

ORGANIZATIONAL CULTURE

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I. INTRODUCTION AND HISTORY

Organizational culture as a concept has a fairly recent origin. Though the concepts of "group norms" and "climate" have been used by psychologists for a long time, the concept of culture has been explicitly used only in the last decade or two (Lewin, Lippitt, & White, 1939). Katz & Kahn in their second edition of "The Social Psychology of Organizations" (1978) refer to roles, norms, and values, but neither climate nor culture is presented as explicit concepts.

One may speculate that culture as a concept was difficult for psychometrically oriented investigators to deal with, and it was not sufficiently powerful as an explanatory variable to warrant the effort to develop measures. Organizational "climate," on the other hand, lent itself directly to observation and measurement and thus has had a longer research tradition (Litwin & Stringer, 1968; Tagiuri & Litwin, 1968; Hellriegel & Slocum, 1974; Schneider, 1975; Jones & James, 1979; Schneider & Reichers, 1983). For purposes of this essay I will focus primarily on the concept of culture to highlight its more recent ascent as a variable to be investigated, and because it subsumes the concept of climate.

In the late 1940's social psychologists interested in Lewinian "action research" and leadership training used the

concept of "cultural island" freely to indicate that the training setting was in some fundamental way different from the "back home" setting from which trainees came. We knew from the leadership training studies of the 1940's that foremen who changed significantly during training would revert in their attitudes once they were back at work (Lewin, 1952; Fleishman, 1953, 1973; Bradford, Gibb, & Benne, 1964; Schein & Bennis, 1965). But the concept of group norms, heavily documented in the Hawthorne studies of the 1920's, seemed sufficient to explain these phenomena (Homans, 1950).

In the 1950's and 60's, the field of organizational psychology began to differentiate itself out of industrial psychology bringing with it a greater emphasis on concepts that dealt with larger units than work groups (Bass, 1965; Schein, 1965). And with that emphasis came a greater need for concepts such as "system" that could describe what could be thought of as a pattern of norms and attitudes that cut across a whole social unit (Jaques, 1951; Likert, 1961, 1967; McGregor, 1960; Katz & Kahn, 1966).

The field of organizational psychology grew with the growth of business and management schools, thus both freeing itself from the limiting influence of psychometrically oriented psychology departments and allowing itself to become increasingly influenced by sociological and anthropological concepts and methods. Cross-cultural psychology had, of course, existed for a long time, but the concept of culture was only applied to organizations within a given society more recently as more investigators interested in organizational phenomena found themselves needing the concept to

explain different patterns of behavior and levels of stability in groups and organizations.

In fact, it may well be that the concept of culture will ultimately prove more useful for the analysis of groups and organizations than total societies because of the relatively greater homogeneity of the smaller units, and because it will be possible to reconstruct the entire history of an organization in a manner not possible for total societies.

What has really thrust the concept into the forefront is the recent emphasis on trying to explain why U. S. companies do not perform as well as some of their counterpart companies in other societies, notably Japan. In observing the differences, it has been noted that national culture is not a sufficient explanation. One needs concepts that permit one to differentiate between organizations within a society, especially in relation to different levels of effectiveness, and, for this purpose, organizational culture has served well (Gellerman, 1963; Harrison, 1972; Handy, 1978; O'Toole, 1979; Pettigrew, 1979; Ouchi, 1981; Pascale & Athos, 1981; Peters & Waterman, 1982; Deal & Kennedy, 1982; Wilkins & Ouchi, 1983).

As more investigators and theoreticians have begun to examine organizational culture, the normative thrust has been balanced by more descriptive research and clinical inquiry to find out what is actually going on in organizations before we rush in to tell managers what to do about them (Louis, 1981, 1983; Martin, 1982, 1983a, 1983b; 1983c; Barley, 1983; Van Maanen & Barley, 1984; Schein, 1985a; Frost, et al, 1985).

We have also seen in the last few years both a popularization of the concept and increasing skepticism about the clarity and value of the concept. Most managers today use "culture" freely to refer to anything having to do with beliefs, values, norms, ideology, and managerial style. If a change program is to be given emphasis and importance, or if resistance to change is encountered, managers speak of "cultural changes" that they are making or contemplating. Mergers and acquisitions are freely talked about as problems of cultural congruence or blending. The effect of all this is to confuse the field and to lead to the suspicion that culture research is just a fad that will pass in a few years.

At the same time, as culture literature has piled up from various fields, serious and valid questions are beginning to be raised about the possibility of really understanding and measuring a concept that deals with the context in which we as researchers are embedded. In other words, our very approaches to studying culture and even our concepts of what is scientific and practical vis-a-vis culture are themselves culturally determined constructs, causing some observers of the contemporary scene to question whether any one approach to this subject can claim to be a better representation of reality than any other (Calas & Smircich, 1987).

The only valid stance may be one of questioning based on the recognition that how we study abstract concepts like culture and how we represent it in our writings is itself cultural and constrained by our own stage of historical and cultural evolution as a society (Van Maanen, 1988).

We can summarize this quick overview by identifying several different conceptual origins or research streams that today influence how we perceive the concept of organizational culture:

1) Social psychology and survey research. From this point of view culture has been viewed as a property of groups that can be measured by questionnaires leading to Likert type profiles (Likert, 1967). The problem with this approach is that we do not as yet know what the right dimensions are for measuring culture, nor do we know whether questionnaires are capable of measuring something as abstract as culture (Hofstede, 1980; Kilmann, 1984).

2) Empirical descriptive. Culture is viewed as a concept for which empirical measures must be developed, even if that means breaking down the concept to smaller units so that it can be analyzed and measured (e. g. Wilkins, 1983; Martin & Siehl, 1983; Harris & Sutton, 1986; Schall, 1983). The problem with this approach is that the wholistic nature of culture may be lost.

3) Ethnographic. Concepts and methods developed in sociology and anthropology are applied to the study of organizations in order to illuminate descriptively aspects of organizational functioning that had previously not been observed. This approach has been necessary to bring real understanding of what is involved, but is time consuming and expensive (Barley, 1983; Van Maanen & Barley, 1984). Its weakness and limitation is that only a small number of cases can be studied and these may not be representative for purposes that other investigators may regard as crucial.

4) Historical. Though historians have rarely applied the concept of culture to their cases, it is clearly viewed as a

legitimate aspect of an organization to be analyzed along with other factors (Chandler, 1977; Dyer, 1986; Westney, 1987). The weaknesses of the historical method are similar to those pointed out for the ethnographic, but those are often offset by the insights that historical and longitudinal analyses can provide.

5) Clinical descriptive. With the growth of organizational consulting has come the opportunity to observe what is going on in organizations in areas from which researchers have traditionally been barred, such as the executive suite. The distillation of empirical knowledge from such clinical experiences provides a much needed balance to the other methods because cultural origins and dynamics can sometimes only be observed in the power centers where culture is created and changed by leaders and powerful managers (Jaques, 1951; Schein, 1983, 1985a; Kets de Vries & Miller, 1984, 1986; Hirschhorn, 1987; Ott, 1989).

The problem with this method is that it does not provide the descriptive breadth of an ethnography nor the methodological rigor of controlled empirical work, but it is my opinion that at this stage of the evolution of our field, clinical research is the most appropriate basis for trying to understand the concept of culture. Most of the material to be presented in this essay will be based upon my own empirical research and clinical experience as an organizational consultant. It is my belief that we need to identify clear variables before we design more rigorous methods of hypothesis testing, and the clinical method is better suited to such conceptual development (Schein, 1969, 1985a, 1987a, 1987b, 1988).

II. DEFINITION: WHAT ORGANIZATIONAL CULTURE IS

My definition is extrapolated from the functionalist anthropological concept of culture because I believe that for the present this paradigm provides the best roadmap for studying what goes on in groups and organizations. Culture is a property of groups, and can be thought of as the accumulated learning that a given group has acquired during its history. The definition emphasizes this learning aspect and also notes that culture applies only to that portion of the accumulated learning that is passed on to newcomers.

Thus, culture can be thought of as:

1) A pattern of basic assumptions, 2) invented, discovered, or developed by a given group, 3) as it learns to cope with its problems of external adaptation and internal integration, 4) that has worked well enough to be considered valid and, therefore 5) is to be taught to new members as the 6) correct way to perceive, think, and feel in relation to those problems.

The strength and degree of integration of a culture is, therefore, a function of the stability of the group, the length of time the group has existed, the intensity of the group's experiences of learning, the mechanisms by which the learning has taken place, i.e. positive reinforcement or avoidance conditioning, and the strength and clarity of the assumptions held by the founders and leaders of the group. Notice also that the learning occurs both with respect to external survival issues and internal integration issues, and that it covers perceptual, cognitive, and

emotional responses.

Culture is thus powerful and ubiquitous, especially so because much of what we learn in groups is "overlearned," and, therefore, drops out of awareness until someone calls our attention to it. Thus the patterns of assumptions that I am calling the culture are largely unconscious in day to day activity, but can be called up into consciousness if someone raises the right set of questions.

Once a group has learned some shared assumptions, the resulting automatic patterns of perceiving, thinking, and behaving provide meaning, stability, and comfort in that the anxiety that would result from the inability to understand or predict events around one is reduced by the shared learning (Hebb, 1954). The strength and tenacity of culture derives in part from this anxiety reduction function, and, indeed, one can think of some aspects of culture as being for the group what defense mechanisms are for the individual (Menzies, 1960; Kets de Vries and Miller, 1984; Schein, 1985b; Hirschhorn, 1987).

Culture is a property of a group. By definition, therefore, a total organization can have a culture if it has been a stable group for some period of time, and every sub-group within that organization can have a culture of its own if it has its own stable history. Whether or not one will find a culture in any given group, therefore, depends upon the stability of that group and the number of significant learning experiences it has had.

The levels of culture

My definition specifies that culture is a set of taken for granted assumptions. Such assumptions need to be distinguished from two other levels that are often used to describe culture as shown in Figure 1.

Insert Figure 1 about here

The level of artifacts deals with what one feels, observes, and notes with all of one's senses as one enters a new culture. But as clear and palpable as those cues are, they are difficult to decipher unless one asks insiders what they mean.

When we get explanations we usually elicit what I call the level of values, usually the espoused goals, ideals, norms, standards, moral principles, and other untestable premises. This is the level that is often tapped when we construct questionnaire surveys of culture.

It is only if we dig beneath the surface of values by observing behavior carefully, noting anomalies, inconsistencies, or phenomena that remain unexplained that we elicit from the insiders their underlying assumptions.

Such assumptions often start out historically as values, but, as they stand the test of time, they gradually become assumptions and come to be taken for granted. To give an example, a company starts out producing medium priced and medium quality products because of the founder's belief that such a strategy will be successful in the marketplace. If the strategy works repeatedly over several generations of products, it will gradually be

WHAT IS ORGANIZATIONAL CULTURE?

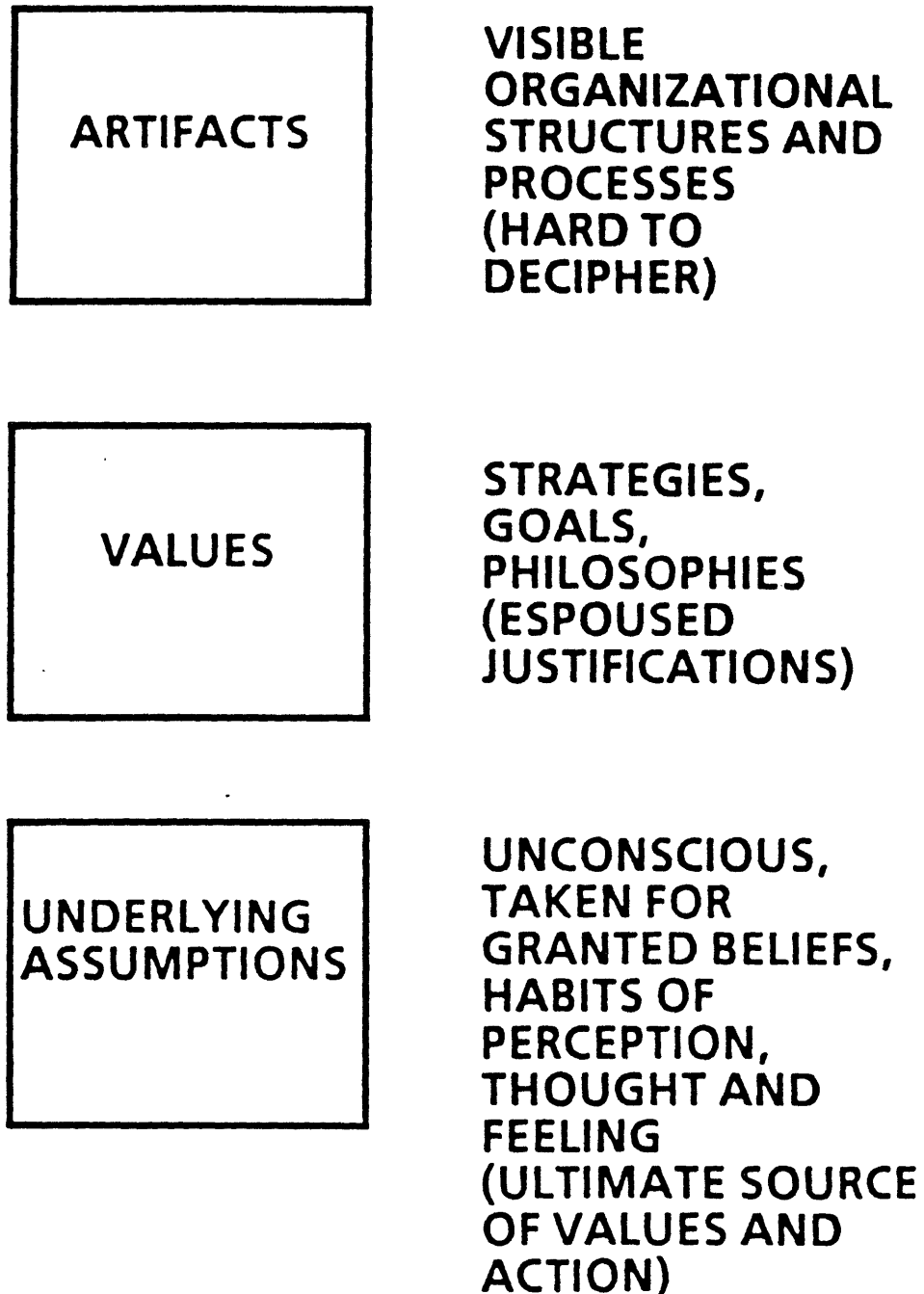


FIG. 1 THE LEVELS OF ORGANIZATIONAL CULTURE

assumed that such a strategy is, in fact, correct and will cease to be questioned. The danger for the organization then is that it may not be able to unlearn this assumption even though the environment may change, especially if the original learning was based on traumatic mistakes.

The "content" of culture.

Culture is ubiquitous. It covers all areas of group life. A content typology is always dangerous because one may not have the right variables in it, but if one distills from the social psychology of groups the dimensions that recur, one can identify a set of major external and internal tasks that all groups face (see Table 1). The group's culture can then be seen as the learned response to each of these tasks, and any others that may arise.

Insert Table 1 about here

Underlying these tasks is a set of even more fundamental issues with which all groups must deal, derived from comparative studies of societies. These are shown in Table 2 along with some preliminary dimensions that have been used in the culture literature to characterize known variations on those dimensions (Kluckhohn & Strodtbeck, 1961; Hofstede, 1980). As we will see in a later section, it is these dimensions that must be examined when we hypothesize what a culture would have to be like in order to favor organizational innovation.

Table 1

The External and Internal Tasks Facing All Groups

External Adaptation Tasks

Developing consensus on:

1. The Core Mission, Manifest and Latent Functions, and Primary Tasks of the Organization Vis-a-Vis its Environments.
2. The Specific Goals to be Pursued by the Organization.
3. The Basic Means to be Used in Accomplishing the Goals.
4. The Criteria to be Used for Measuring Results.
5. The Remedial or Repair Strategies if Goals are not Achieved.

Internal Integration Tasks

Developing Consensus on:

1. The Common Language and Conceptual System to be Used, Including Concepts of Time and Space.
2. The Group Boundaries and Criteria for Inclusion.
3. The Criteria for the Allocation of Status, Power, Authority.
4. The Criteria for Intimacy, Friendship, and Love.
5. Criteria for the Allocation of Rewards and Punishments.
6. Concepts for Managing the Unmanageable--Ideology and Religion.

Table 2

Some Underlying Dimensions of Organizational Culture

1. The Organization's Relationship to its Environment: Does the organization perceive itself to be dominant, submissive, harmonizing, searching out a niche?
2. The Nature of Human Activity: Is the "correct" way for humans to behave to be dominant pro-active, harmonizing, or passive fatalistic?
3. The Nature of Reality and Truth: How do we define what is true and what is not true, and how is truth ultimately determined both in the physical and social world, by pragmatic test or reliance on wisdom?
4. The Nature of Time: What is our basic orientation in terms of past, present, and future, and what kinds of time units are most relevant for the conduct of daily affairs?
5. The Nature of Human Nature: Are humans basically good, neutral, or evil, and is human nature perfectible or fixed?
6. The Nature of Human Relationships: What is the "correct" way for people to relate to each other, to distribute power and

TABLE 2 (CONT.)

affection? Is life competitive or cooperative, is the best way to organize society on the basis of individualism or groupism, is the best authority system autocratic/paternalistic or collegial/participative?

7. Homogeneity vs. Diversity: Is the group best off if it is highly diverse or if it is highly homogeneous, and should individuals in a group be encouraged to innovate or conform?

Insert Table 2 about here

Deciphering cultural content.

Once one has specified dimensions it is tempting to jump to measurement tools, but one needs to remember that culture exists at different levels which will require different "measurement" approaches. The level of artifacts is easy to observe and document, but, as previously noted, difficult to decipher. We can go into an organization and see things, hear things, feel things, and smell things, but we do not necessarily know what they mean to the insiders. The value in documenting what we see and hear is great, however, in terms of providing clues to what may be going on under the surface.

Most cultural studies must involve some degree of field work and on-site observation if one is to draw valid conclusions, but such field work can be accomplished in a variety of ways. The clinician/consultant is often in the best position to make valid observations because members of the organization are more likely to reveal important data if they feel they are being helped and are paying for the help (Schein, 1987a, 1987b) .

The things we observe that do not make sense are the best basis for proceeding with cultural deciphering. We now need some willing and motivated insiders who can be asked about our observations. As we inquire about the things that puzzle us, we generally elicit the level of values, the reasons insiders give to explain why they do the things they do. But these reasons are more likely to be the espoused values, the organization's ideology, not

necessarily its underlying assumptions.

To get at those assumptions we must combine the resources of 1) the observant outsider who raises questions with 2) the efforts of motivated insiders who want to decipher why they do the things they do. This pushes the deciphering process to the level of assumptions by confronting the insider with the discrepancies between observed behavior and espoused values.

If we combine insider knowledge with outsider questions, assumptions can be surfaced, but the process of inquiry has to be interactive, with the outsider continuing to probe until assumptions have really been teased out. Survey instruments or questionnaires simply cannot accomplish such deciphering because we generally do not know what to ask about and it is too easy for the respondent just to provide the socially acceptable answer.

Furthermore, such deciphering works best when it is directed toward identifying those cultural assumptions which aid or hinder the accomplishment of particular organizational goals. Since culture is ubiquitous, it is often not useful to try to identify it in its most general sense. But if we are trying to understand a particular organizational phenomenon, then it is possible to focus on those aspects of the culture that may illuminate that phenomenon.

Research vs. action.

If the investigator is interested in studying the culture for scientific purposes the problem of completeness and validity are fairly serious ones. Culture covers all of a group's learning

and is therefore a vast network of assumptions, some of which fit together into coherent paradigms, while others are loosely coupled and even inconsistent with each other. There is nothing in the concept that implies integration or internal consistency.

On the other hand, if the purpose of the investigation is to help a group to decipher those aspects of its culture that may aid or hinder some direction that the group wants to move in, then a speedier process of helping insiders to decipher their own culture can be used. If one is meeting with the relevant client group, generally a cross-section of members of the organization, one can begin with a short lecture on what culture is and the levels of culture. Following this I ask members in open group discussion to identify as many of their artifacts as they can, then move them into a discussion of values, and finally push to underlying assumptions. This process can be completed in as little as three to four hours because group members are able to surface their own culture much more quickly than an outsider can decipher it. The outsider is needed, however, to provide the framework, to ask the right questions, and to push the group to the level of assumptions.

The picture of the culture that emerges by means of this process will be valid but incomplete. This lack of completeness does not matter, however, since the purpose is to identify only those aspects of the culture that are relevant to the group's action agenda. The final task is then for the group to examine the assumptions it has identified and to classify them in terms of whether they would aid or hinder the agenda. The output of this

discussion then provides the basis for deciding what, if anything, must be done about the culture if the group is to accomplish its goals.

III. TWO CASE EXAMPLES.

Two brief case examples will illustrate the concepts presented thus far. In the Action Co. a visitor would note at the level of artifacts a high degree of informality, open office landscape architecture, frenetic activity all around, a high degree of confrontation, conflict, and fighting in meetings, an obvious lack of status symbols such as parking spaces or executive dining rooms, a sense of high energy and emotional involvement, people staying late, etc.

If one asks about these various behaviors one is told that the company is in a rapidly growing high technology field where hard work, innovation, and rapid solutions to things are very important, and where it is essential for everyone to contribute at their maximum capacity. New employees are carefully screened and when an employee fails, he or she is simply assigned to another task, not fired or punished in any personal way.

If one discusses this further and pushes to the level of assumptions one elicits a pattern or paradigm such as that shown in Figure 2. Because of the kind of technology the company is in, and because of the strongly held beliefs and values of the founder of the company, it operates on several critical and coordinated assumptions: 1) that individuals are the source of all innovation and productivity; 2) that truth can only be determined by pitting

fully involved individuals against each other to debate out ideas until only one idea survives; 3) that ideas will not be implemented unless everyone who is involved in implementation has been convinced of the validity of the idea; and 4) that the members are one big family who will take care of each other and protect each other, even if some members make mistakes or have bad ideas.

Insert Figure 2 about here

Once one understands this paradigm one can understand all of the different observed artifacts such as the ability of the organization to tolerate extremely high degrees of conflict without seeming to destroy or even demotivate its employees. The value of the cultural analysis is that it provides insight, understanding, and a roadmap for future action. For example, as this company grows, some of the assumptions are proving to be dysfunctional and are, therefore, highlighting where the company will experience strains and probably will undergo cultural evolution and change.

By way of contrast, in the Multi Co., a multi-divisional multi-national chemical firm, one finds at the artifact level a high degree of formality, an architecture that puts great emphasis on privacy, a proliferation of status symbols and deference rituals such as addressing people by their titles, a high degree of politeness in group meetings, an emphasis on carefully thinking things out and then implementing them firmly through the hierarchy, a formal code of dressing, working hours, and punctuality,

The Action Co. "Paradigm"

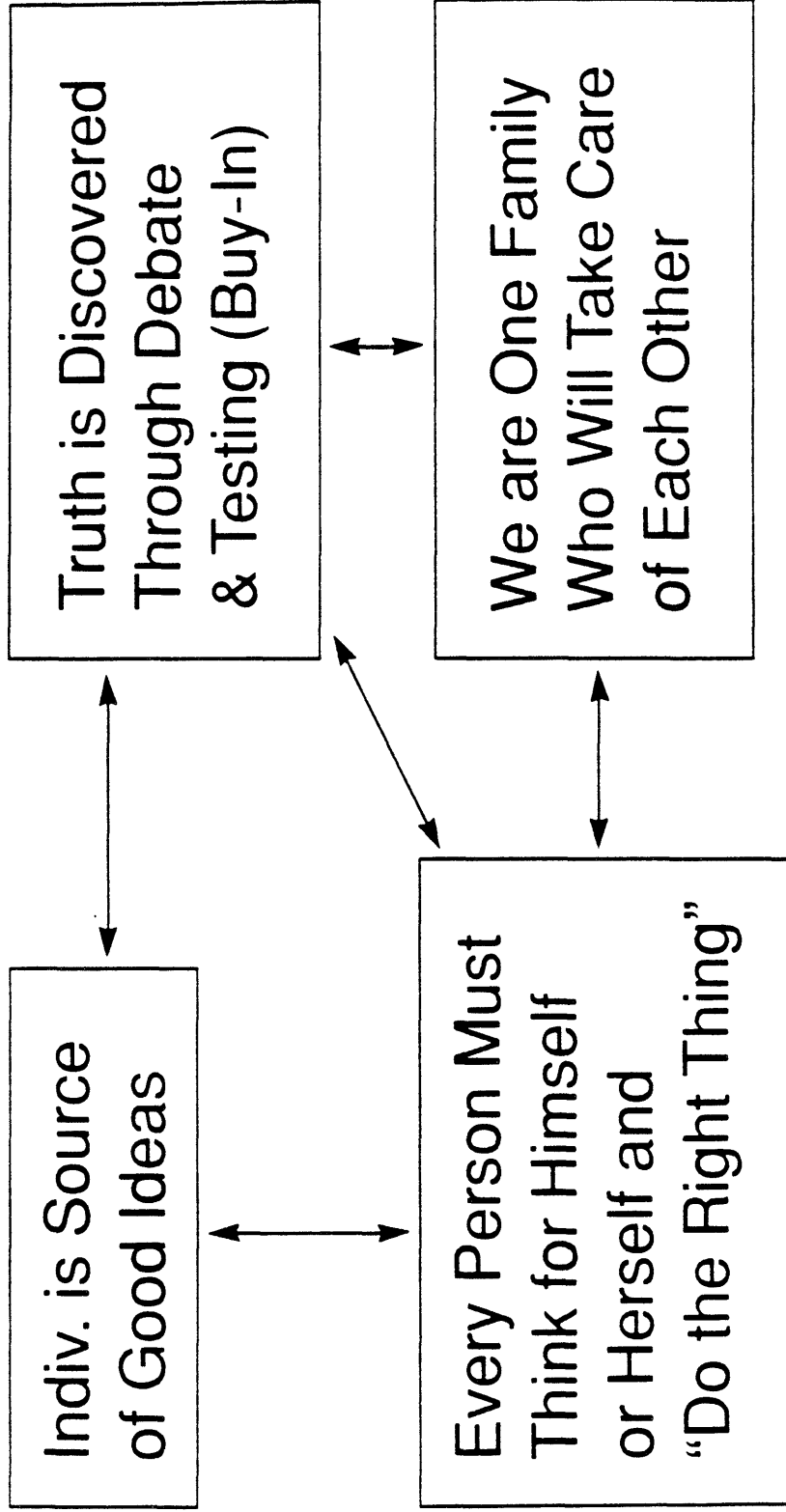


FIG. 2 THE ACTION Co. PARADIGM

and so on. One also finds a total absence of cross-divisional or cross-functional meetings and an almost total lack of lateral communication. Memos left in one department by me with instructions to be given to others, were almost never delivered.

The paradigm that surfaces if one works with insiders to try to decipher what is going on can best be depicted by the assumptions shown in Figure 3. The company is science based and has always derived its success from its research and development activities. It exists in a national culture that is more formal, hierarchical, and status oriented. Where "truth" in the Action Company is derived from debate and conflict, and where everyone down the line is expected to think for themselves, in Multi "truth" is derived from senior wiser heads and employees are expected to go along like good soldiers once a decision is reached.

Insert Figure 3 about here

Multi also sees itself as a family, but its concept of a family is completely different. Whereas in Action, the family is a kind of safety net and assurance of membership, in Multi it is an authoritarian/paternalistic system of eliciting loyalty and compliance in exchange for economic security. And the paradoxical absence of lateral communication is explained by the deeply held assumption that a job is a person's private turf, and that the unsolicited providing of information to that person is an invasion of privacy. Furthermore, it is a threat to ego and status because to tell someone something implies that they are not aware of that

The Multi Co. "Paradigm"

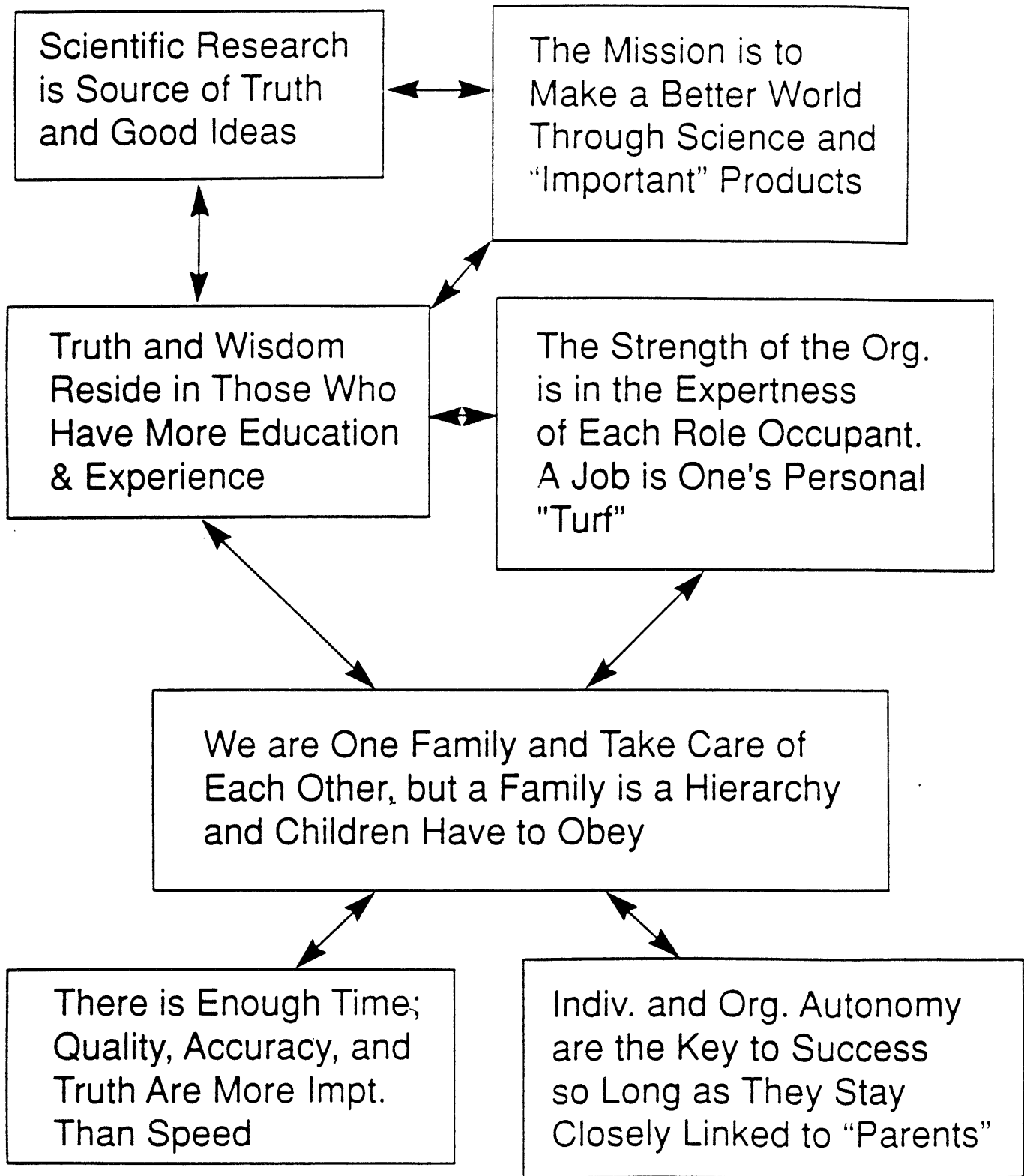


FIG. 3 THE MULTI COMPANY PARADIGM

item. Multi managers are very much on top of their jobs and pride themselves in that. If they ask for information they get it, but it is rarely volunteered by peers.

This cultural analysis highlights what is for Multi a potential problem--its future success may depend much more on its ability to become effective in marketing and manufacturing, yet it still treats R & D as a sacred cow and assumes that new products will be the key to its future success. Increasingly the company finds itself in a world that requires rapid decision making yet has systems and procedures that are slow and cumbersome. To be more innovative in marketing it needs to share ideas more, yet it undermines lateral communication.

IV. CULTURAL DYNAMICS: CREATION, EVOLUTION, AND MANAGED CHANGE

Creation and embedding.

Culture is learned, hence learning models should help us to understand culture creation. Unfortunately, we do not really have many good models of how groups learn, how norms, beliefs, and assumptions are created the first time. Once they exist, we can see clearly how leaders and powerful members embed them in group activity, but the process of learning something that becomes shared, is still only partially understood.

Norm formation around critical incidents. One line of analysis comes from the study of training groups (Bion, 1959; Bennis & Shepard, 1956; Schein, 1985a). One can see in those groups how norms and beliefs arise around the way members respond

to critical incidents. Something emotionally charged or anxiety producing happens such as an attack by a member on the leader. Because everyone witnesses it and because tension is high when an attack occurs, the immediate next set of behaviors will very likely create a norm.

Suppose, for example, that the leader counterattacks, that the group members "concur" with silence or approval, and the offending member indicates with an apology that he or she accepts his or her "mistake." In those few moments a bit of culture has begun to be created-- the norm, eventually to become a belief and then an assumption, if the same pattern recurs, that "we do not attack the leader in this group; authority is sacred."

If the leader and the group had responded differently to attacks, a different norm and eventually assumption would have been formed. If one wants to study the culture of an organization, then, one way is to historically reconstruct critical incidents and to document carefully the responses that occurred immediately after each incident.

Identification with leaders. A second mechanism of culture creation is the modelling by leader figures that permits members to identify with them and internalize their values and assumptions. When groups or organizations first form, there are usually dominant figures or "founders" whose own beliefs, values, and assumptions provide a visible and articulated model for how the group should be structured and how it should function (Schein, 1983). As these get put into practice, some work out and some do not. The group then learns from its own experience what parts of

the "founder" belief system work for the group as a whole. The joint learning then gradually creates a shared assumption.

Founders and subsequent leaders continue to attempt to embed their own assumptions but increasingly they find that other parts of the organization have their own experience to draw on and thus cannot be changed. If the founders are very potent, such sub-culture formation can be overridden, but as the organization grows and becomes differentiated, the culture increasingly comes to reflect not only the experiences of sub-cultures but also the beliefs and assumptions of other powerful figures in the organization.

How do leaders embed their own beliefs? Primary embedding mechanisms are:

- 1) What leaders pay attention to, measure, and control;
- 2) How leaders react to critical incidents and organizational crises;
- 3) Deliberate role modelling and coaching;
- 4) The stated criteria for the allocation of rewards and status; and
- 5) The stated criteria for recruitment, selection, promotion, retirement, and excommunication.

Secondary articulation and reinforcement mechanisms are:

- 1) The organization's design and structure;
- 2) Organizational systems and procedures;
- 3) The design of physical space, facades, and buildings;
- 4) Stories, legends, myths, and symbols; and
- 5) formal statements of organizational philosophy, creeds,

and charters.

As cultures evolve and grow there is a tendency for the various elements that convey culture to become congruent with each other because of the human need for consistency, but because of sub-culture formation it is also probable that any given culture will contain conflicting and dissonant elements within it. Cultural assumptions are not necessarily consistent with each other.

Cultural preservation through socialization.

Culture perpetuates and reproduces itself through the socialization of new members entering the group. As pointed out above in the section on embedding, the socialization process really begins with the recruitment and selection process in that the organization is likely to look for new members who already have the "right" set of assumptions, beliefs, and values. If the organization can find such presocialized members it needs to do relatively less active socialization. More typically, however, new members do not "know the ropes" well enough to be able to take and enact their organizational roles and thus need to be trained and "acculturated" (Schein, 1968; Ritti & Funkhouser, 1987).

The socialization process has been analyzed from a variety of perspectives and can best be conceptualized in terms of a set of dimensions that allow one to study variations in how different organizations approach the process (Van Maanen, 1978; Van Maanen & Schein, 1979). There are seven dimensions along which socialization processes can vary:

- 1) Group vs. individual: The degree to which the organiza-

tion processes recruits in batches like in boot camp or individually as in professional offices.

2) Formal vs. informal: The degree to which the process is formalized as in set training programs or is handled informally through apprenticeships, individual coaching by the immediate superior, or the like.

3) Self destructive and reconstructing vs. self enhancing: The degree to which the process destroys aspects of the self and replaces them as in boot camp or enhances aspects of the self as in professional development programs.

4) Serial vs. random: The degree to which role models are provided as in apprenticeship or mentoring programs or are deliberately withheld as in sink or swim kinds of initiations in which the recruit is expected to figure out his or her own solutions.

5) Sequential vs. disjunctive: The degree to which the process is guided through a series of discrete steps and roles or is open-ended in that the recruit can never predict what organizational role will come next.

6) Fixed vs. variable: The degree to which stages of the training process have fixed time tables for each stage as in military academies, boot camps, or rotational training programs or are open-ended as in typical promotional systems where one is not advanced to the next stage until one is judged to be "ready."

7) Tournament vs. contest: The degree to which each stage is an "elimination tournament" where one is out of the organization if one fails, or a "contest" in which one builds up a track record and "batting average."

Socialization consequences. Though the goal of socialization is to perpetuate the culture, it is clear that the process does not have uniform effects. Individuals respond differently to the same treatment, and, even more importantly, different combinations of socialization tactics can be hypothesized to produce somewhat different outcomes in the first place.

For example, from the point of view of the organization, one can specify three kinds of outcomes: 1) A custodial orientation or total conformity to all norms and complete learning of all assumptions; 2) Creative individualism which implies that the trainee learns all of the central and pivotal assumptions of the culture, but rejects all peripheral ones, permitting the individual to be creative both with respect to the organization's tasks and in how the organization performs them (role innovation); 3) Rebellion or the total rejection of all assumptions. If the rebellious individual is constrained by external circumstances from leaving the organization, he or she will subvert, sabotage, and ultimately foment revolution (Schein, 1968, Van Maanen & Schein, 1979).

The combination of socialization techniques most likely to produce a custodial orientation is 1) formal, 2) self-reconstructing, 3) serial, 4) sequential, 5) variable, and 6) tournament like. Hence if one wants new members to be more creative in the use of their talents, one should use socialization techniques that are informal, self-enhancing, random, disjunctive, fixed in terms of time tables, and contest-like.

The individual versus group dimension can go in either

direction, in that group socialization methods can either produce very loyal custodially oriented cohorts or can produce very disloyal rebels if counter-cultural norms are formed during the socialization process. Similarly in the individual apprenticeship, the direction of socialization will depend very much on the initial orientation of the mentor or coach.

Efforts to measure these socialization dimensions have been made and some preliminary support for the above hypotheses has been forthcoming (Feldman, 1976, 1988; Jones, 1986). Insofar as cultural evolution is very much a function of internal innovative and creative efforts on the part of new members, this line of investigation is especially important.

Natural Evolution.

Every group and organization is an open system that exists in multiple environments. Changes in the environment will produce stresses and strains inside the group, forcing new learning and adaptation. At the same time, as new members come into the group, if they are not over-socialized, they will bring in new beliefs and assumptions that will to varying degrees influence currently held assumptions. To some degree, then, there is constant pressure on any given culture to evolve and grow, but just as individuals do not give up easily the elements of their identity or their defense mechanisms, so groups do not easily give up some of their basic underlying assumptions merely because external events disconfirm them.

To illustrate this mechanism the case can be cited of an

aero-space company that prided itself on its high level of trust in employees, reflected in absence of time clocks, flexible working hours, and systems of self-monitoring and self-control. When a number of other companies in the industry were discovered to have overcharged its government clients, the government legislated a system of controls for all of its contractors, forcing this company to install time clocks and other control mechanisms that began to erode the climate of trust that had been built up over 30 years. Some kind of evolution will be forced by this external event.

Differentiation. As organizations grow and evolve they divide the labor and create functional, geographical, and other kinds of units, each of which exist in their own specific environments and thus begin to build their own sub-cultures. Differentiation inevitably occurs with age and size. Once a group has many sub-cultures, its total culture increasingly becomes a negotiated outcome of the inter-action of its sub-groups. Differentiation and its outcomes thus is one of the main mechanisms of natural evolution.

Guided evolution.

One of the major roles of the field of organization development has been to help organizations to guide the direction of their evolution. Guided evolution 1) enhances cultural elements that are seen to be critical to maintaining identity and effectiveness, 2) starts the process of unlearning around those cultural elements that are increasingly dysfunctional, and 3) starts the

process of learning new cultural elements that will be needed for optimal adaptation to a changing environment (Argyris & Schon, 1978; Argyris, Putnam, & Smith, 1985; Beckhard & Harris, 1987; Hanna, 1988; Walton, 1987; Lippitt, 1982).

This process in organizations is analogous to the process of therapy in individuals, though, of course, the actual tactics are far more complicated when multiple clients are involved and when some of the clients are groups and sub-systems. Furthermore, the role of leaders, managers, employees, insider and outsider consultants is far more complex when we are dealing with organizations in that guided evolution is a process that involves many organization members in different subgroups.

Managed culture change.

Leaders of organizations sometimes are able to overcome their own cultural biases and to recognize that elements of their own organization's culture are dysfunctional for survival and growth in a changing environment. They may feel that they do not have the time to let evolution occur naturally, or that evolution is heading the organization in the wrong direction. In this situation one can observe leaders doing a number of different things, usually in combination, to produce the desired cultural changes:

- 1) Unfreezing the present system by highlighting the threats to the organization if no change occurs, and, at the same time, encouraging the organization by showing that change is possible and desirable;

- 2) Articulating and promulgating a new direction and a new

set of assumptions that they regard as more appropriate;

3) Providing a clear and consistent role model that is predicated on new cultural assumptions;

4) Filling key positions in the organization with new incumbents who hold the new assumptions either because they are hybrids or mutants of the old culture, or are brought in from the outside;

5) Systematically rewarding the adoption of new assumptions and punishing adherence to the old assumptions;

6) Seducing or coercing organization members into adopting new behaviors that are more consistent with new assumptions, often by introducing new technologies that force behavior change, for example computers and other elements of information technology;

7) Creating visible scandals to discredit sacred cows, exploding myths that preserve dysfunctional traditions, and in other ways symbolically destroying the artifacts associated with undesirable assumptions;

8) Creating new emotionally charged rituals and developing new symbols and artifacts around the new assumptions to be embraced, using the embedding mechanisms previously described.

Such cultural change efforts are generally more characteristic of "mid-life" organizations that have become complacent and ill adapted to rapidly changing environmental conditions. The fact that such organizations have strong subcultures aids the change process in that one can draw the new leaders from those subcultures that most represent the direction in which the organization needs to go.

In cases where organizations become extremely maladapted one sees more severe change efforts in the form of destroying the group that is the primary cultural carrier and reconstructing it around new people, thereby allowing a new learning process to occur and a new culture to form. When organizations go bankrupt or are turned over to "turnaround managers" one often sees such extreme measures. What is important to note about such cases is that they invariably involve the replacement of large numbers of people. It is not easy for individuals to give up assumptions that have provided stability and meaning in their life.

Mergers and acquisitions.

One of the most obvious forces toward culture change is the bringing together of two or more cultures. Unfortunately in many mergers and acquisitions, the culture compatibility issue is not raised until after the deal has been consummated, leading in many cases to cultural indigestion and the eventual divestiture of units that could not become culturally integrated. In fact, for many organization members, culture does not have a real meaning until they confront, often in horror, how different another organization can be.

Melding or integration can be aided if the leadership agrees from the outset to a systematic exchange of people across the two cultures to permit a real exploration of commonalities and differences. This process takes time. If a more rapid integration must be achieved, systematic workshops designed to elicit the basic assumptions of each culture need to be carried out. Leaders

from the two cultures can then examine the strengths and weaknesses of each set of assumptions in the context of the overall strategy and decide what, if anything, needs to be changed. How the change is then to be accomplished depends very much on the actual findings of such a workshop.

In many mergers and acquisitions the dominant company or the joint leadership makes the decision to let the two cultures co-exist by minimizing the degree to which either one will control the other. One can find organizations today that are the result of mergers that happened years ago in which two distinct cultures are still very evident.

V. CAN CULTURE BE INNOVATIVE?

Given the degree to which culture functions to stabilize our psychological environment and reduce the anxiety that would result from an inability to decipher and predict events, can we conceive of types of cultures that would be relatively more open to evolution and managed change than others? The identification of such characteristics becomes more and more important as we discover an ever greater need for organizational capacity to adapt to rapidly changing environmental conditions.

The rate of change in the technological, economic, political, and socio-cultural environments is increasing, and organizations are, therefore, finding it more and more important to figure out how to manage perpetual change involving genuinely innovative thrusts--new missions, new goals, new products and services, new ways of getting things done, and even new values and assumptions.

Organizations will have to "learn how to learn" (Schein, 1980; Argyris & Schon, 1978) and to become "self-designing" systems (Weick, 1977). What kinds of organizational cultures will favor such learning?

This question is of especial interest at the present time because of the rapid advances that are being made in the field of information technology (IT). There is ample evidence to suggest that the introduction of IT into organizations not only forces cultural assumptions out into the open, but that the potential of IT as a strategic aid to organizations will not be fulfilled unless, at the same time, those organizations develop (or already possess) what I will define as "innovative cultures."

The cultural dimensions identified in Table 2 can serve as a useful starting point for this analysis, in that one can state for each of these dimensions where a given culture should be to favor learning and innovation. I will state in hypothesis form the assumptions necessary for innovative capacity and summarize these hypotheses in Table 3.

Insert Table 3 about here

1. Organization-environment Relationships.

HYPOTHESIS C1. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ASSUMES THAT ITS ENVIRONMENTS ARE CONTROLLABLE, CHANGEABLE, AND MANAGEABLE.

TABLE 3

CULTURAL DIMENSIONS THAT INFLUENCE INNOVATIVENESS*

1. ORGANIZATION-ENVIRONMENT RELATIONSHIP

Environment Dominant	Symbiotic	Org. Dominant
		X

2. NATURE OF HUMAN ACTIVITY

Reactive, fatalistic	Harmonizing	Pro-active
		X

3. NATURE OF REALITY AND TRUTH

Moralistic Authority	Pragmatism
	X

4. NATURE OF TIME

Past Oriented	Present Oriented	Near Future Oriented
		X

Short Time Units	Medium Time Units	Long Time Units
	X	

5. NATURE OF HUMAN NATURE

Humans are basically evil	Humans are basically good
	X

Human nature is fixed	Human nature is mutable
	X

6. NATURE OF HUMAN RELATIONSHIPS

Groupisms	Individualism
	X

Authoritarian/paternalistic	Collegial/Participative
	X

7. SUB-CULTURE DIVERSITY/CONNECTEDNESS

Low	High
	X

* The X on each dimension indicates the ideal condition for high innovativeness.

Organizations can be distinguished by the shared assumptions they hold about the degree to which they dominate or are dominated by their various environments. At one extreme we have organizations that feel completely dependent and assume that their existence and survival is out of their own control. They act fatalistic and are passive in the face of environmental turbulence. They accept whatever niche the environment provides. At the other extreme we have organizations that hold the shared assumption that their own behavior will influence the environment and that survival and growth are a function of the extent to which they actively are able to dominate some aspects of their environment. Implied is the further assumption that progress and improvement are possible, a basically optimistic orientation toward the environment.

Innovative capacity will increase to the extent that members assume that innovation is possible and necessary, which derives from their optimistic assumption that the environment can be influenced. Organizations that pessimistically assume either that they are dominated by others and/or assume that their environments are fixed, will find it difficult to conceive of new ideas and will find it even more difficult to marshal the energy to try out new ideas.

2. The Nature of Human Activity.

HYPOTHESIS C2. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ASSUMES THAT THE APPROPRIATE HUMAN

ACTIVITY IS TO BE PROACTIVE, ORIENTED TOWARD PROBLEM SOLVING AND IMPROVING THINGS.

All organizations make implicit assumptions about whether the appropriate behavior of members is to be 1) reactive, fatalistic, and oriented to getting what pleasure one can out of one's lot in life (Dionysian), 2) to be proactive, optimistic, and oriented toward improving things (Promethean), or 3) to take a middle ground of trying to harmonize and compromise between one's own needs and whatever environmental constraints and possibilities exist (Apollonian). As will be noted these assumptions are the individual level counterpart to the assumptions relating the organization to its environment.

An innovator in the midst of reactive or harmonizing people will find it virtually impossible to get even an audience much less a commitment to new ways of doing things. In Dionysian or Apollonian organizations, innovators are likely to be called whistle-blowers, boat rockers, or trouble makers, and thus to be neutralized. And if the culture is too fatalistic it will of course not attract or retain innovators in the first place.

One may wish to speculate whether there is an upper limit to activity orientation. If there are too many innovators and if the culture strongly encourages innovation will that cause other problems that, in the end, will undermine innovation by making life too chaotic and unpredictable? I believe not, because if too much innovation becomes a problem, the organization will invent and evolve processes and structures that reduce innovation to a

tolerable level. In other words, if the organization is going out of control, its own innovativeness will enable it to invent mechanisms to achieve greater discipline and control.

The reverse is not true. An organization that is too passive or fatalistic cannot invent "proactivity." It will stagnate until it fails or is taken over by others who will forcibly change the culture by massive replacement of people with a different activity orientation. I am hypothesizing, therefore, that one cannot have too much innovativeness but one can have too much conservatism and passivity.

3. The Nature of Reality and Truth.

HYPOTHESIS C3. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ASSUMES THAT TRUTH IS TO BE ARRIVED AT BY PRAGMATIC (VS. MORALISTIC) MEANS.

Organizations can be distinguished by the degree to which they hold shared assumptions about how one determines whether something is true or not. When a complex decision has to be made involving uncertain futures and information of uncertain validity, what criteria does the organization use to determine when it has enough and the right kind of information to make the decision?

At one extreme one finds a heavy reliance on tradition, dogma, the authority of moral principles, or the wisdom of elders. At the other extreme one finds pragmatism embodied either in a search for scientific verification or a trial and error attitude

if formal verification is not possible or practical (England, 1975). If the decision is in a domain where verification by physical means is not possible, pragmatism would imply that the decision makers debate out the issues and subject each alternative to sufficient scrutiny to determine that the one that survives can be accepted with some measure of confidence.

In organizations dominated by dogma or authorities of various sorts it is not only difficult to articulate new ideas but even more difficult to get the sanction to try them out. An exception is, of course, the situation where the innovator is the person in authority, a situation that arises from time to time in history but that is hard to specify as an organizational condition or to predict. To increase the innovative capacity generally, a positive value must be put on novelty, on breaking tradition, on trying out new things even if they are risky, and such a value must be supported by an underlying assumption that "the truth" is not already known.

The pragmatic end of the continuum also implies a more positive attitude toward trial and error, risk taking, and the acceptance of unsuccessful efforts or failures. The more the organization is committed to dogmas, rules, systems, and procedures that become institutionalized, the harder it will be for members to take the risks necessary for innovation to succeed. The message in such moralistic organizations is "try new things only if you are sure you will not break rules or fail," a prescription for conservatism and playing it safe.

4. The Nature of Time.

HYPOTHESIS C4A. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT IS ORIENTED TO THE NEAR FUTURE (VS. PAST, PRESENT OR FAR FUTURE).

HYPOTHESIS C4B. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT USES MEDIUM LENGTH TIME UNITS (VS. SHORT ONES THAT DONT ALLOW INNOVATION TO DEVELOP OR LONG ONES THAT MAKE INNOVATION DIFFICULT TO EVALUATE).

All organizations hold implicit assumptions about the relative importance of the past, the present, and the future, and all organizations have implicit assumptions about the appropriate length of time units for different kinds of tasks. Some organizations measure themselves in short units such as weeks or months, some use intermediate units such as quarters and years, and some use longer units such as 5 or 10 year spans. All organizations use all of these units for various different purposes, and, as Lawrence and Lorsch (1967) pointed out years ago the different functional units of an organization such as sales and R & D will have very different assumptions about what it means to be "on time" and how long units of work are.

It is likely that in each organization's culture there will be found assumptions about the "really important" time units. The actual size of the relevant time units will vary from company to company, so the determination of what is "past," "present," "near

future," and "far future" must be determined for each organization studied by getting members' consensus on these units. The size of such time units is also influenced by the core technologies that the organization is working with. The development of new products, for example, takes much longer in the pharmaceutical industry than in the consumer goods industry.

Organizations that live in the past or present will find it difficult to place a value on novelty because they are focused on what has worked or is working now. People with new ideas can be dismissed easily because their ideas do not "fit" what the organization likes to think about. On the other hand, if the organization is focused on the far future, it may be unable to launch any innovation because it is assumed that there is always plenty of time to try things "in the future." A near future orientation should, therefore, be most favorable to innovation.

It is also clear that too short a time orientation will always make innovation difficult because one can always show that short-run costs are too high to justify continuation of the trial and error involved in innovation. On the other hand, if the time units are too long, some innovations that are failures will be allowed to continue too long, the organization will lose money, and the whole innovation process will be undermined because people will remember how they were hurt by past innovations. The ability of the organization to develop a sense of an optimal length of time for an innovation thus becomes a very important determinant of its learning capacity.

This optimal length of time will be subjectively defined in

most organizations, and must be measured within each organization, as indicated above. The precise length of the units is not as important as the members' ability to recognize that giving an innovation too little or too much time is equally destructive to the overall innovation process.

Optimal length time units also play a role in the selling of an innovative vision, whether that comes from leaders or from other innovators in the organization. The vision of the future cannot exceed the ability of members of the organization to understand what is proposed, nor can it promise benefits that will only be realized by the next generation. To be motivated to implement something new, people have to be able to see what benefits that will bring them within their own "lifetime."

As Jaques has argued (1976, 1982) the length of time over which organization members have "discretion" appears to vary with organizational rank. On the shop floor supervisors check on employees by the hour or the day. At lower managerial levels one has discretion over weeks, and so on up the ladder until the most senior management is supposed to define its tasks in terms of years. In communicating the future impact of proposed innovations it becomes critical then to consider over what time units the audience is used to thinking. "Optimal" time units, in this context, are partly defined by the actual innovative task that is being proposed or undertaken.

5. The Nature of Human Nature.

HYPOTHESIS C5. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ASSUMES THAT PEOPLE ARE ULTIMATELY NEUTRAL OR GOOD, AND, IN ANY CASE, ARE CAPABLE OF IMPROVEMENT.

Organizations make implicit assumptions about human nature, both in terms of whether it is ultimately good, neutral, or evil, and in terms of how malleable or fixed it is. If organizations are cynical about human nature (McGregor's Theory X) they will not encourage innovation or, worse, will mistrust innovators as having ulterior motives. In such organizations innovative capacity often is devoted to defeating organizational goals. Workers invent elaborate processes and devices to make life easier for themselves at the expense of organizational efficiency (Argyris, 1964; McGregor, 1960; Roethlisberger & Dickson, 1939).

On the other hand, if the organization holds optimistic assumptions about human nature (McGregor's Theory Y), it will expect people to be innovative, will encourage innovation, will listen to new ideas, and will be more likely to trust them. At the same time, for innovation to be encouraged organization members must feel that they are all "perfectible" in the sense that one's personality is not fixed. If one knows one can grow and improve, this knowledge (assumption) acts as a powerful stimulant to personal development and innovation.

6. The Nature of Human Relationships.

HYPOTHESIS C6A. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL

INCREASE TO THE EXTENT THAT IT ASSUMES THE IDEAL OF INDIVIDUALISM AND THE PURSUIT OF INDIVIDUAL DIVERSITY.

HYPOTHESIS C6B. BUT, IF AN ORGANIZATION HAS A FEW INNOVATIVE INDIVIDUALS WHOSE IDEAS ARE ADOPTED, IT CAN IMPLEMENT SOME TYPES OF INNOVATIONS FASTER TO THE EXTENT THAT IT ASSUMES THE IDEAL OF GROUPISM.

HYPOTHESIS C6C. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ASSUMES THAT COLLEGIAL/PARTICIPATIVE METHODS OF DECISION MAKING ARE THE MOST APPROPRIATE.

HYPOTHESIS C6D. BUT, IF AN ORGANIZATION HAS INNOVATIVE PEOPLE IN SENIOR LEADERSHIP ROLES, IT CAN IMPLEMENT SOME INNOVATIONS FASTER TO THE EXTENT THAT IT ASSUMES AUTHORITARIAN/PATERNALISTIC METHODS OF DECISION MAKING.

This dimension of culture has to do with prevailing assumptions about the ideal human relationship. Two dimensions are involved here:

- 1) The degree to which the organization assumes the ideal of "individualism" (that all good things ultimately come from individual effort) or "groupism" (that all good things ultimately come from the group, implying that ultimately all individuals must subordinate themselves to the group), and,

- 2) The degree to which ideal relationships are seen as collegial/participative (implying that power and influence in

decision making is a function of who has what expertise relevant to any given task to be accomplished) or as autocratic/paternalistic (implying that power and influence reside in positions, statuses and roles, or are a function of the specific personality of the individual).

The hypotheses around these two dimensions are more complex and contingent because under certain conditions innovation could occur anywhere along these two dimensions. Basically a culture that values individuals and individual diversity will have more ideas to draw from and create more incentives for ideas to be put forward. However, when it comes to acceptance of ideas and implementation, the strongly individualistic organization may be at some disadvantage. In other words, in a groupist organization it will be harder to get new ideas to be articulated, but if they are adopted, such an organization will be far more effective in implementing them because individuals who may dissent will suppress their dissent for the sake of the total group's welfare.

In such organizations the burden of innovation probably falls on the leadership in that they are the most likely to be able to get an idea adopted in the first place. What the determinants are of innovativeness in the leaders of groupist organizations then becomes the secondary but critical question.

Collegial/participative decision making is more likely to identify the relevant areas in which innovation is needed, to surface good ideas, to stimulate creativity, and to produce a state of affairs where everyone understands the idea so that it will be properly implemented. This assumption is central because collegi-

al/participative decision making influences so many phases of the total innovation process from invention to implementation, particularly if the new idea or process is complex and hard to understand.

If, on the other hand, an autocratic or paternalistic leader has innovative ideas that are sound, if the ideas are not too complex to communicate, and if the socio-technical implications have been correctly thought through, it is possible for the organization to implement such ideas more rapidly and totally.

The danger in this situation is threefold: 1) That the leader will impose an idea that is wrong under conditions where subordinates are neither motivated nor rewarded for pointing out the potential problems; 2) That the idea will not be successfully communicated leading to paralysis and frustration; or 3) That the idea will be implemented incorrectly because the leader did not discover that subordinates did not fully understand what he or she had in mind and/or did not accept the consequences of the innovation.

One additional point bearing on this assumption needs to be brought out. If predictions about the ultimate impact of IT are correct, then leaner, flatter, more highly networked organizations are the likely consequence (Drucker, 1988; Malone, 1987). Such organizations cannot work effectively, however, if their managers are still operating from hierarchical models buttressed by autocratic or paternalistic assumptions (Schein, 1989). The basis of authority in such networks will more likely be the degree of skill or expertise that any given member has at any given moment in time

relative to the task to be done. Positional authority will mean very little. Obviously such systems will function better if they hold collegial/participative assumptions in the first place.

7. Sub-cultural Diversity.

HYPOTHESIS C7. THE CAPACITY OF AN ORGANIZATION TO INNOVATE WILL INCREASE TO THE EXTENT THAT IT ENCOURAGES DIVERSE BUT CONNECTED SUB-CULTURES.

As organizations grow and mature they develop sub-cultures as well as overarching cultures. The nature and diversity of such sub-cultures will influence the organization's innovative capacity. For any given group, culture is a homogenizing force. However, if the organization contains within its total system, enough diverse sub-systems with their own diverse sub-cultures, it can manage to innovate by empowering people and ideas from those sub-cultures that are most different from the "parent" yet best adapted to a changing environment. Drawing on diverse sub-cultures is, in fact, the commonest way that cultures evolve, and this process, if properly managed, is therefore one of the most important sources of potential innovation.

The sub-cultures must be connected and part of a parent culture or their elements will not be seen as relevant when introduced into the parent. For example, in a highly geographically decentralized organization new ideas may well spring up in an overseas subsidiary, but those ideas are only importable into the

parent organization if the subsidiary is perceived to be genuinely part of the larger culture. If the ideas are brought in via transfer of people from the subsidiary, those people will only have credibility and influence if they are perceived to be part of the larger culture and sympathetic to it.

It is this diversity within unity theme that accounts for so many current management statements that the effective organization is one that can both centralize and decentralize, that can be loose and tight at the same time. To restate the point, diversification and decentralization are effective as innovative forces only to the extent that the separate units are perceived to be and feel themselves to be connected to the whole. If they do not feel connected they will not be motivated to innovate on behalf of the whole. If they are not perceived to be connected, their ideas will not be perceived as relevant.

Summary.

To summarize, in order to be innovative an organizational culture must assume:

- 1) That the world is changeable and can be managed,
- 2) That humans are by nature proactive problem solvers,
- 3) That truth is pragmatically arrived at,
- 4) That the appropriate time horizon is near future,
- 5) That time units should be geared to the kind of innovation being considered,
- 6) That human nature is neutral or good and is, in any case, perfectible,

- 7) That human relationships are based on individualism and the valuing of diversity,
- 8) That decision making is collegial/participative,
- 9) That diverse sub-cultures are an asset to be encouraged, but that sub-cultures have to be connected to the parent culture.

VI. THE ROLE OF THE ORGANIZATIONAL PSYCHOLOGIST.

Culture will become an increasingly important concept for organizational psychology. Without such a concept we cannot really understand change or resistance to change. The more we get involved with helping organizations to design their fundamental strategy, particularly in the human resource area, the more important it will be to be able to help organizations to decipher their own culture.

All of the activities that revolve around recruitment, selection, training, socialization, the design of reward systems, the design and description of jobs, and broader issues of organization design cannot be properly carried out without understanding how organizational cultures influence present functioning. Many of the failures of programs designed by psychologists are probably the result of ignoring cultural forces in the organization in which they were to be installed.

Culture does not require a whole new technology of measurement and action skills. Rather, if one is clear about it conceptually, and if one is willing to use interviews and observation, one can decipher most of what one needs to know. The only danger

I see in this area is the assumption that culture can be measured and quantified, leading to the premature design of culture diagnostic instruments, and the application of such instruments in situations that may not be appropriate at all.

We must give culture its due. And that will mean that the organizational psychologist must function as a clinician, ethnographer, and historian in helping organizations to decipher their own culture as they need to do this. The data thus revealed will be of most use to all of us as students of culture.

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