Identity Maintenance and Adaptation: a Multilevel Analysis of Response to Loss

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Date: January 4, 1999

Acknowldegments: This research was sponsored by the International Motor Vehicle Project (IMVP). I am grateful to: IMVP Project Director Charlie Fine for generous, general support; Lotte Bailyn, John Carroll, Maureen Scully, Ed Schein, and John Van Maanen of MIT's Organization Studies Group for comments, counsel, and the freedom to conduct this research; Willie Ocasio for sponsoring the original Research Assistantship out of which this paper emerged; Jane Dutton and Ben Hanna for early advice; Harrison White for sponsoring its presentation at Columbia University's Center for Social Science for and Charles Tilly for his critique there; Karen Norberg and Donald Gair for valuable psychoanalytic insights; and ROB editors Barry Staw and Bob Sutton for helpful direction and outstanding quality control.

An earlier version of this chapter was presented at the 1996 annual meeting of the Academy of Management, Cincinnati OH, where it had been selected as Best Paper, Organizational Development & Change division.

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ABSTRACT

This paper develops a general model of response to loss. Based on original empirical research of the U.S. auto industry and dual literature analyses of macro-organizational behavior and clinical psychology, I observe that organizational response to major environmental change is remarkably similar to individual respond to loss. To explain this similarity, I propose that a common identity maintenance and adaptation imperative drives the process at all social levels through all phases. I explain loss as a chasm between two forms of identity – structural and cognitive – that a viable entity must hold in some reasonable congruence. The analysis suggests a logic underlying Kübler-Ross' (1969) stage theory of loss, a model that has enjoyed widespread clinical acceptance but has met with scientific skepticism. Based on this stage theory, I develop a modified, general model of loss that explains important anomalous findings about loss including loss aversion, escalation, and rigidity under threat, and, more generally, why it usually takes so long to respond and adapt. Practical applications for understanding and managing change processes are proposed.

Loss has long been an important concept in psychology, and clinical therapists worldwide have long found Kübler-Ross' (1969) five-stage model of loss – denial, anger, bargaining, depression, and acceptance – extremely useful in talking about, understanding, and treating those who experience a sharp negative break with their past. The model has also proven clinically robust to a wide variety of loss situations including matters relating to work, injury, and status.

In contrast, there is *no* consensus prescriptively, predictively, or even in words to describe organizations which experience sharp breaks. Organization scholars see widely divergent patterns, running the gamut from neo-classical economists who see efficient diffusion of adaptive practices (e.g., Holmstrom & Tirole 1991) to organizational ecologists (Hannan & Freeman 1989) who argue that organizations remain inert regardless of environmental change. Summarizing the literature on organizational decline as "static," McKinley (1993:6) concludes that, "there is an urgent need to move toward more dynamic models." In this chapter, I argue that many apparent theoretical discrepancies can be reconciled by clarity in specifying the *timing* of responses. Specifically, I propose that organizations and other social entities that experience sharp negative breaks with their past pass through a pattern remarkably similar to that proposed by Kübler-Ross.

The argument is complicated by controversy about the validity of Kübler-Ross' and similar stage models used by clinicians. The academic community is skeptical of both the empirical and theoretical bases for such theories; even the applicability *in principle* of a stage theory seems ill-conceived, at odds with fundamental tenets of free will. So I begin the chapter with an explanation for why we might expect to see Kübler-Ross' stages in the wide variety of loss situations in which observers have seen them, and hypothesize a logic underlying the stage theory as it generally applies to loss. I then present cases of organizational loss including original empirical research on the American auto industry in the aftermath of Japanese advances. I conclude with a discussion of stage models, clinical research, multi-level research, and practical implications of the model I have put forward.

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I. LOSS AND IDENTITY

In this section I derive and explain the identity-maintenance and adaptation thesis, a process which I propose drives response to loss through all phases and at all social levels. I then introduce Kübler-Ross' model as a general model of response to loss and explain why both individuals and organizations tend to respond in this way.

The Identity-Maintenance Thesis

Some skepticism about a concept of organizational loss is in order: as individuals we feel deep emotion from loss; organizations *feel* nothing. But the objective situation is not so different: An esteemed colleague dies; a firm's close trading partner goes bankrupt. A person's role changes due to employment, unemployment, marriage, divorce, births and departures; a firm's role changes due to market gains, setbacks, alliance, reorganization, growth and divestiture.

At both levels, I propose that "loss" is identity incongruence, a concept I derive from the juxtaposition of two distinct understandings of identity: psychological perspectives in which identity resides within the individual versus sociological accounts, which define identities as a function of relationships. The former, more familiar, view conjectures that throughout life we remain in some important way the same (hence the term, "identity"). Erikson (1968, 1980), the leading architect of this view, believed that a stable identity is necessary to mediate between internal aspirations and the demands of society. He explained identity formation as the synthesis of developmental experiences. In contrast to this account of relatively fixed and enduring *identities*, most sociologists postulate *situated selves*. For example, Goffman (1959) describes various masks we learn to put on as we learn the appropriate rules of situation. Observing that, "when the occasion demands we can act as salesperson, moralist, or customer," Van Maanen (1979:92-95) argues that, "humankind is social to the core, not just the skin."

At the organizational level, the same theoretical distinction holds. Most organization theorists who use the concept of identity use Erikson's understanding by analog or aggregation. Albert and Whetten (1985) define identity as a statement of central character based on shared understandings. Presumably these shared understandings arise through shared formative experiences such as described by Schein (1992: chapter 4). Other principal works on organizational identity include those by Dutton, Dukerich and associates who demonstrate in a series of papers (Dutton & Dukerich 1991; Dutton, et. al. 1993; Pratt & Dutton 1996) the ways in which organizational identification by members affects individual self-concept, social interaction, and organizational behavior (an example of which is given at length in Part II). In contrast, White (1992) defines identity structurally – as a function of *present* relationships – and suggests that identity can be mapped on the basis of social relations such as production arrangements, status hierarchies, and memberships.

That these two different explanations of identity can both coexist and draw empirical support suggests that they are usually more-or-less consistent. Indeed, the importance of congruence between cognitive and structural identity could hardly be overstated. Individuals go to great lengths to reduce cognitive dissonance (Festinger 1957), and labor mightily to attain a well-integrated life (e.g., Mowrer 1961). Maintaining such a fit could be understood as the function of a healthy ego (Freud 1921), or, for that matter, a healthy culture (Durkheim 1933). Political thinkers have consciously sought to create such a synchrony at least since Plato's *Republic* (Bloom 1968) and a primary aim of education is to create "well-adjusted" individuals whose interests and comportment allow them to live comfortably in their environment. Likewise, it's widely accepted that *organizational* success is a function of "isomorphism" with its environment (Hannan & Freeman 1984), the debate within organization theory being whether isomorphism is better understood in economic, technical terms (Aiken & Hage 1968, Thompson 1967) or social, institutional ones (Meyer & Rowan 1977; Orru, Woolsey Biggart & Hamilton 1991).

Loss, however, changes structural relationships such that they are far less likely to correspond to cognitive understandings of roles and responsibilities, creating a sudden chasm that must be spanned before an entity can proceed. What happens when a woman who thinks of herself as a wife no longer has a husband? Or when a firm presumed to be at the pinnacle of the industrial world is bypassed by an upstart from a lesser nation? The apparent response among entities at all social levels seems to be the pattern described by Kübler-Ross: First we ignore discrepancies. If they persist, we fight to prevent or reverse structural change. If we cannot prevent structural change, we bargain hard to preserve what is most precious. If we must accept change, a depression ensues during which we work to reconcile past and present. Finally, if we survive this lengthy process, we accept and adapt.

Kübler-Ross' Model

Background, Summary, and Applicability

Elizabeth Kübler-Ross developed her model through observations of how terminally ill patients reacted to being informed that they are going to die. Most went through some or all of the following five stages:

1. Denial and shock: The person denies that the loss is inevitable.
2. Anger and irritability: The person questions why the loss should be happening and feels resentful.
3. Bargaining: The person attempts to postpone the inevitable through appeal made to a high power by making a promise of a certain behavior or sacrifice if the wish is granted (i.e., "If I promise this or do that, I'll get better").
4. Depression and beginning acceptance: A period of hopelessness results in which the person recognizes that the loss is inevitable.
5. Acceptance: A more positive attitude regarding the loss, and readiness to move on.

The Kübler-Ross theory is among the most cited, best known, and widely applied in all of psychology,[1] but it has also been sharply, persistently critiqued (Kastenbaum 1975-1997, Branson

1 According to David Pendlebury of the Institute for Scientific Information (personal communication, 1995), Kübler Ross (1969) had at that time generated more than 2300 citations. This placed it among the 500 most-cited works in

1975, Santmire 1983, Corr 1993) and it is *not* respected in the upper tiers of academic psychology or social science. On a radio interview (Kaufman 1997), a Harvard Medical School cancer specialist griped, "anytime I hear a so-called 'expert' talk about denial, anger, etc. I just want to throw-up." Part of the reason for this disdain may be that the model is misspecified: It has proven robust not about death *per se*, but rather *loss*. Evidence indicates that her model does not generalize to all individuals' experience of death, but is probably limited to the kind of patients whom she initially observed – prime-of-life cancer patients, for whom the news of death unexpectedly destroyed dreams, plans, and the ability to fulfill responsibilities. Retsinas (1988) finds that Kübler-Ross' model is not usually applicable to the dying experiences of elderly patients. She argues that (1) the elderly see themselves as part of a reference group that is also confronting senescence; (2) death of an elderly person may be timely; and (3) aging involves a series of role redefinitions – bodily decay, retirement, and social disengagement. Distinguishing Kübler-Ross' mid-life cancer patients from her own elderly subjects, she notes, "Cancer may make the middle-aged patient stop practicing law, while the octogenarian has left his legal practice long before" (Retsinas 1988:85-86). Accordingly, I make few claims about "organizational death" (Sutton 1984, 1987).

The model, however, has proven robust towards understanding individual loss generally. The *Encyclopedia of Psychology* discussion of "Loss and Grief," for example, focuses almost exclusively on Kübler-Ross' work and derivatives, noting:

> The stage … method of conceptualizing grief processes has proved quite popular and has been applied in a variety of forms to other losses including divorce, homosexual identity formation, and spinal cord injury (Barón 1994:351).

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the Social Science citation index, and among the top few most cited conceptual frameworks (most of the 'most-cited' are methodological works). The book has been translated into almost every written language, is one of the few academic books to be a best seller, and perhaps the only book on death or dying to ever make the list. In 1980, 58% of medical schools included a course on death and dying and the standard curriculum generally focused on Kübler-Ross' stages (Dickenson 1981). Even 30 years later, the stages are remarkably well known among the general public, probably better known than any other psychological theory. They are still widely used in grief counseling and remain a standard item in nursing-school curricula (Doka 1995). In medical school courses on death and dying "Kübler-Ross' theories are [still] the most widely taught" (Holleman, Holleman & Gershenhorn 1994:260).

To Barón's list, we can add sports career death (Blinde & Stratta 1992), family members of alcoholics (Breen 1985, Sapp 1985), unemployment (Winegardner 1984), and AIDS (Sarwer & Crawford 1994; Ross, Tebble & Viliunas 1989).

Kübler-Ross' theory is now thirty years old and, among researchers, has generally been replaced by more specific theories in more circumscribed domains. Until recently, these have tended to be quite similar in framework such as Simos' (1979) model of "anticipatory grief":

Phase 1. shock, alarm, and denial.

Phase 2. acute grief

Phase 3. integration of the loss and grief.

Another example is Parkes' (1983) cognitive model of bereavement (summarized in Cleiren 1993:18):

Phase 1. searching behavior marked by arousal and anxiety.

Phase 2. the loss becomes more 'real'...

Phase 3. disorganization and despair.

Phase 4. constructing a new model of the world in which predictability and control is restored.

In the 1990s, researchers studying grief and loss have become increasingly likely to frame studies in terms of correlations and contingencies much as in organization studies, yet the practical impact of the stage theories has been and continues to be enormous. Early psychological crisis theory overlooked many aspects of the grief process and even tended to view these feelings and behaviors as dysfunctional (Simos 1979). Therapists focused on coping rather than on grieving, the goal being to help people quickly resume the normal functioning experienced before the loss. In the aftermath of Kübler-Ross, however, attention to process and acceptance of "grief-work" has become the norm. Barón concludes his entry in the *Encyclopedia of Psychology* by observing:

> These conceptualizations provide guidance in understanding the varieties of losses and grief reactions experienced by human beings and point toward helpful and healthy patterns of recovery (Barón 1994:353).

General Critiques of Kübler-Ross and the Stage Theory

Despite this apparent usefulness, Kübler-Ross' theory meets with specific and general skepticism among academics. Empirically, it is critiqued for lack of rigor: the stages are never operationalized, nor is there argument that this is an exhaustive or logical subdivision of response sets or stages. The hundreds of studies that support Kübler-Ross are primarily psychiatric, social work, or nursing accounts based on small sample clinical experience or autobiographical accounts of experiences with grief. For such an influential theory and extensive literature, there is little cross-methodological testing or rigor in design sufficient to meet a standard of falsifiability, Popper's (1959) canon of scientific research. Kastenbaum (1997:106) observes that, "neither Kübler-Ross nor any subsequent observer has provided operational definitions of the stages and carried out competent research to test the theory."

On the other hand, there is no such "competent research" rejecting Kübler-Ross either.[2] The apparently damning critique concerns the stage theory in principle: A stage model implies a predetermined path which is inconsistent with the fact of individual differences, environmental differences including treatment variations, and free will, the human power to *choose* a response.

I will revisit this discussion in Section III, where I consider the relative merits of clinical observation and stage models. For now, I argue that simply dismissing Kübler–Ross' and other stage models is both wrong and unfair. It is wrong because there may in fact be an underlying logic. It is unfair because they are intended as empirical generalities rather than unalterable

2 Two studies are regularly cited as evidence that do not support Kübler Ross theory. These are a literature review (Schulz & Alderman 1974) showing that five other studies from the 1960s modeled the death process with varying degrees of disparity to Kübler Ross, and a paper (Metzger 1980) finding "little indication of systematic changes [of patient description] across time from mastectomy to the present." This is a paper based on a Master's thesis designed as an exploratory investigation of an experimental research method ("Q methodology") barely explained and unjustified for this "test." The usage is admittedly "compromised": "Q sorts have previously been used over a period of time to describe changes occurring in a dying patient's needs." In this study, "*retrospective descriptions* of the course of illness were provided." Finally, only *two couples* were questioned, and even among these two, there was little congruence of answers: in one case, the patient and spouse "had fundamentally different perceptions of the patient's experience." (One of the four respondents, by the way, *did* "indicate systematic change across time," but these terms are never defined, and the data are not presented or discussed. The only "substantive" information in the published article is on the "factor loadings" that result from the questionnaire responses. What point in time they represent is unclear.) The author acknowledges that the study was exploratory, designed to test the methodology, but no further papers have been published.

programs: many of those who suffer loss proceed through the stages in order, others backtrack or follow their own sequence; most go through at least some of the stages… but nothing is foreordained. Presently, I ask the reader to grant hypothetically both the many clinical accounts of loss and my observations about organization theory and organizational behavior in an attempt to understand why it might be that entities pass through the stages Kübler-Ross observed in the order she observed them.

In the next section, I review each of Kübler-Ross' five-stages, and show that psychological research supports her observations and can explain why individuals tend to respond in these ways. In parallel, I show that organizational research supports a theory of analogous behavior at the organizational level, and that organizational theories normally considered in conflict may instead be operative during different phases. In each case I propose a new label for the stage that more comprehensively identifies the behavior and helps explain it.

Response to Loss Generalized

Loss, as generally conceived, is a retrospective account. In the beginning, we do not know how a potential loss will run its course, but the process functionally makes sense if we think of each stage as the next level of a decision tree (Norberg, personal communication, 1997):

Table 1: Stages of response to loss as a decision tree.

• Stage 1: Denial **(Ignore)**	Is the event/information something we can ignore? Can we continue business-as-usual?	If no, proceed to:
• Stage 2: Anger **(Defend)**	Can we prevent the change?	If no, proceed to:
• Stage 3: Bargaining **(Negotiate)**	Can we consolidate and preserve what's most important?	The more we can, the less extensive the ensuing,
• Stage 4: Depression **(Reorient)**	What changes must we make in order to go on?	Can we preserve what is still valuable from the past, and reestablish a satisfactory pattern of relationships? If yes, then
• Stage 5: Acceptance **(Proceed)**	Having made these changes, is existence viable?	The better the "solutions" in "depression," the more successful the ultimate acceptance and adaptation.

Stage 1. Ignore (Denial)

The tendency among people to ignore data which is personally threatening has been long observed (i.e., Freud 1917) and widely documented (see Holmes 1994). Likewise, in organizational crises, Starbuck, Greve & Hedburg (1978) found that denials of need for strategic reorientation are standard practice.

Yet it's still difficult to understand *why* people ignore or reject information concerning their own welfare. Denial is perhaps easier to understand at the collective level than at the individual. Starbuck, et al. (1978) found that part of the reason managers would deny the extent of organizational crises was to avoid blame. More generally, individuals often have a vested interest in the status quo despite potential organizational benefits arising from change. Accordingly, denial is widely seen as dysfunctional both for individuals and organizations (e.g., Argyris 1990, 1995).

Part of the difficulty in explaining this phenomenon arises from the label. "Denial" presents a vivid image of active rejection, which has drawn attention to the concept, but also caricatures it. Cases of outright "denial," are, in fact, extreme manifestations of a much more general tendency to *ignore* important information or developments. Those who suffer loss simply do not initially grasp

its full implications. For example, when my father died unexpectedly in an accident, I never "denied" he had died (although I did often dream that he was still alive); rather, I went on about my life as though little had changed. It was only after several weeks that I began to understand how much his death would affect me and how much my own life would necessarily change as a consequence of it.

Lazarus & Lazarus (1994) document quite concrete functional aspects of denial. For example, Cohen & Lazarus (1973) show that among patients facing surgery, those who underestimate the dangers recover more rapidly and have fewer postsurgical complications than those who are aware and vigilant. The authors speculate that this is because hospital patients have little or no control over their outcomes. In the hospital, and in many other settings, it's better to relax and keep anxiety levels down. It would appear that people have evolved to ignore some things because such denial often serves the denier well. The alternative – identifying the loss – often sets us on a course to try to do something about it, which may not be possible – or even desirable.

Loss, again, is a retrospective assessment. Not all indications of loss are accurate, and even actual losses are often temporary – investors, suppliers, and customers can usually be replaced. In situations of ambiguity, a passing storm, and stochastic or cyclical change, "denial" may well be the most successful coping strategy. In an instructive scene from the movie *Lawrence of Arabia* (Bolt 1962), a young lieutenant raves during a crisis in the aftermath of World War I, "We can't just sit here and do nothing!" to which the old major calmly replies, "Why not? It's usually the best thing."

Even when it might not be the best thing, cognitive limits make it difficult to recognize and attend to unexpected problems. Decision-makers interpret events and information based on mental models and schemas, which in turn are based on education and experiences (Holyoak & Gordon 1984). Thus we often fail to observe events that we have not yet experienced or been taught; rather they are part of the great mass of things that must be filtered out so that we can focus on what experience and training have taught us is important. Ocasio (1995:293) observes that, "Adversity

cannot be determined by 'objective' measures, but is enacted through application of schemas which determine what measures are important and which levels of performance or external events constitute a threat." At the time that American auto companies were being surpassed by the Japanese in quality, time-to-market, efficiency, and growth, they were still doing well by their own performance measures: profitability and domestic sales. Even once a problem is acknowledged, there is often little that can immediately be done: Individuals and organizations facing a new threat may already have a full slate of commitments that cannot simply be dropped. Accordingly, Cohen, March & Olsen (1972) show that under heavy load, decision-makers tend to ignore problems for which solutions are not readily available.

A period of denial provides time where there had been none. Kübler-Ross regards denial in the face of loss as healthy:

> Denial functions as a buffer after unexpected shocking news, allows the patient to collect himself, and, with time, mobilize less radical defenses (p. 39).

Individuals may be unable to respond quickly and flexibly to unexpected, shocking news for much the same reasons that organizations cannot. There are powerful forces holding us in place similar to the 'technical factors' described by Hannan & Freeman (1984) and the 'institutional factors' emphasized by Powell & DiMaggio (1991). The former point out that socioeconomic selection processes favor organizations with high reliability and accountability – traits which require standardization, which in turn generates strong inertial pressures. The latter emphasize the importance of stability and legitimacy in the web of relationships. Some degree of denial, for both the individual and the organization, is perhaps the necessary consequence of having ever been a successful entity.

Stage 2. Defend (Anger)

Anger is an unpleasant emotion, both to the possessor (linked with high blood pressure, heart attacks, etc. ...) and those around him. Kübler-Ross notes that this stage is the most difficult for the family and loved ones, but adds that when denial can no longer be maintained,

> the next logical question becomes, "Why me?" … We are angry at those who are taking life from us, mainly God, but anyone else who denies us: the nurse who impedes our mobility, the mother who prevented us from taking a trip when we could have, etc. … (1969:50)

Anger is a remarkable mechanism to protect ourselves, our family, our clan, etc. An assertion of anger is often enough to ward off an adversary, and if it fails to ward him off, it stimulates adrenaline to prepare for fight. Frank (1988:5) points out that economic reasoning leads to a serious deterrence problem; anger, however, signals commitment to retaliation even when the apparent costs may outweigh apparent benefits. Studies in humans and other primates (recounted in Lazarus 1991 and Goleman 1995) show that anger and other emotion work effectively and efficiently as signaling devices: Appropriate displays of emotional commitment not only lead others to refrain from opportunistic behavior, but allow for quick, haggle-free settlement of potential battle-provoking conflicts.

Organizations and other social entities face the same deterrence commitment problem that individuals do. For forty years, the USA and the USSR had to convince each other that they would react angrily rather than with cool reason in the event of a crippling first strike by the other. And for over forty years, M.A.D. (mutually assured destruction) worked – perhaps because we did irrationally hate each other! This is an extreme case of the kind of signaling which organizations must continually make and monitor. For example, firms facing the possibility of a price war or market incursion must try to persuade adversaries to refrain.

Although organizations do not have emotions, human beings whose interests and identities are tied to the organization do. Leaders rally the troops against “enemies” – communists, Republicans, United Parcel Service, or Toyota. Rallies both motivate the organization and signal to adversaries that a particular behavior will not be tolerated. Anger may also be unleashed from the lower echelons. In the auto industry, anger seems to have come most directly from autoworkers who lost their jobs, or whose jobs were threatened.

Staw, Sandelands & Dutton (1981) propose that acknowledged threats lead to restriction in information and constriction in control in organizations as it does physiologically in individuals during anger. A leader trying to rally the troops both to signal the adversary and preparing for fight accentuates the process. Centralization in response to threat has been documented by Singh (1986), Cameron, Kim & Whetten (1987) and Starbuck, Greve & Hedburg (1978); the latter two articles also suggest a more generalized rigidity.

Like "denial," "anger" is a specific, striking instance of a more general phenomenon. Anger is one mechanism by which we protect and defend the self. Rigidity and centralization are others. Additional mechanisms and manifestations of identity-preservation include risk taking, escalation, and dominant response.

That we try very hard to avoid losses is an important, well-documented (see Tversky & Kahneman 1991, Levy 1996) anomaly in economic psychology. Kahneman & Tversky (1979) demonstrated that while individuals are risk-averse with respect to gains, we are *risk-seeking* in the domain of losses. Similar behavior among firms has been documented by Bowman (1980, 1982) who observed in the bottom quartile of firms in various industries a propensity for acquisitions, litigation exposure, and the undertaking of new and risky activities, approaches, and ventures. Studies using both questionnaire (Jackson & Dutton 1988) and archival data (Freeman 1998a) have shown that managers are much more sensitive to threats than opportunities.

Loss aversion may be understandable in terms of an economics of identity: the one constant in nearly all theories of identity from White's structuralism to Eriksonsonian developmentalism is that identities are enormously difficult – and costly – to construct. White (1992) emphasizes the vast, complex net of interrelationships which essentially define us and which we therefore struggle to maintain. Erikson (1968) characterizes the period of identity creation (youth) as a time of crisis (commonplace use of the term "identity crisis" suggests that this concept has resonated strongly and widely) and proposes identity formation as the primary task of adolescence. Sartre (1943) and

other existentialist philosophers (see Olafson 1967) go further still – claiming that creating an identity is our essential "life project."

Identity as such is a precious "possession," perhaps our *most* precious possession. An economics of identity must account for the enormous life investment entailed in constructing and mastering a self-understanding, effective methods of self-presentation, and an appropriate network of social relations whom one understands and among whom one is understood. We would expect risk aversion among the satisfied – it takes much more than money to develop a new, higher status identity. Relevant to discussion of loss, it is likewise rational to engage in objectively poor risks if it means that identity can be preserved: the cost of developing a new identity at a lower economic or status level may be extremely high. Hence, we observe anger that risks alienation and the all -or-nothing risk-seeking gamble (e.g., betting on the long-shot horse at the end of a losing day).

Threat-rigidity and risk-seeking seem anomalous findings in Organizational Behavior that are difficult to reconcile with the two dominant paradigms of the field: economic adaptive rationality and organizational inertia. These findings are, however, consistent with the logic of this phase. So are two additional multi-level phenomena: escalation and dominant response.

Learning theory presumes that negative consequences lead to changes in behavior, but Staw (1976) observed that poor results actually lead to an *escalation* of commitment when self-assessment is at stake. Such behavior has been observed in individuals under experimental conditions (Staw 1976), in corporations (e.g. Lockheed's increasing commitment to the L1011 jet program which ultimately led to bankruptcy), in communities (e.g., British Columbia's steadfast decisions to host a world's fair despite rapidly increasing deficit projections, Ross & Staw 1986) and nations (e.g., escalation in Vietnam to avoid humiliation, Staw 1976:29). Decision-makers under these circumstances show less concern for obtaining favorable outcomes than for justifying past actions (Staw 1981, Conlon & Parks 1987) – an important aspect of preserving an identity.

Dominant response is yet another multi-level phenomenon consistent with the logic of identity-defense. People and other animals (Zajonc 1965), groups (Staw, et. al. 1981), and organizations

(Ocasio 1995), when faced with threats tend to revert to dominant response. This is true at all levels both when threats are typical in which case dominant response tends to be functional, but also when the threat is novel, in which case dominant response is usually dysfunctional. Dominant response has been explained in terms of cognitive limits under stress, but the strong emotions which characterize all the phenomena grouped together here indicate something more purposive: a concerted effort not only to prevent change, but turn it back.

Stage 3. Negotiate (Bargaining)

Kübler-Ross (1969:82) describes the next maneuver of the terminally ill as bargaining.

> "If God has decided to take us from this earth and he did not respond to my angry demands then perhaps he will respond more favorably if we ask nicely."

These three stages can be readily observed in lesser forms of loss, transparently so in the behavior of small children. When we order them to do something they do not want to do – e.g., go to bed – they first ignore us hoping we'll do the same, then they might throw a tantrum or angrily refuse to obey. If that fails, they will bargain, "Please just *five* minutes, then we'll go right to bed."

A bargaining similar to that observed by Kübler-Ross also appears to be the next stage of response to loss for businesses. The organizations studied in this research project sell off divisions, excise employees, and offer up vices as the situation demands. In a study of eight organizations facing death, Sutton (1987) found not only strong efforts to avert demise, but also that, despite leaders' predictions, members at all hierarchical levels maintained or increased their efforts after the closing announcement. One explanation for this phenomenon is that employees hold out the same unrealistic hope of Kübler-Ross' patients – that they might still be rewarded for excellent performance. This widespread individual response aggregates to improved firm performance. Sutton (1987:559) reports that two health care organizations included in his survey "received the best quality-of-care ratings in memory *after* the [closing] announcement."

In a sense, bargaining hardly needs empirical examples or explanation. As the stock in trade of economics and social exchange theory (Homans 1950, 1958; Blau 1964) bargaining is *the* way we

typically understand that changes occur: all of life involves trade-offs; to get one good, we must give up another. The description of Kübler-Ross' patients offering up their vices and body parts to God in return for a postponement of death is striking not because the bargain is unreasonable, but rather because of the patients' apparent faith in an active God who might make such a trade. Given this faith, bargaining is perfectly reasonable.

Bargaining is also the widely accepted form of business adaptation and change. Trading limbs for life itself is quite explicitly consistent with contingency models of the firm (Lawrence & Lorsch 1967, Thompson 1967, Stinchcombe 1972): a central enduring essence that maintains continuity and a flexible periphery that adapts to a diverse and dynamic environment.

Two aspects of loss bargaining, however, differentiate it from standard economic understanding of the phenomenon. First, trade-offs in loss bargaining or consolidation are *painful* – in extreme cases such as *Sophie's Choice* (Styron 1979), unbearably so. The pain does not enter into the economic equation: we should be content if we give up something to preserve something that (by definition) we value more, but that is *not* the way it feels. We viscerally dislike to back away from our commitments or scale down our expectations. This pain is perhaps explainable as a mechanism that helps enforce the defense mechanisms of the stage before: we fight to avoid the pain of consolidation.

Second, loss bargaining is phase-limited, a process that falls in-between bullying and acquiescence. In contrast to an economic view that behavior *is* market behavior, we bargain only if we cannot get exactly what we want, and it only works then if we have adequate barter.[3] Cases of loss are, by definition, those in which we do not.

Stage 4. Reorient (Depression)

Depression is probably the most difficult of these responses to understand. Freud (1917:154) was perplexed by the "mental economics" of mourning, and it remains perplexing. Although an

3 This observation is compatible with Grannovetter's (1985) argument that economic action is embedded in social structure, and Etzioni's (1988) explanation of competition as 'encapsulated conflict' constrained by social bonds.

explanation has proven elusive, mourning, grief, and depression in the wake of loss are hardly contestable as empirical facts. Evidence indicates that *communal* loss is also accompanied by communal grief and depression. Researching a tragic 1972 West Virginia dam burst, which killed 125 and destroyed communities throughout a river valley, Erikson (1976) found survivors still frightened, lonely, and grieving four years later. He surmised that individual losses were paralleled by an even more pervasive communal loss. Marris (1974) observed similar themes in research on a wide variety of topics concerning crucial transitions: bereavement, slum clearance, graduation into an educated elite, and the pioneering of new business ventures.

Although it is clear why we prefer not to lose someone or something we value, it is not at all clear why we should waste time 'crying over spilt milk' once it is lost. Kübler-Ross (1969:86) says that depression prepares the terminally ill patient for "his final separation from this world," but doesn't say why or how.

Therapists believe that one important function of grief is to dissipate the anger (stage 2) that constricts our options, limiting us to a maladaptive dominant response.[4] Therapists observe that patients who cannot get angry at others become depressed (Hirschfeld & Shea 1985), and psychoanalytic theories hypothesize that depression is anger-turned inward (Marsella 1988).

One important function of mourning is probably to help us appreciate just what has been lost. Most of life we usually tend to take for granted; as Joni Mitchell (1969) put it, "You don't know what you've got till it's gone." Bowlby (1973) speculated that the sadness we feel as part of separation and loss motivates us "to recover the lost object," but most of what we define as loss is unrecoverable. So mourning may represent the beginning of a long process of putting together a satisfying life: 'What precisely has been lost?' 'What are we now missing?' In the absence of mourning, we may try to simply recreate relationships that cannot be recreated simply.

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4 One explanation of the seemingly intensifying and accumulating anger in our society may be lack of support for grief and mourning. The rituals for grief and mourning among primitives were among the most extensively developed; such rituals today seem irrational behavior, associated with primitive superstition. Nevertheless, there seems a barely conscious drive to such ritual. Sutton (1987) noted that six out of the eight dying organizations he researched performed a "wake" within two days of the official death. The surprising collective outpouring over Princess Diana's death also suggests a tremendous communal impulse for grief and mourning.

The word *depression*, however, signifies something beyond grief and mourning, a physical low. One possible explanation for this low is that a slowdown in outward activity allows one to do important internal work: formulation of genuinely adaptive cognitive constructs consistent with a new pattern of social ties. Depression in individuals is an inward phenomenon. It is typically accompanied by worldly withdrawal, which would allow a complementary process: leaving time and space for the creation of new social relations consistent with new cognitive understandings.

Depression goes on so long because it represents a crucial internal struggle: "bargaining-turned-inward." We struggle within ourselves to decide what to preserve and what to give up – what values to maintain or adopt (cognitive identity) and what realities to accept or struggle for (structural identity). This inward struggle implies reduced outward activity, which appears to an observer, even a self-observer, as depression.

The first three stages of response to loss are characterized by identity *maintenance* – first we ignore threats, then we aggressively defend against them, then we bargain to preserve what's most essential. Only if and when these strategies fail do we take up the task of adaptation, and when we do it takes a long time. The reason why we are extremely reluctant to reorient and why depressions are long and hard are one and the same: if youthful identities are difficult and costly to create, mid-life complications multiply the challenge. Finding an appropriate niche is sufficiently difficult for an adolescent or a new venture with no established commitments. Before an established person or organization can find a new appropriate niche, it apparently must withdraw from existing commitments to reorient structurally, cognitively, or both. Marris (1974:31) explained grief as,

> … the expression of a profound conflict between contradictory impulses – to consolidate all that is still valuable and important in the past, and preserve it from loss; and at the same time, to reestablish a meaningful pattern of relationships in which the loss is accepted. Each impulse checks the other.

Individuals and organizations must not only find a suitable environmental niche, they must also satisfy competing internal interests. While grief and mourning are uniquely individual phenomena, the more general phenomenon of internal struggle in the aftermath of loss is ubiquitous across all

social levels. Staw, Sandelands & Dutton (1981) review findings showing that whereas competition initially increases group cohesion, losing groups subsequently suffer a decrease in cohesion. Internal battles for leadership break out in the aftermath of defeat. Ocasio (1994) makes similar observations about the circulation of power in industrial corporations. He shows that poor corporate performance triggers political dynamics, CEO succession, and a circulation of elites. March's (1962) observations of the firm as a political coalition and Selznick's (1949, 1957) observations of competing values are particularly salient under conditions of loss and change.

Like the tendency to ignore problems (stage 1), internal struggle is probably more easily understood as a organizational phenomenon than an individual one. When I struggle with myself, who precisely am "I" and with whom am I struggling? The question may arise because of the prevalence of Eriksonian identity as a model of the self. Sociologists explain such struggle as role conflict, and increasingly a concept of *multiple identity* (Elster 1985) is being embraced in neurology (Damasio 1994) and psychology (Pinker 1997) as well as in economics. Schelling (1984), in explaining economic anomalies, describes mental life as a parliament within. Ainslie (1992), in explaining ambivalence, describes the individual as a population of bargaining interests whose first order of business is resolution of conflict.

Stage 5. Proceed (Acceptance)

Kübler-Ross observes that,

> Acceptance should not be mistaken for a happy stage. It is almost void of feelings. It is as if the pain had gone, the struggle is over … (p. 100)

Kübler-Ross' "depression" and "acceptance" correspond with the last two stages of Lewin's (1947:34-35) unfreezing-moving-refreezing model of group change. (Again, I speak of Kübler-Ross' model with respect to loss; with respect to death, the correspondence is *too* literal.) After failing to maintain an identity, organizations and individuals necessarily change (reorient) through depression, internal struggle, restructuring, etc.... After the reorientation, we proceed once more relatively devoid of strong feelings. Once we proceed, we necessarily refreeze for the reasons laid

out by Hannan & Freeman (1977, 1984, 1989), Erikson (1968, 1980), and White (1992): we need an identity which the world we deal with can understand and rely on.

In describing and amending Kübler-Ross' theory, I have taken it as my primary task to explain "Why a loss process?" We would obviously rather not lose, for example, use of our legs but, given the loss, neither denial, nor anger, nor bargaining, nor depression will do anything to get it back. Other intellectual approaches, however, might raise the opposite question: "How do we change at all?" or even, "Do we change?"

One might choose to see human beings as extraordinarily malleable: a non-disabled person may well find the thought of life without legs as unbearable. Soon after spinal cord injury, victims are extremely dissatisfied with their lives (Crewe 1980), probably feeling even worse than they might have predicted because the injury causes problems far beyond loss of limb. Questionnaire data from studies of life satisfaction (Krause 1992, Krause & Dawis 1992) indicate, however, that within a few years after injury, paraplegics and even quadriplegics are highly satisfied with most aspects of their lives.[5] Reference groups change, goals change, and life is as worth living as before, sometimes more so, because little things are appreciated anew. Viewed from both change and persistence perspectives, people are a remarkable compromise between commitment and adaptation. Organizations and institutions share an equivalent need to balance these two attributes.

The evidence indicates that we do eventually accept losses and that loss results in change, not instantaneously perhaps, but eventually. The entire field of behavioral economics has shown that people respond to incentives and changing environmental conditions in almost every conceivable area from criminal behavior to choice of marriage partners to how many hours we sleep (see Becker 1976). Likewise the field of industrial organization has shown that firms similarly respond

5 The scale that Krause & Dawis used was specifically designed for victims of Spinal Cord Injuries to learn what areas of life they are satisfied with and not satisfied with. The studies include 286 respondents (61% quadriplegic) for whom at least 2 years had passed since the injury. Although there is no comparison with the non-disabled population, the satisfaction levels seem remarkably high. These levels range from, at the high end: Living Arrangements (4.3 average satisfaction on a 5 point scale from (1) very dissatisfied to (5) very satisfied), Family Relations (4.2) and Emotional Adjustment (4.1) to, at the low end, Sex Life (3.1), Finances (3.3), Employment (3.5), and Life Opportunities (3.5).

to incentives and changing environmental conditions (Scherer & Ross 1990). Theories of adaptive learning (March & Simon 1958; Nelson & Winter 1982) and common observation tell us that people and organizations are forever changing and at least trying to either adapt or progress. Although this tendency may often be overstated, it is hardly debatable that some adaptive change occurs and that, over the long term, there must be some reconciliation of both organizational and individual attributes with environmental selection criteria.

Summary

The psychological and organizational theories that underlie this generalized model of loss are summarized in Table 2:

Table 2: Psychological and organizational theories underlying stages of response to loss.

Stage	Salient Psychological Theories	Salient Theories of Organizational Change	General Response
1. Ignore (Denial)	Denial (Freud 1917), schema theory (Holyoak & Gordon 1984)	Sociological theories of persistence: organizational ecology (Hannan & Freeman 1989), new institutional theory (Powell & DiMaggio 1991)	No response
2. Defend (Anger)	Emotions (Frank 1988, Lazarus 1991, Goleman 1995); loss aversion (Kahneman & Tverksy 1979)	Threat-rigidity, dominant response (Staw, et al. 1981), loss aversion (Bowman 1980), escalation (Staw 1976; Ross & Staw 1986)	Attempt to restore status quo
3. Negotiate (Bargaining)	Social exchange theory (Homans 1950, 1958; Blau 1964)	Contingency theory (Lawrence & Lorsch 1967, Thompson 1967, Stinchcombe 1972)	Change on the fringes
4. Reorient (depression)	Depression as internal struggle (Marris 1974), multiple identity (Schelling 1984, Elster 1989)	Adversity-induced search (Ocasio 1995), firm as political coalition (March 1962), institutions as forums for competing values (Selznick 1957)	Withdrawal, internal struggle novel response
5. Proceed (acceptance)	Behavioral psychology (Skinner 1938), behavioral economics (Becker 1976)	Industrial organization (Scherer & Ross 1994), adaptive learning (March & Simon 1958; Nelson & Winter 1982), adaptive change (Lewin 1947)	Learning, adaptive fit (and refreezing)

II. ORGANIZATIONAL RESPONSE TO LOSS

In this section, I examine specific cases of organizational response to loss. The first is a widely cited case study from the Organization Theory literature. Next, I present original research on the American automobile industry in the aftermath of emerging Japanese preeminence in design and manufacturing. I conclude with a few brief summaries of other well-known cases of collective loss.

The New York-New Jersey Port Authority: Loss of Mission and Prestige

In highlighting the role of image and identity in organizational adaptation, Dutton and Dukerich (1991) provide a rich eight-year case study of the New York-New Jersey Port Authority's response to a sharp increase in the number of homeless people occupying their facilities (page 518). The agency suffered loss of both *mission* – its role as a premier professional engineering organization – and *prestige* – its place in the community of organizations. This loss was manifested as a severely deteriorated image (p. 520), resulting from its association with homelessness – "a blight on our professionalism" (p. 517). The events Dutton & Dukerich document can be reformulated to illustrate the five-stage pattern[6]:

Stage 1. Ignore. Senior management at the Port Authority ignored dramatic increases in homeless people occupying their facilities for over two years; rather it was treated as a police-security issue. Top management only took notice once the homeless appeared at the organization's flagships – the World Trade Center and the airports (p. 531).

Stage 2. Defend (anger and dominant response). When the problem could no longer be ignored,

> 56% of interviewed employees expressed anger, frustration, and disappointment that [social service] organizations had shirked their responsibilities (p. 537).

The amount of times the words *anger* and *angry* appear is striking for an article by academics about engineers, two professions characterized by dispassion. Moreover the organization itself was characterized as angry. A local newspaper wrote:

> In its last board meeting before Christmas, the Port Authority played Scrooge ... by outlawing begging and sleeping at the ... PATH Transportation Center (p. 534).

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6 In this grounded study, Dutton and Dukerich observe the following five phases in the Port Authority's "struggle with the homelessness issue" (p. 527). Homelessness is:

1. a police security issue (1982-84)
2. a corporate issue, but the Port Authority is not in the social service business (1985-86)
3. a business problem and needs moral solutions (1987)
4. an issue of image and no one else will solve it (1988)
5. linked to other problems; homeless in transportation facilities are unique and need advocates (1989)

Although these phases do not correspond precisely with Kübler-Ross' stages, the correspondence is quite close. The reformulation shows a general pattern consistent with other entities' responses to loss.

Extremely poor relations ensued with the city, press, and police unions (p. 539): the city repealed its anti-loitering law, "significantly restricting the ability to move the homeless out" (p. 533), and police unions hired a public relations agency to put pressure on the Port Authority to hire more police.

Authority actions at this stage indicate use of readily available solutions (March & Olsen 1976; Mintzberg, et. al. 1976) consistent with theories of dominant response to stress (Ocasio 1995; Staw, et. al. 1981): (1) Following bureaucratic process, the Authority formed a committee to collect data, analyze it, and make recommendations; (2) as a facility manager, they tinkered with their facilities, removing benches and restricting access to make areas "uncomfortable"; and (3) as a professional agency, they tried to educate patrons. The researchers described this as:

> the first of many attempts to improve [their] image … using a well-learned recipe: "educating others or helping them to get smart on the issue" (p. 532).

Stage 3. Negotiate. After attempting and failing to embarrass, coerce, and threaten social service agencies into “doing their job,” the Port Authority tried to bargain with external groups. They spent several millions renovating and building new facilities for the homeless in the hope of getting the city to assume responsibility for their operation, but this too failed when the city backed out of an informal agreement.

The activities of these three stages all serve to maintain an organizational identity that the researchers summarized as "a professional organization with a uniquely technical expertise, ill-suited to social service activities” (an ascription made by every one of the researchers' 25 employee-informants during open-ended interviews, p. 526). When they grudgingly accepted responsibility for the problem, they stepped in with an engineering solution consistent with their (cognitive) identity as a premier engineering agency – building a state-of-the-art homeless shelter.

Stage 4. Reorient. When attempts to maintain this identity failed, the agency seemed to fall into something remarkably like depression. Informants commented:

> – we're two feet deep into the business of homelessness, and we don't want to be.

> – We may be throwing a lot of resources at this, but our heart just isn't in it (p. 540).

Increasingly severe morale problems and vivid emotional expression occurred as a result of increasing association with homelessness (p. 538). Informants conveyed with "great disdain" stories about "architects holding babies with AIDS, engineers changing diapers, and sanitation engineers cleaning filthy bathrooms" (p. 545). The researchers surmised that,

> informants expressed negative emotion when inappropriate involvement of individuals or the organization in certain activities compromised the Port Authority's identity (p. 545).

These emotions are the mechanisms by which employees preserve what is most valuable to them from the past. At the same time, however, an important minority involved in new roles were helping to reorient the agency. These included some of the engineers to whom the informants reacted so strongly, but, more often, those in new roles for the agency. Members of a newly created Homeless Project Team were particularly useful in reestablishing a satisfactory pattern of relationships. They did this by becoming a quiet advocate for the homeless and seeking partners in creating social service capacity.

During this period the conflict with local governments and media began to subside as the agency, however reluctantly, quietly accepted responsibility for the homelessness problem. Toward the end of this period, emotions within the agency cooled: “Actions were increasingly deliberate, intentionally highlighted or downplayed,” yet we still see the agency working out its reorientation:

> ... the organization’s position was still not solidified, (one informant said, “We are still like an amoeba with this issue”…) (p. 542)

Stage 5. Proceed. The research came to a conclusion before the process could fully play out, but already we see the seeds of acceptance, proceeding, and even “refreezing.” The Homeless Task Force took on an institutional permanence and the agency established an academic fellowship to study transportation and homelessness. The negative emotion about the issue continued to wind down and, despite all the reluctance, new ethics, goals, and emotions were forming. The data section of the paper ends with the forming of a new identity:

> ... the organization was increasingly recognized as a leader on how to deal with homelessness in the transportation industry. Port Authority members expressed tremendous pride in the organization's method for dealing with homeless. In their eyes, it was the "most humane approach" used by any transportation agency in the region (p. 542).

American Automobile Industry: Loss of Customers, Purpose, and Status[7]

In the aftermath of emerging Japanese preeminence in design and manufacturing, the American automobile industry seems to have suffered three types of loss: (1) customers – a large percentage of the world and domestic market; (2) purpose – valuable competencies in mass production, mass marketing, and massive vehicles; and (3) industrial status – status near the top of the world industrial and social structure. Whereas once a cabinet nominee could state before the Senate, "What's good for General Motors is good for America," the auto industry became increasingly unwelcome supplicants in the political system.[8]

Stage 1. Ignore (Denial)

Despite the magnitude of this loss – or *because* of it – the American auto industry seemed almost oblivious to Japanese advances for a quarter century. In an authoritative book, Womack, Jones & Roos (1990) conclude that American companies missed the essence of Japanese improvements in design and manufacturing until well into the 1980s.

Japanese advances in automotive production and design go back to post-war Japan and the development of a new production system which has come to be called "lean production" (Altshuler, et. al. 1984; Krafcik 1988)[9]. Womack, et. al. (1990) argued that this system –

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7 This section draws on data from a study (Freeman 1998a) on executive attention in the American auto industry in which I coded GM and Chrysler Letters to Shareholders from 1962-1988 and quantitatively analyzed the results. A detailed discussion of the methods used and a thorough presentation of the findings can be found in Section 2 and Appendix C of that report.

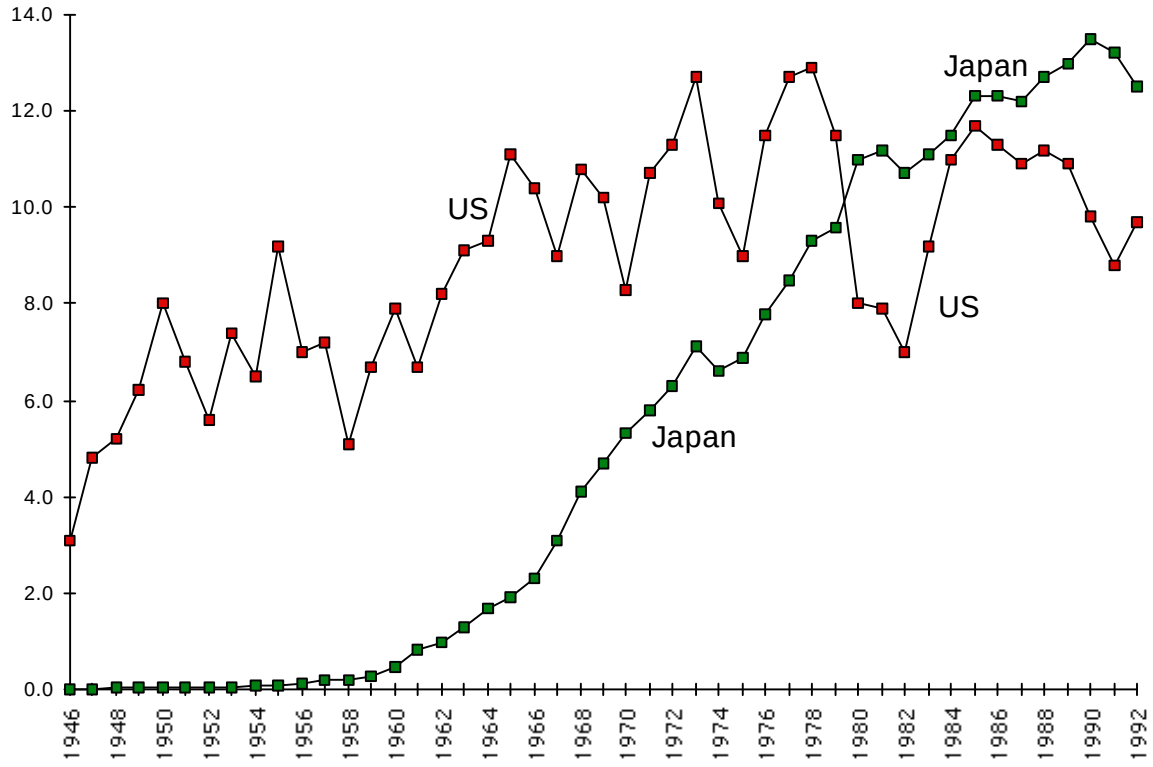
8 Choate (1990) argues that Japanese auto manufacturers routinely outlegislated their American counterparts in the 1980s. For example, their lobbyists were successful in getting pickup trucks classified as cars rather than trucks for tax purposes (2% tariff on cars vs. 30% on trucks), while getting them classified as commercial vehicles for regulatory purposes. ("Cars" are subject to strict Corporate Average Fuel Economy standards from which trucks are exempt.)

9 This production system also had been documented by Cusumano (1985) and MacDuffie (1991) using the terms "Toyota production system," and "flexible."

characterized by low inventories, production flexibility, minimal rework, statistical quality control, and a skilled, dedicated work force – is a revolutionary production logic – the third major paradigm of industrial organization, succeeding mass production, which itself replaced "craft production." This thesis has largely been accepted in auto manufacturing and American manufacturing in general, and the eventual adoption of these lean production practices by American automakers in the 1980s and early 1990s created competitive parity.

American manufacturers might have been expected to pick up on these developments long before then. Figure 1 illustrates the long, sustained increase in world market share of the Japanese auto industry. From a standing start in 1950, they had garnered 5 percent of the world automobile market by 1961, and 17 percent by 1970. By 1980, Japanese auto production superceded that of the U.S.

Figure 1: *Auto production (millions of units) by US and Japanese firms 1960-1990. Source: Wards.*



The first Arab oil embargo of October 1973 brought gasoline rationing and a fourfold price increase which in turn made the attributes of the lean production system all the more valuable. Japanese automakers could flexibly shift production to more fuel efficient cars while American automakers could not, and the Japanese could introduce a new model fourteen months faster and with only half the engineering effort (Clark, Chew & Fujimoto 1988, Fujimoto 1989:Tables 7.4, 7.8). Also, because lean production is less energy intensive, oil price increases resulted in even greater comparative advantage in production costs. From 1973 on, three related threats appear (at least in retrospect) transparent:

- Oil supply was unstable and oil shortages and/or price increases would result in a dramatic shift in consumer demand that American manufacturers were ill-equipped to meet.
- Fuel efficiency was not the only advantageous feature of Japanese cars: perhaps it was what sent buyers into a Toyota showroom, but once there they also found better reliability, craftsmanship, and overall quality.
- Japanese manufacturing was lower-cost, and, presumably, more efficient.

Yet a related study (Freeman 1998a) indicates that throughout this period American auto companies were *not* paying attention to the Japanese. Analysis of auto industry letters to shareholders reveals no mention of Japanese competition or any of the attributes that gave them competitive advantage until the late 1970s. No company even mentions world market share until 1976. Yearly performance is evaluated, instead, on gross sales and profitability. Until the 1970s there is relatively little discussion even of domestic market share, and that, moreover, is obliquely measured. In 1967, GM reported, “Market share of domestically produced cars is 51.8%.” In 1968, it’s “54.7% of North-American type passenger cars.” The implication is that imports are a different market, less important, perhaps negligible.

One might be inclined to dismiss these letters as impression management crafted to portray the firm in its best light, but throughout much of this period, the companies seem to have wanted to portray themselves as *worse* off than they were. For example, GM reported for 1972,

> Earnings per share edged to a new high, but the margin of profit to sales, while slightly higher than in 1971, was well below that of other years. The lag of profit increases behind rising production costs and added investment was a significant consequence of inflationary costs and governmental price controls.

This was a year in which they earned $2.2 billion, more than any company had ever earned in history! The new high it "edged to" was a 12% increase over the previous year and 120% over two years. GM, and the others to a lesser degree, put a negative spin on every performance statistic in the effort to mitigate union demands and ward off government price controls, anti-trust action, and regulations on safety, pollution, and affirmative-action. Even looking for problems, they seemed to miss the Japanese.

A broader analysis of text roughly associated with lean- versus mass- production indicates even less attention to the work processes that were quietly transforming their industry. Table 3 summarizes key differences between lean- and mass- production described by Womack, Jones & Roos (1990) and constructs used to operationalize them in my coding of letters to shareholders (see Freeman 1998a).

Table 3: *Key differences between lean- and mass- production and coding constructs*

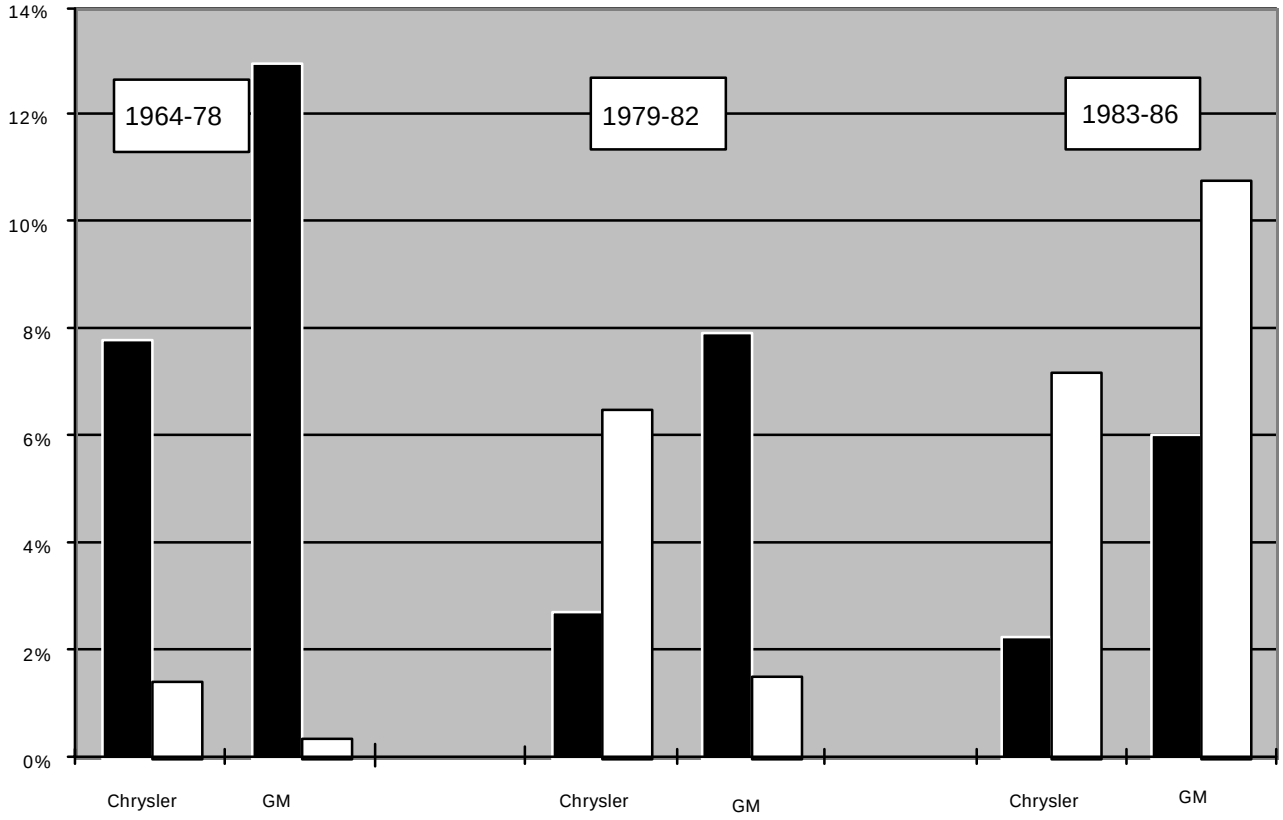
Area	Mass Production (Fordism)	Mass Production Coding Constructs	Lean Production (Toyota Production System)	Lean Production Coding Constructs
Work force	Worker as interchangeable part, constant tension with union.	Union conflict, labor costs.	Need for multiple skills and dedication. Work for life.	Union cooperation, worker training, quality of work life.
Assembly Plant	"Move the metal"; rework at end. Many specialists and foremen. Line workers have low status, no authority. Large inventories.	Direct costs, automation efficiency, standardization, or productivity	Few defects. Everyone a line worker - encouraged to shut line down if there is a problem. Just-in-time production.	Manufacturing process. Reduction of fixed costs, overhead, and inventory.
Product Development/ engineering	Specialization of Labor (e.g., electronic door lock designer reports to the senior door lock designer). Functional hierarchy.	New product features, options.	Team-design. Rewards to team players. Overall quality and reliability.	Product development process, reliability, time to market.

Approach to marketing/ customer relations	Low prices/good value through large runs. Create demand through advertising. Adversarial relations: factory vs. dealer, dealer vs. customer.	Product "value," low costs. Promotion through advertising, rebates.	Flexibility, more models, smaller runs, faster to market. Good relations between factory, dealer and customer. Build-to-order.	Reliability, warrantees, repeat customers, trust, service, dealer relations.
# Supply chain	Low bidders for company specified parts.	# supply costs.	Long term relationships with single suppliers	# supplier relation-ships (Alliances?)

In the attention study, I coded each line of every GM and Chrysler Letter to Shareholders beginning in the 1960s. Figure 2 illustrates that Chrysler did not indicate corporate-level concern with even the broadest issues of lean-production until 1979 and that GM did not do so until 1982! (Data for Ford was not coded, but was believed to be similar with a transition period after Chrysler and before GM.) From 1964 through 1978, 11% of the total text in the letters were devoted to issues related to mass-production and less than 1% to the broad issues of lean-production. (See Freeman 1998a for specific examples of text usage, and actual numbers.)

Figure 2: Indicators of Mass- and Lean-Production in Chrysler and GM Letters to Shareholders during three periods: 1964-78, 1979-82, and 1983-86. Bars represent the proportion of the total lines of text indicating attention to mass- (black bars) and lean- (white bars) production concerns in each period.

[#] I did not use this distinction in the compilation and analysis because of the lack of direct statements about suppliers or supplier chain, but even here a weak construct did show a similar pattern to the others. There was "mass" language about supply costs, mergers & consolidations through 1978 for Chrysler and 1981 for GM; there was "lean" language about alliances and "relationships" thereafter.



Despite the enormous implications for costs, revenues, and even viability, neither Chrysler nor GM were attending to issues of lean-production long after these techniques were proven profitable and effective by Japanese firms. They did not attend to these issues even after the first oil embargo in 1973. Rather as American big-car buying patterns returned with the ensuing calm, Ford and GM enjoyed record profits (see figure 3) building the big cars of old, and all three companies continued to ignore Japanese production advances.

Only once the situation became desperate for Chrysler during the second Arab oil embargo of 1979 did they attend to these issues (figure 2 center columns). GM, never facing equivalent financial exigency, did not attend to them until public embarrassment motivated them to do so. MIT Operations Management Professor Charlie Fine (personal communication, 1997) recalls this as a critical period in the field of operations management. In particular, an NBC documentary, “If Japan Can, Why Can't We?” (Dobbins & Rueven 1980) on the Japanese ascendancy in manufacturing quality and how it was triggered in part by the American quality control guru, Dr.

W. Edwards Deming, "really shook people up." This program was followed by publication of two *Harvard Business Review* articles by leading American manufacturing academicians (Hayes 1981, Wheelwright 1981) and a best-selling book (Schonberger 1982) describing the power of the Japanese way of manufacturing. After all this, GM *had* to pay attention. But even then, it was not necessarily to make changes.

Stage 2. Defend (Anger)

The steep decline in the fortunes of the American auto industry from 1980-82 elicited a great deal of anger. As a quantitative measure, I searched all references in the *New York Times* to autoworker anger. From June 1980 through 1983 there were 21 such stories (10 in the nine months from October 1982 through June 1983); over the next four full years there was only one.[10]

There were nationally publicized Japanese car-bashing parties – compliments of Chevrolet – and a grisly case of a young Asian-American killed by two autoworkers that picked a fight with him in a Detroit bar. Despite guilty pleas acknowledging that they struck him repeatedly in the head with a baseball bat, the autoworkers were freed on probation and $3,000 fines (Cummins 1983). Other *New York Times* articles from the period include:

* DISPLAY OF JAPAN FLAG STARTS PROTEST AT PLANT. Milwaukee auto workers spontaneously ripped down a Japanese flag flown to honor visiting businessmen from Tokyo (Nov. 18 1981: 13).
* RESENTMENT OF JAPANESE IS GROWING, POLL SHOWS. 63 percent of Americans had a favorable attitude toward Japan, while 29 percent had an unfavorable one. In a 1980 poll, 84 percent of Americans looked favorably on the Japanese and 12 percent had negative feelings (April 6, 1982: Sec. B,12).
* IN OHIO, THE ENEMY IS JAPAN documents very strong anti-Japanese sentiment throughout the midwest. Powerful Congressional committee chairman John Dingell (D-

10 This count was performed by using automated features of the Lexis-Nexis news retrieval service, which includes *New York Times* on-line beginning June 1980 (the earliest full text database offered). I searched the *New York Times* for all stories that include the words "autoworker(s)" and ("anger" or "angry"). From these items, I excluded irrelevant juxtapositions (news summaries where "autoworker" and "angry" reference different stories), stories about workers that are "not angry," (evidently by the mid-80s, editors found lack of anger in autoworkers news-worthy), reviews of a book (July 7, 1985) and a play (Nov. 22, 1987) about the earlier period, and a TV review (Jan. 10, 1986) criticizing an angry autoworker character as cliché. (There were no such reviews 1980-83.)

> Michigan) is quoted as saying that the problems of the American auto industry were the fault of "those little yellow people" (April 25, 1982: Sec. 3:8).

Although anger was manifested principally by workers, it was not simply emotional aftereffect. Chevrolet management, the criminal justice system, the congressman, and popular opinion sent out an important signal with official sanctioning. This anger had *strategic value.* It was used, if not fomented, by American auto manufacturers, much as individual anger is used: to protect their turf. Anger, resentment, and fear were at the heart of buy-American campaigns, protectionist legislation, and, most successfully, persuading the Japanese to accept "voluntary" import restraints.

Stage 3. Negotiate (Bargaining)

When financial conditions became ominous for the companies, the normal bargaining which is part of business operations took on an unusual intensity. When, for example, Chrysler's situation further deteriorated, they "began lopping off limbs" (Sawyers 1996:140) to reduce costs and raise money. The firm sold its operations abroad, closed several plants, laid off white collar workers, and entered into agreements with unions and government to an extent unprecedented and unequaled in American history. The United Auto Workers renegotiated contracts at lower wages and benefits, giving up $1.1 billion in concessions (Sawyers 1996). In return Chrysler provided full access to the corporate books, profit sharing privileges, and a seat on the Board of Directors. Such an accord would have been unthinkable even a few years before, and met with criticism from both industry and labor. The U.S. government agreed to back loans of $1.5 billion, an arrangement which upset thinking on corporate relations even more than the union agreements, generating bitter criticism of corporate welfare from across the political spectrum. Additionally, new arrangements were made with dealerships, whereby dealerships also provided loans and the company put in place a new accounting/inventory system that geared production more closely to sales (Kisiel 1996).

Stage 4. Reorientation (Depression) at Chrysler and Ford

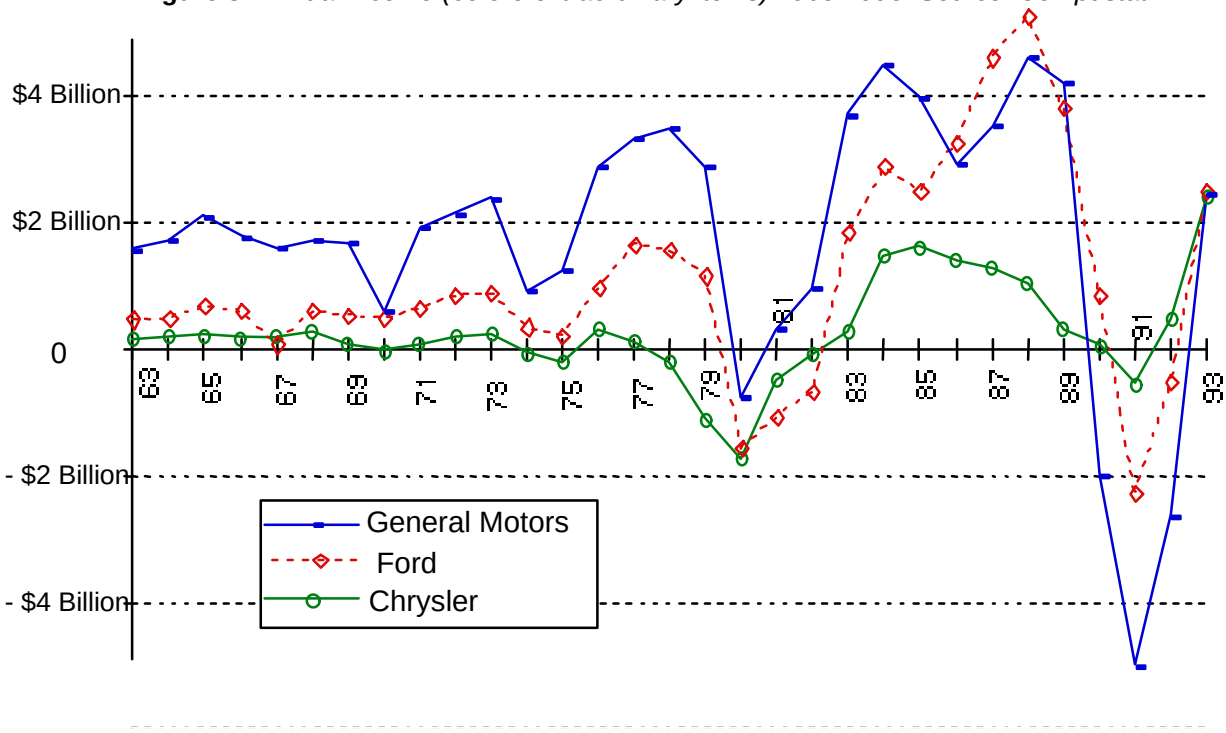
Fundamental reorientation occurred in the industry only after all the alternatives had been tried and failed. As with the Port Authority, these reorientations occurred under conditions well

described by the term “depression.” Share values of first Chrysler and then Ford dropped to a fraction of their former value. Detroit and other auto communities suffered severe economic depression. Morale was low not only because of economics – managers and workers throughout the company didn’t like learning from the Japanese. The joke circulated about the Japanese and American auto engineers who were to sentenced to death and offered a final request: the Japanese engineer requested the customary last meal; the American simply said, “Shoot me first. I couldn’t bear to listen to another lecture on quality.”

Failure happened first at Chrysler. In 1978, Chrysler began a four-year deathwalk, losing a record $1.1 billion in 1979, and an even more staggering $1.7 billion in 1980 (see figure 3). Along with these losses came internal struggle and change. Between 1978 and 1980, the company had three major management reorganizations including changes in the top two posts. There were massive layoffs and divestment. The company took on new partners in the government, union, and dealer network. It was a leaner, different company that emerged with different priorities and an all new market identity. The company focused fully on automotive operations with an emphasis on altogether new cars, quality, and guarantees. Its promotions were particularly novel – CEO direct appeal, money for simply taking a test ride, and everything-covered, multi-year warranties.

Ford’s precipitous decline followed soon on the heels of Chrysler’s, and so too did major layoffs, plant closings and selloffs. As with Chrysler, there were several top management changes. Iacocca was fired as President in 1978 and Henry Ford II resigned as chairman in 1979, relinquishing family control. Like Chrysler, Ford adopted new priorities in quality and new product design. The company’s $5.1 billion investment in Taurus/Sable was the greatest new product development effort in history (Doody & Bingaman 1988). Like Chrysler, Ford emerged as a new company – oriented toward product quality and reliability.

Figure 3: *Annual income (before extraordinary items) 1963-1993. Source: Compustat*



Confounding prevailing "liability of newness" theories, both reorientations were remarkably successful: $1 invested in Ford at the beginning of 1982 was worth $29.02 as of the end of 1993; $1 invested in Chrysler was worth $59.02. (By contrast $1 invested in the S&P 500 index would have only increased to $3.80.) Both have had strings of fine products: Ford Taurus has been the world's most popular vehicle for a decade and Chrysler created a new, hugely popular market for the minivan. In 1993, the *Wall Street Journal* ran a lead story (Miller 1993) on the reversal of fortunes, over the course of a decade, of Chrysler and Ford on the one hand and Honda and Nissan on the other.

General Motors: Deeper Loss, Deeper Pockets, and an Elongated Response Cycle

Severe as the crisis was for Ford and especially Chrysler, GM took much longer to adapt. Whereas Ford and Chrysler had essentially remade themselves by the mid 1980s, GM did not make major changes until the 1990s and their adaptation to the new world order remains suspect to this day. I postulate that the explanation lay with three identity-related factors: (1) a greater loss of

status, (2) deeper pockets to resist the loss, and (3) prior loss from which the firm had not recovered.

Status. GM's fall was from the pinnacle of the industrial world, a point from which Ford had already long since fallen and Chrysler never attained. Long accustomed to emulating GM, it was a comparatively straightforward transition for Chrysler and Ford to emulate Toyota and Honda instead. GM was *not* an emulator; it was a management and technological *leader*. GM Letters to Shareholders never mentioned a competitor and typically half the text was devoted to issues of national or world significance rather than narrow corporate interest (see figure 4).

Once Japan actually surpassed America in auto production in 1980, Ford and Chrysler were quick to copy Japanese manufacturing and supplier partnership practices, and made product reliability and production quality (those features which made Japanese imports so popular) their top priority. In all these areas, GM changes lagged far behind. Even today, GM retains a policy of maintaining multiple, competing suppliers with whom they are notoriously tough negotiators. Rather than emulate Japanese practices, GM bet their future on advanced technology, spending several billions to acquire Ross Perot's Electronic Data Systems and Hughes Electronics. This enormous investment in technology is difficult to justify knowing what we know now or even knew then of Japanese manufacturing and design advances: lean manufacturing advantage (Table 2) comes primarily from improvements in human processes and supplier relations. Nor do the acquisitions seem to make much financial sense. Perot himself claims GM overpaid by at least 50% for both the acquisition of EDS and the buy-back of his GM shares (Levin 1989). But the move could be seen as an attempt to reacquire the industrial preeminence upon which the corporate identity rested.

Buffering. The second difference for GM was that it did not suffer the financial losses of its less well-endowed rivals. Unlike Chrysler and Ford, firms that nearly failed to survive the 1979-81 crisis and needed *prompt* reform, GM's continued existence was never in doubt. Its vast resources

allowed it to create and control its world to a great degree, and its tremendous competitive advantages in marketing, distribution, and economies-of-scale were further strengthened by weakened domestic competition. Chrysler lamented in its 1976 Letter to Shareholders how difficult it was to maintain continuity in the face of conflicting demands. GM stockholders (and other stakeholders) may well lament how difficult it was to *disrupt* continuity.

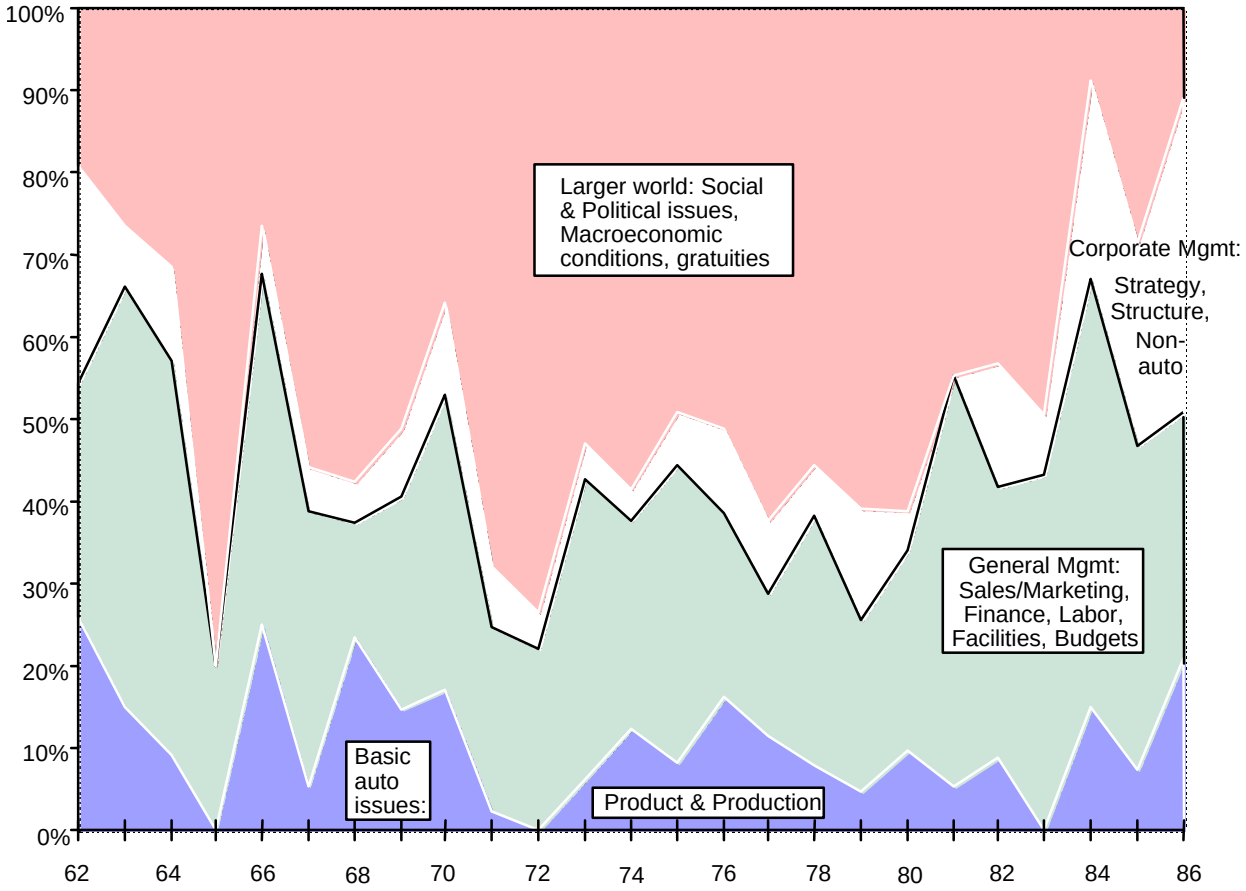
The former President of GM's Chevrolet and Pontiac divisions, John DeLorean, describes a "Fourteenth Floor" completely cut off from accountability or knowledge of the world. A culture of cronyism developed where loyalty to one's boss was the only performance criteria. He recounts an archetypal Executive Committee meeting exchange:

> [Chairman] Dick Gurstenberg: "Goddamnit. We cannot afford new models next year because of the cost of this federally mandated equipment. There is no goddamn money left for styling changes. That's the biggest problem we face."
>
> [Executive Vice President] Dick Terrell (10 minutes later): "Dick, goddamnit. We've just got to face up to the fact that our number one problem is the cost of this federally mandated equipment. This stuff costs so much that we just don't have any money left for styling our new cars. That's our biggest problem."
>
> Gurstenberg: "You're goddamn right, Dick. That's a good point" (Wright 1979:39).

Prior loss. Finally, lean production and the oil embargoes came for GM on the heels of a series of attacks upon its identity which diverted its attention, sapped its resources, and created a bunker mentality. Beginning with Nader's (1965) criticism on safety, waste, and pollution, and GM's heavy-handed attempt to destroy his reputation, GM suffered a dramatic fall from respected industrial giant to establishment villain. This loss of public trust led to more than a decade of preoccupation: from 1965 to 1978 an average of **38%** of the lines in the Letters to Shareholder concerned **social issues** – safety, pollution, efficiency, consumer issues, and affirmative action (figure 4). From 1970 to 1983, the key years in which the company was losing its dominant position in the industry, an average of only **7%** of the lines concerned **product and production**, those areas in which the Japanese and, by now, their American rivals as well, had surpassed them.

For the sixteen years from 1965 to 1980 an average of only 44% of the text lines were about business concerns within their domain of control; 56% were about social issues, macroeconomic conditions, and gratuities (e.g., “We’re confident about our future.”).

Figure 4: *Allocation of subject matter in GM letters to shareholders 1962-1986*



Collapse and Change at GM

GM was able to avoid the kind of change in practices that Ford and Chrysler adopted for a long time, even when their US market share declined sharply in 1987 to 37% from 42% the year before (it had averaged 47% for the previous two decades). Financial losses did not occur until 1990, though when they hit, they were of astounding magnitude: GM lost $2 billion in 1990 (as U.S. market share further dropped to 33%), $5 billion in 1991, and another $2.6 billion in 1992! It

would appear that these losses finally stirred the traditionally compliant GM Board of Directors. The chairman, vice chairman, president, and an executive vice president were forced to retire; the CFO was demoted, and an outside director became chairman. Now at least GM speaks the same language as the rest of the industry. Criticized recently for slowness in stepping up production of popular cars, GM responded: "We're putting quality first. If it takes longer to get it right, so be it" (Plume 1996).

Other Examples of Collective Loss

One might imagine these cases to be oddities that coincidentally fit Kübler-Ross' stage theory of response, but the model seems to hold for other examples as well.

GM and Safety

Accidents and death had been a serious problem associated with automobiles since the inception of the industry. Beginning in the 1950s, the American Medical Association began calling for safety devices in cars as Cornell University studies documented the grisly impact of car crashes and demonstrated conclusively the value of safety devices. But GM dragged their feet on the issue, even pressuring Ford to back off from a 1956 safety campaign on the principle that, "If buyers thought they needed safety devices in a car, they would hesitate to buy one in the first place" (Kurylko 1996).

When a young lawyer, Ralph Nader (1965) documented serious safety defects in the Chevrolet Corvair and charged that GM was responsible for deaths by not spending trivial amounts on recalls, GM reacted by spying on Nader and intercepting his mail in an effort to destroy his reputation. Various other social movements followed. Guilford (1996) looks back at the first Earth Day in 1970: "the automobile, long considered a symbol of US affluence and technological mastery was suddenly recast as a wasteful, pollution-spewing indulgence." Morris & Seaman (1981) reported that students at Florida Tech tried and convicted a Chevrolet for poisoning the air and that New York's Fifth Avenue was closed to traffic for two hours.

GM spent the next decade battling public interest groups and policy makers bargaining over regulations they claimed were too costly, not technically feasible, or otherwise intrusive.

> A ... serious waste of manpower and capital resources is occurring daily... governmental standards for emission control and passenger protection … are excessively stringent. … there is reason to question whether the standards provide benefits to the consumer that are commensurate with their costs... (GM Letter to Shareholders 1972).

The 1980s brought a sharp decline in GM's stature as an industrial leader. With this fall, the company apparently no longer felt a need to protect capitalism, opportunity, and freedom in the face of anti-business zealotry.[11] A new generation of officers who did not see their role as leaders of the free world tended to accept goals more concordant with public sentiment. Today the company proudly trumpets their safety features and other public interest endeavors. In the same *Automotive News* centennial commemorative that recalled the Nader battle, GM ran an oversize two-page color spread boasting how their new daytime running lamps will reduce collisions and save lives (Automotive News 1996:6-7).

The Chemical Industry and *Silent Spring*

Hoffman (1997) documents a strikingly similar story in his study of chemical industry activity in the aftermath of Rachel Carson's *Silent Spring* (1962). The industry initially ignored Carson's claims that growth in the use and potency of chemical pesticides was having increasingly destructive effects on the natural environment. When the debate over the environmental implications of the synthetic chemical industry nevertheless broadened into mainstream media and government, the industry sought to discredit environmental charges by arguing that they are scientifically baseless and that the benefits of technological development merit an acceptable level of risk. The response included harsh personal attacks directly on environmentalists (Meadows, et.

11 One might imagine that the change in attitude was the product of a less hostile political environment, but just as GM stopped editorializing in their annual report, Chrysler began to. In the aftermath of his company's resounding recovery, Iacocca uses the letter annually beginning in 1982 to vigorously argue for reduction of the national deficit, seemingly taking over the baton on discussion of national policy issues from GM as the relative stature and influence of the firms reverse (Freeman 1998a).

al. 1982). Once they finally did acknowledge environmental problems with their products and processes, they tried to counter criticism by developing new products that could mitigate the effects of existing ones.

When events such as Bhopal and Seveso destroyed any hope that this approach would restore a good public image, the industry was demoralized. Polls reflected an immense public distrust for the industry. The practical effects of this industry depression included difficulty attracting young engineers and scientists, lack of internal commitment to carry out past policies, and increasing internal doubt. From this depression, however, new voices emerged that were more concordant with the contemporary environmental ethos. In the aftermath, many chemical firms have emerged at the forefront of the environmental movement as leading patrons of environmental groups and initiatives.

Maritime Resource Depletion

A similar story holds for the fishing industries of New England and the Canadian maritime provinces as they deplete the resource on which they depend. Despite abundant evidence, many commercial establishments and independent fisherman long refused to accept that banks had been overfished and continued to invest in equipment (Collins 1995). When environmentalists sought or government regulators imposed limits and other restrictions, these communities responded with displays of great anger, even when the objective of the regulations was industry preservation. When the anger cooled, the communities would continually bargain for greater privileges and higher takes rather than support more rational taxation measures (Becker 1995).

Russell (1996) observes that, with their ”survival at stake, fishermen are finally beginning to change their wasteful habits and develop sustainable practices,” but he argues that “it is too little, too late.” At present these areas are quite depressed, both economically and psychologically, as the process has insufficiently preserved fishing stocks. In the end, there seems little question that the industry will be cut back dramatically, and that these economies will change as tourism or other industries are substituted for fishing.

III. DISCUSSION

In this chapter I've relied heavily on research methods (stage models and clinical research) and a conceptual framework (organizations as actors) lightly regarded in leading journals and research institutions. In this section I point out some uses and unappreciated attributes of these approaches. I discuss also the value and applications of the model itself.

Stage theories and the alternatives

Stage theories are currently held in disrepute in behavioral science as a sort of primitive substitute for more serious theory, largely because they imply a predetermined path, a conjecture that seems ill-conceived when applied to the variability of human behavior. This chapter illustrates, however, the value of stage theories for two large categories of phenomena: (1) those for which we cannot yet do more "serious" theory, and (2) those about behavior which is difficult to control. Dismissal of stage theories by behavioral scientists may reflect contemporary overestimate of both our current level of knowledge (Schein 1993) and our ability to rationally control behavior (e.g., White 1992).

In exploratory research, Kübler-Ross' included, stage theories are not usually meant to suggest invariable behavior or an inexorable process. Rather they are put forth as broad empirical generalities or simple prototypical models from which real-life cases are expected to deviate. This latter view is the way much of the loss literature treats the five stages. Clinicians write about how their subjects follow the process in some ways but deviate in others. The model provides a way of conversing about a phenomenon that generates useful further discussion. Even in more extensively studied phenomena, stage theories represent useful heuristics, providing insight into process not available through correlations.

For some aspects of behavior, stage theories may be more than just useful – they may be phenomenologically sound. Van de Ven & Poole (1995) make the case that there are only four basic types of change and development – life cycle, teleological, dialectical, and evolutionary –

each of which involve different "motors." The latter two produce change through interactions *between* units: evolutionary change, for example, occurs through variation-selection-retention processes involving births and deaths. All change *within* units is either "life cycle" or "teleological." Most contemporary theories of human behavior emphasize teleology – choice based on goals or intention. On initial consideration, this seems the obvious explanation for most of human behavior including response to loss, but loss is interesting and unusual precisely because it disrupts goals and upsets the continuity of teleological behavior that might otherwise exist.

Stage theories may have more validity than we typically grant them simply because teleological theories have less. How free is choice? It is perhaps the oldest debate in philosophy –and, despite a contemporary predilection for rational actor theories (March & Olsen 1989), it remains unresolved. Responses like grief or anger are beyond intelligence and beyond our control, as are emotions generally. The best we can do is understand and manage them (Goleman 1995). In the case of loss, goal-oriented behavior is problematic because loss changes identity, which changes goals. Only within the context of a relatively fixed, unchanging identity does it make sense to even speak of teleological behavior.

Life cycle or stage theories explain change as imminent development based on logic, program or code (usually genetic). Kübler-Ross' five stages have lacked academic credibility because neither she nor subsequent observers identified any specific change mechanisms, let alone an underlying program, or code. In this chapter, however, I have proposed an underlying logic: that both people and successful organizations unconsciously seek to minimize costs associated with identity (re)formation.

Clinical research and the alternatives

Clinical research is also lightly regarded in academic social science, where it is rejected in favor of a research paradigm based on quantitative measurement occasionally infused with

exploratory ethnographic work.[12] A key concern is, "How do clinical researchers know when they know something?"

Although careful research practices can address this concern,[13] most clinical studies do not convincingly do so. In conducting this research, I found no explicit thought experiments, triangulation, acknowledgment of the limits of the method, or suggestions for operationalization and testing. But despite extant limits on its rigor, clinical research, like stage theorizing, is useful for those phenomena for which the alternatives are even more problematic. In particular, response to loss presents non-clinical researchers serious impediments of access and dissimulation.

Cameron, Sutton & Whetten (1988:13-15) observe "formidable impediments" of access, cost, and funding for traditional research in decline and loss. Few subjects care to have a dispassionate observer studying them. The stigma associated with decline and failure leads people to want to forget, avoid, or ignore it. This leads to low participation and response rates, which require more sophisticated researchers and research designs, and therefore higher costs. At the same time, resources are more difficult to obtain. Whereas successful companies often are willing to support research about their firms, losses result in reluctance or inability to do so. Moreover, it is difficult to obtain general research funding and interest – most research consumers want to learn how to win, not how to deal with loss.

Clinicians, in contrast, are already there – because they are needed. Clinicians also are trained to operate with self-insight and a healthy skepticism (Schein 1993) and usually provide careful observation and description. Even more important, they have skills, training, and *license* that traditional researchers lack to overcome the tendency under conditions of loss for subjects to evade, avoid, deny, or in other ways distort what is going on. Schein (1993:704) observes that,

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12 Although both clinical and ethnographic works are often combined under the broad rubric of qualitative research, the two are fundamentally different approaches. Clinicians operate in a helping mode and are chosen by the client. The ethnographer chooses the research site, and normally tries to operate unobtrusively (Schein 1987).

13 Schein (1987) emphasizes *replication:* Do others see what I see? Weick (1979) presents additional ideas on how case studies can be more rigorous. He relates how two prominent traditional researchers came to appreciate the value of the case study based on the value of the interpretation in context (Cronbach 1975) and the insight that, within a single case study, one can test multiple theoretical implications (Campbell 1975).

> If I am a traditional researcher and ask, "How do you get along with your boss?" the respondent may evade giving an answer because it may be viewed as being none of my business. If I ask the same question as part of a process of helping the client to solve some problem, it is much more likely that I will get a meaningful answer… The very fact that the client has initiated the process licenses the clinician researcher to ask questions that would under other circumstances be viewed as invasions of privacy or be evaded in order to maintain an image.

Organizations and Individuals

Several examples of social systems change in this chapter may seem to demonstrate how *individuals* experience change, so the question arises: Does this theory really address change at the organizational level or does it describe how organizational changes are experienced by individuals? The answer is that this is a multi level theory, in which I have put forth a *general* model of response to loss. The model is inductively derived based on the widespread clinical acceptance of Kübler Ross' (1969) five-stage theory, and the organizational-level substantiation provided here. Organizational-level substantiation has been in the form of both general theory (Part I) and empirical cases (Part II), notably the response of the American automobile industry to emerging Japanese preeminence.

My thesis has been that we observe this pattern of resistance to change in both individuals and organizations because there is an underlying functional logic: The patterns represent an identity maintenance and adaptation continuum. Evolutionary outcomes determining the existing populations of both individuals (Freeman 1998b, Pinker 1997) and organizations (Hannan & Freeman 1984) are the result of selection and retention processes under which maintenance of a stable identity provides important advantages. Adaptation is also advantageous and, under some circumstances, necessary, but because it is difficult and costly, both individuals and organizations have been selected to minimize these costs associated with identity change.

Mechanisms of Organizational Change: Analogous rather than an Aggregration

It does not even seem to be the case that individual transformation is a central *mechanism* of organizational change. In the examples provided, personal change was less important than personnel change: In the Port Authority, adaptation came from a cadre of new hires on the newly formed Homeless Project Team. Change at Ford and Chrysler corresponded with change in top management; at GM, where there were no major firings or change of regime, major change did not come for a generation.

Rather than an aggregation of individual effects, organizational response to loss seems to be *analogous* to individual response to loss, meaning that there is a correspondence in function between different types of parts. Organizational change has been illustrated here as a social and political process. Likewise, personal change can be understood as the outcome of intrapersonal dynamics of internal "factions." To help patients change, counselors work with certain parts of the person. A patient in therapy usually has "parts" that wants to change, and also other parts that resist and try to hold on to life as it is.

Conventional wisdom tends to view organizational behavior as more metaphor than reality. The apparently sensible observation is that, "Organizations don't behave, people do." Conventional wisdom, however, may be subject to a perceptual bias which arises due to the fact that we are, ourselves, people. Some human phenomena, however, are more comprehensible when we see people less as unitary wholes than as loose amalgams of roles, group affiliations, or drives. Conversely some organizational phenomena are better understood by seeing the organization as a coherent whole. Our language illustrates this complex perspectivism: the word "person" derives from the Latin *persona*, the masks worn in theatrical performances, suggesting any of a variety of potential roles. Conversely the word, "corporation" derives from the Latin *corpor* or *corpus*, meaning "body" and suggesting a unified whole.

Multi-Level Theory

In our age of specialization multi-level theories are generally eschewed as lacking accurate understandings with level-accurate mechanisms. But even granting this critique, multi-level theory and, more generally, multi-domain theory can make two important contributions to social science: condensation and insight.

One reason for employing concepts in different contexts is to strive for a useful level of generalization (Boulding 1956), no small point in our age of exponentially expanding information. In an academic e-mail network discussion heralding new electronic journals that could provide virtually unlimited pages and data, one subscriber quite reasonably asked, "But how do I get all this into my low baud brain?" Simon (1969) observes that even the most dedicated professional is limited in the amount of knowledge she can acquire (he estimates roughly 12.6 million "chunks of information"). Thus,

> ... some of the most important progress in science is the discovery and testing of powerful new theories that allow large numbers of facts to be subsumed under a few general principles (Simon 1969:109).

For science as a whole (as opposed to the individual scientist), employing concepts in different contexts generates important insights. First of all, they work. Staw (1991) and Staw & Sutton (1992: 376) observed …

> substantial parallels between macro and micro [organizational] models, but these similarities go largely unrecognized. For example, structural contingency theories imply that there is some impetus toward efficiency or energy minimization … and resource dependence theory (Pfeffer & Salancik, 1978) proposes that organizations strive to minimize sources of external control and uncertainty. These models parallel those of goal-setting, control theory, and expectancy theory, formulations that similarly emphasize how people move toward valued end-states…

They conclude that,

> … [Because] organizations tend to behave like people … individual psychology is useful in developing theories to explain organizational action.

Observing similar processes in different domains further provides the scientist with useful data to get at root causes or processes. Newton, for example, developed the laws of gravity by observing what a falling apple has in common with planetary orbits. By employing concepts of *power* and *influence* then in use at political levels of analysis and applying them to dyadic relations, Emerson (1962) developed fundamental principles of equity and exchange still widely cited today. General systems theory (e.g., Boulding 1956, Miller 1978) and system dynamics (e.g., Senge 1990) have identified a wide array of structures and processes (e.g., reinforcing feedback loops, tragedy of the commons) that we understand better for their deployment in a variety of domains. Here I have used multi-level data to develop a general thesis of identity maintenance and adaptation.

Finally, Weick (1979:48) argues that anthropomorphizing is a useful starting point in understanding any puzzling object. “I am the metaphor by which I can initially comprehend the organizational things around me.” Such analogies are also valuable for what they can teach us about ourselves. Part of the value of this chapter is that the organizational phenomenon sheds light on the process of *loss* that we as individuals suffer.

Practical applications of the model

The principal value of this model is in explaining an otherwise perplexing process of loss and change. Awareness and appreciation of the process is useful whether change is seen as desirable or undesirable. But more hypothetically, the research suggests some practical tools that can be applied to change-management -- and change-resistance.

For the reformer, a process model can help divide an otherwise overwhelming project into manageable, attainable tasks. The model suggests that successful adaptation is dependent on the accomplishment of three pre-change tasks (stages 1-3), and four adaptation tasks (stage 4).

An Aid to Organizational Change and Adaptation: Pre-Change Tasks

Task 1. Refocus attention. People and organizations attend to what was relevant in the past because we are the products of the past. Our genetic heritage attunes us to Pleistocene era threats

because they were a source of danger during our evolutionary period. (For example, people today still fear snakes and may have nightmares about them despite the comparatively minimal threat they pose to well being in modern urban life.) Our cultural heritage educates us about important experience of our people. Finally, our own experiential learning tends to focus attention on vivid past personal experiences.

Likewise, today's existing organizations are those that survived past environments (Hannan & Freeman 1984). They, too, have institutionalized cultural heritages (Powell & DiMaggio 1991) and shared experiences (Schein 1992) which tend to focus attention. Through socialization processes and adapted use of institutionalized schemas, measures, and mental models, organizations may amplify individual tendencies to focus on what was important in the past.

The would-be change agent's first task is therefore a tough one. Consultants and activists implicitly understand this as a difficult first step, and tools useful toward this end are in great demand. Kaplan & Norton´s (1992) "balanced scorecard," a relatively simple tool for refocusing mid-level managerial attention on customer satisfaction, internal processes, and innovation activities through operational measures, generated for the authors five *Harvard Business Review* articles in five years and a billion dollar consulting company. A traditional tool used by environmentalists is the "reference scenario" projecting a bleak picture unless major changes take place. A classic example is Carson´s (1962) opening chapter of a silent, lifeless spring. This tool is also widely used in business (Ackoff 1981) and politics (e.g., the U.S. Social Security trust fund debate).

Task 2. Overcome defenses. No matter what the process, and how beneficial the change, one must expect certain non-rational "defensive" reactions. But these may vary in intensity depending on the degree to which they are provoked. Leaders and activists often appeal to emotions to motivate a protective response, but when fundamental change is desired, it may be that pushing harder for change accomplishes nothing more than eliciting stronger reactions. Conversely, reactionary behavior can perhaps be calmed by persistent, non-inflammatory pressure.

Harsh public criticism of the chemical and auto industries probably contributed to the early high level of defensiveness. But steady pressure by environmentalists and safety advocates ultimately led to radical changes in these industries' practices.

Task 3. Systematically work through options. The essence of the bargaining/negotiation stage is that we try to avoid major loss by accepting lesser ones. Thus we are unlikely to accept major changes unless we are thoroughly convinced that there are no alternatives. Over the past thirty years, physicians have applied this insight to help prepare patients for aggressive treatment. A generation ago, physicians would generally take whatever actions they felt were medically best with little or no patient consultation. Today, however, they usually try to elicit patient cooperation and reduce anxiety by systematically working through options. When they believe that surgery is needed immediately, they explain why less-invasive procedures are not viable. If there is no immediate danger, they may begin with a minimally invasive option, such as diet, and generally encourage patients to try less-invasive procedures first.

Stage 4: Four elements of change and tasks of adaptation

The three tasks associated with the first three stages involve planning for change. Four tasks associated with Stage 4 involve implementing change. In the initial discussion of Stage 4 (Reorient / Depression), I examined four perplexing questions about individual depression in the face of loss. These questions and the answers I posited are:

- *Why do we grieve?* To dissipate anger.
- *Why do we mourn?* To understand the void that we must fill.
- *Why depression*? We need a physiological slowdown and worldly withdrawal.
- *Why does depression go on so long?* An important internal struggle must be resolved.

All these aspects of depression are functional in helping individuals accept and adapt to loss, and probably can be adaptive in the organization as well.

Task 4.1. Deal with emotions: Sadness to replace anger. Anger prevents change, protecting one's interests by superceding rationality (Frank 1988). It prevents others from bullying or

otherwise taking advantage, but at the expense of reason. Therapists understand depression, in part, as the dissipation of anger into sadness, an emotional state in which reason is possible. Organizations for which emotional reaction is maladaptive or which have exhausted emotional response can begin to face the need for change through talk and reflection. This is the essence of therapy and the first essential task of adaptation.

Task 4.2. Ritual elements: Appreciate what has been lost. Virtually all cultures develop elaborate rituals around important transitions. Probably the most important function of these rituals is to establish, affirm, and relinquish bonds. After a death, mourners spend time remembering the bereaved. To adequately adapt to the changes the death entails, mourners must appreciate what they are missing. This is probably as true for organizations as individuals. Those responsible for change in organizations also need to appreciate what has been lost and what is now missing before they can begin to seek how to replace it.

Task 4.3. Reduce outward activity. For individuals, physiological depression tends to discourage business-as-usual. Further, time off after loss is ritually prescribed. Part of this time is for remembrance and relinquishment, but mourning rituals are also community events that serve to affirm bonds, and perhaps set the stage for building new ones. Organizational change, however, is often attempted at the same time as other demands increase. It seems reasonable to assume that the work of organizational identity reformation could be better accomplished given time and conditions adequate for the tasks.

Task 4.4. Determine what "cognitive" values to keep and what "structural" realities to accept. Loss creates a chasm between the two types of identity. How to forge them together into a healthy, congruent whole is the important work of adaptation. When an individual fails to meet career or personal goals, she has a choice between revising those goals – accepting some new cognitive identity – or exploring some new set of relationships or a new niche – a new structural reality. Most likely, she will do some of both.

Firms in changing circumstances such as those experienced by the American auto industry in the 1970s and 80s face a similar problem. Ford and Chrysler managed to successfully remake both their structural and cognitive identities, although it took a long time. It is unclear whether GM ever did.[14] It would seem reasonable that organizations, likewise, do a certain amount of examination of goals and values and exploration of new relationships and niches. Perhaps adaptation could be expedited and generally improved if those who identify with the organization were to ask these questions explicitly and work them through together.

A Palliative to Oppressive Change

Although I believe that this theory suggests a useful model for change management, it is not strictly an instrument in the march of progress. Adaptation and change are incessantly lauded in the management press, but rarely is loss acknowledged as part of the process. Perhaps an apt image of organizational change is the painful process of domesticating an elephant: a young elephant is tricked away from his pride, after which he refuses to eat for days, wails incessantly, and does anything including self-mutilation to try to end his incarceration. It takes three months or more of torture to "break" the creature and make him amenable to service.

For those faced with the prospect of undesired change, this research can be helpful to acknowledge the stages and slowness of response to loss as valid. Insight can be a palliative to a painful process, and perhaps help forces of resistance to make the case against an often oppressive chorus of change-mongers.

CONCLUSION

My original aim in this chapter was to explain the response – and lack-of-response – of the American automobile industry to important advances made by the Japanese. To do so, I have

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[14] In particular, GM seemed unable to accept new structural realities. They did initiate initiatives toward remaking themselves twice – NUMMI, a joint effort with Toyota in the early 1980s and then Saturn, "a different kind of car company" – but neither was ever incorporated into the parent company. Indeed, it seemed as though these initiatives *removed* pressure for internal change or discussion of these questions.

proposed a concept of organizational loss based on research that indicates organizations respond to loss in much the same way that individuals do.

To explain this similarity, I have developed an identity maintenance and adaptation thesis that a common identity imperative drives the process at all social levels through all phases. I explain loss as a chasm between two forms of identity – structural and cognitive – that a viable entity must hold in some reasonable congruence.

This thesis provides a logic for modified, generalized Kübler-Ross' stage theory of loss, a model that has enjoyed widespread clinical acceptance but has met with scientific skepticism. It also provides an explanation for several important anomalous findings about loss – loss aversion, escalation, and rigidity under threat – based on an economics of identity. Because identities are so difficult and costly to construct, both people and organizations take great pains to minimize need for and costs associated with their reformation.

Loss is an unusual topic for academic paper on the automobile industry, but it provides a perspective on our institutions and our selves that cannot readily be gained from more traditionally focused investigations. Loss, like tragedy, highlights distinctive, but hard-to-research aspects of the human condition and social life: emotions, commitment, and the subtle interplay of human constancy and change. For this reason, loss has always been close to the heart of literature and the humanities. I believe it now also warrants a place in the frontal lobe of social science.

REFERENCES

Ackoff, R.L. (1981). *Creating the corporate future.* New York: Wiley.

Aiken, M., & Hage, J. (1968). Organizational interdependence and intraorganizational structure. *American Sociological Review, 33*, 912-930.

Ainslie, G. (1992). *Picoeconomics: The strategic interaction of successive motivational states within the person*. Cambridge: Cambridge U. Press.

Albert, S. & Whetten, D.A. (1985). Organizational identity. In L.L. Cummings and B.M. Staw (Eds.), *Research in organizational behavior* (Vol. 8, pp. 263-296). Greenwich, CT: JAI Press.

Altshuler, A.A., Anderson, M., Jones, D.T., Roos, D., & Womack, J.P. (1984). *The future of the automobile: the report of MIT's international automobile program*. Cambridge, MA: MIT Press.

Argyris, C. (1990). *Overcoming organizational defenses*. Needham, MA: Allyn-Bacon.

Argyris, C. (1995). *Organizational learning II*. Reading, MA: Addison Wesley.

Automotive News • American Automobile Centennial commemorative (1996, June 26). pages 6-7

Barón, A. (1994). Loss and grief. In R.J. Corsini (Ed.), *Encyclopedia of Psychology* New York: Wiley.

Becker, G. (1976). *The economic approach to human behavior*. Chicago: U. of Chicago Press.

Becker, G. (1995, Sept. 18). How to scuttle overfishing? Tax the catch. *Business Week, 3442*, p. 30.

Blau, P.M.(1964). *Exchange and power in social life*. New York: J. Wiley.

Blinde, E. & Stratta, T. (1992). The sports career death of college athletes: involuntary and unanticipated sport exits. *Journal of Sport Behavior*, 15(1)3-20.

Bloom, A. (1968/c. 376 BC). *The republic of Plato* (Translated, with notes and an interpretive essay). New York: Basic Books.

Bolt, R. (1995/ 1962). *Lawrence of Arabia.* Burbank, CA: Columbia TriStar Home Video

Boulding, K. (1956). General systems theory – the skeleton of science. *Management Science, 2*, 197-208.

Bowlby, J. (1973). *Separation: Anxiety and anger*. New York: Basic Books.

Bowman, E.H. (1980). A risk/return paradox for strategic management. *Sloan Management Review, 21*(3), 17-31.

Bowman, E.H. (1982). Risk seeking by troubled firms. *Sloan Management Review, 23*, 33-42.

Branson, R. (1975, May 7). Is acceptance a denial of death: another look at Kübler-Ross. *The Christian Century*, 464-468.

Breen, J. (1985). Children of alcoholics: the subterranean grieving process. *Psychotherapy Patient, 2,* 85-94.

Cameron, K.S., Kim, M. U., & Whetten, D.A. (1987). Organizational effects of decline and turbulence. *Administrative Science Quarterly*, *32,* 222-240.

Cameron, K.S., Sutton, R.I., & Whetten, D.A. (1988). Issues in organizational decline. In *Readings in organizational decline* (pp. 3-20). Cambridge, MA: Ballinger.

Campbell, D.T. (1975). "Degrees of freedom" and the case study. *Comparative Political Studies, 8*, 178-193.

Carson, R. (1962). *Silent spring*. Boston: Houghton Mifflin.

Choate, P. (1990, Sept-Oct). Political advantage: Japan's campaign for America. *Harvard Business Review, 68*, 87-104.

Clark, K.B., Chew, W.B. & Fujimoto, T. (1987). *Product development in the world auto industry.* Brookings papers on Economic Development, No. 3. Washington, DC: Brookings Institute.

Cleiren, M.P.H.D. (1993). *Bereavement and adaptation: a comparative study of the aftermath of death* Washington: Hemisphere Publishing Corp.

Cohen, F. & Lazarus, R.S. (1973). Active coping processes, coping dispositions, and recovery from surgery. *Psychosomatic Medicine, 35,* 357-389.

Cohen, M.D., March, J.G., & Olsen, J.P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly, 17*, 1-25.

Collins, C.H. (1995, November). Beyond denial -- the northeast fisheries crisis: causes, ramification, and choices for the future. *Fisheries, 20*, 4.

Conlon, E.J. & Parks, J.M. (1987). Information requests in the context of escalation. *Journal of Applied Psychology, 72*, 344- 350.

Corr, C.A. (1993). Coping with dying: lessons that we should and should not learn from the work of Elisabeth Kubler-Ross. *Death Studies, 17*, 69-83.

Crewe, N.M. (1980). Quality of life: the ultimate goal in rehabilitation. *Minnesota Medicine* 586-589.

Cronbach, L.J. (1975). Beyond the two disciplines of scientific psychology. *American Psychologist, 30*, 116-127.

Cummins, J. (1983, April 26). Detroit Asian-Americans protest lenient penalties for murder. *New York Times* , p. A16.

Cusumano, M.A. (1985). *The Japanese automobile industry: technology and management at Nissan and Toyota*. Cambridge, MA: Council on East Asian Studies, Harvard University and distributed by the Harvard University Press.

Damasio, A.R. (1994). *Descartes' error: emotion, reason, and the human brain*. New York: G.P. Putnam.

Dickenson, G.E. (1981). Death education in U.S. medical schools 1975-1980. *Journal of Medical Education, 56,* 111-114.

Dobbins, L. & Rueven, F. (1980, June 24). *If Japan can, why can't we?* New York: NBC News.

Doka, K.J. (1995). Coping with life-threatening illness: a task model. *Omega Journal of Death and Dying, 32*, 111-122.

Doody, A.F., & Bingaman, R. (1988). *Reinventing the wheels: Ford's spectacular comeback*. Cambridge, MA: Ballinger.

Durkheim, E. (1933). *The division of labor in society* (George Simpson, Trans.). New York: Free Press.

Dutton, J.E., & Dukerich, J.M. (1991). Keeping an eye on the mirror: image & identity in organizational adaptation. *Academy of Management Journal, 34*, 517-554.

Dutton, J.E., Dukerich, J.M., & Harquail, C.V. (1993). Organizational images and member identification. *Administrative Science Quarterly, 39*, 239-263.

Elster, J. (Ed.) (1985). *The multiple self*. Cambridge: Cambridge U. Press.

Emerson, R.M. (1962). Power dependence relationship. *American Sociological Review, 27*(1), 31-41.

Erikson, E. (1968). *Identity: youth and crisis*. New York: W. Norton & Co.

Erikson, E. (1980). *Identity and the life cycle*. New York: W. Norton & Co.

Erikson, K.T. (1976). *Everything in its path: destruction of community in the Buffalo Creek flood*. New York: Simon Schuster.

Etzioni, A. (1988). *The moral dimension: toward a new economics*. New York: Macmillan, Free Press.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Frank, R.H. (1988). *Passions within reason: the strategic role of the emotions*. New York: Norton.

Freeman, S.F. (1998a). *Effects of environmental change on executive attention: analysis of auto industry letters to shareholders 1962-1987.* (International Motor Vehicle Project #W98-011). Cambridge, MA: Massachusetts Institute of Technology. (Also Chapter 2 of *The problem of identity in organizational behavior and human decision processes*. Ph.D. dissertation, MIT.)

Freeman, S.F. (1998b). *Good Decisions: Reconciling Human Rationality, Evolution, and Ethics*. (Sloan Working Paper #3962.) Cambridge, MA: Massachusetts Institute of Technology. (Also Chapter 4 of *The problem of identity in organizational behavior and human decision processes*. Ph.D. dissertation, MIT.)

Freud, S. (1917/1950). Mourning and melancholia. In *Sigmund Freud, Collected Papers IV* (pp. 152-170). London: Hogarth Press.

Freud, S. (1921/1960). *Group psychology and the analysis of the ego*. New York: Bantam Books.

Fujimoto, T. (1989). *Organizations for effective product development: the case of the global automobile industry.* (Ph.D. dissertation) Boston, MA: Harvard Business School.

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. NY: Bantam.

Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology, 91*, 481-510.

Guilford, D. (1996, June 26). Clean air act ushers in era of heavy regulation. *Automotive News • American Automobile Centennial commemorative,* 130.

Hannan, M.T & Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology, 82*, 929-964.

Hannan, M.T. & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review, 49*, 149-164.

Hannan, M.T & Freeman, J. (1989). *Organizational ecology.* Cambridge: Harvard U. Press.

Hayes, R.H. (1981, Jul-Aug). Why Japanese factories work. *Harvard Business Review*, *59*, pp. 56-66.

Hirschfeld, R. & Shea M.T. (1985). Affective disorders: pyschosocial treatments. In H. Kaplan & B. Sadock (Eds.), *Handbook of Psychiatry* (4th ed.). (pp. 811-831). Baltimore: Williams & Wilkins.

Hoffman, A. (1997). *From heresy to dogma: an institutional history of corporate environmentalism*. San Fancisco, CA: New Lexington Press.

Holleman, W.L., Holleman, M.C. & Gershenhorn, S. (1994). Death education curricula in U.S. medical schools. *Teaching and Learning in Medicine, 6,* 260-263.

Holmes, D.S. (1994). Defense mechanisms. In Corsini, R.J. (Ed.) *Encyclopedia of Psychology*. New York, Wiley.

Holmstrom, B. & Tirole, J. (1991). The theory of the firm. In R. Schalensee & R. Willig (Eds.), *Handbook of Industrial Organization.* Amsterdam: North Holland.

Holyoak, K.J. & Gordon, P.C. (1984). Information processing and social cognition. In R.S. Wyer & T.K. Srull (Eds.) *Handbook of social cognition.* Hillsdale, NJ: Erlbaum Associates.

Homans, G.(1950). *The human group*. New York: Harcourt Brace.

Homans, G.(1958). Social behavior as exchange. *American Sociological Review, 65*, 597-606.

Jackson, S.E., & Dutton, J.E. (1988). Discerning threats and opportunities. *Administrative Science Quarterly, 33*, 370-387.

Kahneman, D., & Tversky, A. (1979). Prospect theory: an analysis of decision under risk. *Econometrica, 47*, 263-291.

Kaplan, R.S. & Norton, D.P. (1992, Jan/Feb) The balanced scorecard - measures that drive performance. *Harvard Business Review*, *70(1)*, pp. 71-80.

Kaufman, J. (1997, September 18). *The Connection.* Interview with Dr. Jerome Groopman, author of *The Measure of Our days*. Cambridge, MA.: WGBH.

Kastenbaum, R. (1975-97). *Death, society, and human experience* (eds. 1-6). Boston: Allyn & Bacon.

Kastenbaum, R. (1997). *Death, society, and human experience* (6th ed.). Boston: Allyn and Bacon.

Kisiel, R. (1996, June 26). Iacocca saved Chrysler. *Automotive News • American Automobile Centennial commemorative,* p. 139.

Krafcik, J.F. (1988). Triumph of the lean production system. *Sloan Management review, 30 (1)* 41-52.

Krause, J.S. (1992). Life satisfaction after spinal cord injury: a descriptive study. *Rehabilitation psychology.* 37:61-70.

Krause, J.S. & Dawis, R.V. (1992). Prediction of life satisfaction after spinal cord injury: a four-year longitudinal approach. *Rehabilitation psychology.* 37:49-60.

Kübler-Ross, E. (1969). *On Death and Dying*. New York: MacMillan.

Kurylko, D.T. (1996, June 26). Ford had a better idea in 1956, but it found that safety didn't sell. *Automotive News • American Automobile Centennial commemorative,* p. 113.

Lawrence, P.R., & Lorsch, J.W. (1967/1986). *Organization and environment: managing differentiation and integration*. Boston: Harvard Business School Press.

Lazarus, R.S. (1991). *Emotion and adaptation*. New York: Oxford University Press.

Lazarus, R.S. & Lazarus, B.N. (1994). *Passion and reason: making sense of our emotions*. New York: Oxford University Press.

Levin, D.P. (1989). *Irreconcilable differences: Ross Perot versus General Motors*. New York: Penguin.

Levy, J.S. (1996). Loss aversion, framing, and bargaining: the implications of prospect theory for international conflict. *International Political Science Review, 17*, 179.

Lewin, K. (1947). Frontiers in group dynamics. *Human Relations, 1*, 5-41.

MacDuffie, J.P. (1991). *Beyond mass production -- flexible production systems and manufacturing performance in the world auto industry.* (Ph.D. dissertation) Cambridge, MA: Massachusetts Institute of Technology, Sloan School of Management

March, J.G. (1962). The business firm as a political coalition. *Journal of Politics, 24*, 662-678.

March, J.G. & Olsen, J.P. (1976). *Ambiguity and choice in organizations*. Bergen: Universitesforlaget.

March, J.G. & Olsen, J.P. (1989). *Rediscovering institutions: the organizational basis of politics*. New York: Free Press.

March, J.G. & Simon, H.A. (1958). *Organizations*. New York: Wiley.

Marris, P. (1974). *Loss and Change*. New York: Random House.

Marsella, A.J. (1988). Depression. In R. J. Corsini (Ed.), *Encyclopedia of Psychology.* New York: Wiley.

McKinley, W. (1993). Organizational decline and adaptation: Theoretical controversies. *Organization Science, 4*, 1-9.

Meadows, D.H., Richardson, J. & Bruckmann, G. (1982). *Groping in the dark: the first decade of global modelling*. New York: Wiley.

Metzger, A.M. (1980). A Q-methodological study of the Kübler-Ross stage theory. *Omega, Journal of death and dying, 10*, 291-302.

Meyer, J.W. & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology, 82*, 340-363.

Miller, J.G. (1978). *Living systems*. New York: McGraw-Hill.

Miller, K. (1993, August 19). Car Tales. *Wall Street Journal,* p. A1.

Mintzberg, H., Raisinghani, D. & Theoret, A. (1976). The structure of 'unstructured' decision processes. *Administrative Science Quarterly, 21*, 246-275.

Mitchell, J. (1969) Big yellow taxi. On *Ladies of the Canyon*. Burbank, CA: Warner Brothers Records. Music available from New York: Siquomb Publishing Company

Morris, M. & Seaman, B. (1981). *Going for broke: the Chrysler story*. Garden City, NY: Doubleday

Mowrer, O.H. (1961). *The crisis in psychiatry and religion*. Princeton, NJ: Van Nostrand.

Nader, R. (1965). *Unsafe at any speed: the designed-in dangers of the American automobile*. New York: Grossman.

Nelson, R.R. & Winter, S.G. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press, div. of Harvard University Press.

Ocasio, W. (1994). Political dynamics and the circulation of power: CEO succession in U.S. industrial corporations. *Administrative Science Quarterly, 39*, 285-312.

Ocasio, W. (1995). The enactment of economic adversity: a reconciliation of theories of failure-induced change and threat-rigidity. In L.L. Cummings and B.M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 17, pp. 287-331). Greenwich, CT: JAI Press.

Olafson, F.A. (1967). Jean-Paul Sartre. In Edwards, P. (Ed.) *The encyclopedia of philosophy*. New York: Collier-Macmillan.

Orru, M., Woolsey Biggart, N. & Hamilton, G. G. (1991). Organizational isomorphism in East Asia. In P.J. DiMaggio &. W.W. Powell (Eds.), *The new institutionalism in organizational analysis,* pp. 361-389. Chicago: University of Chicago Press.

Parkes, C.M. & Weiss, R.S. (1983). *Recovery from bereavement.* New York: Basic Books

Pfeffer, J. & Salancik, G.R. (1978). *The external control of organizations: a research dependence perspective*. New York: Harper & Row.

Pinker, S. (1997). *How the mind works*. New York: Norton.

Plume, J. (1996, June 26). In '80s, poor quality tripped the big 3. *Automotive News • American Automobile Centennial commemorative,* p.162

Popper, K.R. (1959). *The logic of scientific discovery*. New York: Basic Books.

Powell, W.W. & DiMaggio, P.J. (1991). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.

Pratt, M.G. & Dutton, J.E. (1996). Owning up or opting out: on ownership, identity and collective action. In Z. Shapira (Ed.), *Organizational Decision Making* (pp. 517-554).

Retsinas, J. (1988). A theoretical reassessment of the applicability of Kübler-Ross's stages of dying. *Death Studies, 12(3)*, 207-216.

Ross, J., & Staw, B.M. (1986). Expo 86: An escalation prototype. *Administrative Science Quarterly, 31*, 274-297.

Ross, M.W., Tebble, W.E. & Viliunas, D. (1989). Staging of psychological reactions to HIV infection in asymptomatic homosexual men. *Journal of Psychology and Human Sexuality, 2*, 93-104.

Russell, D. (1996). Fisheries in Crisis (Part II.) *E: the Environmental Magazine. 7*, Number 5:38.

Santmire, P. (1983, Dec. 14). Nothing more beautiful than death? *The Christian Century,* 1154-1158.

Sapp, J. (1985). The family's reaction to an alcoholic: an application of Kübler-Ross's five stages. *Alcoholism Treatment Quarterly*; Vol. 2(2) 49-60.

Sartre, J. P. (1943). *Being and nothingness: a phenomenological essay on ontology.* (L'etre et le néant: essai d'ontologie phénoménologique.) New York: Philosophical Library.

Sarwer, D.B. & Crawford, I. (1994). Therapeutic considerations for work with persons with HIV disease. *Psychotherapy, 31*, 262-269.

Sawyers, A. (1996, June 26). 1979 oil shock meant recession for U.S., depression for autos. *Automotive News • American Automobile Centennial commemorative,* p. 140.

Schein, E.H. (1987). *The clinical perspective in fieldwork*. Newbury Park, CA: Sage.

Schein, E.H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco: Jossey-Bass.

Schein, E.H. (1993). Legitimating clinical research in the study of organizational culture. *Journal of Counseling & Development, 7*, 703-708.

Schelling, T.C. (1984). The intimate contest for self-command. In T.C. Schelling (Ed.), *Choice and consequence: perspectives of an errant economist.* Cambridge, MA: Harvard U. Press.

Scherer, F.M. & Ross, D. (1990). *Industrial market structure and economic performance*, 3rd ed. Boston: Houghton Mifflin.

Schonberger, R.J. (1982). *Japanese manufacturing techniques*. New York: Free Press.

Schulz, R. & Alderman, D. (1974). Clinical research and the stages of dying. *Omega, Journal of death and dying, 5*, 137-144.

Selznick, P. (1949). *TVA and the grass roots; a study in the sociology of formal organization*. Berkeley: U. California Press.

Selznick, P. (1957). *Leadership in administration: a sociological interpretation*. Berkeley: U. California Press.

Senge, P.M. (1990). *The fifth discipline: the art and practice of the learning organization*. New York: Doubleday.

Simon, H.A. (1969/1981). *The science of the artificial*. Cambridge, MA: MIT Press.

Simos, B.G. (1979). *A time to grieve: loss as a universal human experience*. New York: Family Service Association of America.

Singh, J.V. (1986). Performance, slack, and risk taking in organizational decision making. *Academy of Management Journal, 29*, 562-585.

Skinner, B. F. (1938). *The behavior of organisms: an experimental analysis*. New York: Appleton.

Starbuck, W.H., Greve, A., & Hedburg, B.L.T. (1978). Responding to crisis. *Journal of Business Administration*, 111-137.

Staw, B.M. (1976). Knee-deep in the big muddy - a study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Performance, 16*, 27-44.

Staw, B.M. (1981). The escalation of commitment to a course of action. *Academy of Management Review, 6*, 577-587.

Staw, B.M. (1991). Dressing up like an organization: when psychological theories can explain organizational action. *Journal of Management, 17,* 805-819.

Staw, B.M., Sandelands, L.E., & Dutton, J.E. (1981). Threat-rigidity effects in organizational behavior: a Mulitlevel Analysis. *Administrative Science Quarterly, 26*, 501-524.

Staw, B.M. & Sutton, R.I. (1992). Macro organizational psychology. In J. K. Murnighan (Ed*.) Social psychology in organizations: advances in theory and research* (pp. 350-384). Englewood Cliffs, NJ: Prentice Hall.

Stinchcombe, A.L. (1972). Social structure and organizations. In M.B. Brinkerhoff & P.R. Kinz (Eds.), *Complex organizations and their environments* (pp. 123-140). Dubuque, Iowa: Wm. C. Brown Co.

Styron, W. (1979). *Sophie's choice*. New York: Random House.

Sutton, R.I. (1984). *Organizational death*. (Ph.D. dissertation) Ann Arbor, MI: University of Michigan.

Sutton, R.I. (1987). The process of organizational death: disbanding and reconnecting. *Administrative Science Quarterly, 32*, 542-569.

Thompson, J.D. (1967). *Organizations in action*. New York: McGraw-Hill.

Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice: a reference-dependent model. *Quarterly Journal of Economics, 106*, 1039-1061.

Van de Ven, A.H. & Poole, M.S. (1995). Explaining development and change in organizations. *Academy of Management Review, 20*, 510-540.

Van Maanen, J. (1979). The self, the situation and the rules of interpersonal relations. In W. Bennis, J. Van Maanen, E.H. Schein, & F.I. Steele (Eds.), *Essays in interpersonal dynamics.* Homewood, IL: Dorsey.

Weick, K.E. (1979). *The social psychology of organizing* (2nd ed.). New York: Random House.

White, H.C. (1992). *Identity and control: a structural theory of social action*. Princeton, NJ: Princeton University Press.

Wheelwright, S.C. (1981, Jul-Aug). Japan – where operations really are strategic. *Harvard Business Review*, *59*, pp. 67-74.

Winegardner, D., Simonetti, J.L. & Nykodym, N. (1984). Unemployment: the living death? *Journal of Employment Counseling*; *21*(4) 149-155.

Womack, J.P., Jones, D.T. & Roos, D. (1990). *The machine that changed the world*. New York: Rawson Associates.

Wright, J.P. (1979). *On a clear day you can see General Motors: John Z. DeLorean's look inside the automotive giant*. Grosse Point, MI: Wright Enterprises.

Zajonc, R.B. (1965). Social facilitation. *Science, 149,* 269-274.