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Roger L. M. Dunbar, Raghu Garud and Sumita Raghuram

Journal of Management Inquiry 1996 5: 23

DOI: 10.1177/105649269651007

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A Frame for Deframing in Strategic Analysis

ROGER L. M. DUNBAR
RAGHU GARUD
New York University

SUMITA RAGHURAM
Fordham University

Deframing processes are needed to deal with pervasive change. We describe what is meant by a frame and how strategy analysts develop and rely on frames to help their understanding. We also discuss the limitations of frames and the need in a changing world for people to be able to both frame and deframe to facilitate their understanding. We then present a frame for understanding the deframing process.

PRELUDE

In 1994, one of the authors talked with consultants who were advising managers in Russia about how firms might be privatized. The consultants asked the author, "Do you think the models of strategy developed by, say, Porter [1980] can be applied in Russia?" They had concluded that Porter's ideas could not be applied there.

Among other things, Porter's (1980) work implies that there are institutional structures in place that acknowledge and protect private property and guarantee independent firms free entry into markets. In 1994 Russia, however, there was little appreciation of the importance of the laws, financial markets, and other institutional structures that support and enable capitalistic practices, and, at the time, such systems had only been partially established. In addition, as state-controlled, centrally planned monopolies still dominated the economy, such concepts as "barriers to entry" had little of the meaning Porter attributed to them. The Russian managers, however, had been read-

ing about market economies. They had learned that profits were key and that Porter offered ideas concerning how firms could make them. They felt they needed to know more about making profits. "You're the experts," they said to the Western consultants, "You tell us what to do. We'll take it from there."

In 1994 Russia, with ubiquitous shortages of consumer goods, just about anything that could be delivered to where it was needed had the potential for generating profits. Distribution was often a problem, however, because criminal gangs or corrupt police stole goods and demanded payoffs. To deal with these obstacles, entrepreneurs formed cooperative cartels to share the costs of organized, armed protection and also to pull together trusted contacts to manage distribution. These entrepreneurs also recognized that although the state was inept, it could still block their activities. The easiest way to avoid this potential problem and to encourage cooperation and minimize interference was to pay off government officials. The resulting Mafia-type organizations relying on physical force and monopoly power were very successful.

The consultants said that the West has no idea how to make profits. It is not until one visits Moscow that one finds out (Erlanger, 1995; Stanley, 1995).

In attempting to offer the Russians useful advice, the consultants became increasingly sensitive to the institutional assumptions that were implicit in Porter's (1980) thinking and reflected the taken-for-granted business contexts of the West and the United States. Russian understandings, in contrast, were based on their dealings with institutions that had been a part of a centrally planned economy with monopolistic powers. These different understandings affected communication itself, let alone any advice that might be given. For, though economic reform was needed in Russia, the consultants were unsure as to what the new structures would be or should be. They did not think they should necessarily be based on models anchored in the institutional contexts of the West, even though this was advocated by some. They also did not think they should be based on practices that were simply adaptations to a centrally planned economy. Useful advice seemed to require, instead, that all parties be subject to a "deframing" process that would purge new proposals of the influence of these different and contrasting understandings. If a relatively clean slate could be achieved, it might be possible to design a framework for economic reform that responded to Russia's transition conditions and then, afterwards, would enable consideration to be given to the sorts of strategies firms should pursue. As outside observers sympathetic to the Russians' situation, the consultants could see the complexity of the issues, but they did not know what to do about them.

INTRODUCTION

The ongoing situation in Russia is an example of a more general problem. When people become familiar with particular ways of doing things or assessing things, the need to adopt or explore alternatives is often neither recognized nor considered. Even when needs for change are recognized, as was the case with the consultants above, what should be done or how one should explore alternatives that would represent a break with historical practice is not at all clear. People, generally, do not know how to abandon the ways of thinking and acting that they have learned to rely on and, oftentimes, they are not even aware it is an issue (Torbert, 1991).

In fact, this does become an increasingly important issue for us all as technical, social, and institutional environments change ever more rapidly and more drastically. In addition, when firms go beyond their home borders to operate in other countries, the need to understand, explore, and adapt to different ways of doing things often becomes a crucial prerequisite for local acceptance and business success. Changing contexts means that managers must be ready to consider, develop, and implement different ways of managing.

Although managers may be increasingly confronted with contextual change, most management studies and prescriptions for managing assume contextual stability along with a preference for incremental adjustments in keeping with this assumed stability. Works such as Porter's (1980), for example, assume a particular type of stable, institutional context. By assuming a stable context, Porter can then focus on a limited number of criteria for assessing effectiveness and proceed to identify categories of variables that may affect achievement according to these criteria. By being repeatedly presented to students in MBA (masters of business administration) programs, to executives in corporate training programs, and to participants at academic conferences, such work establishes a frame defining how people think, what they think about, and what they believe they should be thinking about. Through these repeated diffusion efforts, specific ways of thinking become gradually institutionalized as being the generally recognized, appropriate way to see, assess, and act. Repeated presentation of Porter's work, for example, illustrates how a particular approach to strategic decisions emphasizing profit making can become institutionalized and significantly influence both practice and research.

Porter's (1980) framework takes the free market institutions, such as those that exist in the United States, for granted. Given these institutional structures, his ideas suggest how executives may distinguish strategic figures that may be associated with firm profit making from otherwise undifferentiated ground. When contextual conditions change or are different, however, the downside of such standardized framing is experienced. Specifically, the frame and the approach do not seem to make sense anymore. This is a problem for people who have learned to rely on a particular, standardized framework. When in new circumstances this approach pro-

vides no insights, they are often surprised. They feel helpless, even betrayed.

One should always check whether the underlying assumptions of standardized approaches are appropriate to the particular conditions of interest. In fact, though, people often do not make such checks. If our approaches rely on inappropriate assumptions, we will consistently screen out critical data and hide crucial issues that are in need of our attention. If people do not appreciate the implications of the assumptions their approaches make, they may be surprised and shocked when suddenly, and often accidentally, they find themselves confronted with available data they have previously ignored. What they need at this point is not a new standardized frame, though this is often what they request. Instead, what they need is a better appreciation of the assumptions they were making in applying a particular type of strategic understanding. Where such assumptions are inappropriate, they need to become aware of them so they can free themselves of them. They also need to be aware that potentially inappropriate assumptions are, in fact, implicit in all attempts to approach strategic decision making through using standardized frames. As the limitations of a framing approach are appreciated, people usually develop a renewed appreciation for the ambiguity, uncertainty, and opportunities characteristic of strategic situations.

The next section describes the nature of framing processes in more detail. A frame is then developed to describe the nature of deframing processes. A discussion and conclusion section then explore the implications for the ways in which organizations behave and for the ways in which we as researchers study them.

NATURE OF FRAMING

A vast literature describes the influence of frames in such fields as cognition and decision making (e.g., Argyris, Putnam, & Smith, 1985; Goffman, 1974), strategic analysis (e.g., Allison, 1971), and studies describing the evolution of science and technology (e.g., Kuhn, 1970). Common to all is the idea that to make progress in any situation, one needs to define a focus of interest—that is, to develop a “frame.” Bateson (1972) employs a picture-frame analogy to evoke an image of the influence framing processes have. With a

frame, attention automatically focuses on the content within while tending to ignore the content outside the frame. In day-to-day life, frames are transparent templates people create and then “attempt to fit over the realities of which the world is composed” (Kelly, 1963). They enable us to cognitively contextualize our focus of interest.

The strategy cases of Honda A and B (Pascale, 1983) illustrate how framing processes influence understandings of strategic decision making. In Case A, the way the situation is framed seems to make the issues very clear. In fact, Honda A is a posthoc rationalization, drawing on theories of market share gain, learning curves, and economies of scale to establish a frame for understanding Honda’s successful entry into the U.S. motorcycle market in the early 1960s. This frame seems to “explain” success when, in fact, it obscures understanding of the possibilities for both success and failure.

Honda B, in contrast, retells Honda’s entry into the U.S. market as these events were recalled by the Japanese executive in charge. This account provides a sense of the messy approach characteristic of the Honda team’s effort and suggests that they had no clear plan of how to establish a beachhead for Honda machines in the U.S. motorcycle market. Rather, the actions they describe seem to reflect a dogged determination to simply “try everything.” Given the U.S. context, and also hindsight, many of the things they tried seem naive and silly. As resources for the market entry effort were essentially depleted, and due to their persistence and unforeseeable luck rather than any insights, the Honda B case concludes by describing how success was able to be fortuitously snatched from the jaws of defeat. Case B seems much closer to the “real” world and allows readers to appreciate better how success or failure may emerge from a strategic effort.

The Honda A case demonstrates the way we as academicians, students, or practitioners can use extant frameworks to establish a lens for viewing and understanding a situation. But if we draw conclusions based on our frames only rather than on situational familiarity, then inevitably what we are likely to do is promote our frames and ignore the strategic decision-making process. To the extent that the account of Honda B more accurately describes what actually occurred, for example, we become aware of many critical omissions in Honda A. Case A, for example, never mentions the sense of loyalty that the Japanese

executives felt toward Honda, even though Case B suggests it was this sense of mutual commitment that convinced them that if it were at all possible to sell Honda motorcycles in the United States, they would be able to find a way to do it. Commitment and loyalty were not mentioned in Case A because such factors did not fit within the frame defining the context of the analysis that is presented in Case A.

In turn, this raises the question of how much harm we may do to our students and to the business world by presenting them with cases similar to Honda A as models from which to learn. So often, such presentations are simply reports of the case writers' situational framing. Relationships with what really occurred are effectively obscured. Such cases, as illustrations, highlight an artificially contrived and misleading usefulness to frames that, in fact, cannot be checked. It encourages those who take such analyses seriously to have an inappropriate sense of confidence in the extent to which strategic analysis does and should rely on rational analysis. We shudder to think of the damage extant frameworks may be doing in corporate boardrooms today where students, now executives, apply frameworks without consciously appreciating the serendipitous, messy, changing nature of contexts. As Hayes and Abernathy (1980) aptly point out through their use of the concept of "analytic detachment," we may have managed our way to decline by committing ourselves to established frames while ignoring the associated task of considering whether such frames are, in fact, appropriate to the situation in which they are being applied. As we take this process of analytic detachment seriously, so we are likely to find ourselves involved in a process of deframing rather than framing strategic situations.

The literature usually falls short of talking about deframing. For instance, action science, an interventionist approach that may come closest to the theme of this paper, advocates "reframing" by a process of double-loop learning (Argyris, Putnam, & Smith, 1985). Double-loop learning requires an appreciation of the need to modify espoused frames to be consistent with frames-in-use. Although it highlights an important step in realizing the limits of a frame and the need to reframe, double-loop learning falls short of the sort of "delete design" (Albert, 1984, p. 172) we are proposing. Only when people directly consider whether current frames are adequate and hence whether they need to be deleted will they be able to recognize and appreciate the importance of new and unique phenomena.

In contrast to Argyris and his colleagues, we label this readiness to perceive emerging patterns in a fuzzy environment as representing "zero-order" learning.

The need for deframing reflects recognition of the fact that understanding is necessarily a self-referential process. In most instances, of course, we do not consciously choose to inspect and examine our self-referential conclusions. What we are suggesting here, however, is that we need to have the ability to do so if the evidence we receive from the situations we are studying suggests we may need to. Generally, however, and most of the time, we act in automatic, self-referential ways consistently relying on our established frames. Therefore, we are often surprised when we encounter catastrophic outcomes. We also often think we have no choice but to suffer through long, costly, and painful processes of behavioral and institutional reframings (e.g., organizational restructurings and reengineering). Yet, as we become more aware of the nature of framing as a self-referential process, we also become more conscious of the frames we use. At times, having the option to abandon a frame seems to be a very attractive alternative relative to other possibilities (Watzlawick, Weakland, & Fisch, 1974).

Is it really possible to abandon a frame? After all, aren't cognitive structures "sticky"? In answer, we suggest that these structures are probably sticky to the extent that (a) we are unaware of the frames we are using and hence we are unaware of how they trap us and (b) even if we are aware of these frames, we are unable to escape them. Yet deframing may be possible if we can define the process by which such a capacity might be developed. Toward this end, we first offer ways by which we can realize that we usually operate in a "framed" world and then an appreciation of the process whereby we might be able to deframe.

It is important to note, however, that the notion of deframing that we advocate does not imply that we must obliterate all previous ways of thinking. That is not possible. What it does imply is the need for an ability to step back from a reliance on the particular frames we currently rely on. For instance, with respect to Porter's (1980) five forces model, deframing would require us to develop an ability to reconsider Porter's assumptions and, as a result, start to more clearly see phenomena that lie outside his five forces frame. Firm commitment, loyalty, and mutual trust, for example, were all critically important, strategically, in the case of Honda. But such variables are not easily included in Porter's frame. One must rely on and, at the same

time, be skeptical about whether the focus of current frames is, in fact, directed at the most important, critical issues. Appendix A provides a current example.

A FRAME FOR DEFRAMING

All metaphysical investigations distinguish alternative assumptions about the nature of ideas (ideology), the nature of reality (ontology), and the nature of knowledge (epistemology) (Mitroff & Mason, 1982; Steffy & Grimes, 1986). Strategy research in capitalistic countries is based on an ideology emphasizing the need to understand bases for competitive advantage. However, strategy researchers differ sharply on whether objective or subjective reality is more important for creating competitive advantage and also whether relevant phenomena should be studied using deductive or inductive approaches. These contrasting ontologies (nature of reality) and epistemologies (nature of knowledge) are summarized in Figure 1.

Relying on current frames-in-use, managers feel they know reality because "they call it as they see it" (i.e., they have an objective perspective) and they can conclude that "this must be the answer" (i.e., they have applied a deductive logic). These individuals are "framed"—they are convinced of the utility of the frames they are relying on and so they are usually not open to new possibilities. In contrast, those people who are "deframed" do not have fixed frames they are relying on and are usually relatively open to new possibilities. Entrepreneurs may be a group whose members feel most comfortable in such deframed situations. They probably know that, so far as they are concerned, "what they are dealing with is nothing until they decide to call it something" (i.e., until they enact a subjective perspective), and hence they move to obtain the knowledge they believe needs to be considered by asking, "What's the question that needs to be asked in this situation?" (i.e., they apply an inductive logic).

In between these two extremes are those who view the world through multifaceted lenses and appreciate the socially constructed nature of reality. These multifaceted lenses represent metaphors (Morgan, 1986), some of which gain wider currency and therefore become the basis for everyday discourse and exchange. For instance, employing rich metaphors, news commentators frequently tease out plausible explanations for events that they do not fully understand—

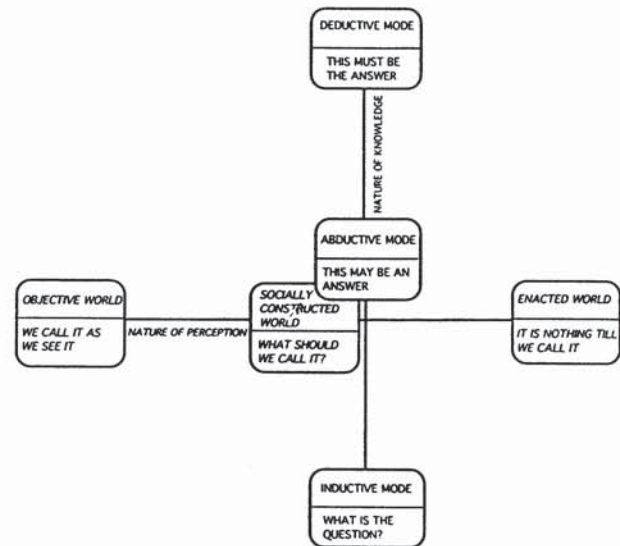


Figure 1: A Frame for Deframing

"this might be an answer" (i.e., an abductive mode of thinking)—while attempting to convince their audience that "this is what we should call it" (i.e., their social construction of reality).

The Framing Process

It is not hard to get from a deframed to a framed state. Because human rationality is bounded, people bracket perceptions into frames. This reduces the detail that is preserved and makes that which is focused upon easier to remember (Weick, 1979). As a result, framing processes encourage a limited view and facilitate confidence in the understandings that are based on this view. This, in turn, makes action easier.

Over time, people become less aware of the limited reality they have circumscribed with their frames. Instead, as the reality included within their frame is often all they remember, they come to regard the framed parts as being the only ones that are important. Based on insights deduced from framed views, the same beliefs, actions, and justifications are consistently noted and mutually confirmed. An associated process of "inversion" (Latour & Woolgar, 1979) then tends to occur, in which frames-in-use gain a life of their own independent of the reality on which they may have been originally based.

This inversion process has occurred when, to determine what is feasible or true, people refer not directly to reality any more but, instead, to the frame they use for assessing and interpreting reality. An example is

our use of IQ scores for identifying human intelligence. Frames (the underlying dimensions of IQ scores) themselves become the basis for determining what is real (human intelligence) rather than being simply structures used to assess and evaluate a diverse and complex reality. By using such shorthand ways to identify complex reality, people start to define and prescribe rather than perceive and describe what they see. Implicitly, also, they define and prescribe what they will not see. Their ways of seeing become ways of not seeing (Poggie, 1965). Because such a process occurs so easily and automatically, it hides awareness of our framing processes. As we become more aware of the process, however, we see that there must be times when we will be in need of an ability to pull ourselves away from our habitual reliance on particular frames.

If, on the other hand, we remain unaware of the framing process and its influence, we are likely to make "Procrustean transformations." That is, in approaching situations, we direct that our prescriptions should take precedence over what actually exists. The downside of such actions in the business world can be disastrous. This is because contemporary strategic environments are global in size and scope and many are characterized by rapid change. This "shifting ground" phenomenon, with which strategic decision makers are continually confronted, requires that they have an ability to both recognize and appreciate new data and changes that are possibly significant.

Taken-for-granted frameworks, however, tend to render us blind to these types of new data. As Allison (1971) demonstrated, frames dictate both what we see and also how we interpret what we see. When we believe in the frames we are using, we tend to ignore, distort, or deny data that are inconsistent with what our frames suggest we should expect. We also actively seek out data that are consistent with our frames and then use this as evidence to further ignore, distort, or deny real data.

As people and organizations unconsciously rely on particular frames for perceiving and interpreting the world, they almost guarantee that there will come a time when they are faced with developments and events that they have not anticipated and which have dire consequences (Walsh & Ungson, 1991). These events will occur more frequently as environments change and as firms operate in global arenas that require managers to deal with the challenge of culturally contrasting rather than culturally shared frames. With many alternative ways of framing available,

managers need to consider the limitations as well as the strengths of the structural frameworks they currently impose on strategic situations. It may be that the frames they usually rely on cannot cope or are inconsistent with the complexities in the situations they are facing.

As an illustration, consider the way inventory management issues have been framed. U.S. research and practice usually conceptualizes inventory as "a reserve of goods" held to cope with fluctuations in demand, or just-in-case possibilities. Inventories may also be conceptualized as a "continuing flow of goods," organized so as to arrive on time and at the places where they are needed, or just-in-time servicing. It is well known in the research literature that just-in-time approaches consistently require lower inventories and generate fewer stock-out events than just-in-case approaches. Hence, if effectiveness is the criteria at which organizations wish to excel, just-in-time approaches should dominate practice. In fact, many U.S. firms still conceptualize inventory issues as the management of a varying reserve. Operations management texts also continue to devote more attention to routines associated with just-in-case conceptualizations rather than just-in-time approaches to inventory management.

It is important to note that it is not appropriate to think of these alternative approaches to inventory management as simply reframings of one another. Although both approaches are concerned with eliminating stock-out events at the lowest possible cost, the respective definitions of the contexts of interest are conceptually quite different. The just-in-case approach focuses attention on a reserve of goods and assumes the aim is to minimize the costs associated with this reserve. The just-in-time approach focuses attention on a flow of goods and assumes the aim is to manage a schedule for the movement of these goods. Because the respective approaches frame inventory management issues in different ways, different measurement routines and assessment procedures are necessary to assess contrasting approaches to implementation.

Contemporary global environments characterized by rapid change and pluralistic cultures require more than managerial adjustments to situations that are reframed in the same way. They require us to develop an ability to reconsider our assumptions that define the situation. When we wish to reconsider our situational assumptions, we need to recognize the old frames we have relied on. We need to consider whether as a result of emerging phenomena, new

frames may be necessary. In other words, there is a need for deframing.

The Deframing Process

There is always a need to establish continuity, even as we are setting up a stage for change (see Albert, 1984). Hence, to develop an understanding of what the deframing process involves, we advocate consideration of a two-step process. The first step involves moving from the fixed frame perspective to a multi-framed perspective. This will occur as one moves from the framed quadrant at the top left-hand corner of Figure 2 toward the center of the grid. As a result of this movement, multiple perspectives on situations will emerge, allowing people to appreciate how any particular phenomenon is subject to a variety of interpretations reflecting alternative framings.

Conceptually, one achieves this by starting at the top of the epistemological axis emphasizing an exclusive reliance on deductive logic and then moving downward. As this occurs, alternative explanations based on deductions become evident. One also becomes aware of the tendency to overdetermine observed phenomena with explanations. It is normal, in fact, to have multiple explanations for observed phenomena. Each explanation highlights some causes or aspects even as it obscures others. To sort through which of our alternative deductions is most relevant, we must identify the premises and the logic we used to reach our conclusions. This usually shows us that our premises are often not specific observations we have identified but rather reports of observations that have attained a rule-like status, which we accept and take for granted. It also leads to an awareness that people with different experiences necessarily base their explanations on different observations that may also attain a rule-like status. Hence people rely on different frames reflecting different premises, and many different frames can and are used to explain the same reality.

It is also necessary to move along the ontological axis from the left to the right to gain a corresponding appreciation that we are dealing with a socially constructed rather than an objective world. After all, if there are multiple realities out there but we behave as if there is only one reality, then there has to be some sort of intersubjective process occurring based on everyday exchanges, whereby we can consensually validate and agree upon what reality is. Insights into the processes that underlie agreements about what is ob-

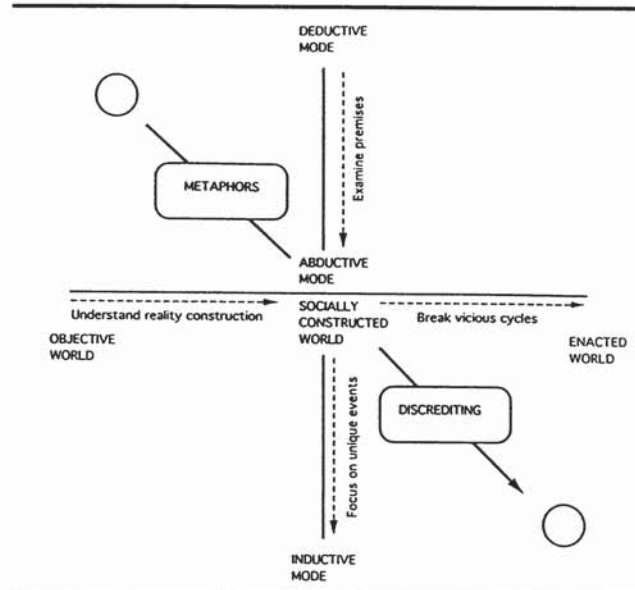


Figure 2: Reframing and Deframing

jective can be obtained through "thick descriptions" (Geertz, 1973, p. 3) of the sociopolitical battles in which situational stakeholders define reality-in-the-making. An appreciation of the multiple deductions that can be used to explain reality along with the socially constructed nature of reality itself allows us to come down the inference ladder we are deconstructing (Argyris, Putnam, & Smith, 1985). We come to realize that our frames-in-use are necessarily summaries of many observations and conclusions drawn from experience. We cannot remember all of these events either accurately or in detail. Instead, we remember them in summarized form and in terms of our impressions, which we usually talk about by using metaphors.

Through these two steps (examining premises and understanding the processes by which reality is socially constructed), we come to a realization that our frames-in-use are essentially metaphors anchored in the past. If we want to simply reframe, we test and try out some new metaphors (Morgan, 1986). This process of exploring alternative metaphors is likely to move our awareness right to the fringes of our established frame (Hirschhorn, 1984).

But it is dangerous to leave matters at this stage because our awareness of multiple frames may simply increase our feelings of ambiguity and uncertainty. The basic question is how many frames can one add to the original before reality is completely obliterated. We suspect that as additional frames are added, analysts get (a) more and more divorced from reality and (b) caught up again in questions of whether or not they should attribute more or less significance to one frame

or another, all of which have little to do with "reality." An ability to create a new frame around emerging phenomena requires that people develop a capacity to deframe so that the new phenomenon is not screened out by frames in use.

Having gotten this far, the deframing option can be explored, initially, by cultivating "splatter vision" (Wilshire, 1989, p. 98)—the process whereby we simply observe and register rather than evaluate what may be going on. This requires a further movement down the epistemological axis, abandoning both deductive and abductive logics and adopting, instead, an inductive approach to thinking, whereby attention is concentrated on watching and observing.

Specifically, we suggest examining more closely those phenomena that have made repeated appearances which, so far, have been defined as unimportant. From the standpoint of a deductive mode of reasoning, for example, these items may have appeared as "error terms" that did not fit with the frame-in-use. In a deductive mode of inquiry, our tendency would have been to develop more elaborate theories and create more powerful methodological tools to explain away or reduce the size of these error terms. However, in an inductive mode of inquiry, it is the "errors" that become the observations that may be of most interest. They may signify unique emerging phenomena that require new questions to be formulated if only their significance is appreciated. Hence we focus on these overlooked data points to discover what it is about them that might be important. This changes our approach from an explaining mode based on deduction to a questioning mode based on induction. It moves us down toward the base of the epistemological grid where we no longer utilize deductive thinking to explore the possibilities uncovered by abductive thinking and, instead, embrace inductive thinking.

A corresponding shift needs to occur along the ontological axis as we move to the right in Figure 2. In doing so, we acknowledge that certain facets of our worlds are not just socially and institutionally constructed but are also personally and cognitively constructed. We realize that we can think about ways to overcome and shape social and physical forces that might otherwise constrain us. We have some discretion to determine both our choices and our actions. In doing so, the ways we attribute causation and explain success and failure are likely to play a critical role. In individualistic societies, such as the United States, for example, people tend to attribute failures to others and successes to themselves. Such an attribution pro-

cess establishes an illusion of control that is self-fulfilling and, in the process, also blocks change. This is because such an attribution process prevents people from seeing how their successes may, in fact, be caused by environmental forces and their failures, to their own omissions. We must either cut or even reverse such causal attributions to prevent self-fulfilling, out-of-control cycles (Weick, 1979). For instance, if we attribute more of our failures to ourselves and our successes at least partly to others, then we might find we are quickly able to identify a number of areas in which, through changing ourselves, we are able to exercise more control in an otherwise deterministic world.

The combination of focusing on the error term to help generate relevant questions rather than explanatory answers, and breaking out of a self-fulfilling world by attributing failures to ourselves and successes to the environment establishes a basis for a general "discrediting" process (Weick, 1979). In turn, this discrediting process is likely to open up new possibilities for change. Total discrediting, in contrast, results in instability and the ultraflexible organization. Ultraflexible organizations are the contrasting ideals to the ultrastable organizations that operate from a framed quadrant. To strike a balance between stability and flexibility, we must split our efforts between crediting and discrediting processes so far as established frames are concerned.

The Reframing Process

"You can't do anything without a frame." We agree. Indeed, we think that in the process of deframing, we are usually sowing the seeds for the emergence of a new frame. It is not hard to get from the deframed quadrant to a framed one. As people spend time in situations and certain issues recur, so they start to develop frames for understanding the sorts of things that are associated with one another and how best to accommodate and respond to them. Inevitably with experience, we try out and test possible frames to see which ones are most useful. Eventually, we begin relying on some heuristics that seem to have worked. We ourselves, the situation, and our responses have become framed.

We see how this process may occur when, as parents, we observe how our children explore different ways of approaching us and then, relatively quickly, learn frames for thinking and behaving that effectively persuade us to give them what they want. The same

thing happens with strategists who learn to rely on particular frameworks, such as Porter's (1980), to decipher what may be important about ongoing events. The problem for both our children and our strategists does not come about until the contexts they depend upon change, something that is inevitable as a result of development and growth. If children or strategists remain committed to their frames-in-use after the context has changed, they will find that their expectations and attempts to behave and interpret get quickly out-of-line with reality. It is then that deframing is required.

DISCUSSION AND CONCLUSION

We increasingly confront rapidly changing and complex worlds. Despite the fact that our contexts change, however, our inclination is to continue to view and interpret the world through familiar, "generic" frames. In this sense, our frames serve as windows to our world, determining what we see and how we interpret it. In this process, our frames enable us in some ways but constrain us in others. Hence, whereas strategy analysts should be concerned about framing, they should also be concerned about deframing. Although framing comes naturally, deframing can be messy, seem difficult, even threatening.

In fact, an attempt to deframe may seem a bit like opening Pandora's box—very few would admit that the reality they have assumed may, in fact, be an illusion. Yet, insofar as our frames are different from those employed by others, what appears to be real to us may appear imaginary to them. Consequently, an awareness of our frames brings us one step closer to an appreciation of how our reality is constructed. A second step toward deframing enables us (a) to reestablish contact with the contexts we are dealing with in a way that (b) helps us achieve our goals in those contexts. Hence an awareness of the deframing process gets us in touch with an area where our choices have fundamental consequences.

Deframing processes have important implications for the creation, transfer, and application of knowledge in organization studies. In creating knowledge, we have already argued for the need to view emerging phenomena in domestic or international arenas with fresh eyes not yet jaded by extant frameworks. For instance, recent resource-based views of the firm (see Peteraf, 1993, for a review) suggest that competitive advantage is sustainable only to the extent that resources are unique and inimitable and to the extent

that these resources are rejuvenated through entrepreneurial efforts. If this is correct, there can be no established generic frame that firms can apply to sustain competitive advantage. This is because the locus of sustainable advantage must lie squarely in the deframed quadrant where idiosyncratic entrepreneurial wealth is created. Yet current research attempts to identify the bases for sustainable competitive advantages by analyzing macrolevel data and large-scale statistical methods ill-suited to teasing out the idiosyncratic facets of organizational sustenance. In fact, this type of research implies that the idiosyncratic nail has to be hammered away with statistical power until the effect of its uniqueness is proven to disappear.

This type of mismatch between theory and methods implicit in discussions of resource-based views can be traced to our efforts as social sciences to emulate physical sciences. In modeling ourselves after the physical sciences, we implicitly adopt an epistemology and ontology that places us in the framed quadrant. The rules of evidence and logic we employ and the theories we develop create a different reality in the social sciences, and we become social and cognitive creatures trapped in webs of significance that are of our own and others' making. In fact, many of our theories and methods for studying organizations should be about exploring the deframed quadrant. By encouraging thinking that is inductive and open with respect to new possibilities, our literature may be able to suggest new ways for organizations to cope with change.

The deframing quadrant requires rules of evidence and approaches that are quite different from an emphasis on reliability and validity, the two pillars of positivistic research. Various researchers (e.g., Lincoln & Guba, 1985) have offered procedural adequacy and credibility as two corresponding criteria that need to be developed further but may be suited to the conduct and evaluation of research embracing naturalistic inquiry. An emphasis on the former criteria for evaluation coupled with a deemphasis on the latter may ensure that our research journals risk both Type I and II errors, accepting for publication those articles that should have been rejected and rejecting those that should have been accepted. Our point is that deframing is needed in our research world.

Deframing is equally applicable with respect to the transfer of knowledge in the classroom. We routinely offer frameworks to students to apply. With little reflection, our students are very likely to use their learning to carry out Procrustean transformations. This is

dangerous because such students are not only framed but also unthinking about their frames. As Morgan (1986) suggests, we need to cultivate the art of critical inquiry in our students, or an ability to ask questions based on an inductive exploration of sociocognitively created worlds. Morgan's metaphorical approach is a step in the right direction toward exposing us to the multiple realities that frameworks impose. In addition, however, they must know the processes associated with deframing. That is, our students should be cognizant of the need to actively discredit and hence become aware of emerging phenomena that existing frames are not able to capture.

It is in the application of knowledge to practice that the pernicious downside of framing is most likely to be felt. Fortunes have been lost not for being wrong but for not realizing that the reality framed was not the existent reality. In this sense, the nature of reality is far from something that is objective but rather is something that is illusory. As Weick (1979) recommends in his articulation of discrediting, our message to practitioners should be that "when you truly believe in something, then you must start disbelieving." This is because when contexts change, the apparent security offered by a frame can be comforting, encouraging an even stronger reliance on the frame. But this reliance can be only an illusion. This is obvious when one enters a foreign business culture, such as current-day Russia. But it may be even more important in our own culture, wherein technological change is institutionally encouraged and supported and bringing about no less significant changes.

If we as academicians, as students, or as practitioners are to change, we must possess capacities to deframe. We have shown here that deframing is an identifiable and understandable process. Once it is understood, a deframing process can also be managed.

APPENDIX A

Framing Work in the Computer Industry

High-speed communication links have changed the technological configuration of computers. Instead of being time-sharing systems as in the past, modern computers are usually distributed-processing systems. Specifically, Tapscott and Caston (1993) suggest that as a result, we have a new information-processing "paradigm" and a rapidly changing environment. Industry members must adopt new and different ways of thinking about competition and survival. The strategies that firms in the computer industry use, therefore, are likely to demonstrate the importance of deframing.

Most firms in the industry now compete by offering "open" systems. In the past, however, many competed by offering "closed" systems. A closed system enables a firm to appropriate benefits from its technology but makes it difficult for other firms to offer compatible systems. As a closed system is incompatible with other systems, whenever customers commit to it, they also isolate themselves from different systems owned by other firms. Because of the threat of customer isolation associated with equipment commitments, it can be difficult to generate a critical mass of firms subscribing to a closed system. Apple Computer adopted this strategy when it initially offered its Macintosh system.

In contrast, firms pursuing an open system approach freely license their technology to others with the intent of increasing the use that is made of their system overall and, as a result, its general viability. Such a strategy sacrifices the returns that might be gained from fees charged for new technology. Instead, revenue is enhanced from the increased sales gained from customers who see that if they commit themselves to an open system, they will have no difficulty communicating with many producers as well as the systems owned by others. It was Sun Microsystems who pioneered this open systems movement. Extolling the virtues of its open systems approach in a networking era, Sun's 1986 Form 10-K reports state that

open systems offer customers significantly greater transportability of application software and allow migration paths to higher performance and more functionality. In addition, customers are able to incorporate hardware options from independent firms and of their own design into the basic system. (p. 1)

To pursue an open systems strategy, one must abandon a closed strategy. For those who are considering such a move, they will most likely have to deframe themselves of the closed system approach. This may be resisted. Observing Sun's success, its critics argued it would be difficult for less well-known firms to sustain an open systems strategy. Commenting on Sun's efforts to encourage others to emulate its strategy, for example, Andrew Rapaport, president of the Technology Research Group stated that

Sun has become the victim of its own success. They gave IBM the idea, and they gave HP the idea, and to a certain extent, they gave DEC the idea [of adopting standards]. Why would you buy a Sun and not an IBM if the architectures are the same? (Card, 1986, p. 87)

But from an open systems perspective, being cloned again is a sure sign of success (Whiting, 1989). Commenting on the developing trends, Sun's CEO, Scott McNealy, stated thus:

In the past, computer companies have been able to charge a premium for proprietary technology; in the future, they will have to offer a discount." (Gannes, 1987, p. 90)

Although most executives in the computer industry at first condemned Sun's open systems approach, they have recently begun to emulate them by offering open systems, as well. For instance, though he had earlier critiqued Sun's

open systems strategy, John Sculley of Apple Corporation expressed regret in 1993 for jealously protecting Apple technology instead of allowing other computer companies to make Macintosh clones ("Information Technology," 1993). Steven Jobs, formerly of Apple and CEO of Next Corporation, who has been known for his adherence to closed systems and proprietary architecture, said that they were persuaded the world had changed to an open-system one (Hill, 1993).

IBM serves as an important example of the significant risks involved with not recognizing and responding to fundamental changes. Caught up in a mainframe logic (Pralhad, cited in Markoff, 1993), IBM continued pursuing its closed mainframe, time-sharing solutions even as much of the industry migrated to open, distributed systems. After IBM lost \$24 billion in market value in 1986, CEO Akers was undaunted. He claimed that in 4 or 5 years, people would see that IBM's performance had been excellent (Loomis, 1991). Ferguson and Morris (1993, pp. 96-97) described IBM decision making at the time: "A steady politicization crept over the management bureaucracy. Presentations inevitably become shorter, punchier, more hermetically designed, served up at senior management meetings like canapés—crisp, bite-sized, bland. Selling a presentation defined success." Later, they concluded that "only a scourge of self-cleansing can save the company from a bleak and constricted future."

IBM under Akers attempted to reframe to better achieve profit goals without grappling with the implications of the fundamental paradigm shift that had occurred in the larger environment and which required a deframing effort. For instance, after it had experienced 4 years of market share and profitability losses despite the best efforts of its management, IBM responded by offering a strategy that would use mainframes to network smaller databases (Verity, 1989). Thus, even though he now recognized the need for distributed computation, Akers still looked to his mainframe time-sharing computers to provide solutions. IBM had built itself on mainframe technologies, and it refused to cannibalize this past strength, although Sun and other firms did. Emphasizing the contrast, Carol Bartz, Sun's vice president, insisted that a company can make money bringing out a new product that would destroy an existing one. She said they would not wait for the competition to do it (Gannes, 1987).

According to many computer industry analysts, executives at IBM finally recognized a new "reality" and a need for drastic change when sales and profits plummeted again in 1990 (Loomis, 1991). Akers's proposal this time was that IBM would no longer protect its mainframes from cannibalization. Instead, the firm would be divided up into several independent companies that would compete against one another (Verity & Forest, 1992). His proposal illustrates how a continued focus on reframing without first deframing continues to create problems rather than solve them. Creating separate businesses that could cannibalize each other's products would have effectively destroyed the synergistic benefits to be derived from the firm's integration around compatible standards that, in turn, would be the basis for IBM's entry into distributed computing.

Events at IBM eventually culminated in a leadership transition. Gerstner replaced Akers in 1993. Whereas Akers wanted to split IBM into baby blues, Gerstner chose to maintain a single big blue. He also abolished presentations featuring fancy transparencies and relaxed IBM's legendary dress code. Perhaps most striking is the fact that Gerstner, an outsider, resisted the temptation to present a strategic vision immediately after accepting his job (McCracken, 1993). Positioning himself in the deframed quadrant, Gerstner pointed out that he was better able to unearth latent technological wealth within the company by pursuing an entrepreneurial approach whereby he remained open to possibilities. He also fumed at the realization that IBM had been the first to create the basic RISC microprocessor technology for workstation applications but chose not to capitalize on it even as workstations encroached on mainframe sales ("Information Technology," 1993). IBM now offers its RISC system/6000 workstation as an open system.

The transition between Akers and Gerstner at IBM is consistent with Nadler and Tushman's (1988) observation that "frame-breaking" changes often require a transition at the level of the top management team. Reframing rather than deframing seems to have occurred for years at IBM. This led to tremendous costs for both the company and many individuals within it. Our contention is that the costs incurred by IBM in the last decade could have been greatly reduced if the CEO and his advisors had first recognized the need to deframe and then honed their ability to do so. We think many other firms embedded in environments in which technologies are changing rapidly face similar issues.

REFERENCES

- Albert, S. (1984). A delete design model for successful transitions. In J. R. Kimberly & R. E. Quinn (Eds.), *New Futures: The challenge of managing corporate transitions* (pp. 169-191). Homewood, IL: Dow Jones-Irwin.
- Allison, G. T. (1971). *Essence of decision: Explaining the Cuban missile crisis*. Boston: Little Brown.
- Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action science*. San Francisco: Jossey-Bass.
- Bateson, G. (1972). *Steps to an ecology of mind*. San Francisco: Chandler.
- Card, D. (1986, March 15). Workstation whirl: The upstarts face the giants. *Electronic Business*, 82-92. Reprinted with permission from *Electronic Business*, March 15, 1986. Copyright Cahnners Publishing Co., 1996.
- Erlanger, S. (1995, July 3). A corrupt tide in Russia from state-business ties. *New York Times*, pp. 1, 5.
- Ferguson, C. H., & Morris, C. (1993). *Computer wars*. New York: Times Books.
- Gannes, S. (1987, August 17). Sun's sizzling race to the top. *Fortune*, 88-91.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. New York: Harper & Row.

- Hayes, R. H., & Abernathy, W. J. (1980). Managing our way to economic decline. *Harvard Business Review*, 58, 67-77.
- Hill, C. G. (1993, November 23). Next will license its "object" software to Sun, open up its operating system. *The Wall Street Journal*, p. B7.
- Hirschhorn, L. (1984). *Beyond mechanization: Work and technology in a post industrial age*. Cambridge, MA: MIT Press.
- Information technology. (1993, July 26). *Fortune*, 48.
- Kelly, G. A. (1963). *A theory of personality: The psychology of personal constructs*. New York: Norton.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago: University of Chicago Press.
- Latour, B., & Woolgar, S. (1979). *Laboratory life: The social construction of scientific facts*. Beverly Hills, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Loomis, C. J. (1991, July 15). Can John Akers save IBM? *Fortune*, 41.
- Markoff, J. (1993, January 27). Help wanted: Computer skills a must. *New York Times*, p. D3.
- McCracken, P. (1993). Taking charge. *Think*, 5-9.
- Mitroff, I. I., & Mason, R. O. (1982). Business policy and metaphysics: Some philosophical considerations. *Academy of Management Review*, 7, 361-371.
- Morgan, G. (1986). *Images of Organization*. Beverly Hills, CA: Sage.
- Nadler, D., & Tushman, M. (1988, June 6). What makes for magic leadership? *Fortune*, 261-262.
- Pascale, R. T. (1983). *Honda A & B*. Cambridge, MA: Harvard Business School Press.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14, 179-191.
- Poggie, G. (1965). A main theme of contemporary sociological analysis: Its achievements and limitations. *British Journal of Sociology*, 16, 283-294.
- Porter, M. (1980). *Competitive strategy*. New York: Free Press.
- Stanly, A. (1995, July 4). Russian tycoon finds politics good business. *New York Times*, p. 3.
- Steffy, B., & Grimes. (1986). A critical theory of science. *Academy of Management Review*, 11, 322-336.
- Sun Microsystems Computer Corporation. 1986. Form 10-K reports.
- Tapscott, D., & Caston, A. (1993). *Paradigm shifts: The new promise of information technology*. New York: McGraw-Hill.
- Torbert, W. R. (1991). *The power of balance: Transforming self, society and scientific inquiry*. Newbury Park, CA: Sage.
- Verity, J. (1989, May 29). A bold move in mainframes. *Business Week*, 72.
- Verity, J., & Forest, S. A. (1992, December). Does IBM get it now? *Business Week*, 32.
- Walsh, J. P., & Ungson, G. R. (1991). Organizational memory. *Academy of Management Review*, 16(1), 57-91.
- Watzlawick, P., Weakland, J. H., & Fisch, R. (1974). *Change: Principles of problem formation and problem resolution*. New York: Norton.
- Weick, K. (1979). *The social psychology of organizing*. New York: Random House.
- Whiting, R. (1989, January 23). Exploring Sun's solar system. *Electronic Business*, 46-50.
- Wilshire, D. 1989. Uses of myth, image and the female body. In A. M. Jaggar and S. R. Bordo (Eds.), *Gender/body/knowledge: Feminist reconstructions of being and knowing*. New Brunswick, NJ: Rutgers University Press.