many. As we shall see, a given crisis was resolved by restoring identities, but identities, once restored, redefined the situation and led to new crises. That is, the successive waves of crisis were produced by each success in managing crisis.

THE TRADING ROOM BEFORE SEPTEMBER 11

(Pseudonymous) International Securities is a global, non-American investment bank with 128 offices in 26 countries across the United States, Europe, and Asia. Its American headquarters occupied some of the most prestigious real estate in New York—the gleaming, irregular postmodern towers of the World Financial Center, located between the World Trade Center and the Hudson River in lower Manhattan.

One cannot understand the chaos that September 11 brought to International Securities without appreciating just how close the bank was to the World Trade Center. The World Trade Center and World Financial Center complexes could almost be thought of as one and the same thing—in their daily commutes, the traders at International Securities entered the lobby of the Trade Center, walked through the boutiques and coffee shops below the twin towers, crossed West Street through an elevated corridor, and finally entered the Financial Center. On rainy days the traders stepped out of the subway and walked into their trading room without a drop of rain ever dampening their carefully chosen business-casual outfits.

For our ethnographic study we made sixty half-day visits over the course of three years (between November 1999 and September 2002). During those thirty-four months we undertook detailed observation at several trading desks, sitting in the tight space between traders, following trades as they unfolded, and sharing lunch and jokes with the traders. We did this with three of the ten teams in the trading room. We complemented the resulting data with in-depth interviews of traders in a more private setting, typically in a small conference room just off the trading room.[1] Our research produced important findings on the strategy and organization of International Securities that help explain the events after September 11.

The trading strategy of choice of quantitative traders at International Securities is arbitrage in its different blends and styles (for a detailed treatment of valuation and arbitrage, see Beunza and Stark 2004). The arbitrageurs at International Securities represent a far cry from the traditional traders of Wall Street of the 1980s, aptly described by Tom Wolfe (1987) as Masters of the Universe. Whereas the latter were characterized by their riches, bravado, and disdain for small investors, modern arbitrageurs have M.B.A.s, degrees in finance, and Ph.D.s in physics and statistics, and they are more appropriately thought of as engineers. None of them wear suspenders. This change in the outlook and personality of traders is part of a silent technological revolution that swept over Wall Street in the last two decades. This revolution—the quantitative revolution in finance—was ignited by the rise of derivatives such as futures and options, of mathematical formulas such as Black-Scholes, of network connectivity to electronic markets such as the NASDAQ, and by high-powered computers.

Arbitrage is a creative trading strategy that hinges on the possibility of interpreting securities in multiple ways and produces profits by associating previously disparate markets. For example, arbitrageurs associate the markets for the stocks of two merging companies when the merger makes their value momentarily comparable. Or they associate the stocks of two companies that are in the same index and hence move similarly, or a stock and a bond of the same company, whose value is linked by a legal clause that makes the bond convertible into stock. The point in every case is to avoid the conventional route of valuing a company by its intrinsic value or by how hot it is with market speculators and to choose instead a lens that produces an opportunity—a new, original valuation that differs from the value that the market assigns to a company. Thus, like a striking literary metaphor, an arbitrage trade reaches out and associates the value of a stock to some other, previously unidentified security. The two securities used for arbitrage have to be similar enough so as to hedge exposure, but different enough so that other traders have not seen the resemblance and realized the opportunity before. No trade, then, is ever exactly like the previous one. Alternative trading strategies such as value investing or momentum trading emphasize early access to information, but arbitrage draws on novel interpretation. Thus, whereas value trading is essentialist and momentum trading is extrinsic, arbitrage is associational (Beunza and Stark 2004).

The trading room at International Securities was purposely built to manage financial uncertainty. In its teams, its layout, its furnishings, and its technology, it was equipped to meet the challenge of recognizing opportunities and especially of making innovative associations. Each desk (merger arbitrage, index arbitrage, and so on) was organized around a distinctive evaluative principle and its corresponding cognitive frames—metrics, "optics," and other specialized instrumentation for pattern recognition. That is, the trading room was the site of diverse, indeed rivalrous, principles of valuation. And it was the interaction across this heterogeneity that generated innovation. The trading room was greater than the sum of the desks because the co-location of diverse arbitrage strategies in the same room created a powerful synergy among them. Traders acquired information from their Bloomberg screens, but the tacit knowledge to interpret this information and carry out complex calculations for recognizing opportunities was acquired through spontaneous social interaction with proximate desks in the trading room (Beunza and Stark 2004). For example, merger arbitrage traders would draw on the specialized knowledge of the nearby convertible bond traders or of those at the stock loan desk as they assessed features of a complex trade. Frequently, as the traders explained, they were not simply requesting particular information but rather learning about what they did not even know they should know.[2] That is, their judgments were often calibrated less by specifically directed questions than by unanticipated interactions and overheard communications.

The manager of the trading room promoted these crucial synergies by developing trust and risk-taking among the traders through a set of human resource policies that put people first. He replaced the subjective annual bonus, an infamous Wall Street tradition, with an objective bonus system to prevent traders from feeling personally undervalued when profits decreased for reasons beyond their control, such as the economic cycle. He made subtle changes in the seating arrangements in the room so that traders would not always be sitting next to the same people but would get to know others. The manager himself sat near the middle of the room, rather than in a closed office, to reduce status differences and promote the notion of open communication. A wall-less, table-less corner of the room surrounded by whiteboard served as a fast-turnover conference room where traders from different desks could exchange their perspectives without risk of being trapped in an interminable, corporate-style meeting.

Rather than being bureaucratically hierarchical, the trading room was heterarchical (Stark 2001; Girard and Stark 2002). In place of hierarchical, vertical ties, we found horizontal ties of lateral, distributed cognition; in place of a single metric of valuation, we found multiple metrics of value; and in place of designed and managed R&D, innovations were combinatorics (Kogut and Zander 1992) that emerged from the interaction across these coexisting principles and instruments. The trading room distributed intelligence and organized diversity. The workplace culture that resulted from this highly localized proximity was a resource with which the traders not only faced but in fact profitably exploited the uncertainties that the market threw at them day by day, minute by minute. This heterarchical organizational form proved to be a resource to cope with the more difficult uncertainties created by the attack on the World Trade Center.

SENSEMAKING IN A CRISIS

How do organizations cope with crisis? In his book *Cognition in the Wild*, Edwin Hutchins (1995) presents a fascinating account of organizational behavior in a time of crisis. While Hutchins was doing ethnographic research on a U.S. Navy vessel, the electrical power failed just as the large destroyer was entering San Diego Harbor. Reversing the engines would not take effect before the initial speed and the weight of the vessel carried it on a calamitous course of collision with other ships anchored at bay. The destroyer had to be navigated to safety, yet all of its sophisticated navigational instrumentation had been rendered inoperative. There was no time to issue orders down a chain of command. Hutchins documents, in a literally second-by-second account, the safe navigation of the vessel in a process of self-organized, laterally coordinated, and socially distributed cognition. Uncertainty was confronted by decisionmaking that was socially distributed across both people and artifacts.

With Hutchins's insights in mind, an observer would conclude that International Securities was particularly well prepared to withstand a shock. With its sociotechnical network of instrumentation and interacting desks, the trading room at International Securities relied extensively on distributed cognition to profit from market uncertainty on a daily basis. The company had succeeded in a highly competitive industry through a heterarchical organizational structure with a flat hierarchy and competing subgroups that made sense of the environment in rivalrous ways (Girard and Stark 2002).

The experience of the World Financial Center traders after 9/11, however, differed in several fundamental ways from that of the sailors navigating San Diego Harbor. Whereas the sailors navigated through a crisis and thereby narrowly avoided a catastrophe, the traders were working in crisis following a disaster. The combined effect of the 9/11 attack, other terror threats, the anthrax deaths and subsequent fear, war, and displacement led to a cognitive shock that is well captured by Karl Weick's (1993) notion of a "cosmological event" after which the universe no longer appears to make sense. For instance, the destruction of the twin towers precipitated an ontological crisis in which the basic laws of matter that one had learned as a child now seemed to be violated: chairs could tip over, and trees could fall down, but buildings of that size and scale were not supposed to so quickly vanish.

Unlike technological change, a financial crisis, or navigational failure at sea, a cosmological event is not fully captured by the notion of uncertainty, even in its extreme form. The remedies to it are accordingly different. The pressing anxiety about safety, career, and well-being that characterized the environment in the wake of September 11 did not need to be brought into the trading room in New Jersey—it was all too present, in the form of mourning for deceased friends, repeated images of a disaster site that was their former workplace, and worrying news of anthrax from the CNN monitors. If anything, the traders needed some isolation, at least emotionally, from these concerns.

The social-psychological contours of the September 11 crisis called instead for limiting the organization's exposure to environmental uncertainty and promoting within it the conditions that would enable the firm to overcome the crisis. For example, in a discussion of leadership, Weick (1995, 54) retells an extraordinary story about a military unit in crisis that survived thanks to the unwarranted resolve produced by a map that did not correspond to the actual territory they faced:

> The incident happened during military maneuvers in Switzerland. The young lieutenant of a small Hungarian detachment in the Alps sent a reconnaissance unit into the icy wilderness. It began to snow immediately, snowed for two days, and the unit did not return. The lieutenant suffered, fearing that he had dispatched his own people to death. But on the third day the unit came back. Where had they been? How had they made their way? Yes, they said, we considered ourselves lost and waited for the end. And then one of us found a map in his pocket. That calmed us down. We pitched camp, lasted out the snowstorm, and then with the map we discovered our bearings. And here we are. The lieutenant

> borrowed this remarkable map and had a good look at it. He discovered to his astonishment that it was not the map of the Alps, but the map of the Pyrenees.

The false map, then, saved the organization by preventing paralysis in the face of dissent, fear, and doubt. Weick (1995, 55) ends this account about sensemaking by referring to one business leader's comment on it: "Now, that story would have been really neat if the leader out with the lost troops had known it was the wrong map and still been able to lead them back." Weick regards this comment as very interesting, since it describes a situation that many leaders often face: the followers are lost and even the leader is not sure where to go.

We find the Hungarian soldiers' story apt for thinking not only about the problems at International Securities in particular but more generally about leadership in nonhierarchical organizations. Heterarchies are predicated on the belief that superiors do not have more or better information than other members of the organization. Indeed, in heterarchies solutions typically emerge from interactions within the organization instead of from its top. Knowledge flows not merely up and down along the lines of command but laterally across social networks. This view of organizations raises an important question about the actors formally charged with responsibility for the company: if leadership is not about being the repository of knowledge or the information hub of the organization, what does it mean to lead in a heterarchy?

EXPLODING UNCERTAINTY: THE 9/11 TERRORIST ATTACK

On September 11, 2001, the work of the arbitrageurs at International Securities was interrupted by a sudden explosion in the building adjacent to it, the World Trade Center. As they rushed to the windows of their trading room, the traders saw Tower One of the Trade Center go up in flames. From that vantage point, some saw the frightful approach of the second plane. That crash brought terror to the trading room and a tumultuous escape to the Hudson River. By the time the towers fell, many of the traders were on boats to New Jersey. Fortunately, none of them were harmed.

Like most other New Yorkers, the traders were thrown into a state of unprecedented confusion and equivocality by the attack. Is this real? Is it a nightmare? Consider, for example, the case of Ray, a senior trader at the customer sales desk. He was the first one to escape from the trading room on September 11. He left the building as soon as the first plane hit, took the ferry, and drove home to New Jersey, where on his living room television he watched the towers collapse. Even to someone like Ray who was at the World Financial

Center at the time of the attack, the collapse of the towers on TV had a sense of unreality. He recalls that "watching [the towers fall], it was very easy to be in denial. You are looking at the tower and wondering, how did they manage to make this movie look so real?"

The unreality of the TV images stemmed from their abrupt departure from the traders' established mental schemata. The images forced Ray, for instance, to radically update his belief system: the twin towers were no longer there, lower Manhattan was fractured at its core, and America suddenly was a vulnerable place. What did all that mean?

Like Ray, the rest of the traders at the bank desperately needed to make sense of events. This process rapidly took on a social nature. On the night of September 11, the manager of the trading room met with other senior traders and technical staff to discuss the disastrous situation of the bank. The World Trade Center had collapsed at its doorstep. The building was badly damaged. As a result, the lively trading room that had once supported the innovative work of arbitrage had become a dark hole with no electricity, no connectivity, and no assurance of safety from toxic chemicals. The bank did have another available facility, a back office in (pseudonymous) Escapaway, a small suburban town in New Jersey. But the only resource that the traders could count on there was spare space in a basement where the firm stored corporate-style minicomputers for processing payroll data. That basement had no workstations, no desks, and no connectivity. Nevertheless, the manager and the others decided to do everything possible to continue International Securities' operations in equity arbitrage. They estimated that it would take them three weeks to three months to begin trading again.

Like the group of traders who met with the manager, the rest of the employees in the trading room also needed to rein in the ambiguities of their situation. Unlike the trading room managers and the technical staff, they did not have the chance to meet face to face and decide on the trading room's future. They resorted to phoning each other. As Ray says:

> The first two days it was talking to the people I'm most close to. We did not know what the hell was gonna happen. We didn't even know that place [the warehouse in Escapaway] existed. I was phoning from home, getting ahold of everybody, making sure they were okay. The next three days [I was] talking to others less close.

Some employees, especially those who did not have the home phone numbers of others, began to interact through the Internet. That interaction was facilitated by the bank when it created, in the first days after the attack, a website of "accounted-for" traders. On the site traders could post the news that they had survived and could also indicate that they had been in contact with others who had managed to get home unharmed. Once the site was up, however, they began to use it as a means for sensemaking: sharing their puzzlement, asking questions of each other, and so on. The "accounted-for" website, according to an executive, had postings such as:

"No one has called me."

"I don't know if I still have a job."

"Can someone tell me what's going on?"

Hence, the traders' bricolage had turned an official list of survivors into a chat room of sorts. But this interactivity posed a problem: the medium gave every employee a view of everyone else's confusion. Instead of structuring the ways in which the employees made meaning of the tragedy in a way that gave reassurance, the website was promoting anxiety. Greg, an executive at the bank, was sensitive to the problem. Although it took only a matter of days, the bank's delay in answering those postings, he felt, was "eternal." On his own initiative, he posted a note saying, "We are trying to reestablish the systems and contact you." The point, he explained, was to send a deeper message to the employees: "It was basically so that they would see that someone was looking at this website and that someone cared. The message really was, 'Be patient. You are valued employees.'"

Beyond the confines of International Securities, a symbolic attack called for a symbolic response. On September 14 the chairman of the New York Stock Exchange (NYSE) vowed to reopen the stock market on September 17 to move the United States toward normality. Underscoring the dramaturgical character of the early market opening, the Exchange and the NASDAQ undertook a full-scale test of their communication, computer, and power systems three days before reopening—the financial equivalent of a dress rehearsal in theater. Emphasizing the message of the markets, President Bush tied the reopening of the market to the country's recovery, declaring that "the markets open tomorrow, people go back to work, and we'll show the world." Vice President Cheney went further, urging investors to buy and demonstrate "confidence in the country, confidence in our economy" (quoted in Stevenson and Fuerbringer 2001, A1). Selling was deemed unpatriotic. The neutral, impartial activity of capturing bits of financial value through arbitrage suddenly became laden with ethical and national value.

The management at International Securities also understood the importance of a symbolic response. It decided to reopen as soon as the markets did, not only for the sake of its customers but in particular to reassure its employees.

Despite the lack of facilities, computers, and connections, and even though they estimated it would take them at least three weeks to trade again, barely six days after September 11—by the time the New York Stock Exchange reopened on September 17—the traders at International Securities were trading again.

We were privileged to witness how this was accomplished. Days after the attack we sent an email to the bank to ask whether everyone had escaped unharmed. To our relief, we learned that no one was injured. To our surprise, the return email also invited us to come over to New Jersey—indeed, insisted that we do so—to witness the recovery process. "It is chaotic," wrote the manager of the trading room, "but also very inspiring." Our presence would be "a reminder of normal times." As ethnographers, we felt enormously honored to be welcomed to document these extraordinary efforts.

MANAGING FEAR: HIGH-TOUCH, LOW-TECH

Thus, two days after the market reopened, we were back among the traders in our new role of conspicuous observers, this time in an improvised trading room in a converted warehouse in Escapaway, New Jersey. The trading room was located in the basement of the building. To reach it we had to cross through several rows of corporate cubicles and interminable corridors of beige carpet. And after the cubicles, there was a truly unexpected sight—the trading room. It was a cavernous, open-plan space, complete with traders, desks, computers, outsized TV screens, and multi-time zone clocks. The room had a makeshift feel to it: there were no windows, a low ceiling, and walls painted in industrial yellow, more fitting for a storage space than a trading room. Correspondingly, the dress code had shifted from business-casual to jeans and boots. The room was noisy, but the sound, as one trader put it, was "a wonderful sound of life."

Prominent—indeed, omnipresent—in the room were American flags. A huge American flag hung in the middle of one wall, and small flags were on nearly every trader's desk or attached to monitors. In these first days after the attack, to the question "Who am I?" the answer was, "An American." The task of reopening the securities exchanges in which the traders were participating was cast as an act of patriotism.

What was happening in those first days? Each trader was dealing with his own fear and grief in a situation in which all of his colleagues were also afraid and grieving. As one executive of a World Trade Center firm told us:

> This was not a fire in a building which just destroyed two floors.... Most everybody lost people they knew. They were traumatized, there was fear of war. Nobody knew if the next day there was going to be

> more. I had a guy walking around with a picture of his wife and kids in his pocket and looking at it every two minutes because he was afraid he was never going to get home again. (quoted in Beunza and Stark 2003, 151)

The tragedy had affected the traders' moods, creating an understandable increase in their anxiety level. "I'm so stressed I almost stop by a drugstore and buy all the pills there," said one trader at International Securities. Cell phones, the tiniest ones imaginable and many purchased after September 11, were not placed within arm's reach on desks but kept in pockets or attached to belts so that in another evacuation this lifeline to family could not be forgotten. Such an evacuation in New Jersey was improbable, but the traders were anxious enough to take the precaution.

Bob, the trading room manager, understood the threat that the traders' uncertainties posed to the organization if they went unattended.[3] "Everything okay?" he asked, stopping by each trader's desk on his regular rounds through the trading room. At some point he came close to the desk that we were observing. "Everything fine" went the unanimous answer. But as he stayed two more minutes making small talk, one of the traders took him aside and said: "Actually, Bob, I wanted to ask you something. I'm buying a house, and the closing is in three weeks. I did it with the previous trading room in mind, but now I don't know where we'll be." The manager then spent some additional time chatting with the trader, aware that what had seemed like a question was also a request for more conversation.

By walking the room, Bob was gaining an appreciation from the traders of the different issues that affected their lives and the continuity of the organization. Before September 11, he used to walk the room for the purpose of "risk management," that is, to identify sources of market uncertainty unforeseen by mathematical risk models. Now he did so to gain a grip on the personal uncertainty of the traders.

As we moved to the statistical arbitrage desk, we found Todd assuring his administrative assistant—a middle-aged woman of Asian origin with a moderate command of English—that the risks of smallpox were low and detailing for her the difference between smallpox and chicken pox. A few feet away from them, Stan, a customer sales trader, was talking to a client on the phone, apparently explaining to him how to adapt his financial strategy to the new political context but ultimately just giving reassurance: "I just don't see this market going anywhere, and with any scare story, it might do something.... Are you nervous about it? Don't be nervous, man. I've got you covered."

As soon as Stan retreated from his front-stage role, however, he showed us a very different face. "We're nutty since the attack," he confessed. "Whenever I go home and drive near Newark Airport and see the planes fly so low...."

One level up the command chain, Stan's boss, Ray, took up the task of reassuring Stan. After hearing Stan discuss the probabilities of a real biological threat, Ray replied, "I don't think they have the technology to do that." "If you say so," Stan conceded, though, unpersuaded, he then added, "but they had the technology to do something much worse!" Ray later told us that he saw his role as "reassuring people." Meanwhile, Ray's boss, the manager of the trading room, put on the same facade of reassurance toward the rest of the employees in the form of general assembly–like speeches. Thus, junior traders appeared calm and assured to clients but disclosed their fears to their senior counterparts. Senior traders, in turn, reassured junior traders and administrative assistants, despite being privately skeptical about the future. And in turn, the manager reassured the whole trading room and showed no cracks in public (though he voiced them to us in private). In this circumstance, "what made the difference," as one manager noted, "for every company that came back successfully [was] that kind of touch, high-touch, low-tech solution" (quoted in Kelly and Stark 2002, 1527; for another case history, see Freeman, Hirschhorn, and Maltz 2002).

IDENTITIES IN PRACTICE

After the attack, the traders were left wondering whether their firm would continue to exist, whether the trading room would operate again, what they should do, and even what they were. The basement turned those survivors back into traders. The layout of the room had been creatively inscribed to restore meaning and order to the traders. They were in New Jersey, unquestionably in a basement storage room in New Jersey. But a sign taped prominently on the wall gave different bearings: 20TH FLOOR, EQUITIES. In other corners of the same enormous room one could read: 21ST FLOOR, FIXED INCOME and 19TH FLOOR, RISK MANAGEMENT. Our traders were still between the nineteenth and twenty-first floors, but now horizontally rather than vertically. Moreover, within the constraints of those temporary quarters, they had arranged their desks to reproduce the layout of the Financial Center trading room. For example, every trader in the agency trading desk remained together, sitting on the same desk. In New Jersey they camped on a table partly occupied by two photocopiers and three fax machines in what used to be the fax station of the data center. They camped, but they stayed together.

To the question of "Who am I?" the computers, desks, and open-plan space answered, "A trader." The 20TH FLOOR sign not only reminded traders that the equities trading room was located between risk management and fixed income but also led employees back to their jobs as traders. To the question of "What should I do?" the 20TH FLOOR sign answered: "The same things you would be doing in the Financial Center trading room."

The Escapaway trading room offers a striking contrast to a crisis analyzed by Karl Weick—the Mann Gulch disaster in which fifteen firefighters perished. As part of a more general argument that identity is vital for sensemaking, Weick (1993, 637) carefully reconstructs how the firefighters became disoriented:

> The critical threat to the firefighters' role identities came when the leader told the retreating crew "throw away your tools!" A fire crew that retreats from a fire should find its identity and morale strained. If the retreating people are then also told to discard the very things that are their reason for being there in the first place, then the moment quickly turns existential. If I am no longer a firefighter, then who am I? With the fire bearing down, the only possible answer becomes, An endangered person in a world where it is every man for himself.

In the trading room, by contrast, the traders were told, in effect, "Pick up your tools"—begin the process of sensemaking and orienting yourself in the world by affirming your identity as a trader through the act of trading.[4]

If the traders were to confirm their identities through the actual practice of trading, the rudimentary technologies and limited bandwidth of the makeshift trading room required considerable improvisation on their part. In the face of damaged technologies and missing tools, the traders recombined old and new tools to be able to trade again. In the agency trading desk, for example, junior traders manually performed operations that had previously been automated by the trading engine, such as booking trades, registering them, breaking them up, and so on, effectively taking the bank back to the trading technology that it had used five years before. Lacking seats, they stood behind the lucky senior traders who had seats and computers, ready to help. When, in the middle of a phone conversation, a senior trader suddenly needed to record a transaction, at the shout of, "Gimme a ticket, somebody gimme a ticket!" three junior traders scrambled to offer tickets, paper, and whatever else he might need. Another junior was sent to "help with the tickets" and "relieve others" in a different desk. But he was told that with a sensitivity to the situation characteristic of International Securities: the senior trader who gave these directions added, "Oh, and this isn't permanent, by the way." So unusual was manual bookkeeping for the junior traders—the bricolage that it entailed was so radical—that some of them did not even know how to do it, or whether it was appropriate for them to do it.

What is the lesson from the makeshift trading room for the organization of responsiveness? Responsiveness, the experience of these traders suggests, is a combination of anticipation and improvisation (Tierney 2002; Beunza and Stark 2003; Kendra and Wachtendorf 2003; Perrow 2002). The bank had a space, but it was far from a perfect replica of the trading room at the Financial Center. Yet the traders managed to be trading in it from day one. How? By engaging in bricolage. The bank had a warehouse, with square feet and little else. In that square footage the traders saw a resource and used it to arrange the desks in almost the same configuration as in their former trading room. The tools the traders had at their disposal were rudimentary in comparison with the precision instruments they were accustomed to. In New Jersey they had only single-line phones, home laptops, reduced connectivity, and single-screen terminals. But the traders made them work: they managed to talk to other banks, enter orders, and connect to the market. Like good bricoleurs, the traders did not let imperfection stand in the way of accomplishing tasks. Instead of waiting for the trading engine to be restored or for new servers to be delivered, the traders readily recombined old and new technologies. They matched their do-it-yourself outfits—jeans and boots—with a corresponding willingness to solve problems. In this process, some traders became clerks, others manual operators, and still others roommates of bandwidth, sharing cable to the NYSE. These changes in role status did not detract from their status as traders; in fact, the changes reaffirmed their status as traders. Sometimes things have to change to remain the same. Their identities as traders were inscribed on their business cards. But what do traders do? They trade. By repositioning themselves in the damaged sociotechnical networks, the traders found ways to trade. Innovation is not having new resources to accomplish new tasks but recognizing configurations that others would not see as resources. Responsiveness is grounded in this resourceful recognition (Beunza and Stark 2003).

In contrast to the Mann Gulch firefighters, the traders at International Securities were told to "pick up your tools." Weick is correct. But to his insight we add another: success in restoring an identity can lead to new crises. Restoring the trading capability of the organization did not put an end to International Securities' problems. The repercussions of September 11 were far more complex than a single crisis of identity. As we shall see, the very fact of buying and selling securities affirmed the employees' identities as traders, but eventually it also affirmed their identities as particular types of traders, thereby leading to new crises of identity.

NO ESCAPE

Whereas trading resolved fundamental uncertainties by restoring basic identities, the particular circumstances of the fall of 2001 brought new uncertainties directly into the very practice of trading. On October 7, the anticipated war broke out between the United States and Afghanistan. "Investors," the *New York Times* wrote the following day, "will enter unfamiliar territory as stock markets in the United States and around the world open this morning for trading" (Berenson and Brick 2001, B13). Unfamiliar indeed: traders who had transformed financial uncertainty into probabilities and scenarios, facts and figures, now had to introduce the political logic of war-related news into their economic calculations. Even worse, those political developments were not unrelated to their own personal security and now threatened them directly. The emotional detachment that had served traders so effectively during peacetime was now much more difficult to re-create.

Because the war affected stock prices, traders at International Securities had to dissect incoming news from the war. Despite being arbitrageurs—in principle unconcerned by market direction—they could easily "get hooked" from a sudden fall in the market: they might be unable to find a counterpart for a trade in a sharply falling market and thus be stuck in the middle of a trade. The result would be precisely the sort of dangerous exposure to the ups and downs in the price of a stock that arbitrageurs try to avoid. War affected them in other ways as well. At the statistical arbitrage desk, Todd found that the conflict had altered the historical correlations of some stocks. For example, the price of Boeing and Northrop Grumman had traditionally moved in parallel, since the market valued both as aviation stocks. But with the rise of political uncertainty, the value of military stocks went up, while the value of stocks related to tourist travel decreased.

As market-driving events shifted from economic to political ones, the traders had to develop new mental frameworks to interpret developments. At the customer sales desk, for example, traders quickly learned that the market had knee-jerk negative reactions to news of American casualties from the war, as well as to news of accidents anywhere in the world, even before these could be confirmed as terrorist acts. Consider the following discussion between Josh, a senior trader at the customer trading desk, and Stan, a more junior one, about how to avoid being hooked (unable to complete an arbitrage hedge). Josh recommended trading following the advances of the American army:

> JOSH: You have to wait until they give more war news, something good, like they took another airport. You should short everything until the rangers get to Afghanistan.
> STAN: Is that good news?
> JOSH: I guess.

The traders modified their information channels to complement the switch to politics. The television screens in the trading room, normally tuned to the financial news channel CNBC, were tuned to CNN. And in their spare time, and without pausing for explicit direction from management, the traders discussed the war. According to Bob, the manager:

> This is an information assessment room, and what they do is what they have always been doing all the time: incorporating all the information they receive. The problem is that now they do it with news of political uncertainty, and so, for example, do you know of daisy cutters? No? Well, let me tell you, they are the latest bomb. We're learning everything about that, and I can tell you all you want to know. We had been focused on anthrax, then moved on to smallpox, then strategies for war in Afghanistan... the whole thing. People compare notes, talk to each other.

Adaptation to wartime trading was not without cost. The traders were in a difficult bind. To trade they needed to be monitoring political developments minute by minute, but the more closely they followed the news about anthrax, biological weapons, war, and terrorism, the more they dwelled on matters of their own and their families' insecurity. They had narrowly escaped the immediate tragedy of the September 11 attack, but they could not escape the consequences of its aftermath. Trading, which had offered a momentary reprieve from the original trauma, was now a source of new anxieties. Although the economic uncertainty that traders characteristically transformed into risk could be boiled down to depersonalized numbers and dealt with in a detached manner, the continuous transformation of political news into risk had unintended effects: it exaggerated the traders' fears. As a consequence, the atmosphere in the trading room, Bob said, became "very depressing."

> Technology also had an effect in this process. In the former room at the Financial Center, traders could choose whether or not to listen to the news, thanks to small individual speakers at every trader's desk. Indeed, most of the time many chose not to. In the trading room at Escapaway, however, there was only one large speaker, always turned on. Although obviously not as trapped in the war as American soldiers on Afghan soil, from a cognitive standpoint the traders in that Escapaway trading room were also trapped in the war.

WALL STREET TRADERS . . . IN NEW JERSEY

As the initial burst of patriotic fervor and the exhilaration of meeting the challenges of rebuilding gave way to the realities of long commutes and continued anxieties, Escapaway became increasingly burdensome for the traders. The temporary trading room was barely an hour's drive from Manhattan, but it felt a universe away from the excitement and activity of Wall Street. Located in a suburban corporate park, the building was surrounded by similar low-rise corporate offices of manufacturing companies such as Colgate-Palmolive and AT&T.

Just around the corner a farm announced HAY FOR SALE, and the surroundings offered an endless succession of indistinguishable shopping malls. The remote back office of International Securities had, in effect, become its front office too. The traders, in short, were Wall Street traders in New Jersey.

International Securities' move to an all-inclusive trading room in Escapaway had confirmed their identities as traders, but their occupational identities were not confined to such a simple construct. Over time, the circumstances in New Jersey began to threaten their identities as sophisticated Manhattanite professionals. As affluent Wall Streeters, the traders were recipients of the glamour and cachet bestowed upon them by countless artifacts of modern global culture, from Oliver Stone's *Wall Street* to Tom Wolfe's *Bonfire of the Vanities*. But once the landmark skyscrapers, the amenities of the financial district, and the fat bonuses were stripped away from trading, what did buying and selling stocks for a living mean? Indeed, to judge from the traders' appearance—from their improvised jeans-and-boots dress code to the cramped facilities and outmoded computers—they suddenly looked more like the working-class, rent-a-seat day traders whom one of us studied during the early months of the NASDAQ boom (Beunza 1999). September 11 had given a blue-collar appearance to a work environment that used to be highly refined even among the affluent white-collar professionals.

The grim suburban reality of Escapaway had no amenities for the traders to escape the pressure of their trading room. According to one trader: "Being in Escapaway was horrible. You were stuck. What could you do? You could drive to Wal-Mart, you could drive to Home Depot. One thing about Escapaway is, people who never lived in the suburbs were able to test it out.... Being there taught more than one that they did not want to live there."

The traders' new hometown quickly became a lightning rod for jokes. During one of our visits an excited junior trader announced to the rest of the desk that he had managed to download from the Web the streets of Escapaway so that "you can find all the fast-food restaurants." To this a senior trader replied in jest, "Why do you need a map for that? There's so many Dunkin' Donuts here, someone told me once to turn right on the Dunkin' Donuts, and I turned on the wrong one." Another trader described being in Escapaway as, "like, you know, when you go to Mexico, they say the locals can drink the water and not get sick. Well, the people in Escapaway can eat from McDonald's every day and not get sick."

The firm had put in place a makeshift cafeteria service, but like college cafeterias during exam periods, the food took up more than its share of blame for the anxiety of the customers. According to one executive:

> In the trading room of the Financial Center we had sushi Tuesdays and Thursdays. The food was pretty decent down there, steak, all that jazz.

> Now we're eating junk. Deli food. There's enough for everyone. But because it's a buffet line, people unconsciously think there's gonna be shortage, so they eat more. People smoke a lot more, and some went back to smoking. So people either ate more, drank more, or smoked more.

The problem, of course, was not the food. Escapaway, as another trader put it, was "not consistent" with his choice of occupation. His most acute memory of those months was having to use backup chemical toilets, something "unheard of for someone working in the securities industry."

As we saw, traders frequently used humor, sometimes self-deprecating, sometimes cynical, to create psychological distance from Escapaway. But there were other ways of expressing their lack of identification with the locale. In one of the very frequent conversations about the commute, a trader commented: "Traffic moves now twenty miles an hour faster than before all this happened. If everyone is doing eighty-five, I'm doing ninety-five. I've got a sports car." This trader effectively ended up defying the law—traffic regulations—for reasons not unlike those of teenagers whether urban or suburban: to manifest his identity by stating that he was different from the locals and their rules did not apply to him.

As frustration mounted, some traders began to contemplate alternative jobs at rival banks in the city. "At least two I know were really ready to throw in the towel," a senior trader recalled. To the many questions that traders were asking themselves, now there was one more to add: do I want to work here? Ray, the senior trader at the merger arbitrage desk, told those who were considering switching jobs: "Now is not the time. Everything's changed so much, it's not time to change anything else. The job is at least something you can hold on to."

A THREAT TO THE FIRM: THE BREAKUP OF THE TRADING ROOM

In December 2001 the bank's steady path to recovery suffered a sudden blow: a group of traders decided to leave the premises at Escapaway and establish themselves in a temporary trading room in midtown Manhattan. The heads of the merger, options, and convertible bond arbitrage desks, responsible for twenty-four traders in total, rented office space in midtown and began to trade from there. They were not changing jobs, but they were changing locales. The bank accepted their relocation. But it was widely felt that the move could jeopardize the unity of the trading room and ultimately the existence of the firm.

Bob, the trading room manager, explained the move as a solution to acute differences in preferences among traders about the desirable location for the trading room. The traders who lived in Manhattan did not want to work in New Jersey because they did not want to be outside the city in case of an attack while their families remained there. On the other hand, the traders who lived and had their families outside Manhattan did not want to risk their lives by going to work in Manhattan. "Manhattan traders," the manager explained, justifying his decision to give the departing traders the green light to go, "didn't *ever* sign up for a job in New Jersey. Some of the people [who chose to go] are really crucial." Thus, he concluded, the bank had to accept their conditions.

The departing traders, however, justified their move in a different way. They emphasized the networking and informational advantages of midtown Manhattan.[5] According to Max Sharper, head of the merger arbitrage desk, "The difference between midtown and Escapaway is like between being in the solar system or outside." Merger arbitrage, as noted earlier, is the practice of valuing firms based on the price of their merger partners. When two firms announce a merger, Max added, "we typically want to know their commitment" to the merger. Midtown Manhattan was particularly good for this purpose because companies announce mergers in presentations at midtown hotels. Being close to them enabled traders to attend those presentations, and doing so in person gave arbitrageurs an advantage over listening to them webcast over the Internet. "Perhaps," Max said, "there is something that you miss in the digital transmission; perhaps they show charts and graphs that are not on the website." Furthermore, webcasts of the analyst meetings "do not capture the reactions of the people in the room or in the corridors after the meeting." Midtown gave traders yet another advantage: improved networking possibilities with members of the arbitrage community. In this sense, Max observed, "Being in midtown allows you to have the occasional lunch or the drink after work. We are five people on the desk, and each week I'd say we do one or two lunches and one or two research meetings. This increases if there are earnings announcements."

The departing traders thus appeared to place greater importance on the external networks and communities of practice than on their intra-organizational ties.

Despite the many advantages of the midtown trading room for the departing traders, it had strong negative political and structural repercussions on the rest of the organization. For the traders who remained in Escapaway, the move felt like special treatment for a few, an unusual practice in a bank that minimized status differences. One of them noted that it "might have created jealousy even if, for some, being there [in Escapaway] was not more desirable."

The new trading room revealed the extent to which the firm based its knowledge-sharing on co-location of the traders. The desks that left the main trading room for the midtown trading room included merger arbitrage, options arbitrage, and convertible bond arbitrage. These desks had crucial information about the details of mergers and the volatility of stocks. Their departure cut off the rest of the desks at Escapaway—customer sales, long-short, stock loan, index arbitrage, and statistical arbitrage—from the vital circulation of knowledge. Commenting on the move, a senior trader who remained at Escapaway noted: "Before, it was like, they're the audience, we're the show, or the other way around, we're the audience, they're the show. But the truth is, they have the information we need." The midtown trading room thus began to threaten the continuity of the bank itself. The manager shared with us his concern about this issue in one of those moments when ethnographers become privy to worries that the confidant does not share with his or her colleagues. "Would you mind closing the door?" he asked in the middle of one of our conversations. (By December 2001 our meetings with the manager were no longer taking place on the open trading floor but in a windowless conference room.) Exhausted, peering up to the ceiling and speaking in hushed tones, Bob continued: "In the past what kept us all in International Securities was that the Financial Center was a very good compromise for everybody—for those of us who lived in Manhattan as well as those who lived in New Jersey." With the destruction at the Financial Center, Bob said, that truce was unsealed. The move of the traders to midtown "introduces personal economic uncertainty ... for me too." Suppose, he said, that the departing desks did well in their new location. This, he thought, could mean the end of the trading room, for "if it becomes clear that we can trade separately, you wonder what's keeping us together, what's preventing some of us from starting an independent hedge fund."

Thus, the manager, along with his traders, faced a new question: what, after all, was the point of having all the desks together? What exactly were the synergies that made the trading room more than the sum of its desks? Before the attack, nobody questioned the advantages of being together, and no one considered leaving the bank. By December 2001, however, not even the integrity of the firm was taken for granted.

ENACTING BACK-TO-BUSINESS-AS-USUAL

Like the Hungarian detachment discussed by Weick (1995), the trading room at International Securities was an organization in crisis, and one whose leadership was similarly in the dark. What they could do was display confidence that the organization would hold together. They too had a kind of map—one that pointed to the return to the World Financial Center. The defection of the traders to midtown could be presented as "temporary" because the arrows from Escapaway and from midtown both pointed to the former trading room.

Aware of the need to reduce uncertainty, management presented the midtown trading room as a short-term policy. Officially, the firm was committed to returning to the building it had left, the World Financial Center, as soon as it reopened. But the manager lacked crucial knowledge about the possibilities for returning. When we privately asked him for a tentative return date, Bob laid his doubts open:

> We don't know when it's going to open up, and indeed, whether it's going to open up at all. Well, of course time is the issue here, because it will likely open up at some point. But it may not be relevant for us, because people don't want to stay here, and the longer we stay the worse the danger of attrition.

The manager, in other words, did not know. But in every interaction that we observed or heard about, he conveyed the confident posture, "We will return." His commitment to returning to the Financial Center—a commitment to a future that resembled the past of the firm—was part of his broader program of publicly interpreting the situation as "on cruise to normality" in the hope of bringing about that very outcome: Bob the manager was enacting back-to-business (Weick 1979).

This strategy faced two difficulties. First, as Bob's remarks indicated, there was a real possibility that the trading room in the World Financial Center would not be reopened. What if the "bathtub," the infrastructure that supported the building against the Hudson River, was found to be structurally compromised? What if a mysterious mold was found, as happened in the Bankers' Trust building also adjacent to the World Trade Center? What if the dust absorbed by the air conditioning system, at first declared to be harmless, later turned out to be carcinogenic?

Second, as Bob's remarks also indicated, the strategy faced a ticking clock. When International Securities' fiscal year ended March 31, bonuses would be determined. As the executive in charge of relocation put it:

> We knew that people would start quitting after six months. The key thing to avoid that was to get back to Manhattan before then, to be back by the beginning of the new fiscal year. You see, the year ends on March 31, and bonuses are paid in the last week of April. If they were going to receive a disappointing bonus, we wanted them to feel they were already making a new start. Also, usually if people want to quit, they wait until having their bonus. No one threatened explicitly to quit, but I think there was a commonly understood agreement.

Informally among themselves, the traders had constructed a deadline. The construction became real in its consequences, forcing the bank to hedge against the possibility that the Financial Center would be declared structurally unstable or environmentally unsafe and not ready by April.

As with any sophisticated hedging strategy, betting that the Financial Center would be ready in time required a counterbalancing bet in the opposite direction—but a relatively low-cost one. The bank reacted to such uncertainty by searching for an alternative trading room that, contingent on events that had yet to unfold, could end up as an interim trading room, a permanent trading room, or a backup trading room.

The search for an alternative site took the traders far beyond merely functional considerations, forcing them to take into account issues as varied as international politics, structural safety, and the width of a building's stairways. The traders first considered a high floor in a landmark midtown skyscraper, the Citicorp Building. But further research on the tower revealed that, as the executive in charge of relocation put it, the building was "about the fifth most important terrorist target" in New York, because 5 percent of it was owned by a Saudi prince. In addition, one of the four external columns of the building was exposed (it has since been covered), and the traders feared that terrorists could bring down the building by taking out the column.

After considering but rejecting a building in Jersey City as too large and too costly, the bank finally chose a building in Hoboken, a recently gentrified New Jersey city across from the western shore of lower Manhattan with convenient access by mass transportation. The office was five minutes away from the World Financial Center by ferryboat, very close to midtown Manhattan by PATH train, and adjacent to the New Jersey Amtrak train station. Seen from the Hudson River as the ferry approaches the New Jersey shore, the area does not appear distinguished. Just beyond the waterfront, however, it offers an up-and-coming neighborhood of young professionals who work in New York City.

The traders' remaining fear of terrorism made some other features of the building particularly attractive. As one put it: "It is nice that we were able to secure a second floor. A first floor would have been ridiculous, but we wanted to be able to go down the stairs and leave the building fast if we needed to. The stairwells were wide enough. We measured them." From height to politics, from the width of stairwells to ferryboats, the traders' relocation criteria reflected the wide web of concerns, issues, and constraints that they experienced.

Thus, for several months the "map" portrayed two sets of arrows, one set pointing to the World Financial Center, another pointing to the Hoboken facility (which was rapidly being converted into a trading room). Although there was uncertainty about which of the trading rooms they would be moving to, that very ambiguity was a means to reinforce the certainty that all the desks would be reunited into one trading room in either case and thus prevent the organization from sliding into a dangerous free fall.

RETURN TO THE WORLD FINANCIAL CENTER

THANKS—WELCOME BACK read a huge sign next to an enormous American flag over the entrance to the World Financial Center as the traders returned to their old trading room in March 2002. In the end the World Financial Center had reopened, and the hedging renovation of the Hoboken facility was justified as a recovery site that would be maintained in the event of any future disaster.[6] All the desks were once again together. In fact, despite the six-month displacement to New Jersey, the extra commute, the potential for serious conflicts around the midtown move, the low bonuses, and many other difficulties, not a single trader had left the trading room. International Securities had retained its most precious assets.

Although the return was marked by a strong sense of accomplishment, it was also accompanied by a renewed experience of loss. Some traders chose not to look down from the twentieth floor to the hollow immediately below where workers were still removing debris, but none of them could entirely avoid the broad windows and the extraordinary emptiness where the towers had once stood. The trading room was familiar, uncannily so, but the daily journey there was now disconcerting. The World Trade Center subway stop had been destroyed, and the traders had to get off at other stations and walk around or alongside the WTC site. Instead of walking past the specialty shops in the old Trade Center, now along this ten-minute detour the traders passed numerous impromptu memorials. One, for example, displayed plastic-covered color photos of deceased police officers, firefighters, and Trade Center employees, with their names and a sign, REMEMBER ME, below each. As the trader walked, he or she confronted a succession of signs: REMEMBER ME, REMEMBER ME, REMEMBER ME. Different, but equally upsetting, were the tourists with their camcorders and gaudy clothes; the vendors selling memorabilia; the constant presence of so many police officers, both regular and plainclothes; the construction workers with their noise, trucks, diesel fumes, and dust. If getting back to work was a way to put closure on the trauma, the process of just getting to the workplace could be emotionally exhausting.

CONCLUSION

In this chapter, we set out to address the following question: how does an organization cope with a sudden and radical change in the world around it?

A long tradition of organizational literature dating back to the open systems school argues that organizations deal best with environmental uncertainty by reproducing it within the organization (Katz and Kahn 1961; Burns and Stalker 1961; Hedberg, Nystrom, and Starbuck 1976). In contrast, the sensemaking literature contends that in situations that challenge all prior mental schemata, the emphasis should be on protecting and preserving the organization—the team, the firm, the factory, the sociotechnical unit—even at the cost of misalignment with the environment. The case of International Securities, an investment bank severely damaged as a result of the terrorist attack on September 11, 2001, speaks to this debate.

The particularities of International Securities prompt another important question: what role should be taken by leaders—and in particular leaders of nonhierarchical organizations—in situations of extreme crisis? Exceptional circumstances seem to call for strong leadership. But heterarchical organizations eschew hierarchy as an organizing principle. Instead, they exploit day-to-day uncertainty by fostering lateral accountability and emergent initiative (Lane and Maxfield 1996; Stark 1999; Neff and Stark 2003). Should the leader of a heterarchy take absolute control of events, or should he or she resist the pressure and preserve the nonhierarchical character of the organization?

Our findings suggest that in conditions of extreme crisis, organizations should indeed favor internal stability. The makeshift trading room, as we saw, began to reduce uncertainty as it provided the means to reenact identities, first as patriots and then as traders. This finding is consistent with the sensemaking literature. For instance, in the case of the Hungarian detachment described by Weick (1995), the faux map was effective not because its leader had superior knowledge or a higher, more privileged, and more encompassing vantage point, but because the map was a device that could help hold the organization together. The "map" of their return to the World Financial Center filled a similar function for the traders at International Securities.

On the other hand, our study warns against the difficulties of simple recipes. As we also saw, the trading room could not entirely buffer the traders from the environment. To be a wartime trader required exposure. To take positions, to be exposed to risk, meant being exposed to the news of war. That news, as well as the continued perception of terrorist threat, interacted with other identities—for example, as spouses and parents whose loved ones were or might be (depending on the location of the trading room) across a river separated by bridges and tunnels that would surely be closed in another attack. These identities provoked differences between traders who lived in Manhattan and those who lived in New Jersey and opened up the black box of the truce in which the trading room's location had been taken for granted. Moreover, as we also saw, by providing the conditions for realizing their professional skills, the Escapaway trading room reinstilled more nuanced identities. How could one be not simply a trader but specifically a practicing merger arbitrageur if one could not have easy access to the midtown meetings where merger deals were announced? In sum, unlike the sailors studied by Hutchins (1995), the Escapaway traders were not all in one boat.

In such contexts, the function of leaders is to manage the employees' interpretations of the environment in ways that downplay conflict and uncertainty. Leaders do not need to abandon their nonhierarchical style and say to their employees, "I know more than you do." But they can hold the organization together to increase the chances that solutions will emerge through the interaction of the skills and knowledge of the members of the organization.

Our case suggests that this low-profile leadership style can be extremely effective. The traders at International Securities managed to navigate six months of exile successfully without losing a single trader. They could do so because their leadership provided some basic conditions—reducing uncertainty on some dimensions while allowing considerable freedom of action along others—that made it possible for the traders to avoid frames that would pull them apart. The organization held together through a leadership style that managed ambiguities, rebuilt identities, assuaged fears, and restored the initiative of organizational actors, creating the conditions for new solutions to emerge.

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NOTES

1. All names of interviewees reported throughout the chapter are pseudonyms.
2. We think of this as a search process in which you do not know what you are looking for but will recognize it when you find it (see Beunza and Stark 2004).
3. Siegal Barsade (2002, 644), for example, refers to "emotional contagion"—the "transfer of mood among people in a group, and subsequent effect on group dynamics."
4. Identities are made through social interaction: "The characteristic features of the actor arise in the interaction with the context and, in that sense, the actor is made, just as he helps to make the other actors in the network. . . . Identities (the reproduction of actors) thus cannot be taken for granted. If the conditions are not met, identities will not be sustained" (White 1995, 81). The social character of identities is also sociotechnical (Callon 1998, 15): it includes interactions with things as well as with people. That is, among the "conditions to be met" are the tools with which people can enact their identities.

5. Elsewhere (Beunza and Stark 2003) we discuss the changing urban geography of finance in the context of debates about the future of lower Manhattan. For overviews on the geography of finance, see the papers in Stuart Corbridge and Nigel Thrift (1994), Andrew Leyshon and Nigel Thrift (1997), Ron Martin (1999), and Gordon Clark, Maryann Feldman, and Meric Gertler (2000).
6. Across the Hudson River from the World Financial Center, the Hoboken disaster recovery room can be reached by ferry. Tests confirm that it can be fully operative within thirty minutes after an evacuation from the Manhattan site. Replete with backed-up data and up-to-date computers—one for each trader, with the trader's name marked on top—it is an eerie, unoccupied space.

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