1 *Crazy systems, Kafka circuits, and unusual routines*

Two stories of mundane complexity and dysfunctional feedback

In most organizations (whether corporations, academic departments, retail stores, government agencies, hospitals), most everyone at least at some time is trying to improve, suffering from, attempting to avoid, or complaining about, some aspect of the organization or particular system. Unfortunately, the improving, suffering, avoiding, and complaining are rarely linked. After a while, complaints disappear as people develop workarounds or ways of overcoming, without solving, the problems, or avoid them, or disengage from the process, or displace the costs to others. But the tension and frustration percolates throughout the organization and its environment, and different people who have to interact with the system (employees, customers, technical support, administrators) continue to pay in varying psychological, professional, pedagogical, or just practical ways. Such interactions would seem nonsensical on the face of it: why would organization members regularly behave in ways that frustrate them, weaken their performance, or create other kinds of negative outcomes? And why should it prove so difficult for well-intentioned people to change such patterns? Consider these two stories, one a seemingly trivial frustration of daily life, the other a seemingly ineluctable feature of public bureaucracy.

Sweeping it under the rug

Recently, I went to the local grocery store to rent a carpet shampooer. I went to the shampooer stand, took the one and only shampooer, and went to the Express line, as I had only one item. Of course the Express line was the slowest line, and I spent that time worrying whether renting a shampooer was acceptable in the Express line, and whether

they would take a check in the Express line (though there was no sign saying "Cash Only").

Finally when I came up to the checkout clerk, the checkout person didn't see the shampooer (because only the top of the handle was in my hand, which was pulling the cleaner on the floor), and starting checking out the next person's stuff. I'm not sure why she thought I was in the line if I didn't appear to her to have anything to pay for. So I showed her the shampooer (causing some frustration for the person behind me who expected to be served), and she said she didn't know what it was. I said it was a shampooer. She said, no, she didn't know what it cost. I began to go to the stand to read the rental cost, but she said no, she had to get the price from a manager. To do this she had to close down her register and leave her stand, creating ripples of frustration in the line of customers who were there precisely to receive "express" checkout. She got the attention of the manager (who was checking out customers a few rows down), who said no, I should have taken it to the customer service window. I asked the checkout clerk if the stand had any sign telling people that's what they had to do. (I had now spent fifteen minutes worrying about doing the right thing, only to find out it was wrong.) She got upset, as though I was raising a forbidden topic. (There was no such sign.)

I left the Express line on the way to the customer service desk, and when I was next to the manager I said that if they had put the information on a sign on the stand I would have followed it, but there was nothing there. She ignored me, obviously angered that I questioned this whole thing.

It never occurred to either the checkout person or the manager that some process at the *store* might be at fault; this may be because that's an abstraction. Because there's no *person* associated with the display stand for the shampoo machines, it can't be the *stand's* fault. And it wasn't the manager's fault, or the checkout clerk's fault, because they were just doing their job. All these things are *true*. So my predicament *must* be my fault – the customer's fault. But this is *not* true! It was obvious to her that I should have known to take it to the customer service desk, because to her there was a policy in place, and they would have prior awareness through multiple instances. But I only rent a carpet shampooer once or twice in a lifetime, and never from the same place, so it is an extremely unusual event to me; how am I supposed to *know* this, when there was no sign saying so? What

might possibly be a *usual* routine to them is a very *unusual* routine to me, but, worse, the interactions following from trying to deal with or recover from that disjunction also involve an unusual routine for both them and me.

Possibly the worst implication of this situation is that not only did the checkout clerk learn nothing about a transaction which created delays and frustrations for a number of customers, but the manager didn't realize a repeat of the various aspects of the incident (my distress and their secondary distress) could be avoided by simply placing a sign at the shampooer display. Perhaps this is because the manager doesn't really pay any consequences of the *store's* oversight (the first problem); she only pays the consequences of a *customer* raising the issue of the predicament (the consequent problem). So the easiest and most sensible approach was to put the costs on the customer (and, as a byproduct, the checkout clerk and other customers), and deflect learning by making a negative judgment about an unhappy customer. Everyone loses, and the process only confirms each participant's view of the process. I'm a dumb customer, they're unfriendly checkout clerks, the Express sign is misleading, and the store is a faceless bureaucracy.

Ironically enough, my trip to the store was the consequence of another system's failure. A previously reported but nonetheless unrepaired problem with my office air conditioning had caused water to leak onto the carpet. The university's maintenance crew had been unable to remove the water spot, so I had decided to take care of it myself. The chain of events illustrates potential interdependencies among presumptively independent systems, percolating through the most mundane situations (for an elaborate story of unusual routines in trying to deal with multiple new media, see Rice, 2009a).

A poetic license to steal

Umberto Eco, known primarily for semiotic analysis and his very successful novel *The Name of the Rose*, was a journalist early on in his career. In one story, he wryly describes a classic problem and contorted solution (1994). He lost his wallet in Amsterdam. He received his commercial credit and press cards in short order, but a permanent replacement of his driver's license was another story. This situation occurred in Italy, but it is by no means unique to that country.

He received his temporary license in two months, but only because of his position, education, and contacts. It still involved three cities, six institutions, numerous personal contacts, and a newspaper and magazine. Each visit unearthed new requirements, forms, sources of delays. In one instance, he was told he would have to return to the original place of issuance in order to obtain a document number to trace license documentation, not the actual license number itself, in order to issue a temporary license. But the original location was very far away, impossible to reach without a car, which he could not use because he had lost his license. Also, the main issuing office could not retrieve the license information based only on the driver's name; they needed the license number. But the license was now lost, of course. He initially tried to use the license number written on one of his past rental car receipts, but that turned out to have been written down incorrectly by the rental car office.

The temporary license was finally issued, but only in a series of six-month extensions awaiting the permanent license. The temporary document had no real value and could easily be forged, so there must have been many illegal temporary documents around. Also, he had to purchase an annual tax stamp for the temporary document, but was told by the seller not to cancel it, because he'd just have to buy a new one when the real license arrived. But not canceling it would probably be a crime itself! When he finally received his permanent license nearly two years later, it was not sealed, so it could have been printed by anyone; it seems likely there were lots of forged and illegal permanent licenses in use. That is, it would be very easy to create illegally, and terrorists did (and do) this quite well, so why was it so hard to obtain a permanent license legally? He suggests, in the best Swiftian tradition, why not just have a coin-operated machine available in public places for purchasing a license, or why not hire repentant terrorists in the license office, thus reducing prison costs and improving administrative efficiency in one move.

Just stories?

Are these just random, idiosyncratic occasional occurrences? Are these kinds of experiences primarily noise in the music of social interaction? Is there any way to talk or think about these kinds of situations based on more than frustration, irony, bemusement, complaint,

resignation? We argue that there is. The primary goal of this book is to develop a detailed vocabulary and conceptual framework for identifying, understanding, analyzing, and possibly resolving such phenomena. The chapter begins by first describing an early perspective on dysfunctional organizational and societal feedback loops by the sociologist Benjamin Singer, involving *crazy systems*. The chapter then introduces the more general concept of an *unusual routine* (UR), along with a preliminary model of unusual routines, which will be developed throughout the book.

Crazy systems

An early framework for identifying and assessing these situations is what Singer (1980) called *crazy systems* and *Kafka circuits*. Briefly, Singer proposed that organizations suffer from psychotic and pathological behaviors much as people do, but are rarely diagnosed, critiqued, or treated as such. The dysfunctional organizational behaviors often take the form of "crazy systems" that generate "confusion, error, and ambiguity" and even "inscrutability and unaccountability, involving harm to the victim and often to the system itself, [breeding] a new kind of organizational trap" called Kafka circuits. These involve "blind alleys, crazy situations," and processes that "end where they began" (p. 48).

One does not have to agree with Singer that organizations or systems can be literally "crazy" in order to readily recall such interactions with systems; we use the term metaphorically. Other terms such as wasteful, silly, dangerous, or foolish, while indicative of some of the characteristics and consequences of these systems, do not quite capture the frustrating sense of dysfunctionality reinforced, of processes seemingly taking on a life of their own, diverging from even the best-intentioned designer's, employee's, or client's aims.

Causes

Singer and others have identified the following factors as contributing to the emergence of crazy systems.

Conflicting goals

Most organizations are rife with latent goal conflicts (Cyert and March, 1963). James March and Karl Weick, among others, have

argued not only that a plethora of goals – even inherent paradoxes (Putnam, 1986) – represents the ordinary state of organizations, but that both the presence of conflicting goals and the awareness of them are salutary for organizational learning and performance. Eisenberg (1984), for instance, argues that ambiguity (such as in the meaning of organizational mission statements and logos) helps achieve strategic goals such as commitment, by allowing individuals to invest some of their own meaning into shared words. The folly of apparently inconsistent reward structures may mask a deeper organizational wisdom, due to the need to serve multiple contradictory goals (Boettger and Greer, 1994). Kerr (1995), however, disagrees, arguing that rewarding A while hoping for B is organizational folly.

"Organizations perform in contradictory ways because they must satisfy contradictory expectations" (Fairhurst *et al.*, 2002, p. 502). This is particularly the case in complex environments, as organizational adaptation and success requires internal variety matching environmental variety (Weick, 1979). Fairhurst *et al.* relate this to Giddens' (1984) structurational argument that every social system involves an antagonism of opposites, whereby systems have structural properties that are both shared and opposed. Typically there is one primary contradiction (about the nature of the system itself) and possibly many secondary contradictions, which emerge from, and, ironically, sometimes worsen the primary one.

"Organizations are inherently paradoxical" (Ford and Backoff, 1988, p. 82), involving, for example, control vs. independence, nonconformity vs. conformity, centralization vs. decentralization, order vs. variation, etc. Sometimes these conflicts are embedded in what might appear as a consensual goal. For instance, principles and goals of just-in-time manufacturing engage the tensions of quality and low cost, high current performance and adaptability to change, full-capacity efficiency and organizational slack to allow for errors and experimentation, push scheduling of production and pull demand triggering production, and standard production and customized product lines (Eisenhardt and Westcott, 1988). As another example, Total Quality Management seeks to achieve the unifying goal of high-quality climate, products and services, but through multiple goals which themselves include conflicts: seek diversity, but build a shared vision; encourage creativity, but be consistent in everything; focus on continuous process improvement, but make breakthrough change an

important part of the job; use autonomous work groups to enhance performance, but ensure careful and uniform control of product and service quality; build a cohesive work team, but welcome conflict when critically analyzing ideas; set realistic, yet challenging, goals for maximum performance, but use stretch targets to dramatically improve performance; and reward team effort, but create a high performance climate for individuals (Thompson, 1998). These multiple conflicts may be summarized as a fundamental tension between the goals of *learning* and *control* (Simard and Rice, 2006). Managers attempting to achieve both goals must adopt multiple, sometimes incompatible, roles.

Typically, important goal conflicts are rarely identified, understood, or publicized. Instead, there are multiple requests/goals/commands from multiple stakeholders, with different time lines and feedback cycles, involving explicit as well as tacit pressures of varying kinds. Organizations may have explicit goals that are both vague and incompatible, which Dorner (1989/1996, p. 68) refers to as "documentary integration of incompatibles." Attempts at resolution of incompatible goals are influenced by explicit and salient rewards, incentives and norms, and are often seen as a source of professional expertise and pride. However, the actual resolutions and the actual influences are largely invisible outside the local context, so no one learns about their existence or their consequences. Related to the presence of documentary integration of incompatibles, one study analyzed short narratives from 560 MBAs at eighteen US university human relations management classes about one of their recent on-the-job communication problems resulting from their understandings of one of their organization's communication rules (Gilsdorf, 1998). The respondents reported twenty-two different types of sources (mostly non-written) for such rules. The study found instances of written guidelines that were functional but not reinforced, causing people to turn to an unwritten rule for guidance, which might have been less functional. But noticeable consequences of this decision were often evaluated against, and punished according to, the written (but unreinforced) policy. "If an organization's management does not consider which communication behaviors it wishes to foster for its success, the signals it sends to employees may be inconsistent or counterproductive … Resulting patterns may be dysfunctional to the organization" (p. 175).

Boettger and Greer (1994) point out four conditions in which conflicting goals are likely:

(1) Operative and avowed goals can both be important yet divergent. Operative goals require practical and effective activities, involving drifting and adapting from the initial avowed goals, while supporting the official avowed goals rewards stakeholders and strengthens accountability.
(2) Periods of complex change may require short-term inconsistencies to foster long-term goals; a simple solution in the short-term may hobble a long-term solution.
(3) Some situations present individuals with two sets of contradictory but justified responsibilities (say, product and function, or efficiency and quality).
(4) Loose coupling between formal structures and ongoing work activities increases the likelihood of inconsistent reward structures.

We will return to these issues in Chapter 4.

Poor feedback

Systems can become "crazy" if feedback mechanisms are not built into their processes that allow users to communicate information with regard to error or malfunction. This lack of feedback, whether intentional or due to oversight, dissuades users from complaining to, or, in the long run, even interacting with, the organization (Singer, 1980; Chapter 7, this volume). One specific kind of organizational pathology is where the only feedback loops are through a flawed system itself, so perceptions of the system are inherently constrained or distorted.

Singer noted the general decline in access to feedback with institutions and organizations, with specific indicators such as the increasing use of one-way addresses or phone numbers, recorded messages, warranties without addresses (1973, 1977). Not only do these decrease motivations and a sense of legitimacy in contacting the organization, they also raise the cost to the consumer to communicate with organizations; even then, many calls or contacts are ignored. Even when those who persist do make contact, they may well receive irrelevant, perhaps formulaic, communications, which serve (whether intentionally or not) to distract the customer or end the interaction. This opaqueness may also be related to organizations becoming pervasively mediated

through information and communication technologies (ICTs) (Singer, 1977; Zmud, 1990; Chapter 2, this volume).

Organizational non-response takes various forms. These include *hiding out*, primarily through increased mediation (one-way addresses or phone numbers, recorded messages, warranties without addresses; increased costs to the consumer to communicate with organizations; simply not responding to calls or contacts), *irrelevant responses* (formulaic, superficially indicating response, but serving to distract or end the interaction), and *work circuits* (increased ratio of work to goal benefits, such as requiring specifically-formatted letters or other "formwork," forcing users to communicate on the organization's terms). Other techniques include blaming the victim, cooling out techniques, cover-ups, insufficient compensation, semantic manipulation (reinterpreting the error as correct), bureaucratic diffusion of responsibility, and attrition through time (Singer, 1978, p. 30, referring to Mintz and Cohen's 1976 review of case studies of the consequences of unaccountability). Making excuses is a form of non-response, as it suppresses resolving both the customer's problem and the internal system problem (Bear and Hill, 1994).

In turn, client or customer responses to this increasingly pervasive and intolerable situation include apathy, helplessness, unquestioning compliance, tolerance of insults, explosive, "irrational" behavior, and counter-bureaucratic coping (applying one's civil rights, developing some countervailing power) (Singer, 1978).

Symbolic uses and manipulation

One factor that seems to contribute to the development and maintenance of Kafka circuits (and URs) is what Feldman and March (1981) call the symbolic value of information. Briefly, traditional models of organizational decision-making assume that before decisions are made, organizational members conduct a rational analysis until they obtain relevant and sufficient information, and then use that information as criteria for a reasoned decision. However, there are many instances where irrelevant information is collected, information continues to be collected after the decision is made, the decision may be made before any information is collected, and people demand more information even when they are surrounded by relevant information which they continue to ignore. Feldman and March's theoretical insight is that information in organizations serves two conceptually

different purposes. Information is used as a *denotative signal*, representing the "facts" or the results of system analysis, as well as a *connotative symbol*, representing various values and images necessary to the maintenance of organizational roles, subunit goals, and public accountability. For example, if the corporate library is managed as "overhead," other units are implicitly encouraged to engage in irrelevant information requests because the benefits from surveillance and monitoring, as well as the symbolic value of appearing "informed" (even if the information is never used), reduce future risks as well as lend legitimacy and accountability to any solutions stemming from that unit – yet without (direct) cost to the users. However, in this situation, the corporate library can never show evidence of success, and ends up being rewarded for disseminating more irrelevant information, or punished for always being behind in service delivery and above budget allocations.

However, it is not simply the symbolic nature of information that fosters manipulation, deception, or fraud. Organizations and their structures often provide the very resources and positions that allow some to distort, suppress, or misuse information (Singer, 1980; Chapters 7 and 8, this volume). There may be low levels of perceived responsibility of the individuals making the product, or the executives guiding the organization. Kafka's servants in *The Castle*, Eco's inquisitor, Bernard Gui, in *The Name of the Rose*, Gilliam's bureaucrats in the movie *Brazil*, and the head Vogon (alien) bureaucrat, Prostetnic Vogon Jeltz, in the book and movie of Adams' *The Hitchhiker's Guide to the Galaxy* all fulfill their job descriptions and use resources so effectively that there is no recourse for the innocent, efficient, altruistic, or reasonable. Bureaucracies may, by their very nature – efficiently applying, through multiple levels of authority, the same set of rules to every situation – foster dysfunctional behavior (Mieczkowski, 1991).

Zmud (1990) argued that characteristics and uses of ICTs make some organizational functions especially vulnerable to *strategic information behaviors* such as manipulation or distortion. This may happen in two primary ways (in the content of a message that a system transmits/stores/distributes, or in how a message directs operations of the system itself) and in a variety of system nodes (sensor, filter, router, carrier, interpreter, learner, and modifier). It is not the technological complexity of computer systems per se that facilitates manipulation,

but the pace, abstraction, and distancing possible in communicating through such systems. Flanagin *et al.* (2009) identified five types of destructive communication activities associated with ICTs. The first is *counterproductive activities*, or uses that conflict with organizational goals, or create employer risks through illegal behavior (downloading music at work, online gambling), create data security risks (viruses, network attacks, denial of service), or involve unauthorized use of the system. Most of these, they argue, go unreported. The second is *nonproductive activities*, such as social communication, cyberloafing/online procrastination, visiting inappropriate websites, conducting personal business, or using company resources. The third is *inappropriate activities*, such as flaming, sharing inappropriate jokes or pornography, releasing confidential information (sometimes used in the name of exposing truth). The fourth is *deceptive and equivocal activities* such as dishonesty, lying, knowingly sending messages to generate an incorrect conclusion. Related activities include identity deception and misrepresentation, identity concealment, use of avatars to reduce anxiety while misrepresenting oneself, and greater opportunities for ambiguous and misinterpreted messages. The final category of ICT-related destructive communication is *intrusive activities* which interrupt work activities or cognitive focus, shift one's focus, fragment tasks, and require time for recovery and refocus.

Barriers to perception

Singer (1978, 1980) argues that crazy systems and even their subroutines often become invisible, impervious to critique, or tolerated due to what he calls barriers to perception. These include such tendencies and practices as inherent organizational incentives to maintaining components of these systems, mechanization and bureaucratization of processes, ascribing normalcy to otherwise bizarre procedures simply because they occur in familiar situations, projecting an air of rationality onto technological and rationalized processes, perceiving legitimation cues in organizational and authority activities no matter how inconsistent, and the fragmentation of both perceptions and routines so that it becomes difficult to even identify a pattern of craziness or to allocate blame. Not only does technology itself promote a sense of rationality, but forms of communication about technology may foster a sense of rationality, which may diminish the ability to question or even identify potential problems. For example, referring to