Leadership in the Midst of Complexity, Uncertainty, Turbulence—and Contradiction

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At this point, I introduce a theme that shall be found throughout this set of essays: our 21st Century world is highly complex, unpredictable and turbulent. This theme happens to align closely with a theme that is widely embraced among contemporary organizational theorists and leadership development specialists: **VUCA** (which is an acronym standing for volatility, uncertainty, complexity and ambiguity). I am not alone in suggesting that complexity, uncertainty (including ambiguity) and turbulence (volatility) are widely to be found in our contemporary world. I add, in this essay, a fourth component that makes complexity, uncertainty and turbulence even more challenging—this is the condition of contradiction. This is the world of irony and I will be building on the utopian proposal offered by the philosopher, Richard Rorty (1989).

Along with Rorty, I propose that a new condition of irony is one in which we will not just recognize and appreciate multiple perspectives, multiple truths and multiple narratives. It is a condition in which we willingly embrace these multiple realities and enter these realities into our own consciousness—despite the (ironic) fact that these realities might contradict one another. We engage these multiple realities (and accompanying truths) contingently by fully appreciating and empathizing with the emotional experiences of the "unfamiliar others" who live with these alternative realities and truths.

In terms of organizational dynamics and leadership, we will begin, as ironists, to not just understand and appreciate the values and perspectives inherent in every organization and in every leader. As I have already suggested, we will wholeheartedly claim each of these values and perspectives as being part-and-parcel of our own

working perspective on the life of a contemporary leader. Furthermore, we will take action based on our full appreciation of these multiple realities, values and claims.

The Nature of Emergence

While the specifics of this new ironic condition are yet to be fully worked out by me (or other writers about irony), it seems that such a perspective relates directly to the concept of emergence (a philosophical perspective that can be traced back many centuries). During the 20th Century, we saw the ironic emergence of the concept of emergence: we can't predict the nature of a higher order system from the characteristics of the subsystems that constitute this higher order system.

Rather, a new phenomenon emerges from the old phenomenon that could never have been predicted. Even more generally, Whitehead and his colleagues sought to create a unified concept of the world, with the complex organization of components at one level (e.g. the physical level) yielding novel and irreducible properties at a higher level (e.g. the chemical level). Furthermore, the subsystems from which the new system emerges may themselves seem incompatible or even contradictory—hence the relationship between emergence and irony.

For example, we could never imagine that water would emerge from the combination of two units of hydrogen and one unit of oxygen. Neither hydrogen nor oxygen manifest either the physical properties of water nor interact with other chemical entities in the way that water does. How can a combination of lifeless chemicals along with some unique environmental conditions create something that is alive and that evolves into extraordinary plants and animals? Could this evolution have ever been predicted?

At a very different level, we might comment on the incompatibility of various characteristics of leaders in history: how could a warrior king (such as Alexander or Charlemagne) have also been a champion of culture, the arts and intellectual discourse. Where did these men find the motivation to fight not only for land, but also for artistic expression? Today, we can identify many events (what Taleb calls the "black swans")

(Taleb, 2010) that defy all analyses and predictions—ranging from global terrorism and collapse of economic systems (Smick's curved world) (Smick,2008) to global explosion in the use of the Internet (Friedman's flat world) (Friedman, 2007).

Big History and Tipping Points

Today, we find an ambitious project being undertaken by the proponents of "big history." Rather than creating a separate history of our universe, our solar system, our planet, the geography of our planet, the biology of our planet and human history, David Christian (Christian and McNeill, 2004) and his big history colleagues, describe ways in which this is all one unified history, with the movement from one scale (e.g. the universe) to another scale (e.g. the solar system) providing new insights about both scales.

Much as one cannot predict water from the combination of hydrogen and oxygen, so one cannot predict the properties of the system at one scale (e.g. the history of living beings on the earth as addressed in the field of biology) from properties of the system at another scale (e.g. the geographical history of the earth as addressed in the field of geology).

Big history is about major breakthroughs. These breakthroughs (whether at the level of the creation of the universe, the formation of life forms on earth, or the emergence of a new species of fish) have always involved a delicate (and infrequent) interweaving between and balancing of order with chaos. We see this same pattern emerging in the ironic dynamics of organizations.

As Ralph Stacey (1996) has noted, the interplay between order and chaos provides the opportunity for creativity and renewal in organizations. With only order, there is no incentive for or source of ideas for innovation. With only chaos, there is no structure or process by which new ideas are reviewed and ultimately implemented. Even at the level of our individual lives, we find that major learning occurs when order (support) is balanced off with chaos (challenge) and many of the most motivating experiences

("flow") occur at the threshold between boredom (order) and anxiety (chaos). I will be addressing this interplay and threshold frequently in this essay.

Specifically, as a system becomes more complex, it reaches a point when it dramatically changes form and function. Called a "phase change" or "tipping point" (Gladwell, 2002), the system emerges as something quite different from what it was in its previous, less complex form. The irony inherent in this emergence concerns not just the unpredictability of two or more seemingly predictable subsystems coming together to form something brand new, but also the great sense-making that occurs when we observe and analyze the way in which this phase change takes place.

Most importantly, for those us providing coaching and consulting services, the fundamental issue is: are our clients merely observers and perhaps discerning analysts of this irony-filled phase change (Soft Irony) or are they living it in an intimate and profound manner each day of their life (Hard Irony)? Do they just read about tipping points in Gladwell's (2002) best-selling book or they on the brink of a major tipping edge in their own life? Mutual discernment by the interventionist and client is important at this (tipping) point.

The Interplay between Order and Chaos

21st Century leaders, postmodernists and ironists often find themselves addressing a basic issue concerning the interplay between order and chaos. Systems (including organizations) seem to make sense—sometimes. The policies and procedures look right (at least on paper) and things seem to be moving along in a predictable manner. At other times, everything seems to be fragmented and chaotic. Nothing makes any sense in the organization and one wonders if the center can hold. Postmodern and ironist theorists (especially those who are studying chaotic systems) suggest that these seemingly contradictory observations are actually a result of examining the organization at different levels (Kauffman, 1996, p. 8):

> The emerging sciences of complexity begin to suggest that . . . order is not accidental, that vast veins of spontaneous order lie at hand. . . We have all known that simple physical systems exhibit spontaneous order: an oil droplet in water forms a sphere; snowflakes exhibit their evanescent six-fold symmetry. What is new is that the range of spontaneous order is enormously greater than we have supposed. Profound order is being discovered in large, complex, and apparently random systems. I believe that this emergent order underlies not only the origin of life itself, but much of the order seen in organisms today. So, too, do many of my colleagues, who are starting to find overlapping evidence of such emergent order in all different kinds of complex systems.

Organizations (like virtually all other systems) contain layers of chaos and order. When confronted with a seemingly chaotic and unpredictable organization, we have only to move up one level (to greater abstraction), or down one level (to greater specificity) if we wish to find order—this is the essence of emergence.

For instance, the behavior of a specific person may begin to make some sense once we begin to examine overall dynamics in her department rather than just look at her individual behavior. Organizational theorists tell us about the deskilling of managers or subordinates that often occurs in organizations and the ways in which this deskilling contributes in some manner to the maintenance of stability in this department. Similarly, we can move up or down levels of analysis to find chaos in an organization that seems to be orderly.

This is the process described by the "big history" advocates in their emphasis on the scale of analysis. The operation of a ballet or theater company, for instance, may look very orderly from the audience's perspective. At a higher level, however, everything may look quite chaotic (inadequate funding, props that never arrive, recalcitrant performers)—just as at the level of the individual performer we will find stage fright, confusion, rivalry and other forms of non-rational and chaotic behavior that are never seen by the appreciative audience.

Similarly, in many large organizations, the customers (and perhaps even corporate board members) are never allowed to witness its pervasive chaos. We polish and rationalize (public relations) decisions that have been made in highly irrational ways and in complex, unpredictable settings. We collude in the creation of impostureships and rehearsed untruths.

Order is being discovered in many different systems—some of which seem on first glance to be purely random and chaotic. Human organizations are among the systems that have been found to be both orderly and chaotic. We find order everywhere in our world, despite its turbulent, complex and unpredictable characteristics. Our world is, at a very fundamental level, nothing more (or less) than a set of interacting systems that are each internally consistent, coherent, self-regulating and self-fulfilling. Within each of these systems there is additional order.

Subsystems tend to replicate or mirror each other as well as the overall system. This subsystem mirroring provides coherence and predictability. There is also abundant disorder and chaos in our 21st Century world. Turbulence, unpredictability, and fragmentation dominate the spaces where systems and subsystems meet. VUCA reigns supreme. Since there are more and more systems in operation today that are not consistent with one another, there is an increasing amount of turbulent, unpredictable and fragmented space in which systems are in interaction—an increasing amount of chaos and irony.

Emergence and Irony within Organizations

As I have already been hinting, the observation of order and chaos in interaction within virtually all organizations leads to an important conclusion regarding the relationship between emergence and irony. Various systems and subsystems within organizations seem to contradict one another – yet they need each other and influence (emergence) one another.

These ironic conditions are produced by and in turn contribute to the complexity, unpredictability and turbulence within an organization. (Vaill, 1989; Wheatley, 2006; Stacey, 1996) I propose that each of these three challenges (complexity, unpredictability and turbulence) requires a new kind of organizational leadership, and a new level of appreciation for irony (Soft Irony)

Turning first to complexity, we know that high levels of complexity within an organization demand a level of cognitive functioning that often leaves us, as Robert Kegan (1994) suggests, "in over our heads." We must be able to understand and grapple with complex issues that are often nested inside other complex issues or are juxtaposed with other challenging issues—this is the essence of Rorty's ironic condition.

We are faced in complex settings with an additional challenge: we must simultaneously be able to think about our own thinking and take actions. We must be able to learn from our mistakes and successes, as well as be aware of the particular settings in which we learn and in which we don't learn (often called meta-learning) We must adopt Rorty's contingent mode of thought and engagement.

We are even more challenged when faced with uncertainty. Obviously, under conditions of uncertainty, we can't predict what will happen next. However, there is an additional challenge: we are continually faced with new information that comes from many different angles. We must continually accommodate to this new information while abandoning—at least temporarily—old assimilated models, assumptions, and social constructions of organizational reality (Berger and Luckmann, 1967: Argyris and Schön, 1974; Argyris, 1982; Senge, 1990).

Using Kurt Lewin's term, we are always "unfreezing" and never have a chance to settle in with our new learning and new accommodation. (Lippitt, Watson and Westley, 1958) Using Rorty's analysis of irony, we are always faced with shifting contingencies in our role as organizational leaders and must always entertain multiple perspectives and

explore multiple strategies when living in this world of complexity and unpredictability.

The White-Water World of Contemporary Organizations

The condition of turbulence further compounds the challenge of complexity and unpredictability, given that we, as leaders, must live in a swirling "white-water world" (Vaill, 1989) in which rapid change intermixes with patterned change, stagnation and chaos. I'll begin with the positive side: there is nothing more beautiful and variable than a mountain stream, with its falls, whirlpools, rivulets, and quiet pools of water.

The stream is beautiful in part because it is always changing. Like the flickering flames in a fireplace, the crash of waves on an ocean beach, or the fall of snow on a winter evening, there is always something new (emergent) evolving from the unpredictable interplay of various subsystems in the mountain stream. The whole is always something more than the sum of its parts.

If one looks more closely at this extraordinarily complex system, one finds that four different kinds of subsystems are operating in the stream. These four subsystems interact to produce increased complexity and they, in turn, produce a phase change (tipping point) which becomes the magical white-water world of the flowing stream (the positive side), as well as the ironic challenges of unpredictability and contradiction (the negative side).

First, there is the rapidly flowing subsystem of the stream. The movement in this subsystem is very rapid and highly predictable. When we watch a leaf being carried by this subsystem we can readily tell where it will be two seconds from now. The flow of water in this subsystem resembles the flow in a large river: powerful, constant and quiet. This subsystem of the stream exemplifies the orderly subsystems in an organization.

A second kind of subsystem of the stream is also orderly, though it is much more complex. This is the whirlpool that is formed when the water hits an impediment (such

as a submerged rock). The water in a whirlpool keeps changing directions; however, one can predict the change in directions since the water is moving in a predictable spiral formation. We know where the leaf that enters a whirlpool will be two seconds from now. However, we may not be able to predict where it will be in five seconds, since the whirlpool is likely to pull the leaf down below the surface of the water and throw it off into some other subsystem.

In an organization, this whirlpool-type subsystem is represented by the predictable changes in the life cycle and seasons of the organization. Change is occurring in the organization, but it is change that has occurred before in the organization (seasonal change) or it is change that one can anticipate given the experiences of comparable organizations as they grow larger or older (lifecycle change).

There are the unknown aspects of the change—as the organization (like the leaf) is pulled into the vortex of the compelling change. Even if they don't know where it will all end up after the predictable cycle, seasoned leaders can be relatively confident regarding the pattern of organizational change that will unfold in the cycle. Budget preparation times in companies are typically whirlpool occasions: intense, dizzying but ultimately predictable.

The stream also embraces a third subsystem that is to be found in the quiet pools that are tucked away behind a large boulder in the stream or at the edge of the stream beside a large sunken tree trunk. It is remarkable that a stream with rapidly flowing water also inevitably contains many subsystems that are not only very quiet but also often stagnant. We can usually drink from the rapidly flowing water in a stream--but are warned (by the smell) to avoid drinking from the stagnant pools. Yet, these pools are often the sources of nutrients for the ecosystem of the stream.

Our leaf floats into the stagnant pool and remains there. It eventually sinks and joins with other rotting leaves to form a richly nutritious bio-mass for the living organisms of the stream. The quiet pools represent yet another form of order in the turbulent stream.

Nothing changes. Everything eventually sinks, rots and contributes to the ongoing revitalization of the bio-system.

The quiet pool is represented in the organization by those subsystems that never change or change very slowly. These are the subsystems that provide what Talcott Parsons (1955) calls the latent pattern maintenance functions of the organization. They preserve the continuity of the organization, while other subsystems are rapidly changing. These subsystems include the rituals, ceremonies, norms, values, and narratives of the organization—the deeply embedded and often invisible (latent) patterns of behavior in the organization (to which I turn in a later chapter).

The quiet pool is also represented in the formal bureaucratic processes of the organization: those rules and regulations that are slow to change and that seem to have a life of their own. They are reinforced even when no longer appropriate and are followed even when no longer formally in force. These are the bureaucratic ways represented in the phrase, "that's the way we have always done it around here." We might also include those people and departments who represent the old ways of doing things in the organization. Sometimes called the "remnant," Everett Rodgers (2003) identifies these people as the "recalcitrant" of an organization who forever struggle against change and innovation.

This quiet pool may at first seem to represent a deficit in an organization and a source of resistance and consternation for those seeking to improve and adapt the organization for a changing world. We must recognize, however, that a quiet pool is the primary source of nutrition for the stream—and that in a comparable manner the quiet pool in an organization is the primary source of its distinctive character, traditions and culture.

Without this core patterning, the organization will fall apart. It will lose its integrative glue and its sense of abiding values and purposes. In a postmodern and ironic world where boundaries are falling away, the quiet pool in an organization contributes in a profound way to its clarity regarding organizational intentions and to its sense of

continuity and commitment. From this perspective, the remnant of an organization provides an invaluable wisdom regarding the deeply embedded patterns of the organization, and the stagnant resistance of the organization becomes a fertile ground for the formulation of new strategies that honor the past while leaning toward the future.

There is finally a fourth type of subsystem in the stream. This is the subsystem that resides on the boundaries between the three other subsystems. When looking at a stream, one sees this type of subsystem in the area that exists between the rapidly flowing section of the stream (subsystem one) and the stagnant pool (subsystem three) or between the whirlpool (subsystem two) and either the rapidly flowing or stagnant water. Unpredictability is endemic to this fourth type of subsystem.

A leaf that floats into this subsystem begins to move in a highly erratic manner. One cannot predict from moment to moment where the leaf will be. It bobs and weaves, darting from one point to another in a seemingly random manner. Eventually the leaf will end up in the stagnant pool, the whirlpool or the fast lane (subsystem one). Meanwhile (to borrow from the movie *All About Eve*) it is in for "a bumpy ride!"

The fourth subsystem is common in contemporary organizations that are filled with the uncertainty resulting from the complex and unpredictable dynamics inherent in this subsystem. Typically, the participants in these turbulences not only have differing priorities, they also move at a different pace from each other and in different directions. This is at the heart of the ironic conditions in which many contemporary leaders find their life inside an organization.

Three Physical States

To better understand this world of white-water and turbulence, we will turn to another analogy. During the early years in the study of chaos and complexity, Stuart Kauffman (1991) suggested that there are three physical states. He points to the three states of water as an exemplar. On the one hand, there are systems that are highly orderly—such

as ice. Ice is highly orderly and non-changing (as long as the environment in which it exists remains constant). There is also a second physical state—gas—which Kauffman suggests is chaotic. Water vapor, for instance, is unpredictable in its movement and destination; one has only to observe the steam that comes out of a teakettle.

A third physical state is represented in the condition that is intermediate between frozen and gaseous. This is the liquid state of an ingredient. This state represents the interplay between order (frozen) and chaos (gaseous) and is typified by turbulence. This turbulence is found in a whitewater stream and for that matter in any system that is moving rapidly--but is faced with obstacles and divergent forces (such as other entering streams or wind currents).

This is a very important corrective on many of the recent attempts to apply chaos theory to organizational life. Chaos does not exist, *per se,* in an isolated form in any biological system. Rather, chaos is always being played off against and being balanced by the orderly functions of the system. A chaotic organization, therefore, would cease to exist if there was no order. The turbulence in a stream only exists because the fourth subsystem serves as a buffer and point of transition between two orderly systems that are operating in quite different ways (stagnant versus rapidly moving; whirlpool versus stagnant; whirlpool versus rapidly moving). Similarly, turbulence in an organization only exists because some subsystem in the organization is buffering or serving as a transition point between two other systems that operate with their own patterns and underlying order.

Contemporary organizations, like streams that have many interacting subsystems tend to create more turbulent subsystems than do those with few subsystems. Streams will have many subsystems if submerged rocks or trees that have fallen into the stream are present (creating whirlpools and stagnant pools). It is important to reiterate that any stream will tend to become more turbulent the more rapidly the water in it is moving. Any system will tend to become turbulent as the movement of subsystems within the

system is increased. This acceleration of movement produces an increasing amount of interaction among the subsystems.

There are an increasing number of subsystems in 21st Century organizations that are not consistent with one another (the ironic condition). Furthermore, there is an acceleration in the change within and among these organizations—resulting in an increasing amount of turbulent, unpredictable and fragmented space in which subsystems interact. Thus, we find, as in the mountain stream, a rich interplay between elements of order and elements of chaos, all intertwined in complex, unpredictable and turbulent subsystems of organizational life.

The Landscape of Puzzles, Problems, Dilemmas and Mysteries

I am about to introduce another metaphor and another level of analysis in understanding the nature of irony operating in contemporary organizations and the nature of challenges facing the leaders of these organizations. I specifically propose that there are four kinds of issues being addressed in most contemporary organizations: puzzles, problems, dilemmas and mysteries. Each of these issues involves a different organizational landscape and each, in its own way, yields ironies that the leaders of these contemporary organizations must confront.

Puzzles

Puzzles are the everyday issues that anyone working in an organization must face. Puzzles have answers. They are uni-dimensional, in that they can be clearly defined and can readily be quantified or at least measured. Puzzles concern such things as changing a production schedule to accommodate a major new order or determining the appropriate fee for a new, longer training program. Puzzles also concern changes in organizational policies to accommodate new laws or re-arranging an office floor plan or a parking space distribution. With a puzzle, the parameters are clear. The desired outcome of a puzzle-solution process can readily be identified and is often important to (and can be decided by) a relatively small number of organization members. It is the

sort of issue rightly passed to the lowest level of responsibility where the necessary information is available.

Researchers who study complex systems use the metaphor of landscape to distinguish a complex challenge from other types of simpler challenges being faced in various systems, including organizations. They point to the image of a single, dominant mountain peak when describing one type of landscape. Often volcanic in origin, these imposing mountains are clearly the highest point within sight. For those living in or visiting the Western United States, we can point to Mt. Rainer (in western Washington) or Mt. Shasta (in northern California). Mt. Fuji in Japan also exemplifies this type of landscape. You know when you have reached the highest point in the region and there is no doubt regarding the prominence of this peak. Similarly, in the case of puzzles, one knows when a satisfactory solution has been identified and one can stand triumphantly at the top of the mountain/puzzle, knowing that one has succeeded and can look back down to the path followed in reaching the solution/peak.

Problems

I have identified the second type of issue that a 21st Century leader faces as a problem. Problems can be differentiated from puzzles because there are multiple perspectives that can be applied when analyzing a problem, several possible solutions are associated with any one problem and multiple criteria can be applied to the evaluation of the potential effectiveness of any one solution. There are many more cognitive demands being placed on us when we confront problems than when we confront puzzles—given that problems do not have simple or single solutions.

Problems are multi-dimensional and inter-disciplinary in nature. They are inevitably complicated in that they involve many elements. Any one problem can be viewed from many different points of view that are each creditable; thus, it is unclear when a problem has been successfully resolved and the contemporary leader is faced with the ironic challenge of acknowledging multiple realities and solutions. For example, we

find a technical solution and realize that the problem has financial implications. We address the financial implications and soon find that there are a whole host of managerial concerns associated with the problem. Because the outcome of the problem-solution process itself is of significant interest to multiple stakeholders, often the most important and difficult discussions revolve around agreeing on the criteria for solving a problem or even evaluating when solutions are successful.

Researchers and theorists who are seeking to understand complicated problems often describe the settings in which problems emerge as "rugged landscapes." (Miller and Page, 2007) This type of landscape is filled with many mountains of about the same height (think of the majestic mountain range called the Grand Tetons or the front range of the Rocky Mountains that citizens of Denver Colorado see every day), as compared with a landscape in which one mountain peak dominates. In a rugged landscape that is complicated, one finds many competing viewpoints about which mountain is higher or which vista is more beautiful. A similar case can be made regarding the challenging and ironic problems that must be engaged by the 21st Century leader.

Dilemmas

When certain issues that leaders face appear impervious to a definitive solution, it becomes useful to classify them as dilemmas. While dilemmas like problems are complicated, they are also complex, in that each of the many elements embedded in the dilemmas is connected to each (or most) of the other elements (Miller and Page, 2007). We may view the issue from one perspective and take action to alleviate one part of the issue, and we immediately confront another part of the issue, often represented by an opposing stakeholder group. We are facing full-blown irony.

We tighten up our policies regarding new product development and find that creativity is dropping off. We increase the price of a service that we deliver in order to increase revenues and find that we are losing customers, thereby losing revenues. Leaders may not always recognize a dilemma for what it is. New leaders tend to see dilemmas in a

limited or simplistic way, and attempt to deal with them as if they are puzzles or problems. When that happens, leaders dig themselves deeper and deeper into the complexity, seriousness, and irony of the "mess." (Schön, 1983)

At times we find that the issue is a set of nested dilemmas. One set of conflicting priorities exists within another set of conflicting priorities. For instance, we want to pay one employee a bonus, but are concerned that if we do so other employees who find out about it will be resentful and less likely to collaborate with their bonused colleague. This dilemma, in turn, rests inside an even bigger dilemma: we want to increase salary and benefits to all our employees, yet also are trying to keep down costs because the market in which our product is being sold is highly competitive. These are very complex dilemmas - not readily solved puzzles or even complicated problems.

As in the case of problems, dilemmas can be described as "rugged landscapes." (Miller and Page, 2007) However, because dilemmas involve multiple elements that are intimately interlinked, they are far more than a cluster or range of mountain peaks of similar size. This type of complex landscape is filled not only with many mountains of about the same height, but also with river valleys, forested plains and many communities (think of the Appalachian Mountains), as compared with a landscape in which one mountain peak dominates or in which a series of mountains dominate. In a complex, rugged landscape, one finds not only many competing viewpoints but also an intricate and irony-filled interweaving of these differing viewpoints.

The sign of an effectively engaged leader is that they can hold opposing and ironic views. The sign of a viable organization is that it can live with and manage its dilemmas in real time, without questioning its identity at every turn in the road, whip-lashing its strategies, tearing and rebuilding it structures reactively, or scapegoating its people. To return to our landscape metaphor, we may find that we are living not in a complex rugged landscape but in what Miller and Page (2007) call a "dancing landscape." Priorities are not only interconnected, they are constantly shifting, and new alliances between old competing polarities are being forged. Clearly, when a world of complexity

collides with a world of uncertainty and a world of turbulence, the landscape begins to dance and organizational leaders must learn how to make their organizations dance (Kantor, 1990). In engaging the dance, these 21st Century leaders have entered the world of Hard Irony.

Mysteries

As we begin to address the challenges associated with dancing landscapes, we enter a domain in which problems and dilemmas seem to merge into mysteries. Mysteries operate at a different level than puzzles, problems or dilemmas. Mysteries are too complex to understand and are ultimately unknowable. A specific mystery is profound (desired outcomes are elusive but of great importance to many stakeholders) and awe-inspiring or just awe-ful. A mystery is inevitably viewed from many different perspectives and deeply rooted in culture and tradition. Mysteries have no boundaries, and all aspects are interrelated.

Mysteries are constituted of multiple and often nested ironies. They are beyond rational comprehension and resolution, and they are viewed with respect. Some mysteries relate to traumatic and devastating events: Why did I get out of the World Trade Center while my desk mate perished? Why did lightning strike our freighter but not the one next to it? Why did my child die before me? Mysteries also encompass many positive events and moments of reflection: How did I deserve all these talents? What is my destiny? Why have I been so blessed in my professional life? Why did I fall in love with this person? Why did this remarkable person fall in love with me? How did I ever raise such an exceptional child? How did I earn so much affection from these people at my retirement party?

Locus of Control

We perceive mysteries as taking place outside our sphere of control or influence. Psychologists call this an external locus of control and note that some people are inclined to view most issues as outside their control (that is, as mysteries). By contrast,

puzzles are usually perceived as being under our control. Psychologists identify this perspective as an internal locus of control and note that some people are likely to view all issues as being under their control (that is, as puzzles).

Problems and dilemmas are usually complex mixtures of controllable and uncontrollable elements. The ironic condition is filled with many problems and dilemmas. Internal and external locus of control must exist side by side with one another—especially in nested dilemmas. Our task as leaders of ironic organizations and concerned citizens living in and actively engaged in ironic societies – as men and women living in Hard Irony—is to be discerning: what can we control and what can't we control?

Even if we set aside the challenge of Hard Irony, we will be able to successfully address a problem or dilemma only by embracing a balanced perspective with regard to internal and external loci of control. One of the most helpful inquiries when confronting problems, dilemmas and (in particular) nested dilemmas is to identify what is and what is not under one's control, and to do that from a perspective that challenges immediate perceptions. A problem or dilemma that is embedded in a rugged landscape is more likely to have components that are under a leader's partial control than is a problem or dilemma that is embedded in a dancing landscape. Often, obscure or potential strengths can come to light when a leader realizes how much broader is her actual span of control when compared to her self-limiting awareness—in other words, when she expands the scope of her internal locus of control.

There are myriad challenges associated with the role of leader in identifying and addressing these four different kinds of issues. For the leader facing these issues, the Irony is Hard. First, leaders typically want their issues to be puzzles they can control or perhaps mysteries for which they have no responsibility. Puzzles can be solved and we know when we have solved them.

Mysteries are outside our control, so we don't have to feel responsible for resolving them. But problems and dilemmas—these are much more difficult to address. We have to determine which aspects of the problem or dilemma are under our control and which aspects are not. This confusing mixture of internal and external control is inherent in problems and dilemmas, and so is the balancing of competing but valid interests represented by different stakeholders. That's what makes these issues so difficult to address. They exemplify the ironic condition existing in contemporary organizations.

Sense-Making, Leadership and Irony

When dealing with complexity, unpredictability and turbulence we are constantly trying to make sense of the challenges we are facing and alternative solutions that we might enact. We try to make sense of the conceptual challenges and strategic challenges we face by comparing these challenges to something about which we are already knowledgeable. This is part of the reason why I am relying heavily on metaphor in this set of essays: the white-water environment and the differing landscapes of contemporary organizations. It is also the reason why metaphor is of great value in addressing organizational challenges associated with irony.

We can more readily address the intricacy of irony by framing each element of the ironic condition in concrete, descriptive terms (such as "financial bottom line" versus "long life" or "quality" versus "quantity"). While there is much that can be said about the role played by metaphor in framing and resolving organizational issues, I will focus on two particularly important sets of metaphors—namely those associated with the process of appreciation and those associated with differing leadership styles.

Effective leaders make sense of the Hard Irony to be found all around in the world where they work and live. Multiple-scale analysis reveals the complexity, unpredictability and turbulence of the system in which members of organizations work and in which they seek to serve as leaders. This full appreciation of the multiple levels

at which organizations and people operate can be frightening (we lose the container for anxiety).

This appreciation can also be illuminating (helping people make sense of what is happening all around them). This illumination can in turn help people forgive their own confusion and even forgive their own mistakes and the mistakes being made by other members of the organization. As the proponents of organizational learning frequently note, the effectiveness of a contemporary organization is determined not by the ability to avoid making mistakes, but by the ability to learn from these mistakes and not repeatedly make the same mistakes.

How can we make sense of and appreciate leadership in the organizations of which we are members (Soft Irony)? It depends on the society in which we live. People who live in premodern societies, with economies based primarily on hunting, gathering, agriculture, or the extraction, cultivation and crafting of other natural resources, tend to conceive of leadership as the "head of household."

They make sense of leadership by crafting stories (often mythic in scope) about great men and women who were selected for their character and education. These great men and women not only lead organizations, they also influence history and establish societal values—this is the mythic nature of their existence and profound legacy. Premodern leaders are either born to greatness or provided with an elitist program of liberal arts and mentorship. They tend to exert authority through a paternal or maternal concern for the welfare and proper education of those who depend on them.

By contrast, those living in modern societies, with economies based on large-scale manufacturing and marketing, tend to make sense of their leaders by conceiving of them as master cogs in a great machine. Members of modern societies emphasize structures, processes and procedures that ensure the appropriate expression of leadership and influence. Events and structures—not great people—determine the

course of modern history, and values are identified as products of the system and bureaucracy rather than as products of any specific individual(s).

Emphasis is thus placed not on identifying or producing a great leader (as in the premodern society), but on constructing a great system. Those who head modern organizations typically define themselves as managers rather than leaders. They are to manage and be worthy stewards of the great system that has been created by other people (the nameless and faceless designers of bureaucracies). Modern authority is expressed through the autonomy of rules, regulations, roles and organizational structures.

Those who reside in postmodern societies, with economies based on digital communication and commerce call both the premodern and modern notions of leadership into question. They make sense of postmodern leaders by considering these men and women to be neither inherently great nor merely a product of a great system or bureaucracy. Greatness in a postmodern society involves interaction and great alignment between potentially great people and a potentially great system.

Effective postmodern leadership can be found at any level of an organization. Engaged leaders are effective as they exemplify Rorty's notion of contingency: leadership can be effectively exerted and will be influential if applied at the right time, in the right place, in the right manner, and with regard to the right problem or goal. This contextual and contingent model of leadership requires careful consideration of both individual and organizational character and style. It also requires a tolerance for ambiguity, recognition of the need for one to learn from his or her mistakes, and a clear sense of personal aspirations.