Cautionary tales from the Kalahari: how hunters become herders (and may have trouble changing back again)

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Executive Overview

Much has been written about organizational change, but often with little insight into why established organizations are so stable and difficult to transform. In this article David Hurst uses the experience of the Kalahari Bushmen to bring an additional perspective to the problem. He draws the parallels between the recent transformation of the Bushmen from hunters to herders with the evolution of organizations from entrepreneurial ventures to settled bureaucracies.

Anthropologists have identified the accumulation of possessions as the catalyst for the Bushmen's transformation and Hurst suggests that it is the products of success—physical and psychological possessions—that are responsible for the stability of organizational bureaucracies. However bureaucracies, like herders, can excel only in low variation environments and Hurst contends that their very success under such conditions leaves bureaucracies (and herders) vulnerable to sudden environmental change. He argues that the organizational structures required for performance actually inhibit learning and prevent transformation of herders back into hunters.

Nevertheless, he suggests that both performance and learning in an organization can be enhanced by the use of a soft, "woven" matrix organization which links both the learning and performance aspects of the organization with the cognitive structures of meaning which integrate the individual, organization, and society.

In My View

"And the end of all our exploring
Will be to arrive back where we started
And know the place for the first time."

(T.S. Eliot, Little Gidding)

There has been a good deal written recently about the need to transform organizational cultures. We have been told that our lumbering bureaucracies need to be changed into fleet, nimble structures, preferably by leaders with a "vision." The gurus say that hierarchies must be replaced by teams of passionately empowered workers. Commitment at the bottom of the organization must supplant command from the top; people must become "self-organizing" and so on. Yet the methods recommended by the experts to achieve such results rarely display much insight into how organizations become established in the first place and why they are so difficult to change. Indeed managers themselves are often at a loss to understand why their organizations are so rigid and inflexible. Metaphors based on Newtonian physics which attribute organizational stability to "forces of inertia" and "resistance to change" offer little indication as to what might be

needed to transform a stable culture. What is needed for this purpose are some new analogies drawn from other fields.

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A recent article (April 1990) in the Scientific American[1] offers just such an analogy and yields a number of insights into the nature of cultural change. The article deals with the cultural transformation of the Kalahari Bushmen, who for thousands of years have been nomadic hunters and foragers in this harsh, unpredictable Southern African desert. During the past twenty to thirty years this nomadic society has been transformed into communities of settled herders and farmers.

Nowadays Bushmen keep cattle and donkeys and raise goats and chickens. Their vegetable diet now includes cultivated corn rather than just the wild roots and tubers they have traditonally eaten.

This type of cultural change has occurred throughout history in many societies but the reasons for such cultural shifts continue to puzzle anthropologists. For a time it was believed that the diet of farmers was nutritionally superior to that of nomads and hence offered agricultural societies an advantage in the struggle for survival. It now appears, however, that if anything the opposite is the case; the hunter/forager diet actually yields a more balanced intake than that of the herder/farmer. In addition, in the case of the Bushmen, the hunter/forager mode of life suited them ideally. In a drought-prone region, communities relying on water-dependent herds and crops have little to fall back on when disaster strikes: the hunter/forager can always move on. With their generalist strategy and keenly honed skills Bushmen could find water where none was known to exist and, in the absence of game, they could survive on a wide variety of reptiles and plants.

Hunters
Young organizations which have to operate in harsh, unpredictable environments often have to display hunter/forager strategies. While they may have a fairly narrow range of product, their early sales "diet" will often be extraordinarily diverse as entrepreneurs attempt to meet divergent customer demands while struggling to master recalcitrant technologies. Curiously, the intense teamwork and absence of hierarchy found in such emergent organizations is also found among the Bushmen in their hunter/forager mode of operation. For traditionally the Bushmen have formed loose coalitions or bands, membership of which is governed by ties of family, kinship and even friendship. As they roam the desert a Bushman family has a relatively wide choice of bands with whom to travel. Unencumbered by possessions, they have great physical mobility and are able to switch easily from less successful groups to those having more luck. Effectively this gives their society the ability to cover large areas of territory without losing the flexibility to capitalize on success wherever it is found. Their strategy could best be described as opportunistic and "emergent": developing from a series of rapid response to activities which show promise.

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The flexible band system is complemented by values which stress the ethic of sharing, both of meat and possessions. This not only ensures equal distribution of food but, extended to relatives outside of the band, it leads to a system of delayed reciprocity between neighbours. For instance a hunter's kill, which is more than enough to feed him and his immediate family, will also be used to feed neighbours against the day when they will make similar kills and reciprocate. The distribution is initiated by a custom that awards the ownership of a dead animal (and thus the right to distribute its meat) to the owner of the first of the poisoned arrows to effectively penetrate its skin. Arrows are freely exchanged among members of the band either as gifts or as loans so the primary distributor of the meat may not even be a member of the hunting party. Yet the hunters, through their choice of which arrows to use, can exercise considerable control over the process by deciding which complex pattern of reciprocity to set in motion.

The ultimate effect of this intricate system of distribution is that the rewards of the hunt accrue to the band as a whole—successes belong to the team and not the individual one might say.

The custom of gift-giving ranks second only to meat-sharing in importance within the Bushman community. They regard trading among each other as undignified and as likely to lead to bad feelings within the community. So artifacts and utensils of all kinds make a slow rotation among members of the society. The unwritten rules of this activity are that no Bushman may refuse a gift and that they must reciprocate with an item of similar value: although the delay between receipt and response may range from weeks (anything less might look like trading) to years. Thus through meat-sharing and gift-giving the Bushman bands are held together by webs of mutual obligations—at any given time everyone within the society owes someone else a favour.

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The hunter/forager society's social values are reflected directly in the physical structures in which they live. The Bushmen's temporary hunting camps consist of grass huts arranged in a circular pattern with all entrances facing towards the centre of the circle. The cooking hearths are placed just outside the hut entrances. This "open door" layout encourages openness and interaction—social intercourse takes place around the cooking fires—everyone knows everyone else's business. Indeed as anthropologist, Lorna Marshall has put it "The (Bushmen) are the most loquacious people I know. Conversation in a(n) encampment is a constant sound like the sound of a brook, and as low and as lapping, except for shrieks of laughter. People cluster together in little groups during the day, talking, perhaps making artifacts at the same time. At night, families talk late by their fires with their children between their knees or in their arms if the wind is cold.

There always seems to be plenty to talk about. People tell about events with much detail and repetition and discuss the comings and goings of their relatives and friends and make plans. . . . (T)he mens' imaginations turn to hunting. They converse musingly, as though enjoying a sort of daydream together, about past hunts, telling over and over where the game was found and who killed it. They wonder where the game is at present and say what fat bucks they hope to kill. They also plan their next hunts with practicality.

Apart from promoting consensus building and allowing the emergence of plans, the conversations round the camp fires maintain community bonds and surface incipient social problems. According to Marshall: "Getting things out in words keeps everyone in touch with what others are thinking and feeling, releases tensions, and prevents pressures from building up until they burst out in aggressive acts."[3]

The physical living arrangements which facilitate such intimacy could probably not be better calculated to foster a sense of belonging among the members of the Bushman community, and prehistoric man must have lived successfully in this way for thousands of years. But it is interesting to note that it is exactly this kind of open, interactive, nurturing environment that successful R&D organizations such as GE, 3M, and Corning Glass try to arrange, particularly in research facilities. They have learned that often the best ideas emerge in the informal interactions that take place between researchers in a physical environment designed to promote such activity. GE goes so far as to insist that its researchers vary their table-mates in the cafeteria to encourage casual contact between researchers from different disciplines.[4]

Yet the processes active round the Bushmen's camp fires go well beyond the physical and social bonding activities described so far. For while events and plans

are discussed, interpreted and developed at the conscious level, these activities take place against a vast unconscious backdrop which brings meaning to the Bushman's daily routines. Round the camp fires the Bushmen enact in story, song, and dance the rituals which remind them of the origins of their universe and their place within it. Their mythology is rich in the details of the provenance of every element and inhabitant of the desert, explaining both their roles and their relationship with each other. It is mythology which locates the Bushman in a web of significance, descriptive of what their part has been and prescriptive of what it ought to be. It constitutes a web of meaning, a cognitive framework, that allows the Bushman to make sense of and negotiate what to outsiders look like a dangerous, unpredictable enviroment—an environment that the Bushmen are comfortable to call their home.

Herders
But now the Bushmen's hunter/forager society has changed dramatically. The families are sedentary rather than mobile. Young men are no longer taught how to hunt and the bows and arrows that they construct are made only for the curio trade. Even the design of their living spaces has changed, as the circular patterns have given way to linear box-like arrangements. Many Bushmen now live in permanent mud walled huts. The entrances have doors and are sited for privacy rather than intimacy. Even the hearths have been moved inside. As a consequence the Bushmen no longer meet around their camp fires either to discuss community events or to reach consensus on band activities. The need for hunters to visualize where the game might be no longer exists and their traditions are no longer celebrated in story, song, and dance.

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One of the more immediate consequences of this change in living arragements is that the Bushmen are finding that they need a hierarchy of authority to resolve disputes among themselves. Usually they turn to a local Bantu chief to play this role, for in the desert leadership was not centered on one person but, like the Bushman's strategy, it emerged from the demands of the situation as the band followed its fortunes, making the best of the harsh environment. Once consensus on a general course of action had been reached around the camp fire, leadership on the ground would move among the members of the band as circumstances dictated: sometimes it might be the best tracker who led, at others it might be a woman who could locate water-bearing tubers and so on.

Now, however, in the absence of the open communication within their community, consensus is difficult to reach and social tensions can build to intolerably high levels. In their hunter/forager society, as a last resort, intractable interpersonal problems were resolved by the quarrelling parties moving away from each other, at least for a while.

In their new static, "boxed" culture these free flowing processes are no longer available to the Bushmen. In a rigid society, characterized by standard routines requiring minimal interpersonal interaction and offering little opportunity for intensive informal communication, a formal authority is required to settle disputes and maintain order, just as it would be in any bureaucracy.

Why did this rapid (by anthropological standards) cultural change take place so fast? The anthropologists in the *Scientific American* report suggest that it was the exposure of the Bushmen to material wealth that catalyzed the transformation. The emergence of a market economy on the fringes of the Kalahari allowed the Bushmen, for the first time, to become accumulators of possessions. These possessions not only hampered their physical mobility, forcing them to change from foraging to farming, but more importantly, the ownership of possessions ran

directly counter to their ethic of sharing. It seems that as the Bushmen accumulated wealth they felt increasingly uncomfortable exposing their new possessions to the scrutiny of the rest of the band, let alone sharing their good fortune with them. In the past the relative scarcity of goods had encouraged their community use as they were passed from owner to owner in the form of gift-giving. Now the relative abundance of goods meant that everyone could aspire to have their own. And so the Bushmen began to hoard goods and, ashamed of their reluctance to share them with others, arranged their living spaces to give themselves maximum privacy.

Bureaucracies

Our established bureaucracies are rather like the Bushmen's new culture. In the process of enshrining success we build organizational structures which break down what were once novel, complex activities into simple, routine procedures. The maintenance of these procedures is ensured by a system of hierarchical control mechanisms which require little informal interaction among organizational members. Nevertheless in this organizing process the people who perform and manage these essential tasks are endowed with a variety of possessions, both physical and psychological, which increase as the organization grows and prospers. These products of success, these possessions, are protected and preserved in the boxes of the formal hierarchy which is designed to formulate (or perhaps, more accurately, to formalize) strategy, settle disputes and perpetuate the static organization via a system of controls and sanctions against deviations from plan.

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Like societies of herders and farmers, bureaucracies excel in low variation environments, where the recipe for success remains stable. They are much less successful in situations where the recipe is changing, for their very strength—their ability to maintain the status quo—reduces their capacity to change. The test comes for them, as it will for the Bushmen, when the environment becomes turbulent and ceases to be predictable. Although the Bushmen have not yet faced this challenge, their story helps us imagine what it might take to change their culture back to what it was before they came into contact with a material society.

Transformation

The first question that strikes one is whether the shift from hunter to herder is reversible at all: the change seems to be unidirectional. With the loss of their daily enactment of the hunter/forager way of life, the basic skills required to live such a life will soon wither through disuse. The Bushman's intimate knowledge of the particular parts of the Kalahari where they live depends upon detailed on-the-ground experience which cannot be duplicated by any abstract map that would soon become stale and outdated. Without the social intercourse around the camp fires, the entire process of socializing the young and their inculcation with hunter/forager values will be lost. Without the stories, songs, and dances, the origins and destinations of the society will be forgotten. And even if they are remembered, the Bushmen may find it hard to shed the attachments of the settled life, although the turbulent environment will certainly help in that regard. Nevertheless the surrender of psychological possessions such as status and power is likely to be even harder than it is with physical possessions. For even in the face of an ecological crisis many of those higher up in the hierarchy will cling to the secrets and confidentialities that they "own" and will be dismissive of the notion that teams can be self-organizing. "Who is going to resolve the disputes?" they will demand to know, and indeed a herder/farmer may not be able to even imagine how a hunter/forager could ever function without a hierarchy.

Thus the Bushmen may find themselves possessed by their possessions and quite unable to summon the cultural memory of the hunting/foraging skills which ensured their survival in a turbulent past. Without either role models or their archetypes, embodied in myth and legend, there will be neither behaviours which

they can emulate nor traditions to which they can appeal. Indeed the hunter/forager way of life is probably already lost and, in the absence of a written record, the skills may be beyond recovery. Thus if a severe environmental crisis were to strike the Bushmen in their herder/farmer mode of living their society might well disappear, incapable of adapting to the changed circumstances.

The case for transformation sounds daunting, yet I believe that the situation of the Bushmen, although extreme, does contain all of the elements of the problems faced by any organization seeking to transform itself. This analogy, drawn from the experience of the Bushmen and the future challenges they may face, gives us some clues as to what is needed to change our settled bureaucracies into more flexible organizations: to convert at least part of these organizations from herders back into hunters. For the challenge faced by modern organizations is, at least in some ways, even more difficult than that faced by the Bushmen. In a turbulent environment, managers have to preserve the core "farming" competences, which produce a value-added surplus, while the hunting skills at the periphery of the organization are used to forage for new opportunities.

Lessons for Managers—Structures and Processes: Theory and Practice

The most prominent feature of the Bushman's hunter/forager culture is its apparently natural balance—a woven blend of stable structures and flexible processes which allows them to follow and capitalize upon the natural rhythms of their desert home (to be "attuned" to the environment in the current jargon). The most striking of the structures is the physical living arrangement which facilitates the social processes allowing the Bushmen to both frame and resolve problems without engaging in overt "decision-making." By problem framing I mean that the intense social interaction allows members of the community to identify and articulate issues as they arise, usually resolving them well before they become "problems" requiring "decisions." The ease with which this process operates in the hunter/forager mode contrasts starkly with the difficulties the Bushmen now experience in their herder/farmer society, where their problems now require decision makers with hierarchical power.

In North American management thought we have usually regarded decision making as being the essence of the manager's role, tacitly assuming that problems exist as some sort of "given" in the environment. Our Bushman analogy suggests that, in fact, problems may often be systemic in their origin—a by-product of interactions, not only between the organization and the environment, but within the organization itself. Thus, if an organization experiences the need for constant decision making on the part of its managers, this may be a symptom of dysfunctions within the organizations, reflecting the absence of social processes capable of framing and resolving emerging issues before they become overt problems.

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There is evidence to support this view in the social processes which appear to operate within many Japanese corporations, processes which have often baffled Western observers. In particular, the extensive socializing among bosses and subordinates after office hours, known as *otsukiai* or "fellowship,"[5] seems especially tedious to Western managers. Even though business topics are forbidden in the bars and on the golf courses where this socializing takes place, Western managers often have the uncomfortable feeling that policy is being made there.[6] They are probably right—the Japanese emphasis on teams, consensus building, and intense socializing probably reflects, as it does in the case of the Bushmen, the substitution of a group policymaking process for what North Americans have always thought of as an individual, intellectual, decision-making process. The decision criteria in the group process are societal values and interpersonal relationships, not just the logic of conceptual frameworks. This surely is part of the reason why, although the Japanese do not appear to "make"

decisions in the same way as we do, they seem to be able to implement their "non-decisions" with great speed.

Of course these kinds of social processes are not restricted to Japanese organizations and have been extensively observed in Western organizations, particularly in fast growing high-tech operations such as Tandem and organizations such as Disney.[7] Indeed, in every business, one of the primary motives of business entertainment is to stimulate these social processes which are so essential to the building of consensus.

A second stable structure in the Bushman's hunter/forager culture which is less obvious than the one just discussed is the mythological framework within which they operate. Unlike modern Western man, the Bushmen do not appear to regard their mythology as a fiction to be contrasted unfavourably with historical facts; rather they regard their mythology as an extraction of the essence of role behaviours which have worked at all times. Thus their mythology informs their daily activities by supplying helpful information about elements of their environment (such as the habits of animals and the characteristics of plants) and helps them coordinate their experience—to derive meaning from their lives. As Northrop Frye has pointed out[8] myths play a leading role in early societies in giving them a shared possession of knowledge, essential instruction which everyone in the society has to know. It is this function of the myth in the present tense that generates meaning for the members of the society by showing how every element of the environment is related each to the other.

Thus the Bushman hunter/foragers live self-sufficiently in a seamless universe of which they are an integral part. This is in sharp contrast with their more fragmented life as herder/farmers where trade and barter are essential if they are to satisfy basic needs. Meaning must now be found in the acquisition of material possessions in a society where laws, hierarchical authority, and the technology of herding and farming have replaced the regulatory role of mythology and the natural cycles of the climate and the environment. While there is no doubt that this development creates considerable material prosperity, it is not costless. For apart from the susceptibility of their society to all the ills which attend the loss of community feeling and their identity as a people, their lack of flexibility leaves them vulnerable to disastrous reversals when the recipe for success changes. All of which brings us back to the central question of whether it is possible for long established human organizations to recover a lost hunter/forager way of life and, by blending opportunism with preexisting strategy, to get the best of both modes of living.

Transformation in Theory
As far as organizational structure is concerned, the transformation of an organization from an established herder/farmer way of life would appear to require a weaving together of the hard, "vertical" elements of the formal organization with the softer, "horizontal" communication processes so characteristic of hunter/foragers. The term "weaving" is used deliberately, as the metaphor captures neatly the continuity of both the vertical and horizontal elements of the organization, as well as the complex nature of their interaction.[9] This soft, woven matrix must be clearly distinguished from the hard organizational matrices which were so popular in the 1970s.[10] These hard matrices consisted of two or more interlocking, formal structures which together created an organizational gridlock and often suffered from excessive bureaucratic overhead and consequent rigidity. They are the antithesis of what is being suggested here.

As far as cognitive structures are concerned, transformation of a herder/farmer culture seems to need the discovery and exploration of new patterns of meaning:

meanings which can invest the daily activities of the organization's members with a cognitive significance that binds together the individual, organization, and society. The metaphor of a soft, woven organizational matrix allows one to think about these patterns as being analogous to the patterns of a tapestry or a fine Persian carpet. Patterns such as these emerge from the interweaving of diverse elements and can be discovered, explored, and interpreted only by a perceptual/cognitive process which oscillates in multiple dimensions, between the big picture and the details, figure and ground, text and context.

Like the mythology of the Bushmen which, in their hunter/forager mode, is explicitly understood by all members of the society, the objective of the transformation should be to discover and explore, develop and interpret patterns of meaning with as wide an audience as possible. The purpose is to reinterpret the past and visualize the future, for it is the weaving of the "texts" or lessons from the past with the expected scenarios or "contexts" of the future that constitute the cognitive pattern that we call a "vision" of the future.

Practice—the Revitalization of General Electric

One of the best known examples of an attempt to transform a major organization is Jack Welch's efforts to change GE. Since his appointment in 1981 his best known action has been to slash 100,000 employees as he has cut operations to focus on what he believes to be the core elements of the business.[11] Much more significant have been his moves to release the organization's emotional energy and creativity to capitalize on the opportunities offered by changes in GE's environment.[12] His emphasis is on the restoration of open communication: "Real communication takes countless hours of eyeball to eyeball, back and forth. It means more listening than talking . . . It is human beings coming to see and accept things through a constant interactive process aimed at consensus."[13]

Welch began the process by delayering the management hierarchy and reducing corporate staff. According to him the jobs of middle managers have to be redefined: "They have to see their roles as a combination of teacher, cheerleader, and liberator, not controller."[14] Although the language is that of current North American managementspeak, the objective of these activities is clearly to create or perhaps to restore social processes in GE which approximate those found in a hunter/forager society.

Welch's prescription for the decision-making process within GE stresses the sharing of the facts and assumptions behind decisions rather than the logic of the decisions themselves: "Everyone in the same room, everyone with the same information . . . The complications arise when people are cut off from the information they need."[15] His views on what information is relevant for GE's managers are astonishingly radical for a North American CEO. For example the "Work-Out" program of in-depth communication is designed to ". . . expose the business leaders to the vibrations of their businesses—opinions, feelings, emotions, resentments, not abstract theories of organization and management."[16] In other words the business leaders have to understand their business intimately through their people for, as Max de Pree has put it so well, "Intimacy is at the heart of competence."[17]

The Work-Out program is central to the development of a shared corporate vision within GE. According to Tichy and Charan, commenting on one division's experience with the program, it represents ". . . an intense effort to unravel, evaluate, and reconsider the complex web of personal relationships, cross-functional interactions and formal work procedures through which the business of (GE) gets done. Cross-functional teams cooperated to address actual

business problems. Each functional team developed a vision of where its operations are headed."[18] These cross-functional teams are the soft weft of the woven matrix which, together with the hard warp of the formal organization, constitute the fabric of meaning for the members of the division.

Welch's aim to transform the cognitive structures within GE, to explore new patterns of meaning within the organization, is explicit in the new organizational processes and the value statements that accompany them. Pascale and Athos[19] have compared the deep structures of meaning within an organization to the rhythm in a piece of music. Explicit strategies, structures and systems, the surface cognitive structures are analogous to the melody, while the rhythm, the fundamental values of the organization, express the concerns that the organization really cares about. Pascale and Athos suggest that great organizations create meaning by tying the purposes of the firm to human values, something that GE tries to achieve by incorporating both individual and business dimensions in the value statements. Welch believes that this link is the essence of loyalty: "Loyalty is an affinity among people who want to grapple with the outside world and win. Their personal values, dreams, and ambitions cause them to gravitate towards each other and toward a company like GE that gives them the resources and opportunities to flourish."[20]

The net effect of these efforts, if successful, will be to produce individuals who, like the hunting Bushmen, will have a fine sense of their role and place within the organization, society and the world. It is this shared sense of purpose, role and place which allows a group of individuals to be "self-organizing"—to coordinate their activities without either hierarchy or external control.

Without this sense of role and place an organization's members, however competent, will always need a structure designed by someone external to the situation. As elements of another's design they will always be technicians—someone "who understands everything about his job except its ultimate purpose and its place in the order of the universe."[21]

Lessons for Managers—the Use of Events
The structures and processes required for organizational transformation can be discussed in the abstract but they cannot be used and implemented in the abstract. That is, would-be change agents have to use external events, which are beyond their direct control, to frame and promote the transformation process.

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In the case of the Bushmen the transformation from herders to hunters would have to be triggered by some external event such as drought or disease. This would have the effect of removing their possessions, breaking their attachments to the settled life and preparing the community for the coming change.

Similarly the transformation of any herder/farmer organization would be greatly assisted by a "crop failure" which shattered the existing pattern of meaning and destabilized the status quo. While there is a good deal of evidence that much change does seem to require a crisis,[22] this is rather unsatisfactory prescriptive advice. For while the need for change may be clearer in a crisis, by the time the crisis is apparent it may be too late for a manager to effect the change required. Thus a would-be change agent is faced with a paradox—the change process cannot begin before the failure of the old order is manifest, but to be successful the process probably has to get under way before there is a crisis.

The resolution of this paradox has to be found in the sensitive perceptions and creative activities generated in the soft processes of the woven matrix and

interpreted and expressed by an effective leader. For even if the manager who realizes the need for change is able to articulate the reasons for it, the rationale is unlikely to be accepted by those who are "settled" in the hierarchy—after all, they still have the comfort of their possessions. A rationale for change will only be accepted if it can be framed within a context of environmental events which compels the organization to change its fixed course. The would-be change agent will have to seize upon critical events which often occur at the periphery of the organization's vision to use them as a catalyst to facilitate the change process. In chemical reactions catalysts often allow processes to proceed at temperatures and pressures much lower than would normally be possible. The analogy holds for organizational change: the appropriate framing of environmental events can promote organizational transformation before those same events escalate to impose radical change upon the organization and plunge it into crisis.

Apart from the case of Jack Welch and GE already cited, examples of such leadership behavior are hard to find. There is a good deal more evidence of managers in large, stable organizations denying that some environmental event represents a need for change in their way of life. Indeed this is as it should be. After all it is the role of these managers to maintain the organization through a variety of environmental shocks by treating such events as threats to the status quo rather than as opportunities for change. Such behavior only becomes dysfunctional when real change is required on the organization's part. The problem is how does one know when real change is required?

The well-known case of Honda's entry into the U.S. motorcycle market is illustrative of how an early warning system might work. As described by Richard Pascale,[23] Honda first came to the U.S. in the late 1950s intent on selling what were then its larger, 200cc-300cc bikes. They brought with them a few of their small 50cc "Supercub" bikes without any real intention of selling them commercially, because they were seen as being the antithesis of the "macho" image of American bikers. Nevertheless, after encountering some quality problems with the first of the larger bikes and in desperate need of cashflow, they began to sell the Supercubs, an action which was to lead directly to their subsequent success. This action was taken, it is rumored, as the result of a chance meeting in a supermarket parking lot between some of its employees riding Supercubs and a Sears buyer. Thus the strategy developed in Tokyo by senior management was radically modified as the result of initiatives taken by junior personnel close to the marketplace. They framed the environmental event, a chance encounter in a parking lot, as a strategic opportunity (as indeed did the Sears buyer). Both Honda and Sears exhibited behaviour analogous to that of the Bushmen in their hunter/forager mode—they allowed events at the periphery of the organization, interpreted by field personnel, to play a leadership role in the organization.

Thus it seems likely that the attention paid to peripheral events in an organization and the significance given to their interpretation are critical elements in the initiation of the process of change. This peripheral perception is supplied by the issue-oriented task forces that constitute the soft weft of the organizational matrix. The formal "warp" structures derive their effectiveness through their focus on existing operations to the exclusion of peripheral events. The informal task forces can deal with apparently peripheral issues *precisely because they are informal*—they are not designed to defend any explicit routines or procedures, and events can be framed as opportunities rather than as threats. In short, the relatively unstructured teams and task forces are true learning organizations—temporary structures containing processes that encourage experimentation and that build up over time layers of hierarchically organized knowledge in the organizational memory.

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Yet in the management of these temporary, informal structures a change agent is faced with a paradox which is the mirror image of that encountered with the formal hierarchy. The formal hierarchy struggles to learn because of the necessary depth with which it has embedded successful behaviours learned in a previous era. The informal task forces struggle for coherence because the very flexibility that allows them to learn (and their lack of a detailed, remembered past) also allows them to disintegrate very quickly; for unlike the hard warp of the formal organization, they cannot be coordinated and managed by a logic derived from past successes. Rather, they depend for their coherence upon shared values and common purpose and have to be guided by a vision of the future.

It is this transfer of the regulation of the organization from control via formal systems to coherence through shared values, purpose, and vision that we call an act of leadership. It is the ability of leaders to operate at both these levels of regulation that distinguishes them from managers, who operate only at the level of the formal system.[24]

Strategy, Stability, and Change

The analogy between the transformation of our organizational bureaucracies and the experience of the Bushmen in the Kalahari is helpful because it highlights the existential tension in all human organizations between herding and hunting, performance and learning, stability and change. North American management philosophy has not recognized this tension explicitly and, for many years, ignored it completely, settling for the single pole of stability. Equilibrium was regarded as the organization's natural state and the variables studied were overwhelmingly those concerned with control and performance rather than change and learning.[25]

In the field of strategic management this bias resulted in a paradigm that emphasized strategy formulation at the top of the organization and implementation at the bottom. The stress was on organizational performance without the recognition that this would inhibit organizational learning which, in the absence of genius at the top, is so essential for organizational survival.

In recent times there has been more criticism of the classical strategic model and the perils of a single valued framework have been pointed out.[26] As William Dill, one of the earlier critics, has put it: "Organizational life is some kind of alternation between initiative and adaptation, between proclaiming and listening, between leading and following. Strategy pertains to initiative, proclaiming, and leading; and pretending that it stretches to cover activities which involve adaptation, listening and following simply gets in the way of having your motives accepted as honest ones."[27]

In other words, organizational life consists of learning and performance following each other in an endless cycle of what ought to be a creative process of "continual improvement." Strategy is an intermediate product in this process; as an **output** of the learning organization, it articulates what the organization has learned and coordinates its experience. As an **input** to the performance organization it specifies goals and tasks, and informs its behavior. In short, strategy is at the nexus of the twin organizational structures of the woven matrix and the twin cognitive structures of text and context, information and meaning, the "melody" and the "rhythm" that are required to resolve the existential tensions.

Cognitively it is as if the change agent has to craft some wonderful instrument which has both lenses with which to scan the future (visions) and mirrors with which to review the past (values). As far as the vision component of this

instrument is concerned, it is clear that to be effective, it cannot be the product of one person, at least at the early stages of the organization's renewal. It can only be a cultural product, gradually articulated and expressed perhaps by one person or by a small group, but developed through the soft processes of the woven matrix, which involves many people from all levels in the old hierarchy.

The cognitive structure, like the organizational structure cannot be single valued—it cannot deal exclusively with the future, for the only solid foundations lie in the past—in the unchanging, eternal values to whose fulfillment the vision must appeal.

In the Bushmen's culture, myths and legends play the role of the value "mirrors" which allow them (for a while longer yet) to see themselves as they really were. These myths do not deal with "facts," for that would embed the society too firmly in a particular context and act as a hindrance to change, rather as our corporate histories sometimes tend to do. Values are somehow a cognitive level "above" facts, they are the subtle threads that run through the facts and connect events which would otherwise appear to be far apart in space and time. For values are archetypical patterns of human behaviour for whose realization in everyday life the effective manager has to grope and grasp so that these patterns can be articulated and expressed.

Only values can supply the glue to hold together a crumbling settler society. Only the eternal values can frame the imagined future towards which the organization must strive. Our analogy from the Kalahari also suggests that some of these values may be generic; common to all people who ever hunted and foraged. They are the old ones: sharing, intimacy, open communication and, once they are present, the recognition that giving people space and the freedom to move within it allows a whole lot of problems to resolve themselves.

Endnotes

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[21] Attributed to Sir Richard Livingstone and quoted in A.H. Maslow *Motivation and Personality*, (New York: Harper and Row, 1954), 21.

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