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ORGANIZATIONS OF THE FUTURE:
AN ANALYSIS OF CURRENT LITERATURE AND A NEW MODEL

by

Barbara E. Gilliss

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education

University of San Diego

1993

Dissertation Committee

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William Foster, Ed. D.
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—

ABSTRACT

ORGANIZATIONS OF THE FUTURE: AN ANALYSIS OF CURRENT LITERATURE AND A NEW MODEL

GILLISS, BARBARA E., Ed. D., University of San Diego
1993, 558 pp.

Director: Joseph Rost, Ph. D.

This study confronts the following problem: Western society and its organizations are experiencing the stresses of turbulent times about which there is little clear understanding. The study addresses the need for organizations, their leaders, and their members to understand these times and to determine how to engage themselves in moving toward more enlightened futures. The study questions whether current literature provides a basis for comprehending today's turmoil and its effect on organizations and whether the literature provides a theoretical basis for constructing a model of organizations of the future with which to help them proceed through a transition period.

The researcher reviewed and triangulated over 350 pieces of current literature and determined that societal turmoil is basically the result of a shift from science-based, separatist, and mechanistic beliefs and practices to spiritually-based, holistic, and humanistic views. The literature revealed that organizational stresses are a reflection of this societal shift and that organizations must provide leadership for moving toward a desired future based on the new views.

From main themes identified in the literature, a model for organizations providing this leadership and for operating in the future was constructed. The model consists of four interactive strands: One, organizations are holons in open systems. They perceive their relationships to their internal and external wholes, and they

maintain their ability to change rapidly in response to interactions with their environment. Two, organizations are cultural entities which reflect holistic beliefs in spirituality and humanism. Three, the purposes of organizations are to advance toward desired futures based on these beliefs. Desired futures are identified in shared visions, and movement is enabled by flexible organizational designs which support those visions. Four, organizations are led by transformed leaders who unify members and reflect, support, and direct organizational cultures and purposes toward shared visions.

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Barbara E. Gilliss

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DEDICATION

TO MAX

Who makes all things possible

ACKNOWLEDGEMENTS

It is my pleasure to acknowledge the wonderful people who have assisted in the creation of this work.

My dissertation committee gave me guidance, support, and encouragement while letting me fly. Dr. Joseph Rost mentored me in so many ways: by reading every word attentively and guiding me to hone my ideas and present them with clarity, by accepting this formidable task with grace and encouraging me with positive comments, by attending carefully to all the administrative details necessary to bring the project to closure, and especially by serving as a model for scholarly thought about leadership and its importance. Dr. William Foster, through printed word and positive feedback, inspired and excited me to think deeply and strive heartily to achieve a high standard of precision and excellence of thought. Dr. Mildred Hight listened long with total understanding and unfailingly provided me with encouragement and determination. With such support and guidance, how could any project fail to be worthy!

My husband, Max Gilliss, made it possible for me to work on the project full time and granted me the necessary solitude to complete it. With great patience and interest, he edited every page. Without his support, there would be no degree.

My family and friends forgave me my priorities, unselfishly encouraged me every step of the way, and remained true. I am grateful, and now I can come out to play.

My Master Mind group assured me month after month, chapter after chapter, that the work already existed in the universe and that I could not fail to produce it truly and well. I am humbled and appreciative. The wonderful people at the Center for Life Enrichment showed me the meaning of spirituality and unconditional love and helped me unquestioningly whenever they were asked. My hope is to use what I have learned from this project and from these people to spread their lessons a little wider.

Lastly, I wish to acknowledge librarians the world over for their patience and skill. I stand in awe.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Some years back I was confronted with two questions which articulate the basic problem of this study. I had just conducted a seminar on leadership, when one of my brighter students stepped up and asked me, "How will this make me be a better leader? How will it help me help my staff and my organization to do a better job?"

Her questions illustrate a problem I have been contemplating in my doctoral studies and one I wish to address here: How can people who desire to improve leadership in their organizations be helped to do so?

The world has become a very complex place. It seems to have become a more stressful place with a more uncertain future and a greater need for the understanding and practice of real leadership than ever before. Hunter said that with longevity the world's messes have now grown into big messes (1991, p. 11).

People are seeking directions and leadership. They are exhibiting a desire for connectedness and an aspiration for ascendance--the emergence of what Huffington called the forgotten instinct which, she said, drives humankind toward wholeness, self-knowledge, and inner transformation and links us with the future. She saw it as coming to grips with today's turbulent times and moving toward achieving a more certain and enlightened future (1989, p. 76).

The problem, then, is to help people understand the world's messes and to apply that understanding in the context of organizations so that leaders are stimulated and better equipped to come to grips with these turbulent times and better able to help move humanity toward inner transformation and an enlightened future.

This study reflects a statement by Strauss: "Researchers, as workers, can and should care very deeply about their work; [they should] find deep and satisfying meaning in their work" (1987, p. 5). For me, the study, besides being the culmination of years of academic pursuits, is an attempt to develop knowledge with

which to make a contribution. I hope it will make a difference in some way.

The Issue

The issue here is that we are living in turbulent times and we have not yet developed a clear enough understanding of those times, and of the future they are directed toward, to help organizations and their leaders adapt and survive in that turbulence.

That we live in times of fear and uncertainty almost goes without saying. Many authors have described widespread and generalized distress and apprehension. Swimme wrote of a "great spasm of confusion" and described despair and fear as the ways people deal with repressed awareness of immense problems (1985, p. 35). Feinselber reported survey results identifying floating anxiety and shapeless dread (1992b, p. A-3). Cleveland described a "pervasive sense of crisis, a deeply felt connection that something is radically wrong" which is held in nations around the world (1972, p. 7).

Harman described dilemmas resulting in a cultural crisis--a "gnawing and massive challenge to the legitimacy" of our present system (1979, p. 115), and Keen stated that the world is in turmoil and troubled times are coming (1992, n. p.). Keyes said "the mess we have brought upon ourselves is both perilous and challenging" (1982, p. 10), and Bell wrote of the rhetoric of apocalypse that haunts our time (1980, p. 26). Mumford wrote long ago that "the age we live in threatens worldwide catastrophe," and said that people have never before been so close to losing the core of humanity (1951, p. 3).

Authors who have cited more specific examples of distress are legion. For example, Bradshaw (1988) and Clancy, Daly, Golden, and Shumway (1988) have written about dysfunctional families, child abuse, substance abuse and addiction. Psychological and social problems such as lack of personal fulfillment and satisfaction, alienation, suicides, intellectual and cultural anomie, loss of spirituality, mental illness, value conflicts, addictions, over crowding, sexual hedonism, cultism, and cultural nihilism have been discussed by Anderson (1990), Bellah, Madsen, Sullivan, Swidler, and Tipton (1985), Campbell (1972), Harman (1988), Hooker

(1987), Kinsolving (1992), Pelletier (1978), Schaef and Fassel (1988), Simmons (1990), and Tarnas (1991).

Economical and political problems such as inflation, recession, unemployment, decay of industry and declining productivity, greed and consumption; loss of faith in organizations, institutions, government, political and social order systems; as well as urban sprawl and inner-city deterioration are cited by Ferkiss (1984), Henderson (1992a), Hunter (1991), Kiplinger (1986), Lamm (1985), F. Lear (1992), N. Lear (1990), Mitchell (1992b), Stephens and Eisen (1984), and Theobald (1987).

Ecological problems such as pollution, misuse of resources, energy production, environmental collapse, world hunger, and overpopulation are concerns shown by Berman (1984), Brewer (1986), Capra (1982b), Sagan (1992), and Sahtouris (1989). Violence, terrorism, and war are cited as signs of society's distress by Harman (1988), Skorneck (1991), and van Creveld (1991).

These relatively few examples suggest a wide awareness of societal stress, and they undergird the basic issues of this study.

First, those concerned seem either to be seeing only their part of the elephant, or they are able to discern only that there is some sort of huge animal looming about out there without having much clarity about what it is. This suggests a need and an opportunity to develop a more comprehensive view of the critter.

Second, the amount of energy focusing on the existence of societal stress and stressors (from any point of view) seems far more than that focusing on dealing with them. This suggests the second need and opportunity for the study: to develop a description of the beast in order to identify the animal and to help those who must live with it to adjust and prosper.

Organizations are reflecting these needs by exhibiting their own types of stress. For example, Butler reported evidence of organizational conflicts in boredom, absenteeism, and poor productivity (1984, p. 2). Klaus saw it in employees experiencing lack of security, association and commitment (1987, p. 48). Kanter likened business today to the croquet game in *Alice in Wonderland*--with everything in constant change. She said the magnitude of problems facing businesses today requires serious rethinking of the way they organize to do business (1989, p. 19).

Owen stated that turbulent environmental circumstances are forcing all organizations to modify their forms and structures or cease to exist (1984, p. 209).

Owen noted that we are at the ending of an age and that old beliefs and values as well as current organizational forms are becoming increasingly unworkable (1984, p. 209). Foster stated that organizational tensions are caused by the continued existence of time-worn, science-based ideologies that "don't come to grips with the realities of human existence" (1986, p. 50).

Harman emphasized that business people must better understand the significance of present indicators and the dynamics of current transformational forces in order to make good business decisions and to effectively contribute to the whole (1991a, p. 128).

The major issue for the study, then, is the need for insight and guidance for organizations, their members, and their leaders who must adjust to and ultimately move beyond this current period of upheaval. Burrell and Morgan supported development of such insight when they stated that "there is room for theorizing and research in relation to the concept of organization and the part it plays in the context of ordinary life" (1979, p. 397).

Purpose, Objectives, and Research Questions

The purpose of this study is to examine the recent literature on the nature of societal and organizational stress in an effort to understand what organizations of the future might be like and to develop a model of organizational behavior for survival and growth in transitional times and the future.

The objectives of this investigation are:

1. To study current literature on social problems in order to identify commonly-held perceptions about major stressors and their causes and to build a base of understanding about our times.
2. To examine the effect of current social problems on organizations.
3. To determine if current social and organizational stress can suggest a theoretical framework for organizations in transition toward the future.
4. To develop a model for organizations in transition toward the future.

The research questions are:

1. Does current literature on social problems provide a base for comprehending today's turmoil?
2. How does current societal upheaval affect present-time organizational stresses?
3. Does knowledge of current social and organizational problems suggest a theoretical framework for organizations and their transition toward the future?
4. Can a general model for organizations in transition be constructed?

Assumptions

There are several assumptions underlying this study. The first is that the social turbulence currently being experienced reflects a period of transition between two societal belief systems--a paradigm shift.

The notions of transition, paradigm, and paradigm shift are fully explored in the "Definition of Terms" section below. For now, it is sufficient to accept that many writers assert the above to be true. Fox, for example, said that anomalies in one's paradigm create a growing awareness that "something is amiss", a crisis or breakdown, a failure to fit in the old paradigm (1988, p. 141). Mumford referred to "periods for extreme disruption" occurring prior to conflicting paradigm integration (1955, p. 8). Campbell noted that when protective ideas break down there is catharsis or elimination of rational structuring (1990, p. 66).

Harman stated that modern society has broken with the past in a number of important respects, and he described the present as a unique point in history in which a metamorphosis is taking place "away from the emphasis on materialistic values and economic growth and toward a more human and person-centered society" (1979, p. 10). He further suggested that social unrest not only occurs when an operating paradigm is being rejected, but that it is inevitable. "It is impossible to create a well-working society on a knowledge base which is fundamentally inadequate, seriously incomplete, and mistaken in basic assumptions" (1988, p. 101).

Not all authors have viewed the present turmoil as a portent of a major social shift in belief systems. Butler (1984) and Kanter (1989), for example, see it as

normal evolutionary growth. Gelb said that blaming the world's current perils on old paradigm thinking and attempting to connect the two is overly simplistic (1991, p. 38).

The widely held view, however, seems to be that the present conflict suggests movement toward a change in the basic perceptions of reality.

A second assumption is that old paradigm thinking is based on deeply-held science-based ideologies and that it is these beliefs which the people in our society are currently finding inadequate and are attempting to move away from (hence the tension and turmoil). These themes are developed at some length in the study, but a few references here should suffice to establish them as basic premises.

Lodge defined the old paradigm--currently at issue with the new one--as having components based on science as it was developed by Copernicus and Newton. He described those components as fragmentation, reductionism, objectivism, rationalism, and materialism (1987, p. 34).

Harman noted similar components as coming from the scientific age and from science assumptions which he listed as objectivism, positivism, and reductionism. He stated that these beliefs were underscored by the basic notions of man controlling nature and that they have contributed to the separation of humans from the matrix of life (1988, p. 85). A few years later he reiterated these assumptions of science as having been adopted as proper during the mid-twentieth century, and decried such beliefs as having led to the separation of humankind from nature and the presupposition of its superiority over other creatures (1991b, p. 111).

Former astronaut Edgar Mitchell stated that the old belief system based on separateness and a mechanistic universe does not reflect the reality of the world in which we live (1992b, n. p.)

Sahtouris explained that the mechanistic view is antithetical to real life. Machines remain functional and are valued only if they don't change, whereas living organisms change constantly and must do so to retain their function and value (1989, p. 26). Boulding (1980) wrote of how the differences in values between science subcultures and social ecosystems create tensions.

Not all theorists accept or support a separation in belief or value systems

between the premises of science and the value of living organisms. O'Hara, for example, firmly stated that science is a way of apprehending nature, that life knowledge can only be attained through scientific effort, and that today's seekers need science as a way to understand their world (1988, p. 152).

The value of scientific thought in the new paradigm is explored later. For now, it is sufficient to say that many experts believe that considerable tension has been created by the initial rejection of the science-based belief system. Kautz summed up the situation by saying that science has been the source of authority in our modern world and that many people now believe that that assumption is shaky (in an interview reported by Sullivan, 1992, p. 82).

A third assumption is that societal turmoil, caused by the pulling away from former science-based belief systems and modes of thought, is having a major impact on organizational behavior. Organization theory does not yet reflect this movement nor has it developed new models. Morgan (1980) reported the need to understand the nature of organizational linkage to wider modes of societal organization. This linkage is explored in Chapters Six, Seven, and Eight.

Morgan suggested that as worldviews change, different metaphors are applied to perceive the nature of organizations in fundamentally different ways, and he stressed the importance of challenging background assumptions and exploring different metaphors. He stated: "New metaphors may be used to create new ways of viewing organizations which overcome the weaknesses and blind spots of traditional metaphors Viewing organizations on the basis of new metaphors makes it possible to understand them in new ways" (1980, pp. 612, 615). Some years back Burrell and Morgan reported that most studies of organizations have thus far been located within the assumptions of functionalism and that challenging this dominant orthodoxy and providing an alternative view are necessary (1979, p. 398).

Apparently little has changed over the years. In 1981, Ramos called organizational theory naive, that is "predicated in instrumental rationality [and] the outcome of intensive application of natural sciences It has created a distorted impact on human associated life" (p. 72). The citadel of organizational scholarship is a "tower of Babel." "The so-called science of organization, as we know it, is

entrapped within unchallenged assumptions" (pp. 72, 75).

In 1985, Clark reported that there was much to support the reality that the traditional bureaucratic paradigm still holds primacy in the field of organizational theory. He saw the classical paradigm as a cohesive worldview which dominated and therefore constrained and determined all inquiry, thought, practice, training, and action in the field. In 1986, Foster noted that orthodox accounts of administrative theory systematically exclude approaches that do not subscribe to positivist views.

In 1991 Bolman and Deal bemoaned the lack of current theory and showed concern for the future. They noted that "incomplete maps in either research or practice limit our ability to understand and manage." Leaders and managers need to expand and enrich their ideas and styles to address problems and dilemmas. These people live in psychic prisons--they cannot see old problems in a new light and cannot attack old challenges with new tools. "When they don't know what to do, they simply do more of what they know" (p. 4).

One final set of assumptions is that certain general behaviors which organizations might exhibit as they move away from a science-based paradigm have been correctly identified. For example, Deal and Kennedy conjectured the breakdown of large, traditional, hierarchical organizations (1982, p. 177), and Outlook '92 predicted the preponderance of small, entrepreneurial organizations as people become displaced by corporate restructuring (1991, p. 54).

Harman stated that if a fundamental transformation is under way, we should be seeing certain signs in the business community. He suggested the following: Choosing trust over fear; discovering a deep sense of purpose, creating a vision out of that purpose, and structuring the organization around the goal of helping each individual find and act from a deep sense of purpose; accepting intuition; managing for personal growth, empowerment, and team building; and operating on the basis of feedback being seen as positive information on appropriateness of actions (1988, p. 164).

Kiefer and Senge suggested metanoic organizations as those exhibiting a fundamental shift of mind and a reawakening of intuition and vision as well as an understanding and nurturance of responsibility for the larger social system (1984, p.

70. Bleeker projected a primary focus on appreciation of people and ideas--nurturing creative synthesis, conceptualizations, empowerment, mental energy, and valuing (1987, p. 15).

In a 1989 speech, Vaill predicted the importance of valuing in organizations of the future. He emphasized moral and ethical aspects of organizational behavior as well as the spiritual aspects of developing meaning in work and engendering values, energy, and faith as central to the organization's survival and development (p. 33). These and similar statements are explored in greater detail with other literature on the future of organizations.

Extent or Scope of Study

The scope of this study has grown far beyond what I had originally envisioned. As it turns out, in attempting to come to grips with the shaky state of the world today, nearly every subject applies! In fact, the study has become not so much a culmination of years of schooling and learning, as mentioned earlier, as a beginning. So much so that it has become frustrating. There seems to be no end. Materials which I feel should be included find their way to my desk on a daily basis. A study of the future should be mounted from the cutting edge. But the cutting edge seems to keep moving.

Nevertheless, I must stop somewhere. I have taken heart in a reminder by Mintzberg (1983) of a poster he recalled which said that life is a journey rather than a destination. So, although new ideas and information in many subject areas come into existence continuously, each worthy of complete study in its own right, few if any paths can be followed to their ultimate conclusions. The extent to which the broad scope of this study can be addressed must, for sanity's sake, be limited in some ways.

The literature selected extends only to those materials published within the last ten years, with the exception of references included for their historical value or because they were frequently mentioned. In a study focusing on the future, even ten-year-old ideas are largely out of date, so older materials have been limited.

Regarding the vastness of the subject area, the study includes only those topics which recurred consistently enough to be considered important. There may be other

areas of concern to organizations of the future, but again, one must stop somewhere. This study includes those most frequently addressed.

To the extent it was possible and they were available, disputing voices are included. In many instances, no dissenters presented themselves, likely because a discussion of many topics is just beginning. Lack of dissenting material is in no way intended to suggest that ideas, conjectures, conclusions, or whatever are unanimous. The study includes whatever thinking on particular topics is available.

One aspect of the scope of the study deserves particular attention: leadership. For many years the importance of leadership in bringing about a societal shift has been noted. In 1951 Mumford stated that heroic duties and personal decisions would be needed to bring about a collective regeneration, to create understanding and values necessary for survival and salvation. A dominant personality would help move society and having one person in ten fully awake and exercising his or her high centers of intelligence and morality could arrest the present processes and set a new direction (pp. 20, 119). Mumford later described the emergence of such a leader in the new paradigm. Somewhere in the transitional period a new, matured, balanced person will feel a tie with humanity, and out of humility and self awareness, will perceive a sense of alternatives along with confidence in his or her own power to create the future (1955, p. 308).

Kuhn suggested that the reconstruction of society will likely begin with the emergence from the mind of a young person not fully committed to the old paradigm, a concrete proposal to which many individuals will eventually become committed and which will triumph only through the development of hard arguments by the supporters (1970, pp. 143, 156).

Mumford said, "The change that will produce a balanced man will perhaps occur in the minds of the older generation, but it is the young who will have the audacity and courage to carry it through" (1951, p. 289). Pelletier stressed the importance of having leaders express the vision and sound a call to unify humankind in order for society to achieve a new paradigm (1978, p. 8).

Cleveland and Harman both emphasized the important role of business leaders during advancing times. Cleveland said future executives will have new ethical

burdens. They will have to develop personal directions, accept responsibility for the situation as a whole, and formulate and implement society's purposes (1972, p. 121). Harman called business leaders the first true planetary citizens and charged them with making decisions affecting societies and being concerned with world problems (1988, p. 132).

More recent expressions of expectations for leaders of the future include models of transformational leadership introduced by Burns (1978) and honed by Rost (1991). In addition, many theorists have offered specific aspects of leadership for the future as they perceived it from their points of view. These various considerations are addressed and culminate in a definition of leadership which reflects the importance of leadership to transition, organization, and this study.

Limitations

In addition to the limitations mentioned above--inability to include all the very latest writings or to treat each area of interest with the in-depth attention it deserves--two rather unusual limitations have presented themselves.

The first has to do with language. As most people are aware, and Mumford (1951) and others have pointed out, humanity uses words as symbols to conceive of the external world. Language makes it possible for people to create meaning, interpret reality, reduce complexity, and deal with the non-present. As Senge said more recently, our thinking stems from our language, "and without language, thought as we know it, couldn't be there" (1990, p. 242). The problem lies in having a language capable of forming new thought. As Edgar Mitchell stated, language must be adequate to the experience or the experience can't be described (1992b, n. p.). More specifically to my study are K. K. Smith's statements that all behavior is language and that we can't think of organizations separate from language- behavior (1982, p. 328).

The limitations of language in attempting to describe an emerging reality or to develop a totally new organizational model is well illustrated by a statement quoted by Kidder: "There's no reason to expect [our ordinary] language to have any relevance to the way things are" (1988, p. B-2).

Ferguson described the situation when she reminded her readers that language molds thought and that if we are to experience reality we must acknowledge the limits of language. We are on the brink of a new life and entering a new domain. "In what language can we describe things for which there are as yet no names?" (1980, p. 52). Max Born, in describing the inadequacy of words to create understanding of new scientific concepts, said, "The difficulty lies in the fact that we are compelled to use words of common language when we wish to describe a phenomenon . . . by describing a picture appealing to the imagination" (1957, p. 97). Zukov reported a personal conversation with David Finkelstein, Director of Physics at Georgia Tech, in which Finkelstein said that symbols allow only an incomplete description because they follow rules of their own. He said that "the problem is not in the language, the problem is the language" (1979, p. 261).

I think Sahtouris illustrated the dilemma best when she explained that European-based languages are structured so that things/names have a linear relationship to actions/verbs. Water falls. Some languages, such as Native American dialects, are process languages. The world is seen as patterns of interwoven processes in time versus linear relationships in space. Such languages have expressions that don't separate water from falling. The former are better suited to mechanical world views while the latter are better suited to organic, holistic views (1989, p. 156).

My limitation, then, is language ill-suited to stimulating new thinking and creating new meanings when I need to describe an emerging situation and create a new organizational model. It feels a little like needing the skills of a Walt Disney animator--with a full complement of high-tech media available to create total, multidirectional, simultaneous action with continuous surround-sound plus all the light, color, taste, smell and tactile sensations possible--and having only the tools of paper and pencil to apply to linear thinking.

There is no answer to this dilemma other than to use the medium available as creatively as possible. Indeed, Campbell considered symbols as art forms and stated that "the function of literature and art is to translate knowledge and information into experience" (1990, p. 33). He also declared it the artist's function and responsibility

to recognize in the conditions of life the possibility of transparency and to apply his or her medium to render the forms of the world we live in transparent (1972, p. 179).

Creativity is one of the elements of a new paradigm which is frequently suggested. For example, Bradshaw noted that our logic is still rationalistic, at the expense of intuition, creativity, and the phenomenology of human experience (1988, p. 171).

Some measure of creativity is exercised in the presentation of this study. This is partly because there is a need to break out of mechanistic approaches to stimulate new thought, and partly because the writer feels the need to exhibit the courage of her convictions. If I am to suggest various elements of new behaviors as directions for the future, I must demonstrate my belief by showing a willingness to move in those directions.

Lest I set off any alarms, rest assured that all the normal requirements for content information and format are met. After all, one of the descriptors of a new paradigm, which is addressed shortly, is that it is not necessary to throw out all of the old thought patterns in order to move forward. Indeed, Kuhn stated that new paradigms are born from old ones and that the new usually incorporates many of previously employed traditions of the old paradigm (1970, p. 146).

So the reader may find the presentation style somewhat more conversational (and I hope more readable, if not artistic) than the usual dissertations and is asked to indulge in some imaginative thinking, particularly regarding an organizational model for the future.

The second unusual limitation is related to the first. It concerns the need to address only one topic at a time when in reality everything is interacting and occurring at once. The concept of the hologram, also discussed later, applies here. Very simply, a hologram is a "whole message" or image which has the peculiar characteristic that, if it is broken, any piece, or holon, will construct the entire image (Back and Lang, 1985; Ferguson, 1980). My point is made by Wilber's discussion of holography in which he moves it beyond a visual image and applies the concept generally. All holons or elements of a given level are roughly equivalent in status, interconnected in dimension, and interpenetrating in fact (1983, p. 135).

I experienced this phenomenon throughout the study. Statements or discussions by an author on a particular aspect of a future paradigm, for example, seemed to instantly reflect dozens of other statements in as many ways. Here again, the limitation is in attempting to address simultaneous, multidimensional ideas one at a time. The reader may have already become aware of this interconnectedness, perhaps with some frustration, noticing that in a discussion of one topic, related others have been briefly introduced, with promises of fuller explorations of the secondary topic in another place in the document.

Perhaps in the future, there will be some hologrammic learning device which allows simultaneous absorption of multiple ideas for instantaneous comprehension of the whole. For now, I again beg the reader's indulgence. If ideas appear incompletely addressed, if the reader is referred to past or future sections of the document, or if information seems repetitive, please know that I am attempting to paint the big picture one all-reflective piece at a time. The reader is invited, if not required, to create the hologram.

Organization of the Document

The definition of terms is normally introduced in Chapter One, however in this document it comprises the whole of Chapter Two. This insures sufficient space to fully develop key terms and to establish well-grounded bases for exploring the literature. The terms defined and the major foci on each, are: (a) paradigm: an exploration of various perspectives on the term culminating in a working definition; (b) paradigm shift: a definition of the term plus discussions of causes and reactions; (c) transition: a theoretical description plus expectations of behaviors for such a period; (d) leaders and leadership: an exploration of the specific aspects of leadership frequently related to transitional and future times, comparison of authors' expectations for future leadership with a transformational leadership model, and a definition; and (e) organizations: establishment of organizations as the context for leadership and transformation and a generic definition.

The study of current literature on social problems begins with Chapter Three, "The Past," which is a fairly in-depth survey of history. No review of literature

could be complete without this analysis, as nearly all authors have grounded their theses historically. I support this as a valid beginning for my study as well.

Harman noted that understanding "the nature and necessity of the forces of historical change" will help society understand what needs doing in the present and future (1988, foreword). Simmons noted that the whole world is changing and that we are at the threshold of "a new historical spiral that will be as unlike our recent past as our present is unlike those of early hunters and gatherers." The more we understand about our history and transitions, the more conscious our actions can be (1990, p. 4).

Anderson said that to emerge completely, we need a better sense of history-- "an idea of what it is the human species has found out about itself in recent centuries, and what effects that discovery has had on us" (1990, p. 28). The focus of this historical review is on the development of a science-based belief system as the core of the current paradigm.

Chapter Four, "The Present," is an examination of the turbulence of our times and an argument for acknowledging it as a period of transition between paradigms. For example, Simmons asserted that "we are presently in a 'cusp' time--a time of major transition from something to something else" (1990, p. 4).

This chapter explores the most frequently discussed stressors of our times and offers evidence of a paradigm shift. It includes a discussion of those areas which theorists believe illustrate new thinking. Corrick wrote that this is a period of transition from an "era of materialism and consumption to . . . [an] era of responsibility" with a sense of transcending concerns (1990, p. 60). The chapter examines those areas of responsibility and concerns.

"The Future" is the title of Chapter Five. It begins with prognoses for the future most frequently presented in the literature. Most authors have suggested that humankind will exceed itself, transcend its problems, and move toward harmony and completeness (Huffington, 1989, for example). Miller reported, from the synthesized findings of over 10,000 studies compiled by Michael Murphy, that "evidence points toward the 'unfoldment' of human capabilities and toward a transcendent order of existence" (1992, p. 7).

There are voices of doom and caution, however, and many who suggest that

the future is primarily one of choice. Nanus pointed out that humankind is now in the position to make social choices. We have the capability to form mental images of the future, and, having that capability, we must decide to what extent to design our future and to create that reality through action (1990, p. 14).

Chapter Five explores options and choices for the future along with the underlying belief systems on which they are based. It then presents the most widely shared prognoses along with elements of that future most generally asserted to be essential.

Chapter Six turns the focus of attention to organizations. The chapter begins by exploring the relationship between organizations and society and establishing the concept of paradigm within the organizational setting. For example, Erickson noted that the dominant forces in social transitions are reflected in dynamic industrial innovations (1985, p. 41). Raymond wrote that businesses are integral parts of societal turmoil and must address new demands to stay in business (1986, p. 16). And Owen stated that turbulent environmental circumstances force transformations on all organizations (1984, p. 209).

Chapter Six continues with a brief review of the impact of a science-based paradigm on organizations. For example, Harman saw business as being totally a product of the Western industrial paradigm (1988, p. 164). Ackerman said that traditional organizational models describe organizations as being made up of parts and components fitted together and operated through a control system (1984, p. 115). And Garfield stated that the central metaphor for life in the twentieth century is the machine, and it is reflected throughout business and organizations (1992a, p. 14).

The chapter then explores societal pressures which are forcing organizations to move beyond old paradigm views. Garfield suggested some of the forces which are "nudging companies toward transformation" as competition, environmental threats, social problems, and employee demands. The chapter closes with discussions of the process of transition and the importance of the leader as a change agent in that process.

Chapters Seven and Eight examine organizations as operating units within the greater society and present organizational behaviors which the authors cite as

indicative of change or new organizational thrusts. Kiefer and Senge saw organizational movement in five major areas: vision or purpose, alignment, empowerment, structural integrity, and balance of reason and intuition (1984, p. 71). Pascarella and Frohman foresaw innovations in the three major areas of global marketplace, technology, and new values and lifestyles (1989, p. 2). Stewart predicted organizational revolution in technology, economics, and social concerns (1989, p. 3). More specific behaviors in these major areas are discussed in the contexts of the two chapters.

Chapter Seven, "Organizations as Social Entities," examines the notion of perceiving organizations-as-entities from various points of view, then reviews the cultural and human elements of organizations and points out the importance of leader-member relationships to those elements. Chapter Eight, "Organizations as Systems and Structures," examines the operational aspects of organizations in response to current stressors. For example, Porter focused on job shortfalls and changes in the nature of work (1986, p. 9), and Butler emphasized needs for new jobs skills, for more humane workplaces, and for increased responses to worker demands (1984, p. 5).

The chapter includes an emphasis on integrating the operational and humanistic aspects of organizations, in keeping with Harrison, who stated that "when the forms (systems and structures) and processes (doings) of the organization flow from its essential qualities (being), the organization will become energized and integrated and will be effective in dealing with its environment" (1984, p. 106).

A look at the changed role of management and at the importance of leaders as visionaries and as communicators and implementors of their visions closes these two chapters' exploration of organizational responses to the need for transition.

Chapter Nine concludes the study. It begins by reiterating the importance of the study then discusses the methodology of literature analysis as a satisfactory and humanistic approach to a dissertation study. Borg and Gall supported "the conduct of a vigorous literature analysis" as making a "significant contribution to our understanding of research on a particular problem" (1983, p. 198). The design of the study is differentiated from a science-based meta-analysis study of literature, as

described by Glass, McGaw, and Smith (1981) and is described in terms of a humanistic study with the researcher as the data collection instrument (Guba and Lincoln, 1987) and with the focus on developing a grounded theory (Strauss & Corbin, 1990). The importance of this point is illustrated by Burrell and Morgan who stated that methodology should be employed based on its ability "to present the most 'accurate' view of the social reality" being studied (1979, p. 399). This is a study of new-paradigm thinking, and Guba stated that the naturalistic approach to inquiry authenticates and supports the new paradigm (1985, p. 89), hence the emphasis on this review of literature as a humanistic study.

The primary focus of Chapter Nine is the culmination of the literature analysis in the presentation, description, and discussion of a model for organizations in transitions toward the future. Mitchell stated that we need better models, as vital and creative processes, for newer understanding and explanations of reality (1992b, n. p.). The development of a model, according to Guba and Lincoln, reflects the purpose and desired outcomes of a naturalistic study, which is the development of a theory grounded in data. They said that the researcher forces out hidden meanings and "develops a theory to explain the data" (1987, p. 315). "Discovery of theory from data--which we call grounded theory--is a major task confronting sociology today" (1981, p. 68), and "a social inquiry that provides a fuller, richer, or more meaningful understanding of human enterprises ultimately increases the fund of knowledge about such organizational forms and enterprises" (1987, p. 149).

To increase the fund of knowledge about organizational forms and enterprises in transition to the future is the purpose of the model presented in this chapter. It is also the major purpose of this study.

This final chapter closes the study by drawing general conclusions, reviewing limitations, examining applicability, and suggesting areas for further investigation.

Summary

As presented here in Chapter One, I intend, in this study, to address the need to help organizational members and their leaders come to grips with the turbulent times in which we live by reviewing what is currently understood about the state of

the world and by examining the implications of these understandings for organizations. In addition, by studying theorists' projections about organizations of the future, it is my intention to develop a theoretical model as a possible tool for assisting organizations to move toward a new paradigm.

CHAPTER II

DEFINITION OF TERMS

The following is an introduction to key terms in the study. Discussion of each term is intended to provide the reader with background information from theorists who have expressed opinions about the terms and to culminate in working definitions and common understandings between the reader and the author as bases for communication about the study.

Paradigm

Morrow (1991) pointed out that paradigm comes originally from the Greek *paradeigma*, meaning a pattern, example or model. He also noted that it was becoming a buzz word for theorists in the emerging world. Harman stated that a paradigm couldn't be defined precisely in a few well-chosen sentences, and that, "In fact, it is not something to be expressed verbally at all" (1979, p. 24).

Thomas Kuhn introduced the term in the 1960s, and reiterated it in 1970. Kuhn was writing in the context of scientific inquiry, and he developed the term to mean far more than merely a pattern or a model. He described a paradigm as a way of seeing the world--an "implicit body of intertwined theoretical and methodological belief" or an entire "constellation of beliefs [and] values" (1970, p. 17, 175). Paradigm as a set of core assumptions or basic perceptions of reality is widely accepted (Guba and Lincoln, 1981; Harman, 1979, 1988; Lincoln, 1985a; Morgan, 1980).

Kuhn's complete definition of a paradigm, which he relabelled "disciplinary matrix" in 1970, included members of the scientific community, i.e. "producers and validators of scientific knowledge, . . . the practitioners of a scientific specialty" and their accepted practices. According to Kuhn, the specialty the community shared included their accepted practices and also their commitment to symbolic generalizations, metaphysical paradigms (beliefs in particular models), and values

(which could also be shared by a wider scientific community, that is scientists who differ in their applications) (1970, pp. 176, 181).

Burrell and Morgan (1979, p. 23), Mohrman and Lawler (1985, p. 151), and Morgan (1980, p. 606) all perceived Kuhn's paradigm to consist of three basic elements. In sum, they defined paradigm as: (1) the basic metatheoretical assumptions or the complete view of reality adhered to by a group of theorists which underwrites (2) a particular frame of reference, mode of theorizing, school of thought or set of rules of practice with particular achievements which practitioners solidify or perpetuate as they interact within it, using (3) specific *modus operandi*, techniques, and instruments to go beyond conceptual contexts and gain tacit knowledge of the paradigm.

Several writers supported the literal definition of paradigm as a model: "a pattern or model for how inquiry may be conducted" (Guba & Lincoln, 1987, p. 311), a model framework for creating order out of chaos, a map for "making our way in the world" (Garfield, 1992a, p. 9). Kuhn, himself, referred to a paradigm model as a map which constitutes research activity, "a vehicle for scientific theory [which] tells the scientist about the entities that nature does and does not contain" (1970, p. 108).

Kuhn suggested the paradigm/model as a learning device--for comparing new problems and situations with known models to develop further understanding of worthy new models--a process he considered learning by doing science versus learning by learning the rules for doing science. Kung (1989) saw paradigms as comprehensive models for understanding, and Morrow called paradigm a "reality thrasher"--a way of comparing past and present, an implement for sorting out history "at a moment of tumbling global change" (1991, p. 66).

Foster and others suggested that paradigms as models could be limiting. Foster stated that "in strict usage, a paradigm is as much a set of blinders as it is a lens" (1986, p.57). Kuhn acknowledged that by defining legitimacy, a paradigm determines what is selected for scientific evaluation and criticism and that paradigms mostly address problems which articulate their own beliefs rather than "strive for conceptual or phenomenal novelty" (1970, p. 35). He also acknowledged that

scientists practicing research under a held set of beliefs attempt to force nature into their conceptual boxes and that when they take their set of beliefs for granted they no longer need to justify each concept (1970, p. 20). In this sense, paradigms are normative, according to Lincoln. "They tell the practitioners what to do without the necessity of long existential or epistemological considerations" (1985a, p. 29).

Several authors agreed that paradigms are self-validating and self-confirming, noting how unconscious assumptions, by constructing coherence, predictability, and reasonableness, determine the way we conceptualize and make sense of experience, and how they help us ward off those threatening aspects of reality which do not fit our unconscious assumptions. These writers continued that, in fact, we pay attention to experiences that conform to our ideas about the way the world works and reject or only tentatively accept experiences that are counter to those ideas, waiting for confirmation of a need to reshape our beliefs (Harman, 1988, p. 15; O'Hara 1988, p. 149; Mitchell, 1992b, n. p.; and Tarnas, 1991, p. 437).

Concerning the way in which paradigm belief systems become so deeply embedded, authors simply accepted the unconscious existence of a dominant belief system. Harman suggested that we may hold a common sense view about the nature of ourselves and the universe from some innermost authority (1988, p. 14), and Nicoll said that these views are based on cause-effect metaphors from primitive sensory experiences (1984b, p. 437). Tarnas held that:

The bold conjectures and myths that the human mind produces in its quest for knowledge ultimately come from something far deeper than a purely human source. They come from the wellspring of nature itself, from the universal unconscious that is bringing forth through the human mind and imagination its own gradually unfolding reality. (1991, p. 436)

Mitchell suggested that belief systems may come not only from precognitive commitment but also from early human training through which adults influence their young to grow up with certain sets of beliefs (1992b, n. p.), and Lincoln stated that paradigms become deeply embedded as adherents and practitioners are socialized about what is reasonable, legitimate, and important (1985a p. 29). In this view, conditioning may take place at a more conscious level. Mitchell also suggested that

humans organize information consciously as well as subconsciously (1992b, n. p.).

O'Hara wrote that our experience of reality is not just an automatic response but that it is consciously constructed on the basis of perceptions and interpretations (1988 p. 149), and Garfield said that a paradigm is a story we consciously invent to make sense of the world (1992a, p. 8). Kuhn, in referring to scientific paradigms, suggested that paradigms come from "universally recognized scientific achievements" and that "arbitrary elements, personal and historical accidents, are formative ingredients of the beliefs espoused by a given scientific community at a given time" (1970, pp. x, 5).

Paradigm theorists, then, suggest that belief systems may have been embedded in human thought from prehistoric time or that they may have been conditioned into humans from the beginning of individual lifetimes and that these early programmings may control human thought and behavior on a subconscious level. Theorists also suggest, however, that belief systems may also be formulated consciously, which leaves open the possibility that purposeful adjustments can be made in long-held beliefs.

The question arises as to how paradigms can be known if they exist at subconscious levels. Harman suggested that the unconscious beliefs which shape our perceptions can be inferred from behavior (1988, p. 14). Kuhn more specifically stated that it is relatively easy to determine a paradigm from the problems, techniques, models, or examples which come to replace explicit rules for puzzle-solving (1970, pp. 43, 175). Morgan agreed, saying that different schools of thought are known by the common metaphors or ways of studying they use as foundations for inquiry in their shared reality. (1980, p. 606).

The idea of different schools of thought suggests that there can be more than one paradigm at any given time. In fact, Foster stated that "the very concept of paradigm raises our awareness to more than one dominant way of seeing things" (1986, p. 55). Lincoln said that "each of us lives with several paradigms at any given time," depending on what we're inspecting. We can simultaneously hold different sets of beliefs in legal, demographic, theological, and organizational arenas, for example [emphasis added] (1985a, p. 30).

Kuhn described levels of belief systems, stating that a global paradigm may cover lesser, general paradigms or subsets of rules which have been abstracted from it. Groups of scientists can agree on shared attributes or families of activities and networks of resemblances as sufficient to account for corresponding activities. Within the whole category of natural scientists, for example, there are the major fields of inquiry such as chemistry, astronomy, and zoology, and each group is then divided into specialty areas (such as organic chemistry, physical chemistry, geochemistry, and electrochemistry, for example). Within these groups are even lower schools of thought with different viewpoints (1970, pp. 44, 177).

Harman (1979) and Kung (1989) labelled and defined these different levels of beliefs as macro-paradigms (all encompassing characteristics of a whole such as a culture), meso-paradigms (ideologies or worldviews), and micro-paradigms (individual perceptions of reality).

The authors suggested, then, that more than one set of beliefs can be held in different areas of interest and at different levels of concern. This also suggests that conflicting views can be accommodated unless they occur within a single arena or level. In this case, according to some theorists, paradigmatic blinders will cause either an attempt to create conformity or a rejection of the novel, either one successfully averting a shift in belief systems.

Sahtouris noted that "people are very reluctant to change their worldview because [it] holds everything together It makes sense of the world." There is practical evidence of how well we get along in the world when we use a particular view to guide experience and behavior, but it is important to recognize that other views exist and that the truth of any one world view cannot be scientifically validated. The most important discovery of modern science is that "there can be no single true and complete worldview" (1989, p. 154).

Although Kuhn developed the notion of paradigms around the hard sciences, we need, according to Rost, to adjust Kuhn's model to the soft social sciences (1992, n. p.). Many theorists have moved in that direction. For example, Burrell and Morgan referred to use of the term by social theorists (1979, p. 329), Harman defined paradigms as sets of beliefs held by whole cultures (1979, p. 24), and Lincoln

included organizations as sets of beliefs (1985a, p. 30). Ferguson (1980) noted evidences of Kuhn's theory in many areas besides science, and Kuhn, himself, described parallels between political revolutions and paradigm shifts and said there was no doubt of the existence of parallels between scientific and political development (1970, p. 92). Morgan (1980, p. 607) and Morhman and Lawler (1985, p. 150) saw paradigm in terms of social science, and they defined it as the view of social reality of the community or network which adopts it.

Most theorists accept the idea of paradigm in the social context, and this study reflects that adaptation as well as the concept of organizations as one level of belief system within the total societal paradigm. The definition of organization, which addresses this issue, appears later in this chapter.

The above exploration leads to the following definition of paradigm: a basic constellation of beliefs shared by a community of adherents and evidenced through a set of commitments, generalizations, values, and practices which comprise a view of reality and the problems which will be admitted and tried. Multiple paradigms can simultaneously exist only at different levels or within different areas of concern.

Paradigm Shift

The foregoing definition of paradigm hints at a definition of paradigm shift. It suggests that such a shift would be a change in the basic constellation of beliefs held at a given level. Many theorists saw paradigm shift as a profound change (Buckley and Perkins, 1984, p. 56; Schaef and Fassel, 1988, p. 26; and Senge, 1990, p. 14).

Many described it as involving a major upheaval or as a tearing down and rebuilding. Examples are: fragmentation and disintegration (Lincoln, 1985a, p. 30), breaking through (de Bivort, 1984, p. 244), giving way to (Guba, 1985, p. 79), reconstructing (Pascarella and Frohman, 1989, p. 26), reforming and restructuring (Ferguson, 1980, p. 67), or transmutation (Buckley and Perkins, 1984, p. 58).

Another term connoting a total change which is occasionally used to describe a paradigm shift is revolution. It is the term most frequently used by Kuhn, who defined it as, "non-cumulative developmental episodes in which an older paradigm is replaced in whole or part by an incompatible new one" (1970, p. 3). Lincoln

described it as old assumptions taken on faith which disintegrated as bases for new beliefs became evident (1985a, p. 31).

The term most frequently used as a synonym for paradigm shift is transformation. This term was used from two points of view. One school of thought held that transformation begins with deep, personal change and that when a sufficient number of personal changes occur a massive change of thoughtforms would result in organizational or societal shifts. The other school of thought focused on the need for groups or organizations to be transformed through a change process. Although authors did not often make their positions clear, I have attempted to present discussions of individual transformation separate from the group phenomenon.

Mumford suggested that transformation must begin with deep personal change. "Transformation takes place first in the individual person." It will quickly end, however, unless a social base develops in which there is interplay between the person and the group for constant support (1951, pp. 93, 189). Fields, Taylor, Weyler, and Ingrasci suggested that transformation of personal attitudes, values, and beliefs, specifically a shift from materialism to spiritualism in present times, is necessary to shift to a new paradigm model for social order (1984, p. 237).

Several authors saw personal change as stemming from the intellectual level--shifts in mind, thoughts, or mental perceptions, or deliberate changes in terms of inquiry, structures, or models (Buckley and Perkins 1984, p. 58; Guba 1985, p. 79; Pascarella and Frohman, 1989, p. 3; and Senge, 1990, p. 14). These writers reflected Kuhn's stance that the decision to reject one paradigm and to accept another is based on a judgment which comes from comparing the two (1970, p. 77).

Ferguson made a case for this intellectual shift. She said that the "most critical learning tool is human intelligence." She noted that the brain has boundless capabilities for paradigm shifts; it can reorder and integrate and transcend old conflicts. She added that making mental connections beyond the given, seeing patterns, contents, and relationships, and using many ways of thinking lead to personal discoveries and transformation (1980, pp. 32, 73).

Most theorists suggested that there are different levels of change and that true transformation occurs at a deep level. Buckley and Perkins for example, described

three levels of change: minor (mental attitudes and behaviors change without a shift in perception), major (new perspectives, habits, and patterns develop accompanied by uncertainty, turmoil, and a search for causes), and transformational (a fundamental shift occurs in perceptions, values, and consciousness) (1986, p. 57).

Foster described the deeper change when he stated that "a paradigm 'shifts' through insight, discovery, and conversion, not through rational and neutral evaluation and selection" (1986, p. 57). Many agreed and variously described such an experience as: a moment of insight or realization during which human consciousness achieves new perspectives or new seeing and perceives new awarenesses and new dimensions (de Chardin, 1964, pp. 116, 153; Ferguson, 1980, p. 45; and Pelletier, 1978, p. 6) a change of allegiance due to an "aha" or conversion experience akin to a spiritual change in faith (Fox, 1988, p. 141, Garfield, 1992a, p. 78, and Keat & Urry, 1975, p. 55); a move beyond ego and toward unconscious ideas in response to infusions of excitement and fascination as the human spirit exercises free choice to break out of its limits (Campbell, 1990, p. 66 and Tamas 1991, p. 420); an internal reorientation driven by an instinct toward transcendence of the frustration of historic experience and toward higher levels of consciousness; a new view which is deeply reflected in the psyche and produces a new person (Huffington, 1989, p. 76; Mumford 1951, p. 93; and Simmons 1990, pp. 27, 36).

Pelletier gave, as an example of a personal paradigm shift, an astronaut's experience of altered states of consciousness in space, where astronauts have reported feeling humility, awe, inspiration and profound personal changes as well as instant global consciousness (1978, p. 10). Former astronaut Edgar Mitchell gave this description of his experience:

I recognized that my prior vision of "reality" was far too limited. I realized that our science was incomplete, that our religious cosmologies were Earth-centered and flawed. I recognized that in some sense the universe is conscious and intelligent in ways I did not then comprehend. (1992a, p. 30)

Such shifts lead, according to the authors noted, to new belief structures (de Bivort, 1984, p. 244), faith (Lincoln, 1995a, p. 30), visions of reality (Buckley & Perkins, 1984, p. 58), and world views (Ferguson, 1980, p. 68 and Schaef & Fassel,

1988, p. 26).

Whether or not a paradigm shift ultimately takes place in response to inner urges toward transcendence may never be known. Mumford stated that transformation has never been satisfactorily described in detail, that scholars are unable to describe a change that takes place internally in a single individual. He said it can only be deduced by consequences (1951, p. 100). This reflects Kuhn's and others' statements that a paradigm can only be known by inference from its problems, techniques, models, and so on.

Harman saw transformation as ultimately a social phenomenon. He stated that "the hallmark of transformation is a change at the deepest level of the social structure" (1988, p. 10). Ferguson said that the heart of transformation is a change in the basic social paradigm. She recalled lectures by Ilya Prigogine, who won a 1977 Nobel Prize for his theory describing transformations, in which he spoke of transformation as the natural process of society responding to crises which results in its being thrust into a higher order (1980, p. 25).

Many authors described various aspects of this process. Kuhn said that a paradigm shift in the science community begins with an awareness of anomaly (the perception that nature has violated expectations) and that failure of existing rules stimulates a sense of malfunction, which, if it lasts long and cannot be accounted for, creates crisis and a period of "pronounced professional insecurity." Such insecurity is the impetus for change. "A shift occurs because the issues must be resolved" (1970, pp. 68, 156).

The following theorists described a similar process: Campbell (1990, p. 86), Ferguson (1980, p. 127), Fox (1988, p. 141), Henderson (1988, p. 348), Hubbard (1982, p. 102), Hunter (1991, p. 12), Mohrman and Lawler (1985, p. 153), Morgan (1986, p. 262), Mumford (1951, pp. 25, 215), Nicoll (1984b, p. 6), Pelletier (1978, p. 2), Schaef and Fassel (1988, p. 65), and Simmons (1990, p. 65).

In sum, these authors said that people become aware that they no longer feel at home with the old social and cultural tasks and ideas. The ideas they grew up with no longer match their beliefs and are no longer effective. They experience dissatisfaction and deprivation, and they become disoriented, confused, and insecure.

Then they lose faith and confidence in the legitimacy of norms or in any moral plane, and when they no longer have a conceptual framework in which to fit the information they encounter, life becomes hollow and meaningless. This accumulated insecurity and prolonged personal stress results in a growing sense of crisis and in the realization that, the boundaries of a particular system having been reached, there is a need for a different model. The crisis, then, provides outward pressure and acts as a catalyst or foundation for major, transformational change.

A few authors suggested that societal change can occur on two levels: deep transformational change and a more shallow type of change. Wilber described translation (surface structure change) versus transformation (deep structure change) (1983, p. 252). K. K. Smith described morphostasis (surface change or developmental maturation) versus morphogenesis (an altered core reflected in future generations) (1982, p. 318). These terms were defined respectively by Henderson as "deviation damping" and "deviation amplifying" (1988, p. 119).

Harman (1988, 1991c) asserted that true transformational change ultimately occurs when people act to challenge the legitimacy of old paradigm-based behaviors and withdraw their support and sanction. It is this personal action which, when carried out in numbers, ultimately brings about a social paradigm shift.

Both personal and societal changes in beliefs and behaviors are real and observable. For now, it may be sufficient to reconcile them by concluding that a shift to new beliefs systems includes and is likely prompted by changes emanating from somewhere deep in human consciousness.

Morgan stated that resolving the crisis between old and new belief systems "invariably rests in the dominance of one or the other side or in some kind of reframing whereby differences find a new unity" (1986, p. 266). Many theorists described paradigm shift in terms of the dominance of one belief system over another.

Kuhn stated that judgment from comparing two paradigms results in the decision simultaneously to reject and discard old incompatible theories and to accept and adopt the new. He noted that the transition from one paradigm to another is not a cumulative process, and that one is not an articulation or extension of the other (1970, p. 77).

Morgan agreed. He said, "The acquisition of new ways of thinking depends upon a departure from the old world view," and he illustrated the point by recalling Plato's allegory of the cave--Socrates' story which stated that if one prisoner left his group of fellow prisoners who had been chained to the wall all their lives and had seen nothing but shadows from the fire, the freed prisoner, on returning, would never be able to live in the old way. Further, the old prisoners would reject and fear his tales of the outer world and would tighten their grip on their own reality (1980, p. 605; 1986, p. 199).

Others who echoed Kuhn's sentiment are: Burrell and Morgan who saw closure as necessary to avoid incorporation of one paradigm into another and to allow the new paradigm to develop (1979, p. 24); Mohrman and Lawler who said that there was no such thing as incremental paradigm shifts (1985, p. 156); and Guba and Lincoln who stated that "there can be no compromise on axiomatic assumptions" (1987, p. 330).

Some authors took exception to the whole notion of Kuhn's paradigm shift because of this strong either/or requirement. Gelb said that the notion of absolute, incompatible paradigms is a dangerous dichotomy. It is escapism, it equates the new with good and the old with bad, and it posits a clean break, which inflates the importance of the present. Gelb called for an end to paradigms. What is needed is a holism which would promote dialogue and humility about knowledge and experience as well as lessening of the strength of personally held ideas and diverse values (1991, p. 40, 41).

Schaefer and Fassel saw Kuhn's theory as limited and based on a static world view. Dualistic thinking about competing paradigms is a problem, and challenging such thinking leads to higher functioning. "Perhaps a 'true' paradigm shift is not to something new but to an openness to see what is already present in the world yet not seen because it is occluded by the assumptions of the pervading worldview" (1988, p. 35).

Many authors felt strongly about the need for a less rigid interpretation of paradigm shift. Pelletier said, "Change seems to be linked with partial or total destruction of what has gone on before" [emphasis added] (1978, p. 6).

Kuhn allowed room for this less rigid approach, in spite of his strong statements on rejecting the old to adopt the new. He said that new paradigms are born from old ones and that the new ones usually incorporate much of the previously employed paradigm's traditions, particularly preserving a large part of the problem-solving ability that has accrued to science through its predecessors. Although a complete transition causes the profession to have a changed view of the field, the same data can be handled, but it is handled in a new way--placed in a new system of relations or a new framework (1970, pp. 85, 90).

Bellah et al. (1985, p. 282), Garfield (1992a, p. 67), and Mumford (1951), supported a less rigid approach to paradigm shift. Either-or choices will not suffice, old ideas and traditions are important to provide sense and meaning in our lives, and the challenge is to reconcile and reinstate, perhaps by synthesis, old values around new ones as they emerge.

Zaleznik suggested application of Hippocrates' Equilibrium Hypothesis at the level of society as a means of integrating two belief systems. "The forces toward change encounter the forces toward stability. The new equilibrium contains both the enduring structures of the past with the currents of what is new and changing. The lesson of history is both continuity and change" (1987, p. 3). Recall that Gelb suggested the need for dialogue (1991, p. 41). Dialoguing, seeking equilibrium, reconciling the old with the new, and so on, also reflects Morgan's suggestion that crisis resolution can be accomplished through some kind of reframing for unity as well as through dominance (1986, p. 266).

One method of reframing for unity could be to perceive the crisis-stimulus as creative tension. Both K. K. Smith (1982, p. 363) and Foster (1987, n. p.) suggested that this tension of opposites is the basis for change, and they and others have shown how creative tension can be resolved through dialectic interaction. The dialectic process is a means to understand and ultimately manage change. Any act creates a resisting opposite which in turn creates its opposite, thereby negating itself. This act, in turn creates an opposite, which in its turn also negates itself, and so on. Increasing negations ultimately reach a point of transformation. Continued opposition about how to do something will ultimately end with a new idea of how to do it. A new

paradigm, by creating resistance will ultimately be transformed into something more than the opposite of the old paradigms and will have incorporated some parts of both into the new (1987, n.p.).

K. K. Smith included the notion that an entity automatically creates a boundary beyond which it is not. The boundary summarizes the relationship between what is and what is not, and any change must be made by cooperatively determining the boundary. The boundary belongs to neither; it is only a rule about the relationship. Thus a new paradigm can only be defined by agreement with what it is not (the old paradigm), and the boundary between the two is fluid (1982, p. 334).

Morgan asserted that society continues to evolve through the dialectic process and that the dialectic method of analysis is crucially important (1986, p. 255). He and Foster agreed that dialectic analysis offers immense power to understand the dynamic through which the world changes.

Various authors offered additional ideas about completion of the process of paradigm shift. For example, Kuhn (1970, pp. 17, 77, 150), Mohrman and Lawler (1987, pp. 154, 156), and Theobald (1987, p. 70) said that a paradigm shift is an experience that can't be forced and that for a shift of allegiance to occur, the breakdown of the old paradigm must be truly obvious and that a clear alternate must exist and be available to take the place of the old. Further, for a new paradigm to be completely accepted, there must be faith that the new approach is correct. It must be perceived to work, that is, to solve problems facing the old paradigm that cannot be met in any other way, and it must lead to achievements unattainable under the old paradigm.

Kuhn said that a new paradigm is completely successful when "there is a match between the facts that the paradigm reveals and its predictions" or when it proves "totally successful with a single problem or notably successful with a large number." He cautioned that, although it must seem better than its competitors, the new paradigm "will never explain all the facts with which it can be confronted." He generalized that a new paradigm qualitatively transforms the scientific world and quantitatively enriches it with new facts or theories (1970, pp. 23, 24, 18).

Mumford noted that it is difficult to determine a paradigm shift, but that, even

though they are transcendent shifts in consciousness and cannot be described in advance, they are not supernatural occurrences or impossible dreams. They are natural processes "no less possible than mutations of matter and energy in the physical world," and they do exist. (1951, p. 119). Rost suggested that not just any change should be considered a paradigm shift but that the term should be used to refer to significant or massive changes (1992, n. p.). Ferguson concluded that when a transformation does take place it "ultimately feels right" (1980, p. 33).

Kuhn said that a scientist knows a shift has taken place or that "his perception has shifted when he can make it shift back and forth" (1970, p. 113). Following a shift the scientist is responding to a different world. He has a changed view of the field, the data is placed in a new field, and the nature of research changes accordingly. His perception must be re-educated. He must "learn to see a new Gestalt" (1970, p. 111). Eoyang, reflecting the three elements of a paradigm presented earlier, said a new paradigm brings change through shifts in belief systems, associations, and cognitions (1983, p. 119).

Tarnas generalized that:

As with the evolution of scientific paradigms, so with all forms of human thought. A new philosophical paradigm reflects the emergence of global experiential Gestalt that informs that philosopher's vision, that governs his or her reasoning and observations, and that ultimately affects the entire cultural and sociological context within which the philosopher's vision is taking form. (1991, p. 439)

O'Hara interjected a word of caution concerning adoption of a new paradigm. The human mind fills in conceptual and perceptual gaps. A strong mind set can prevail over contradicting information and can discern a new paradigm for which no supporting evidence can be found. A new, conjectured paradigm can be perceived as superior to the old although it may not, in reality, exist (1988, p. 149).

Several theorists referred to paradigm shifts as recurring or cyclic. Hubbard (1982, p. 105), Kuhn (1970, p. 171), Mohrman and Lawler (1985, p. 153), Mumford (1951, p. 101), and Simmons (1990, p. 27) described recurring shifts as traditional evolutionary spirals composed of sequences of long periods, perhaps

centuries, during which normal lifestyles and primary patterns of puzzle-solving prevail through possible incremental changes. These periods are punctuated by or sandwiched between major shifts--revolutionary selections and transformations which bring qualitative changes and which ultimately become the new norm.

Tarnas said that each paradigm, as a stage in an unfolding revolutionary sequence, loses its luminosity and is felt as oppressive when its purpose has been fulfilled. The emerging paradigm is then perceived as liberating (1991, p. 438). Theobald said that many historians believe that "trying to change these phases is like hoping to hold back the tides" (1987, p. 69).

de Chardin (echoed by Hubbard, 1982, p. 105) described such major shifts as the law of recurrence in which the growth of consciousness is linked with the advance of complexity in a process of universal evolution. An ever-increasing unification or in-folding of humanity occurs, beginning from a disconnected and disordered state, progressing through having all anomalies vanish and through experiencing super-transformation, and ultimately achieving common vision and total harmony. There is "a continual heightening of consciousness in the universe" (1964, p. 78).

Colorado offered an example of this evolutionary process. The 30,000-year-old oral history of Native Americans says the earth has been transformed four times. According to legend, each time the world was transformed it realigned to come into balance. Between each realignment, important learnings were taking place. With each transformation, humanity had to put itself in accord with the natural world again (1992, p. 19).

Ramos did not agree with the spiral-evolutionary view of paradigm shift. He wrote that history shows that shifts were made horizontally, that when troubled people chose to begin over they moved to a new space. In each case there was a break, a beginning and an end of history, rather than serial progression. A historical break is currently imminent, and since there is no more space in this "planetary institutional frame of our time, [the break] will have to assume the unprecedented character of a pure exodus . . . i. e., through the change in people's hearts" (1981, p. 39).

On the basis of the theorists' beliefs discussed above, a definition of paradigm shift is: an inner transformation in which individuals and ultimately societies convert

from a belief system within which they experience anomalies and paradoxes which in turn create stress and disorientation to the point of crisis. This crisis stimulates new thoughts or beliefs and causes converts to choose and reorient themselves to new and higher-level worldviews which they perceive as successful in solving new problems. The new views may incorporate applicable beliefs and practices from the past and may occur as one phase of a spiral series of transformations which take place periodically in the evolution of humankind.

Transition

To say that transition is the period of time during which a paradigm shift is taking place would be correct, but it would not be very enlightening. Closer examination of the term offers more insight.

Buckley and Perkins stated that transition is a period of time and state of affairs which occurs between the identification of a need in a present state and the achievement of that need in a desired and altered future state (1984, p. 56).

Ferguson described the four steps of transition, which she labelled "a journey without a destination," as: entry point, (attending to things that shake up old understanding), exploration (questing for better answers), integration (using intuition and inner knowing for awareness), and conspiracy (finding fulfillment in joining others to conspire for renewal) (1980, p. 94). Attainment and renewal is implied.

Mumford (1951) also described four transitional steps: formulation (alteration of feeling and introduction of new perceptions), incarnation (personification of the new doctrine by a lonely prophet), incorporation (adoption by doubting disciples), and embodiment (alteration and reshaping of every social institution and the whole society, which includes confirmation of the inner, private change). Mumford's process actually included eight steps because he said the reverse process is necessary before beginning the steps to renewal and growth--receding through disembodiment, detachment, disenchantment, and withdrawal from society, or "stripping down from the collective ego to fresh growth" (1951, p. 161).

Both Ferguson's and Mumford's examples reflect both basic change models and the general definition of transition--beginning with discernment of a need,

concluding with fulfillment of that need and suggesting exploration and decision-making in the interval. The examples are interesting attempts to suggest order in the transition process, but for a definition useful for examining our present-day situation, a more detailed exploration is necessary.

Simmons reminded his readers that the term transition implies something temporary or fleeting and that transition is a temporary period of evolvement (1990, p. 49). Although a transition may be temporary, Bennis noted that "[It] takes place slowly [Anyone might] develop a new paradigm in an afternoon, but turning theory into fact could take a lifetime" (1989, p. 30).

Ferguson offered the first reason why the dynamic period between identification of need and attainment of desired future might be prolonged. It does not have a smooth beginning, it "announces itself in sputtering fits and starts" (1980, p. 37). Kuhn said that in science different schools compete for dominance in a given field and that different people in those fields initially confront and interpret similar phenomena differently. New interpretations are limited in scope and precision, and new achievement is sufficiently unprecedented to attract an enduring group of adherents away from competing activity. Scientists are often willing to wait until discrepancies ultimately respond to normal practice, and new interpretations largely disappear. Only when new achievement becomes successful at solving problems recognized as acute by its competitors does it gain status (1970, pp. 10, 23).

Hubbard suggested that a hesitant beginning is caused by the need to overcome the inertia of the status quo (1982, p. 27), and Lodge suggested that it could be due to the limited number of isolated souls who perceive crisis quickly and form the holistic view that crisis is a useful stimulant to efficient change (1987, p. 43).

Several writers noted that transition begins with individuals who quickly perceive the need for change. Campbell (1990, p. 198), Ferguson (1980, p. 24), Mumford (1951, p. 93), and Plummer (1989, p. 10) together said a new paradigm is first expressed by the more flexible individuals in society who are willing to experiment, to reexamine old assumptions, and to experience personal change. They don't wait for society to waken, nor do they set out to change it. They simply detach themselves, turn their attention to higher order needs, and find their own way.

Ferguson (1980, p. 40), Mumford (1951, p. 93), Pelletier (1978, p. 7), and Simmons (1990, p. 17) described how those who experienced personal change begin to detach themselves from local groups and become part of a more universal belief system. They begin to coalesce, share values and meanings, and form clusters, linkages, interpersonal networks, or webs of reinforcement which help carry them through the transition.

Kuhn noted that, in order to triumph, a new paradigm must have supporters who will develop hard and pervasive arguments in its favor (1970, p. 158). The development of a network of supporters with pervasive arguments for a new paradigm moves transition forward into a period of instability, which Ferguson saw as the key to transformation (1980, p. 164).

Capra (1982a, p. 26), de Chardin (1964), Ferguson (1980, p. 164), Garfield (1992a, p. 67), Marien (1984, p. 38), and Mumford (1951, 1955) described aspects of this instability. In sum, they noted that one belief system does not replace another cleanly or spontaneously; they mingle confusedly for awhile. During continuous movements of energy in dynamic interactions complex forces of demands, values, and viewpoints must be differentiated, segregated, and reconciled.

During these interactions, according to Fox (1988) and Mumford (1951), the people outside the newly emerging group must develop new perspectives, give up old customs, shift previously held views, and learn newly required roles; they must be re-educated. According to Ferguson, in order for new insight to develop, certainty must be relinquished and information must be refined and integrated. It must "come together in a new form [with] ideas harmonized into a powerful new synthesis . . . , a new perspective" (1980, p. 72). The relearning necessary for deep level change is defined by Argyris (1982) and Argyris and Schon (1984) as double-loop learning and by Senge (1990) as generative learning.

The process of re-education prolongs the transition period as does the resistance of some of those who must be reeducated, those whom Simmons called "laggards", as compared to "pathfinders" or "pioneers" (1990, p. 28). Ferguson called the resisters "critics," noting that the transition process begins as flexible members of society start to experiment, that traditionalists gradually drift in, but that

critics "call for a return to a lawful, orderly universe, call forward thinkers hedonists and cultists, and attempt to call people back to the old allegiance" (1980, p. 128).

Several authors noted resistance through what Bellah et al. called "distraction and escapism" (1991, p. 273). Harman explained that signs of a breakdown and of transformation, such as behavior patterns becoming inappropriate, conditions changing, and basic contradictions becoming apparent, force people to recognize the need for fundamental change. Such change becomes too threatening and they unconsciously, perhaps neurotically, attempt to hide and avoid seeing the situation (1979, p. 6; 1991c, p. 2).

Bateson showed how the modern psyche attempts to escape contradictions when psychological and spiritual predispositions are absurdly at variance with the world, how inner feelings can be repressed and denied to the point of full blown psychopathic reactions of the schizophrenic (1972, p. 206).

Simmons described how those who are embroiled in change but are not comfortable with either going back to past time or forward to an unknown future may backlash against transition by engaging in defensiveness such as self-indulgence, by increasing fringe activities or retreating to ritualistic behaviors, by becoming inert and perhaps giving up freedom to dictators, or by choosing to die (1990, p. 49).

Lamm concluded that resistance, in whatever form, can continue to the point where some people and institutions remain unwilling to become productive until forced by the collapse of the old structures (1985, p. 1). Theobald suggested that for those who finally, whether by force or not, become aware of new patterns at a late date, the shift will appear incredibly rapid. "They have no idea of the amount of time which went into the preparatory work" (1987, p. 70).

Mohrman and Lawler noted that it is only after a transition is complete that real progress can be determined because during the process there is no real definition of progress since each paradigm invalidates the criteria of the other. After a transformation occurs, progress and accomplishments are viewed as sensible stages in a normal process (1985, p. 156).

Ultimately, according to Bellah et al., "personal transformation among large numbers is essential" for the transition process to be complete (1985, p. 286). Allen

and Kraft said that true transformation must reach the far corners of the earth and affect many layers of human society (1984, p. 36).

Kuhn stated that small revolutions or paradigm shifts, beginning within a scientific specialty and affecting only the members of that specialty, can occur but that upheavals in paradigmatic thought must move on to transform neighboring sciences. A transition period is complete when the profession has changed its view of the field, but a paradigm shift must ultimately move to the worlds of the philosopher and educator, then must finally include everyone. "Transformation can be achieved only through a global scale learning process" (1970, p. 106). This is a gradual process. Adoption of a new paradigm is not finally completed until the opponents whom it didn't convince finally die out and the older schools disappear, leaving a new generation familiar with the new paradigm from having grown up with it to insure the complete conversion (1970, pp. 19, 106, 150).

Harrison (1984, p. 99) and Mumford (1951, p. 288) both suggested that transformation can be considered to have taken place at a crucial moment when it becomes plain that a critical mass of humanity has been reached and a new view has matured and has been transmitted throughout the human community, that an evolutionary leap has been made. Mohrman and Lawler suggested that a critical mass is reached when collective consciences and practices begin constructively re-enforcing one another (1985, p. 150).

Keyes advanced the popular theory of critical mass when he reported the Hundredth Monkey phenomenon. Young monkeys being studied by scientists on an isolated island began washing their sweet potatoes before eating them. Only the mothers who had been taught by their offspring and the young ones washed their potatoes. Some years after the first occurrence, almost all monkeys on the island were suddenly seen washing their potatoes. Then, without explanation, other scientists reported monkeys all over other remote islands washing their potatoes. An ideological breakthrough had occurred. Keyes' report on the phenomenon read:

Thus, when a certain critical number achieves an awareness, this new awareness may be communicated from mind to mind. Although the exact number may vary, the Hundredth Monkey Phenomenon means that when only

a limited number of people know of a new way, it may remain the consciousness property of these people. But there is a point at which if only one more person tunes in to a new awareness, a field is strengthened so that this awareness is picked up by almost everyone! (1982, p. 17)

Some authors wrote of a belief system achieving dominance rather than of its adoption at a critical point or number. Rost for example, described a dominant paradigm as one in which beliefs, models, and practices (Kuhn's three aspects of a paradigm) significantly influence a given system, profession, society, or organization. Dominance doesn't mean 100%, but a high majority. Significant minority or alternate views are also allowed to exist along with the dominant one (1992, n. p.) This occurrence is noted in the history review below.

Mumford envisioned a new paradigm as total--a dynamic integration and renewal ultimately occurring through every institution, group, and person in society so that "something like a spontaneous collective decision will be possible" (1951, p. 20).

Whether or not either a critical mass or dominance of a new paradigm has been reached in our present time has not been determined. Various views are introduced in Chapter Four. The following definition, derived from the foregoing theorists' views, is offered as a basis for that discussion.

Transition is an extended period of instability begun by the perception of need for a transformation during which aware individuals surface, develop followers, and coalesce while unready individuals avoid and resist change. Ultimately, through deep-level re-education, a point is reached at which a dominant number accept integrated beliefs and achieve a higher-order future. Remaining resisters eventually die out, the new paradigm is adopted, and the transition becomes complete.

Leaders and Leadership

Leaders

We have learned, so far, that a paradigm is a belief system shared by a community of adherents; that a shift occurs when individuals within that community, and ultimately the whole community, convert to a new set of beliefs; and that the

process begins with some individuals' perceptions that the old beliefs no longer address the problems of the day. To more fully understand the process it is necessary to examine the human element. As Mumford said, "The principles of science are mere affairs of method; personal forces are the starting points of new effects The dynamic agent in this transformation will be the individual human person." A single decisive personality can determine the direction and movement of conflicting social forces (1951, pp. 228, 229). Ferguson stated, "One person can create a transformative environment for others" (1980, p. 412), and Mitchell saw transformational ideas as coming from individuals (1992b, n. p.).

Self-exploration. Many theorists have attempted to understand how or why certain individuals can determine direction, create environments, and so on. Eoyang saw people who may significantly alter the world as being prompted by some insight, revelation, mystical experience or other profound learning (1983, p. 114). Simmons noted that people who emerge as leaders in transformational times are exceptional in that they embody an intense distillation of some inherent quality (1990, p. 34).

Bennis and Nanus (1985, p. 65) and Jones (1992, p. 9) suggested that emotional wisdom and personal mastery come from a process of self-examination. Harman stated that as individuals explore and develop their "own deep sense of purpose, the secret of life," they achieve a clarity of mission (1988, p. 165). Senge said that inspiration or a "pattern of becoming" which gives unique meaning to personal aspiration emerges from self-examination. He labelled it a "purpose story" (1990, p. 345).

Campbell encouraged the self-exploration process and advised people to "find your life's true passion and follow it, 'follow your bliss' When you have the unmistakable experience of the aha! then you'll know you're riding on the mystery When you get yourself off course or accept some moral principle that isn't related to what is natural, dismiss it and follow the bliss" (1990, pp. xiv, 211). Mumford wrote that "the new [emerging] person will have honestly confronted his own life and redirected his purposes based on his fresh vision of the good" (1951, p. 289).

Foster described this honest confrontation as engaging in critical thinking and

imagining--the process of examining basic assumptions and perceiving different consequences. For human agents to intervene, they must first thoroughly understand both the community and themselves. They must be critical, and such critique, according to Foster, is not an option (1988, p. 21).

Grob also emphasized the importance of self-critique. He said:

Without willingness to examine one's life, leaders become identified with their purposes which inevitably congeal into fixed doctrines or dogmas; *no longer nourished by a wellspring of critical process at its center, leadership "dries up" and becomes, finally the mere wielding of power in behalf of status and ideals* (1984, p. 264)

Critical self-examination, Foster noted, is an ongoing and creative experience which is never accomplished (1988, p. 24). Along with intuitive introspection, critical analysis must include what Nanus described as the forces in the outside world and society's momentum (1989, p. 82). Foster said that external information could provide the impetus for leadership behaviors, noting in a critique of political-historical models of leadership that such models suggest that leadership is brought out in certain individuals voluntarily and by circumstances (1988, p. 7).

Fay concluded that an examination of self and society leads to "a genuine narrative" or a perception of an underlying unity of human consciousness and human activity as well as some underlying principles of change (1987, p. 69). Foster suggested that through this process, leaders become clear about the circumstances of their influence and that identifying the genuine narrative of the relationship between subconscious wants and needs and conscious awareness may be the major contribution of leaders to their community (1988, p. 35).

Many theorists agreed that thorough self and social examination leads to the perception necessary to direct events. Cleveland (1982, p. 168) and Pelletier (1978, p. 8) wrote that the process of transformation begins with individuals who see the world in a new way, who can perceive the situation as a whole, who conceive of new ways to resolve issues, and whose concern exceeds their confusion. Mumford described those individuals as having developed new attitudes, a sense of alternatives, and personal confidence in the power of creation (1955, p. 308).

People who have the ability to perceive a situation wholly and to conceive of innovative alternatives are said to have vision, which theorists suggested stems from both that inner quality held by exceptional individuals and from their self-examination.

Personal vision. Nanus (1989, p. 78) and Pascarella and Frohman (1989, p. 132) wrote that there are limits to rational processes in contemplating the future, especially in situations of complexity and uncertainty, and that vision is arrived at intuitively by those whose minds are operating in a future tense.

Senge explained that a vision is a calling; it "comes from within," from a sense of destiny, and it provides a picture of the desired future or destination without which nothing happens (1990, p. 147). Mumford emphasized the power of the vision, saying that emergent individuals are pulled toward a picture of the whole in which humanity has its being, by "a sense of the richness of possibilities" (1951, p. 290). Ferguson described this picture as belief that people might transcend 'normal' consciousness and reverse the alienation of the human condition" (1980, p. 45).

Vision, then, includes belief in accomplishing some future improved state, some desired purpose. Although the terms vision and purpose are often used interchangeably, a difference has been established by some scholars. Harman (1988, p. 166), Land and Jarman (1992b, p. 27), Rost (1991, p. 119), and Senge (1990, p. 147) contributed to understanding that difference.

According to these authors, vision relies on an underlying sense of purpose; purpose is the heart of the vision. It gives those with personal mastery a sense of why they are alive. It provides a holistic, long-range frame of reference or internal guidance system for maintaining direction and reference points for making choices in a complex world. Vision provides an appropriate scale for the more general, abstract purpose, and it stimulates commitment.

Nanus pointed out, however, that people must understand the purpose behind the vision or they will resist the efforts of those who are out to change the world (1989, p. 75). Rost noted that purposes are held in common between those who originated them and those who perceive mutuality with their own purposes and that, out of these mutually held purposes, common visions are built (1991, p. 120).

Purpose and vision stimulate commitment on the part of those out to change the world as well as those who join them. Bolman and Deal (1984, p. 298), Ferguson (1980, p. 199), and Theobald (1987, p. 157) noted that those with vision have an inner drive or commitment to both the integrity and application of their visions; they know both how to dream and how to implement.

Individuals with a commitment to their vision take steps toward accomplishing it. Mumford saw those who take the lead in the transformation process as persons who are willing to "break existing patterns" and, with the "comfortable automatism of the past," to make departures, persons who detach themselves, strip off the symbols of the local culture, and no longer conform to customs. He said that they are newly illumined individuals capable of living outside the group who enter into a fuller inheritance than that of group member, and who make the wider world their home (1951, pp. 95, 308).

Campbell placed the emergent individuals in the context of the age-old, universal myth of the hero's journey, in which the legendary hero must leave the old and go in quest of a germinal idea with the potentiality of bringing forth a new thing (1990, p. xvi).

Harman pointed out that, in the world in which heroes quest, disaster is so predictable as to suggest the sojourners as saviors who revise aspirations, revive faith, and lead people out of the wilderness. The journey places their survival in jeopardy, and "it is in the nature of complexity that no one savior will do" (1979, p. 65).

Several authors agreed, noting that those individuals who detach themselves and emerge from their former group unite in a common cause. Pelletier said that individuals with new insights begin to coalesce, and he agreed with Mumford that, although a single prophet might not be welcome and might fail, revitalization of the cultural order is the critical issue (1978, p. 7). Mumford wrote earlier that the task of an individual Messiah of the past ultimately falls on all. He said that, instead of a single transforming agent, there are millions of them in every walk of society in every country. He foresaw a widespread democratic transformation (1951, p. 120).

Ferguson wrote of historical transformations having been begun by a "vanguard, articulated by [the] most gifted thinkers, artists, and visionaries" (1980, p.

32). A creative minority of individuals from every layer of society become transformed by their inner discoveries, unite to summon a common vision of a new way of life, and engage in the effort to raise life to a new stage (1980, p. 32). Theobald emphasized that to move in new directions, the many innovators must listen to and trust one another. They must be unified (1991, p. 59).

Although many theorists focused on those exceptional individuals who respond to some inner drive to initiate change, clarify their purpose and vision through self-examination, and emerge from society to join others in the cause of transforming social problems, many others wrote about the interaction between those individuals and others with whom they may engage in order to move toward accomplishing that change. For clarification let us tentatively label the individuals as leaders and the interaction as leadership.

Leadership

Bolman and Deal expressed such a delineation when they described leadership as a relationship, saying that leadership is not just what a leader does, it is what happens in the relationship between leaders and followers (1991, p. 410). Rost (1991) also emphasized that leadership is a relationship among leaders and followers, and he commented on the term followers. He noted that it is a holdover in meaning from the old industrial model and that it connotes passivity in the relationship with leaders (1991, p. 107). In an effort to develop new language symbols and perceptions for a new paradigm, therefore, I use the term members to refer to those who join leaders in the leadership relationship. The old term is used only in the context of the old paradigm or when direct quotations require it.

Many authors have offered many ideas about the process of leadership in the contexts of transition and the future. The major areas of interest are vision and leader-member roles and relationships, along with topics related to those such as alignment, empowerment, education, and symbolism.

The remainder of this section includes exploration of these topics which leads to a composite picture of leadership in transformational times. That description is then compared to the Rost (1991) model of transformational leadership which ultimately leads to the formulation of a definition of leadership intended for use in

exploring our current period of turmoil.

Shared vision. When leaders bring their personal visions to the leader-member interaction process, vision becomes what theorists consider to be one of the most important facets of leadership. Adams and Spencer said that the primary role of leaders is to "activate, establish, and nurture a focus on vision, purpose, and outcome" (1986, p. 10). Bolman and Deal reported that the only universal characteristic found in studies of good leadership was vision (1989, p. 411).

Gaster (1992, p. 114), Nanus (1990, p. 14), and Ritscher (1986, p. 63) agreed with Rost's (1991, p. 120) statement that in leadership, vision is developed among leaders and members and is based on their mutually held purposes. Shared vision comes from group consciousness, which is the most preferable feature for leading, from which evolves the most desired outcomes, and out of which are determined the most worthwhile attitudes, values, and relationships.

The role of vision in establishing positive attitudes toward the future was discussed by Anderson (1992, p. 25), Gardner (1990, p. 10), Mumford (1951, p. 207), Senge (1990, p. 345), and Theobald (1987, p. 51). Together they said that vision gives people a unique meaning to their personal hopes and aspirations, a sense that problems are solvable, and a belief in the future and in themselves. It provides an understanding of what humanity wants in future--the ideal image of what it may become, of humankind's cosmic purpose.

The authors continued that this ideal, summed up and framed in a conscious philosophy, is a psychic necessity. Without its support, humans cannot live--growth is merely a procession of events in a time series. They agreed with Theobald's observation that the Biblical statement "without vision the people perish" remains true and with the notion that vision provides positive direction for actions, roles for community members, and the stimulation to accomplish it.

The idea that vision not only supports positive attitudes but that it motivates accomplishment as well was strongly supported by a number of theorists. Brown and Bennet (1992, n. p.), Gardner (1990, p. 11), Harrison (1984, p. 103), and Mumford (1951, p. 22) all noted that the articulation of vision and clear intention is not only a source of positive attitudes but also a source of vitality which guides energies,

engenders courage and risk-taking, and promotes journeys of discovery.

Harrison pointed out that studies of high performing people such as athletes confirm that visualizing results affirms accomplishments and stimulates high performance. The evolution of consciousness has now reached a point at which we recognize the human ability to create reality with our thoughts. The idea of manifesting reality has been around for some time, and he cited as examples both Peales' Power of Positive Thinking and Eastern philosophies (1984, p. 104).

Several authors supported this belief. Brown and Bennet asserted that the future never just happens, that it is created (1992, n. p.). One of Adams and Spencer's leadership operating premise is: "What we hold in our minds as an expectation will have a tendency to occur" (1986, p. 9).

Vision is a primary aspect of the leadership process, then, because it generates both perceptions of desired outcomes and the energy to move toward them. Ritscher noted that inspired vision, the core of leadership, is a spiritual phenomenon. When vision comes out of the consciousness of the group it is a powerful experience. It taps into a higher place and calls people to embrace something more expansive than themselves (1986, p. 63). Senge pointed out that "mankind's nature is to ascend to greater awareness of our place in the natural order" and that the leader's vision is the means (1990, p. 347).

Mumford believed that not only was the leader's vision the means to raising humanity to higher levels of awareness but that it is the leader's responsibility to do so--to feed the spirit. When those who become personally transformed detach themselves, they emerge from animal necessities and move toward achievement of more ultimate goals. In opening a new stage of development for humanity at large, they speak from cosmic as well as human perspectives and they represent the highest side of people's nature. These leaders must espouse a doctrine capable of bringing together the severed halves of humanity (creativity versus necessity, for example) and of giving people the potential for freedom (1951, p. 96).

Becker (1973, p. 6), Campbell (1972, p. 221), DeForest (1986, p. 215), and Nanus (1989, p. 54) all agreed, saying together that humanity's noble side is capable of greater acts but that people need spiritual and emotional harmony and direction.

The leader's vision is needed to unite and feed the spirit as well as the mind and body, to guide humanity to greater heights, and to establish, validate, and support the norms of a moral framework with which people can judge what is truly meaningful and worth doing.

Eoyang perceived the importance of raising the moral order. The way to affect transformational change is to challenge established value preferences and to introduce new ideas which are superior in importance-- by challenging self-interests and promising superior social consequences, for example. The success of social challenges is historically rare, however (1983, p. 118).

Ferguson said that the heart of transformation is change in the basic social paradigm (1980, p. 203). Burns, in emphasizing the end values of his transformational leadership model, reflected concern for higher purposes and principles "validated by the most enduring criteria of justice and humanity" (1978, p. 429).

Foster saw elevating people to new levels of morality as one aspect of emancipating leadership, which he stated "must be oriented to social change." When people see a good and proper life, the ethical form of leadership is away from individuality and toward a community with democratic values. Leadership is "always a critical practice"--leaders continually examine and critique conditions in order to identify areas which need to be resisted and re-ordered--, and it is "oriented toward a reconceptualization of life practices where common ideals of freedom and democracy stand important" (1988, pp. 25, 30).

The importance of shared vision, then, was well established by theorists. They saw it as essential for positive attitudes, as highly motivating, and as imperative for raising humanity to higher spiritual and moral levels. They also saw its attainment as a major focus of the leader-member relationship.

Leaders and members: A relationship. According to Senge, the relationship between members and leaders in the leadership process is a paradox because it is both collective and highly individual. An ancient Eastern saying suggests that the best leader is the one about whom the people say that they did it themselves (1990, pp. 360, 341).

Burns (1978) described the roles of leaders and members as separate in his transactional model of leadership, in which he said that members exchange their commitment in return for realization of their personal and collective needs (1978, p. 425). Etzioni (1987, p. 73) and Mumford (1951, p. 107) also pointed out the separate and distinct responsibility of members to develop commitment, which Mumford said included loving and imitating leaders and which he saw as necessary so that people with diverse backgrounds and histories could achieve common understanding and combine their efforts.

Harrison (1984) also subscribed to separate roles, but he reversed Mumford's view. He described leadership as stewardship, where leaders bring love and serve their members. Theobald, who also subscribed to the notion of "servant leadership," noted that "women generally use servant leadership styles more easily than men" (1987, p. 89). Helgeson described these styles or qualities as: creating ambiance for interactions, negotiating to build relationships, listening, and showing concern for human values (1990, p. 247). Senge agreed that this type of leadership will be required in the future, and he noted that changing to female-dominant patterns "will stress cultures profoundly" (1990, p. 89).

Etzioni (1987, p. 73), Foster (1988, p. 38), and Nichols (1992, p. 387) saw leaders' and members' roles as separate and interchangeable, saying that members can, and often do, assume the leadership role and that leaders can become members. Etzioni suggested that leadership is really fifty percent membership. Sergiovanni, in an interview with Brandt, stated that leaders become better leaders by being better members--by better articulating community purposes and by becoming more passionate about them (1992, p. 47).

Theobald supported the idea of exchanging roles through what he called "sapiential authority" and which he defined as "putting the right to make decisions in the hands of those who are most competent." Since nobody is competent at everything, leaders must learn to lead where they can and follow when they should (1987, p. 89). Ferguson (1980, p. 217) and Kinsman (1986, p. 20) agreed, saying that different kinds of skills are needed under different conditions, particularly in an ever-changing future.

Rost described leadership as a multidirectional relationship where both members and leaders persuade other members and leaders and in which leaders and members may change places. Rost clarified, however, that not all members will become leaders. Some people don't have the personal development needed to be leaders. The relationship is inherently unequal because leaders have more influence than most members. They are willing to commit more resources to the relationship, and they have more skill at using them. Members can choose to become more active and exert more influence, but they will still be members. The relationship is one of leadership. Hence, there will always be a difference between leaders and members although they may exchange roles. In our complex times, people will be involved in many leadership relationships and that they may be leaders in some situations and members in others. In addition, not all people will even be members. Those who remain passive and choose not to get involved will have no influence (1991, pp. 105, 107).

Nicoll concluded that the relationship is holographic (each part containing the whole) as well as interactive (with wisdom and meaning developing from interplay) (1986, p. 33). Many authors saw leadership as the result of a holistic as well as interactive relationship between leader and member roles. For example, Foster said that leaders only exist because of a relationship with members and that transformative leadership, which is the result of shared roles and mutual interactions and negotiations, only exists within the social community. He illustrated the communitarian role of leadership by noting that individuals share their visions and develop a common narrative (1988, pp. 7, 8).

Burns (1978) and Ritscher (1986) both saw leadership as a communal relationship--Burns' transformational model focusing on common purposes carried out by leaders and members together, and Ritscher emphasizing unity through teamwork, connection, caring, and warmth.

Lipnack and Stamps labeled leadership *polycephalous* from the Greek, meaning many-headed. In the ideal situation, all participants share in the leadership function. In practice, however, leadership is more plural and cooperative than multi-headed (1987, p. 24). Rost said that leadership is a complex, shared or collaborative

phenomenon with more than one member and typically more than one leader. It is "the sum total of all the interactions among all the leaders and followers in that relationship" (1991, p. 111).

Many theorists saw achieving unity and common purpose within this plural and complex relationship as the process of alignment.

Alignment. Authors described alignment as the process of determining mutually held visions from participants' purposes. Leaders come to the relationship with personal purposes to create new social realities. At this point, according to Foster, they must negotiate visions and ideas with potential members to develop shared narratives (1988, p. 29). Mumford noted that the process requires effort and that diversity must be replaced with unanimity (1955, p. 107).

Nichols saw the alignment process as pathfinding and culture building, as changing the way people look at the world and relating to each other to bring new, carefully-worded missions to life (1992, p. 388). Foster and Pascarella both saw it as democratic leadership. Foster said that leaders must be concerned with meeting members' needs, with helping them achieve their purposes, and with transforming their values so that they too can exert leadership (1988, p. 38). Pascarella stated that "effective leadership depends on bringing people together in common purpose when they are aware that they are free to choose not to commit to that purpose" (1984, p. 174). Pascarella and Frohman disagreed with Foster, however, that leaders change members' values. They said:

Changing peoples' values is not what leadership is all about. Purpose-deriving leaders bring out what is already there. They change not what was inside but what comes out. They uncover what people are committed to or will commit themselves to. They transform not people but the way they are organized and focused. (1989, p. 116)

Rost (1991, p. 118) and Senge (1990, p. 206) both emphasized the mutuality of purpose. They said that leaders must remember that their vision doesn't automatically become the group's vision, that visions imposed from the top down get compliance rather than commitment, and that the relationship can't reflect only what the leaders want or what the members want. It must reflect both. Brown and Isaacs

saw understanding their members' purposes and arriving at a purpose that is of the whole as a leader's primary role (1991, p. 8).

According to theorists, achieving mutually held purposes creates a shared picture of a preferred future. Bernis (1989, p. 23), Senge (1990, pp. 9, 206), and Stephens and Eisen (1984, p. 189) all wrote that a common purpose and a shared picture are necessary for unified effort and group accomplishment. Building and holding a shared vision creates common caring. Visions are truly shared when two or more hold the same picture and are committed to one another achieving it. Jointly perceiving a desired future fosters long term group commitment and compels participants to acquire support for it. It focuses attention on a larger whole and detaches focus from individual limitations and immediate concerns. Further, adoption of such a picture prompts those who hold it to see it as if it exists and stimulates their capacity to create it.

Several authors pointed out that detaching from individual concerns and attaching to the unified whole requires trust, which Nanus saw as required for leader legitimacy (1989, p. 100). Gilliss described a trusting relationship as one in which leaders and members experience belief in interdependence, empathy and acceptance of one another's views, commitments to others' values, and faith in others' best interests as reflecting their own (1991, p. 21).

Senge (1990, p. 211) and Ritscher (1986, p. 67) said that such a relationship is based on truthfulness--the bedrock of shared vision--and on openness, which requires an act of faith in self and others, a tough-minded optimism with high expectations and willingness to provide support. From such openness, according to the authors, comes unguarded candor and a willingness to establish an atmosphere for others to share and from which to create integration.

Nicoll described dialogue as a trust-building process of open discussions. Leaders and members interact in synergistic relationships, learning to recognize divergent interests, release love, and focus on the process of creation and on the long term relationship (1986, p. 35). Theobald emphasized that people are becoming more willing to engage in open dialogues. They recognize that there are no tidy responses to complex questions and that they are willing to respond to challenges and discuss

potentials (1987, p. 100).

Burns and others described this trust-based interaction to achieve unity as a symbolic act. Burns saw the interactive process as the context in which transforming leaders influence motives and goals through "the symbolic solution of internal and external conflict" (1978, p. 244). Eoyang also saw it as primarily a symbolic process, stating that "transformational leaders may serve to reconcile psychological contradictions between various cognitions and experiences by providing a coherent symbolic context which incorporates the disparate elements into a meaningful and consistent Gestalt." Having achieved resolution of psychological conflicts, people experience significant changes in established beliefs and understandings (1983, p. 115).

Rost and others saw interactions between leaders and members as more than symbolic. Rost described them as more than rational discourse, as processes of engaging in noncoersive influence, that is, without involving use of authority or power, to persuade or have impact on members in the relationship (1991, p. 105). Helgeson stressed the noncoercive aspect of such leadership discourse. "The voice of the covenantal leader must be strong but in no sense authoritarian" and that outcomes are covenantal versus contractual (1990, p. 71).

K. K. Smith, who discussed rational discourse in relation to the dialectic process, also saw it as a real, sense-making, rather than symbolic, interaction (1982, p. 346). Foster noted that the dialectic process is more closely related to transformational leadership than to any other leadership model (1987, n.p.), which suggests the democratic, dialectic process as a means of communicating openly and developing trust in leadership interaction aimed at achieving mutual purposes through alignment.

Empowerment. Discussions of alignment frequently include various terms suggesting the presence of energy. For example: People are driven by concern for the cause (Autry, 1991, p. 206); pulling toward goals energizes people (Bennis, 1989, p. 23); changing viewpoints stimulates activity, brings it to life (Nichols 1992, p. 387); alignment merges strength and will, it is a power-created relationship (Gilliss, 1991, p. 21); shared vision has impressive power, it is a force in people's hearts, it

inspires them, it compels their courage to do whatever is necessary to acquire it (Senge, 1990, p. 206); aligned individuals have extraordinary influence (Kiefer and Senge, 1984, p. 70); people coalesce into self-organized groups to powerful effect (Ferguson, 1980, p. 50); leaders see members as creators of energy (Foster, 1988, p. 38); leadership gives energy, it empowers (Bennis, 1989, p. 22); and people use their ability to generate ideas and leaders tap the power (Pascarella and Frohman, 1989, p. 36).

Theorists referred to the energy stimulated by a shared vision as empowerment. Some discussed it as something that is generated externally, that leaders do for members, while others saw it as an internal force. Buckley and Steffy suggested leaders as an external source of power when they said that leaders release and delegate power to associates--they give away power on a visible plane to acquire it on invisible planes, they exchange power and encouragement for individual realization of potential (1986, p. 241). Foster saw leaders as generating positive power by elevating people to new levels of morality (1988, p. 30).

Kiefer said that leaders empower members to use their creativity at a higher level and to create what they want through teaching or coaching (1986, p. 191). Lundin and Lancaster also said that leaders empower through teaching-- teaching members how, then providing encouragement and rewards (1990, p. 19). Many writers noted the importance of education and learning in the leadership process, and it is discussed more fully later in the chapter.

Senge said that power is generated internally, and he explained how. He said that holding the vision of a desired future can be difficult and that holding such a vision while concurrently telling the truth about the current reality related to that vision stimulates acute awareness of the gap between the vision and the reality. This gap generates energy in the form of creative tension (1990, p. 142).

Nanus illustrated Senge's theory. First he qualified the kind of vision that would stimulate creative tension. "A true vision must provide a clear image of a desirable future, one that represents an achievable, challenging, and worthwhile long range target toward which people can direct their energies." Such a vision creates farsightedness and clear intention beyond present constraints (1989, p. 68).

Nanus' explanation mentions the two basic elements of creative energy: intention and constraints. The words intention and tension come from the same Latin root: *tendere*, meaning stretch and are illustrated by a rubber band pulled forward at one end and held back at the other. Evidence of this energy is seen when one end is let go. Senge noted that there are two ways to relieve this creative tension--to reduce the vision or to change (and I would suggest advance) reality (1990, p. 150).

Mumford illustrated creative tension when he stated that "with the illuminated person, the static culture turns into active drama with conflict between higher aims and anxiety about security and survival" (1951, p. 99). Martin Luther King suggested applying the idea when he said, "[We must] create the kind of tension in society that will help men rise from the dark depths of prejudice and racism" (1986, p. 54).

Senge saw leaders' core task as continually generating creative tension--constantly focusing and refocusing the vision. The most effective people are those who continue to hold their vision while remaining committed to seeing reality clearly (1990, pp. 357, 149). Foster agreed, saying that "the most crucial and critical role of leadership is to show new social arrangements while still demonstrating a continuity with the past" (1988, p. 28).

Bennis and Nanus concluded that empowering others means helping them to sustain their intentions and to translate those intentions into reality as well as assisting them to sustain those intentions (1985, p. 241). This supports Harman's belief that "the function of leaders is to empower others to accomplish goals that are emergent in the situation" (1986, p. 109)

This view suggests that, although the real source of energy, the intention, is internal, leaders can assist in generating that energy from external positions. The two most commonly suggested means by which to do so are: education and the use of symbolism.

Education. Theorists saw education as reflected in leadership throughout the alignment/empowerment process. Kiefer and Senge said that leaders are teachers who hold responsibility for sustaining the vision and catalyzing alignment (1984, p. 78). Senge said that one of a leader's most important roles of leadership is to design learning processes whereby people can develop their mastery and can come to deal

productively with the critical issues they face (1990, p. 345).

Foster cited the educative function as a characteristic of emancipating leadership. Through education, leadership is stimulating the intention to achieve a desired future--desirable because it aims at a higher level of human consciousness and well being--and that leaders must educate by critiqueing oppressive traditions and aiming for transformation of those conditions (1988, p. 27).

Ferguson, in keeping with the notion that power is internally generated, said that no one can persuade another to change. People often fear letting go of old beliefs, but they must decide on their own how conscious they want to be (1980, p. 112). Nichols suggested that the way to help people reduce their fear and uncertainty is to help them understand what is going on around them (1992, p. 388). Eoyang saw this as a cognitive process. Transformational leadership "introduces cognitive changes which incorporate both old and new beliefs and values in a different equilibrium than before" (1983, p. 117).

Foster suggested critical thinking and critical analysis as the means for people to self-reflect and to examine the logic of opposites between their basic assumptions, fears, and old beliefs and their desired futures. Critical analysis gives them the opportunity to review the present as it has been received from history in relation to new social structures. Critical thinking stimulates double-loop learning, which Foster saw as true transformation (1987, n. p.; 1988, p. 27).

Senge also emphasized the importance of deep learning, which he called generative learning. This type of learning takes place only when people are striving to accomplish something that matters deeply. Senge contrasted generative learning with adaptive learning which takes place without vision or real meaning. Generative learning takes place when people become excited about a vision, and it expands their ability to create (1990, p. 14).

The creative ability is often discussed in relation to another type of deep learning, which may or may not be generated by designed learning processes or by critical thinking: intuition. Harrison stated that he had never seen anyone change in a fundamental way through rational planning but that intuition carries deep influence, especially when guided by strongly held intentions (1984, p. 104). Harman noted that

the creative/intuitive mind transforms decisions from a deeper context than the rational mind and that it is the "function of the leader to empower others to use their creative mind" (1986, p. 109). Ritscher emphasized that a clear and balanced mind is necessary to retain vision and that such focus requires both rational thinking plus intuition and creativity and that it can be trained (1986, p. 64).

Education, then, is an important and integral aspect of leadership by which those involved deepen their learning, both cognitively and intuitively, for the purpose of moving forward toward preferred futures.

Symbolism. Harman noted that the rise and fall of images precedes or accompanies the rise and fall of cultures. He also noted the importance of holding an image of newly desired societal aims (1979, p. 114). Communicating and solidifying such an image requires the use of symbols, as Garfield observed. "Vision remains in the imagination until it is communicated to others" (1992a, p. 377).

The leader's responsibility for generating appropriate symbols was pointed out by Eoyang (1983, pp. 110, 116) and by Bennis and Nanus (1985, p. 39), who, together, said that leaders articulate and define what has previously remained implicit and unsaid, and they identify those themes which are particularly important, then they construct symbols, images, metaphors, and models that are clearly directed to those themes which will arouse common reactions and provide a new focus for attention. Martin Luther King illustrated the last point when he told his followers, "It is important to dramatize the issue so that it cannot be ignored" (1986, p. 55).

Helgeson stressed that visions must be voiced to become unifying. An emphasis on voicing the vision rather than on the vision itself contrasts the difference between female and male leadership. Emphasizing the vision focuses on outcomes, which reflects the more male, mechanistic, goal-oriented model of behavior, whereas emphasizing the voice focuses on the means for getting the vision across or on connectedness, the more female model of conduct (1990, p. 223). Leadership is an on-going process rather than an end result and voicing (the voice itself being a principal medium for transmitting symbols) or otherwise communicating the vision is of primary importance to that process.

Eoyang emphasized the importance of selecting the appropriate symbols to

modify cognitions and to create new preferences. The value of the symbol is a function of the importance attached to it and of the association it invokes from the individual evaluating it. It is the responsibility of leaders to create new meaning sembolically, to establish new contexts, and to reorder old associations in order to promote recognition of a greater good or superior social consequence. After interacting with symbols which promise a desired future, the result could be a substantial reordering of priorities (1983, p. 116).

Several authors suggested different means of using symbols in leadership relationships. Buckley and Steffy, for example, noted the power of using symbols as affirmations--simple, positive declarations of future states as though they were already achieved (1986, p. 238). DeForest offered the use of celebrations as effective means to nourish the spirit and to portray desired futures (1986, p. 64). Autry (1991, p. 74) and Pondy (1983, p. 150) suggested metaphors as the primary devices by which leaders create symbolic realities and develop alignment. Autry saw metaphors as having the transformational power to change the way we think about our world. Leadership has a great deal to do with creating and changing metaphors, and "we [leaders] intend metaphors as inspiration to make things appear as they are not now but should be" (1991, p. 74).

Foster said that conveying the relationship between desired futures and the present involves the use of narratives--stories of human lives which have a sense of meaning and continuity and which provide future generations with a degree of connectedness to the past. Change calls for new narratives which can be presented by new individuals interpreting old narratives in their own fashion (1988, p. 29).

Nanus wrote of communicating the vision in terms of models, pointing out that leaders can keep members' energies aligned and help them transcend confusion by providing a convincing model of the greatly improved situation they are trying to create for the future (1989, p. 54).

Ritscher hinted at another application of symbolism when he said that communicating the mutual vision requires a performer (1986, p. 64). Bennis gave a broader hint when he said leaders must articulate and embody the ideal (1989, p. 23). Ferguson opined that leaders can't convince people to change but that they can foster

a shift in those who are ready for change by showing through example (1980, p. 202). Nanus indicated that leaders provide members with a framework on which to judge what is worth doing and what are acceptable means by providing a role model (1989, p. 54). Burns emphasized the importance of this symbol when he said that people learn from those with whom they identify and from whom they take as models (1978, p. 63). And Gaster stated it quite clearly: "The only coherent model is yourself [the leader]" (1992, p. 115).

Many other authors agreed on the importance of the leader serving as a role model to communicate change. In the process of transformation the prophet must personify the doctrine so that members may know it "deeper than words," according to Mumford. Leaders communicate by their presence, affirm by their acts, and impress by their personality; they demonstrate by their acts that a shift is needed (1951, p. 101).

Eoyang pointed out that leaders not only interact with members symbolically in ways that result in significant changes but that they also "become symbols of their constituencies by representing to the world at large the important values and beliefs of those that follow and support the leaders" (1982, p. 110). Symbolism must be acknowledged and appropriately utilized as an important element in the leadership process.

The context. So far leadership and its elements have been discussed as occurring within a community of like-minded leaders and members. In this paper, the community in which leadership takes place is the organization. The concept of organization and the basis of organizations as the appropriate context for leadership are fully explored in the next section. For now, it is sufficient to suggest, as Senge did (1990) that the activities of leadership take place in the context of organizations.

Transformational leadership. While many theorists explored the notion of leadership as it relates to transformation in our time from their respective disciplines or areas of interest, Rost perceived the need for a definition of transformation leadership to move us into the new paradigm, and proceeded to develop such a model from his expertise as a leadership scholar.

Rost devised his model of transformational leadership, a sharpening and

updating of the Burns 1978 model, to answer the needs of people living in this decade and the twenty-first century. Rost said that "a profound transformation of leadership thought and practice must take place in the 1990s If a transformation to a postindustrial era is to happen in the 1990s, we need leaders who are imbued with a postindustrial model of leadership that guides the choices, behaviors, and thoughts of leaders and followers" (1991, p. 100).

Rost defined leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (1991, p. 102). He saw the definition as having four essential elements, and he discussed each in detail. The following is a summary of each of Rost's four elements followed by a comparison with a definition of leadership derived by the researcher from a composite of other theorists' and futurists' writings.

1. "The relationship is based on influence" (p. 102). It is a multidirectional relationship in which leaders and followers can exchange roles and one in which leaders use noncoercive means to persuade followers.

Theorists, in general, did not reflect this persuasive element of leadership. Rost's model is more politically oriented. The composite definition focuses on empowerment, with the leader's role as stimulating and enabling members, through such means as education and use of symbolism, to tap into personal sources of energy. Such means might be interpreted as persuasive, but the language to describe them reflects little focus on the marshalling of resources or application of power (however noncoercive) generally associated with persuasion.

2. "Leaders and followers are the people in the relationship" (p. 107). There are any number of leaders and followers in the relationship, and followers can be as active as they choose in the process, but the relationship remains inherently unequal because leaders have more influence and power sources.

The derived definition pretty much parallels the parameters of membership in the leadership relationship, however, here again, there is less emphasis on influence and inequality of roles, and more on the collectivity achieved through common vision.

3. "Leaders and followers intend real changes" (p. 113). Leadership is a purposeful activity in which participants expect to accomplish any number of

substantive transformations.

The derived view is similar to this, however it places greater emphasis on intention as the driving force for the whole process. Rost's model addresses the moving force behind transformational leadership more secondarily, with greater emphasis on influence than on intention. Also, the composite version is more descriptive about the real changes to be accomplished. It requires that changes aim to improve society, raise the level of humanity, elevate morality, or move toward the ideals of freedom and democracy.

Rost explained that in his model mutuality is intended to reflect the unity of economic and psychological individualism with the common good, the belief in God and human redemption, as well as justice and civic virtue. He omitted more specific moral content from his model because, at present, "our moral systems of thought, our moral language, do not encompass a concept of a social vision, a common good, a public interest" (p. 175). We need to develop a language that will construct an understanding of civic virtue and enable leadership to address social needs, he wrote. Out of the new language, an ethical framework for leadership will evolve.

Theorists from the various disciplines concerned with the future and the exercise of leadership in the future seem to be calling for a more direct requirement that purpose and vision aim at societal improvement. With Rost, however, these were left very general. They seem to reflect the higher level end values of the Burns (1978) model of transformational leadership. Other authors have offered particular higher-order goals suitable for a new definition of leadership, and these are discussed later in the exploration of a new paradigm.

4. "Leaders and followers develop mutual purposes" (p. 118). Participants agree on long-range, holistic outcomes which they may or may not ultimately accomplish.

The composite model reflected the notion of unified purposes, but it went one step further in forming those purposes into a unified vision or picture of the desired future through which varied purposes could be accomplished. The derived model places much more emphasis than Rost did on the process through which mutual visions are developed, that of alignment. Theorists perceived this as a primary aspect

of the leadership relationship. In addition, the derived model emphasizes the on-going nature of leadership interaction. It agrees that outcomes may not ultimately be accomplished, but suggests changes in the environment as a possible reason. Failure of the leadership process could, of course, be another reason.

Rost's model addresses leadership only--the interaction process between leaders and members--whereas a number of theorists focused on the leader as an individual. Therefore, the derived version includes a definition of a leader. Also, the composite version places leadership in the context of community. Rost emphasized the collaborative nature of leadership, but did not directly address the context as such.

The Rost model and the composite description of transformative leadership are similar in many respects. The derived model may address more facets of the process due to the wide variety of interests represented by the many authors. Below are definitions of leaders and leadership reflecting views of the many authors I have analyzed which are offered as suitable for exploring our present transitional time and the projected future.

Definitions

A transformational leader is a person who experiences the awareness of a need for societal improvements, who has determined a purpose and vision, and who emerges from the social setting to engage others in leadership interaction for the purpose of accomplishing mutual purposes.

Transformational leadership is the mutually interactive relationship whereby leaders engage and assist members in developing both a common understanding of present circumstances and an alignment of their similar purposes into a collective vision of a future desiring societal improvement. Leaders then enable and support the resultant intention which empowers members toward accomplishment. This interaction is an on-going process, and it takes place in the context of organizations.

Organizations

Leadership aimed at societal transformation, according to the above discussion, takes place in the context of organizations. To more fully understand both leadership and the transformational process, it is important to more fully comprehend that

context.

The concept of organization is basically one of establishing order, according to Morgan. Organizations are attempts to manage ourselves and to create order so as to sustain the myth that we're actually in control. They are attempts to create order that will survive for generations or, ultimately, quests for immortality (1986 p. 213).

Smircich said that organizations have long been addressed in terms of their relationship to problems of order--based on human experiences of empirical order (cycles, seasons, and so on) and on concern for problems of social order.

"'Organization' is a metaphor for the experience of collective coordination and orderliness" (1983a, p. 341).

To more fully understand organizations, then, it is necessary to explore the collective experience of order, the metaphor of the organization, and the relationship of organizations to the social order. Beginning with the collective experience, Harman said that the world's institutions are shaped (ordered) by collectively held beliefs (1988, p. 157).

Alderfer agreed and defined two different types of human groups. Everyone belongs to both types of groups and both are collections of individuals with independent relationships who, as group members, have group roles, can be recognized from nonmembers, and can relate to other groups. The difference in the two groups is that in identity groups members share world views and take their group membership with them elsewhere whereas in organization groups members share views, experiences, position, resources, boundaries, and the like but can separate their identity from the group (1982, p. 138).

K. K. Smith emphasized both collective beliefs and boundaries as determining organizational order. He defined organization as a system of relationships among parts and among other sets of relationships. Each relationship can be understood by seeing how its participants make sense of it and attach meanings to it. Patterned regularity is continually being recreated by members as an embodiment of meaning, and the context constrains the continual creation of meaning.

Smith continued that each relationship relates to the whole as to something that it is not. An organization is defined by the boundary between what it defines itself to

be and what it is not. Its definition automatically determines what it excludes. This negotiated boundary creates the distinctions between organizations, and it establishes the basis for their relating. The boundary can only be defined metaphorically (1982, p. 325).

Using the metaphor to better understand organizations was suggested by Morgan who stated that "since organizations are generally complex, ambiguous, and paradoxical, the real challenge is to learn to deal with this complexity" (1986, p. 17). Smircich agreed. Using metaphors to define and examine organizations helps to comprehend the inherent order which is their legacy (1983a, p. 341).

Pondy pointed out that there is lack of total agreement among philosophers, linguists, psychologist and the like as to what a metaphor is. There is some agreement that it has to do with calling one entity by the name of another or describing one event in terms appropriate to another (1983, p. 159). K. K. Smith agreed that a metaphor is a term for one object applied to another and suggested it as a map of the familiar to define the unfamiliar. He cautioned that it is only a representation--the map is not the territory--and that the adequacy of the map depends on its similarity to the reality (1982, p. 329).

Autry issued a similar caution when he described metaphor as a figure of speech--the application of a word or phrase to something that it does not apply to literally. He reminded readers that metaphors aren't really true, or that if they are true they aren't literally accurate (1991, p. 72). Although metaphors are not true representations of reality, they are very powerful, as Smith pointed out. Appropriateness of the metaphor is critical and the internal properties of the terrain must be similar to the metaphor or the metaphor must be able to change with the terrain. Once a metaphor is attached it becomes a reality and is difficult to detach (1982, p. 332).

Autry (1991, p. 73), Morgan (1986, p. 4), Pondy (1983, p. 157), and Smith (1982, p. 332) all noted the power of metaphor to create reality. In sum they said that research shows that metaphors have a formative influence on how we think and express ourselves. Metaphors imply a way of thinking and seeing and they infuse meaning that pervades how we see and understand our world and our organizational

experience. Repetition of a metaphor continues to infuse meaning, and although it may initially cause disequilibrium, it will continue to guide underlying means and will ultimately force a phenomena to fit it. Thus the metaphor becomes accurate.

Autry noted that the lesson of Plato's noble lie is that the posture of pretense can have real ramifications. Commitment to the lie can create the conditions that will make it a reality (1991, p. 73). Morgan supported the power of metaphors noting that they are "central to the process of imaginization through which people enact or 'write' the character of organizational life" (1986, p. 344).

Various other cautions concerning the use of metaphor were also voiced. For example, Kidder (1988, p. B-1) and Sahtouris (1989, p. 184) both pointed out that there are problems when metaphors from one discipline are applied to another. And Morgan noted that metaphors are one-sided--they highlight certain interpretations and force others into the background (1986, p. 13).

Although they must be used cautiously, metaphors are meaningful and useful ways in which to view, think about, and explain organizations, according to Morgan (1980, 1986). Examples of organizational metaphors which have been offered recently by such authors as Ackerman (1984), Allen and Kraft (1984), Autry (1991), Bennis (1989), Mohrman and Lawler (1985), Pascarella and Frohman (1989), and Schaefer and Fassel (1985) include: teams, machines, energy, growth stages, prisons, paradigms, and addictions.

The use of specific metaphors is an attempt to understand the order and meaning of organization, however many theorists refer to organizations in terms which have come to be accepted as nearly synonymous without regard to specific meanings. For example, the term corporation has a legally prescribed definition. Others, such as businesses, professions, or industries, are quasi-legal or generally identifiable. Still others, such as institutions or governments are quite nonspecific and vague. In general, different authors use these terms almost interchangeably, seeming to apply whichever ones appeal to them for their own reasons and allowing readers to infer whatever meanings and interpretations they choose.

These undifferentiated or metaphorically defined groups, such as the examples given, are referred to in this study as organizations. Specific terms are used if

necessary to assure accuracy of meaning, fair representation of authors' intent, or correctness of quotes. Otherwise the term organization is used to represent a wide variety of purposeful leader-member interactions.

Bellah et al. serve as an example of this treatment, having referred to a wide variety of groups as institutions which they defined as "pattern[s] of expected actions of individuals or groups enforced by social sanctions" (1991, p. 10). The authors referred at various times to organizations, corporations, agencies of the state, companies, schools, governments, and public arenas as operating within the context of institutions. It is this broad interpretation of the term organization which is intended here.

To establish better understanding of organizations in the context of transition and paradigm shift, it is important to briefly examine the relationship of organizations, through their members, to the larger society. This topic is more fully examined in Chapter Six.

Bellah et al. (1991, p. 6), Garfield (1992a, p. 317), Mumford (1951, p. 124), and Ramos (1981, p. 81) described the active influence of groups and organizations in socializing those members of society who are their members. Mumford said that the individual is the ethical center of humanity. All the authors mentioned above agreed that humans have an innate awareness of interdependence and a strong natural desire for connection. Groups and organizations are the context in which people become individuals. Organizations are the paradigm for organizing patterns of thinking and language; they mold people, give them functions, and serve as an indispensable source from which character is formed. Mumford said that individuals take their groups with them on their path of development.

Bella et al. (1991, p. 11) and Simmons (1990, p. 24) noted that groups form individual character rather rigidly. Organizations are less flexible than individuals and can be hostile to character development, restraining rather than supporting people. Organizations can deteriorate or shatter rather than creatively adapt and often need to be totally reconceived and reformed in order to promote change.

For these reasons, Morgan (1986, p. 339) and Murphy, in an interview with Miller (1992, p. 13), concluded that today's organizational structures create problems

which mitigate against integration of new social beliefs and must be newly designed to support transformation. For example, organizations must begin by finding ways to unite those people from all over the world who find important commonalities in new ideas. Organizations must be made up of people who inspire one another's practices. Murphy reminded readers that Buddha's first law was to seek a community of seekers.

Ferguson foresaw new organizational forms, with none of the characteristics usually associated with organizations, as having a high impact on originating more idealistic and human outlooks (1980, p. 340). Bellah et al. added that organizations must challenge their members, engender a sense of enjoyable achievement, and contribute to the welfare of others (1991, p. 49).

This contribution was seen by a number of authors as the primary focus of organizations in transitional times. Together, Allan and Kraft (1984, p. 36), Garfield (1992b, n. p.), and Senge (1990, p. 347) said that organizations hold a sacred stewardship for the common good and that they have the greatest potential possible for generating the commitment of people to build a better world and for serving as the link between individual change and global transformation.

There seems to be general agreement, then, that organizations are the context in which individuals, through interactions between leaders and members, form common visions and intentions to create social improvement. For purposes of exploring organizations as appropriate venues for leader-member interaction and for generating individual and social growth, the following definition is suggested.

Organizations, which may best be understood through the use of metaphor, are groups whose members adhere to collectively held beliefs and find order in common meanings and which can be identified by the negotiated boundary beyond which these unifying characteristics do not hold. Organizations may be responsible for contributing to greater individual and social good and may require reordering of internal characteristics in order to carry out that charge.

Summary

There is a close relationship among the key terms in this study. There is a

common theme which reflects the elements of a present-time, present-circumstance existence of unrest (anomalies, stress, instability, felt need), the stimulus of a new view (new beliefs, a desired higher-order future, contribution to greater good), and a resultant focus on change (shift, achievement, alignment, reordering).

This theme recurs as paradigm shift is seen to take place in a time of transition and to rely on emergent leaders, leadership interaction, and organizational change. Each concept echoes or mirrors the other, illustrating the hologrammic relationship of elements in the world today--organizations reflecting society and the present reflecting the past, for example.

The review of history which follows establishes the relationship of the past to the present as it places the concepts just discussed in the context of humanity's progress--exploring periods of transition, examining possible paradigm shifts, and suggesting a few leaders. Perceiving these concepts from the historic point of view creates a deeper understanding of their meaning and a better basis for examining them in the context of today's transition and tomorrow's future.

CHAPTER III

THE PAST

Marilyn Ferguson said that the roots of our transitional times are buried deep in human history (1980, p. 21), and Anderson stated that we need "an idea of what it is the human species has found out about itself in recent centuries and what effects that discovery has had on us" in order to emerge completely from our present transitional times. (1990, p. 28). Simmons agreed, saying from a "long view" we can make better sense out of what is going on in the present, that "we need to encompass our past, present, and possible future" (1990, p. 4).

Foster saw the study of history as educative. The traditions of history suggest what to value, how to think, and how to live and that history provides meaning and a sense of place. Foster perceived specific times in history as sets of circumstances which control human behaviors, ways of seeing, and options for actions (1988, p. 27).

Foster's view reflects Mumford's belief that different historical periods exhibit different categories of thought (1955, p. 20). Harman suggested that reviewing these different periods and the progress of history will help those in the present society to understand the nature and necessity of the forces of historical change and ultimately to understand what needs doing in the present (1988, foreword). He noted that in our present turmoil we are questioning the circumstances controlling behaviors and the ways of seeing, namely the science-based paradigm, and that to do so adequately we must go back to the origins of that system. "If it is flawed, we need to know" (1992c, p. 4).

Anderson emphasized the importance of understanding the impact of history on decisions for the future. "All important changes in human endeavor are preceded or accompanied by ideas that have been forgotten" and that the impulse to create something is powered by energy from the past (1992, p. 23).

Ferguson cautioned that history should not be seen as predictive. According to

general systems theory, for example, history may be interesting and instructive but that no one can say "what the dance of variables will produce tomorrow, next month, or next year. Surprise is inherent in nature" (1980, pp. 21, 157).

A review of history, then, is important not as a means of predicting the future but as a source of information--a means to trace the traditions of times past, and to better understand our current dilemma and ultimately to make more informed decisions for the future.

Theorists do not agree on which historical periods suggest distinct categories of thought. Campbell (1972, p. 87) and Swimme (1984, p. 33) both described three periods of unique thought in the history of humanity: (1) the period of tribal or food foragers, (2) the classical period, and (3) the present scientific-technological era. Harman (1979, p. 21) also suggested three major periods: the founding of the world's great religions, the fall of the Roman empire, and the end of the Middle Ages. Hubbard (1982) and Toffler (1980) described three industrial revolutions or waves of human advancement based on technology--agricultural, industrial or mechanistic, and the present.

There is also lack of agreement on which occurrences signify shifts in historical periods. Harman, for example, said that profound transformations are distinguished from other revolutionary social and political changes by their new metaphysical and ideological bases. They rest on "deeper stirrings and intuitions which formed new pictures of the cosmos and the nature of man." Each shift signifies "major changes in social roles and institutions, fundamental changes in cultural premises and dominant values and in man's image of himself" (1979, p. 20). The signs of such profound change are "typically increased frequency in mental illness, social disruption, violent crime, terrorism, cultism, and sexual hedonism" (1988, forward).

Gardner echoed Harman's two ingredients of historic change, the existence of negative influences in the society and movement to new ideological bases, specifically. At the heart of historic transitions are (1) "recognition that life is not easy and that nothing is ever finally safe" and (2) "positive attitudes toward the future and toward what one can accomplish" (1990, p. 9). Note the similarity between this

observation of the drivers of historic change and the elements of tension described in the last chapter as key to leadership.

Both Gardner and Ferguson emphasized the movement toward higher ideals as a primary descriptor of historic change. Ferguson said that the transformations which have emerged with increasing strength and clarity reveal times during which humanity is spiritually free, has choice, can awaken to its true nature, and can draw fully on inner resources to achieve new dimensions (1980, p. 46).

Gardner continued, reflecting the notion of release of tension in his description of how a civilization rises to greatness when something happens in human minds:

There occurs at breathtaking moments in history an exhilarating burst of energy and motivation, of hope and zest and imagination, and a severing of the bonds that normally hold in check the full release of human possibilities. A door is opened and the caged eagle soars. (1990, p. 9)

This movement forward was perceived from two points of view: as moving from one set of beliefs to a new and different set of beliefs or as movement through cyclic and evolving sets of belief systems.

Recall that Kuhn and others subscribed to the former view. Although Kuhn acknowledged that some previously held traditions are incorporated into new beliefs, he said that history (of science) reveals that principles from the past are discarded as they are incompatible with new beliefs and that new (scientific) theory demands rejection of the older one as "cumulative acquisition of novelty is improbable" (1970, pp. 4, 94). Burrell and Morgan (1979, p. 24), Guba and Lincoln (1987, p. 330), Morhman and Lawler (1985, p. 153), and Morgan (1980, p. 605; 1986, p. 16) all agreed that a new way of thinking stands out as a major break with intellectual tradition and a departure from former world views.

Ramos also agreed. He acknowledged that there is a "common assumption that history discloses its meaning in a series of empirico-temporal stages--a serialist ideology," but he asserted that "human nature changes its structure through distinct qualitative degrees of actualization corresponding to different steps occurring in an ascendant serial kind of time" (1987, p. 37).

Many authors subscribed to the serialist ideology, perceiving periods of

transition as a cyclic pattern in evolving history without distinct steps. de Chardin saw the whole of history as a gradual consolidation and organization of humankind on higher and higher levels--phases in a metaphysics of union which ultimately lead toward totalization. He described "a cosmic drift of matter toward states of arrangement that show progressively greater centro-complexity" and which can be seen in the emergence of an ascending series of critical points and developments (1975, p. 212).

Hubbard echoed de Chardin's notion of continuing ascendancy. She described a law of attraction in the universe which is reflected in continued synthesis of the earth's elements and inhabitants. With each transformation, humanity transcends historic limitations and integrates into a higher and more complex level to become something more (1982, pp. 36-44).

Simmons also described the continual emergence of humanity as spiraling, exhibiting higher and higher levels of qualitative change in individual and collective organization, awareness, and accomplishment, with each level building on the development of previous states and containing resonances with major and minor themes from similar historical points of earlier, lower spirals. The current themes may be forerunners of future spirals, but history doesn't necessarily repeat itself. Each spiral is a higher octave, a more complex system (1990, p. 29).

Tarnas saw a spiral ascendancy of the human condition with qualitative change. The world speaks through human consciousness and that truth achieves its existence when it comes to birth in the human mind. The human mind is a reflection of nature bringing forth its own mind by continually bringing forth new stages of human knowledge. He perceived a long evolution of dialectic syntheses from primordial undifferentiated consciousness through dualistic alienation which continues to the present (1991, p. 435).

Recall that Foster (1987, n. p.), Smith (1982, p. 366), and Zaleznik (1987, p. 3) suggested that the tension caused by the forces of stability encountering the forces of change ultimately carries them both forward to be reframed into a new equilibrium, primarily through the process of dialectic interaction.

Sahtouris, without addressing the issue of revolution versus evolution,

suggested that in the total perspective of the development of knowledge, our culture is immature. Identifying specific development periods, she wrote that in infancy (prehistory) we were close to mother nature. This was followed by a peaceful childhood (the Classical Period) in which we developed art and agriculture and learned of our ego as separate from nature. During the next period, the prepubescence of the middle ages, we began to express our egos more boldly and to challenge religious facts with scientific observations, after which we moved to the adolescence of the Renaissance and Enlightenment during which our egos swelled with science and technology. During our industrial youth, we left home and found challenges, and now, in our early maturity, we are returning home wiser, aware of false pride, and aware of the necessity of making choices for the rest of our lives (1989, p. 205).

Sahtouris' developmental perspective not only reflects the notions of continued human advancement, it also identifies the major historical periods described by most theorists, each of which holds information of interest to our present time.

Infancy: Prehistory

Many theorists begin a review of history by examining beliefs about the origins of the universe both because those beliefs have had tremendous impact on humanity and because they are being called into question as society currently contemplates moving beyond a science paradigm.

Wilber recounted the Perrenial Story which, he said, relates the beginning in terms of involution. He told how the initial consciousness awakened to itself, felt separate from infinity and attempted to find a means to reunite with all-that-is without experiencing the death of its self-sense. In so doing, the consciousness attempted to create ever tighter modes of awareness, ultimately moving from the original blissful state down through subtle, mental, pranic, and ultimately the material level before falling exhausted into insentient slumber (1983, p. 130).

Wilber concluded that behind this drama of the self's desire for mortality, the supreme consciousness remains and the ultimate aim of evolution is to move back up to the original level of blissful consciousness. This reawakening is now half

complete. Humanity has now evolved through the material level with creation of the universe, through the pranic level with the realization of life, and through the mental level up to human awareness .

de Chardin described four similar phases of the genesis of humanity beginning with the "irreversible and self-sufficient present of First Being or Omega Point." This essence then moved to awareness both of its existence in triune with its own opposition and with nature and of the necessity to fulfill itself by uniting with the other two. At the next phase, according to de Chardin, the Omega united with its core self and all of nature, stimulated its external, opposite pole of being, and then existed as a self-subsistent unity containing the thought or ability to fashion the earth and being surrounded by a pure multiple of itself. de Chardin's last phase is the realization of that creative act, which includes maintaining the original trinity and leaving the external multiple as pure passivity and potentiality. de Chardin concluded that the potentiality of returning to unity is being fulfilled through a continuous process of socialization leading ultimately to human totalization and attainment of the Omega Point (1975, p. 193).

The view that creation initiated from a First Being or consciousness and that humankind is evolving ultimately toward one with such consciousness is a return to a belief system which survived a period of its negation and is not universally accepted. For example, Wilford reported that researchers in a NASA laboratory have recently developed new information on the Big Bang, the explosion which is believed to have created the universe 15-20 billion years ago. Lab scientists have found density fluctuations in cold microwaves which are known to have radiated from the explosion, which have bathed space ever since, and which are believed to be the seeds which gave rise to the structure of today's universe. Wilford reported that since the scientists have released their findings, they have had to confront philosophical and religious ramifications beyond their original, purely scientific interpretations. He said that one scientist saw the discovery as a mystical, religious experience and stated, "Its like finding the driving mechanism for the universe, and isn't that what God is?" (1992, p. AA-1).

Mitchell (1992b, n. p.), Sahtouris (1989, p. 29), and Wilford (1992, p. AA-1)

described the creation of the universe from a scientific point of view--the initial existence of energy exploding into space, thinning out, cooling, and spreading into infinity. Each attached some higher meaning to the event, however. For example, Mitchell suggested that the explosion was more likely to have been caused by the intention of a consciousness than to have been an accident, and he favored recent scientific evidence that the universe is closed rather than open, that is, that all matter will ultimately converge and return to energy versus continue to expand to nothingness. He expressed the difference as humanity existing as consciousness experiencing material being rather than as material beings yearning for spirituality.

Harman (1988, p. 53), Hubbard (1982, pp. 26, 31), Mitchell (1992b, n. p.), Sahtouris (1989, p. 29), and Wilber (1983, p. 130) all contributed to the picture of how life began in the universe. The science-based story describes how planets were formed 4 to 5 billion years ago as hot liquids which cooled and how after 2 or 3 billion years single-celled organisms materialized and adapted to solar energy, developed into multicelled creatures and finally, about 800 million years ago formed into plants and animals.

Each of these authors suggested meaning beyond this purely scientific process, however. For example, Harman stated that the whole scientific story, from the Big Bang through accidental and random emergence of plant and animal life, does not deal adequately with consciousness. By omitting meaning or values and by suggesting death as an end without meaning, the story must be considered "cock and bull" (1992c, p. 3).

Hubbard interpreted the formation of planets as reflecting the synthesis of elements driven by the power of attraction toward the Prime Cause (1982, p. 31). de Chardin, suggested that the process of planetization and vitalization of matter reflects the progress of collectivisation toward totalization of humankind (1964, p. 115). He saw the process continuing with the development of humans, suggesting that from the first appearance of ruminants and carnivores to the end of the Paleolithic Age (from 5 million to 25,000 years ago), all primates formed a single system of sapiens (1975, p. 176).

The emergence of sapiens or humans around 250,000 B.C. has been of interest

to current theorists. Campbell (1972, pp. 178, 253), Hubbard (1982, p. 26, 42), Mitchell (1992b, n. p.), Sahtouris (1989, p. 158), Simmons (1990, p. 29), and others described this period as one in which humans discovered fire and devised tools and weapons. They were primitive food foragers and hunters who lived on the edge, collecting what they could carry, in tune with nature and the natural rhythms of earth, and aware of the intermingling of natural and supernatural (Simmons, 1990, p. 29).

They saw nature as the great mother goddess who controlled their future and gave them life and sustenance (Sahtouris, 1980, p. 158), a diety whom they could only placate and from whom they must accept their fate (Nanus, 1990, p. 13). They were not particularly gentle with nature, however "their power to do damage was limited" (Toffler, 1980, p. 100).

Carl Sagan expressed an objective, scientific view of this time. He noted that human ability to master and possess nature appeared early on and that early inventions had the potential to be used for evil as well as good (1992, p. 10). Eisler urged that the early use of implements be interpreted from a different point of view. The assumptions under the prevailing paradigm are that early humans made important discoveries for the purposes of more effective killing, that crude wood and stone implements, and later, metals, were assumed to be used first and foremost for weapons. Archeological evidence, however, shows that early implements were used for tools and that metals were used for ornaments, religious purposes, and tool manufacturing (1987, p. 45).

Bolman and Deal pointed out that in the total span of human life since the first primates appeared on earth, most of our time has been spent in the simple social context of hunting and gathering (1991, p. 4). Theorists showed special interest in this period as the beginning of the human ability to think, communicate, cooperate, and form belief systems, and they noted the relationship of the early cognitions to our present belief systems. Writers also theorized that the period forms a basis for suggesting the equivalent of the first paradigm shift.

The shift was described as movement from a hunting and gathering society to an agricultural society. This new form of society began about 8000 B.C., and lasted until the beginning of the Classical Age around 600 B.C. Simmons described the

people in this period as living in tribes with dependable food supplies from domesticated plants and animals, as having beasts of burden which increased their ownership of personal possessions, and as having more fully developed and specialized skills. This shift is seen as both a major transition to new beliefs and practices and as a basis for comparing later shifts and subsequent systems of belief and practice.

For example: This change was a revolution fueled by land and can be compared with later revolutions fueled by capital and by information (Gore, 1990, p. 24). This period changed the way work was performed compared to later changes with machines and computers (Asimov, 1987, p. 26). It showed a shift in man's relationship with nature compared with later shifts toward man against nature (Naisbett, 1982, p. 10). It began an evolution of complexity in institutions (Bolman & Deal, 1991, p. 4). It began the process of social organization with the linking of families into small autonomous groups to be followed by links between tribes, territorial associations, and formations of villages, then cities (de Chardin, 1964, p. 37). It signaled the first wave of technological advances (Toffler, 1980). It also signalled the first wave of thought, beginning with religion, e.g. story tellers giving names and faces to elemental forces (followed by science as the second wave of thought and an as-yet-unnamed third wave of thinking (Clancy et al., 1988, p. 16).

The development of human thought was considered the most compelling reason for theorists to focus on this period. Riedl noted that by this time the human brain had evolved and developed the ability to store information and recall it, to reflect on the content of memory, and to conduct mental experiments (1984, p. 73).

Mitchell described the advent of language, which took place around 3000 B.C., as a major step in the development of humankind. From that time forward, humans were able to talk, to pass on ideas, to think about things beyond those which could be seen, and to become self-reflective--to think about the ability to think (1992b, n. p.).

The advent and application of language were considered by many theorists to be the equivalent of a paradigm shift. Sahtouris called language the heart of humanity and said it changed humankind's mental image of itself and its world, allowing people

to think of themselves as separate from the world, "as observers and knowers of it" (1989, p. 152).

de Chardin perceived this move to the human level of thought and to the power of human's consciousness to turn in upon themselves--to know that they know--as a radical shift from instinct to intelligence, from hands to brains. He saw it as moving to the second species of life and as being the first stage in the humanization of life, that is, a change of state, with the creation of a new and higher order holding a favored place in the structure of the world and in the race toward higher forms of complexity and ultimate unity with the Omega (1964, p. 133; 1975, p. 171).

Both Simmons (1990, p. 30) and Campbell (1972, p. 178) noted the development of mythology during this period, with expressions of transcendental truths coming out of the constant interweaving between the human and the divine through planting and harvesting. Campbell observed that agricultural processes resulted in the development of fertility rites and in rituals of seeding and reaping. Sahtouris wrote that the people in this time saw the Mother Goddess as the creative force of nature and perceived themselves in a "creative-destructive dance of life and death" with nature. The stories of man and woman having been created together (much like the original Hebrew-Christian Genesis appeared before it was rewritten as Eve coming from Adam's rib) emanated from this time (1989, p. 159).

A shift in the structure of the society and in its world view occurred before the end of this period when hunters and nomads invaded and conquered the peaceful, egalitarian societies. Eisler (1987, p. 43), Sahtouris (1989, p. 160), and Tarnas (1991, p. 441) described this shift in terms which reflect Harman's two elements of major transitions: negative aspects in society and a move to new ideological bases. Nomadic, patriarchal tribes, headed by men experienced with weapons (perhaps from having been driven to competition by harsh climates), who believed in their own superiority, who were Father-God worshippers, and who saw people and their gods as outside and above nature, invaded and initiated social violence. The society went from partnership to domination, from goddess to god worship, and from life-giving to life-taking (Sahtouris, 1989, p. 160).

Tarnas suggested that this dominator belief system has served as the foundation

for the Western mind's repression of the feminine, of a participation mystique with nature, of a unity consciousness, and of a community of being or world soul (1991, p. 441).

Theorists examined the prehistoric period, humanity's infancy, as a means to gain insights into the bases for some of today's beliefs and practices about the origin of the universe, about initial shifts in ideological bases, about the beginnings of thought and language as well as mythology and religion, and about the initiation of patriarchal and dominator societies.

Childhood: The Classical Period

Bateson emphasized the importance in today's world of examining the Classical Period. He said that interpreting human behavior can't be done without bridging back to the beginnings of scientific-philosophic thought--before science, philosophy and religions were separate (1972, xxii). Most theorists consider this a significant period in human thought and evolution.

Mumford described the period as one of those few in history which exhibit the highest vitality--periods during which humankind has been most whole and society has most supported and furthered that wholeness (1951, p. 230).

Sahtouris described the beginning of the Classical Period, around 600 B.C., as having most of the civilized world organized into large kingdoms or empires with strict laws for keeping order and worldviews which attempted to understand and explain the world in terms of nature. All over the civilized world, great thinkers such as Lao-tse and Confucious in China, Buddha and the Vedist Hindus in India, and Zoroaster in Persia as well as Thales, Anaximander, and Heracletus in Melesian Greece (now Turkey) agreed that nature's constant movement was away from disorder and toward balanced order (1989, pp. 161, 163).

Mitchell described these early thinkers in similar terms. He said that at the time of Confucious, Buddha, and Zoroaster, philosophers in the Golden Age of Greece began to move beyond their senses toward critical introspection (1992b, n. p.).

Sahtouris continued that these early thinkers saw the world as cosmos. They

saw nature, including humans, as alive, self-creative, and forever changing from within--striving to create balance and to make order out of disorder. They saw nature as a great dance of life with all things connected through the endless interaction of opposing forces such as male and female, light and dark. They did not see the world as perfect, but perceived nature as constantly struggling to reach a balance between chaos and harmony which, if ever reached, would either stop evolution or throw the world back into chaos (1989, p. 165). Sahtouris noted that the Greek experiment with democracy was related to this belief system, that it was an attempt at self-rule by imperfect humans in an imperfect world through establishing some means of order (p. 166).

Sahtouris also described the other school of thought founded in Greece during this time: the objective mechanical worldview. Thinkers such as Permenides, Socrates, and Plato, who hailed primarily from Eleatic Greece (the opposite side of Greece from the Milesians) believed the world could only be known through pure reason. They were fascinated by the human mind and the way it formed ideas and created order through logical thought and reasoning. These men believed in the existence of perfect ideas, and they saw the man-made languages of arithmetic (numbers) and geometry (form) as built on rules of harmony and balance. They saw the cosmos as the construction of perfect geometric spheres, perfectly created by a perfect creator. These ideas were later translated into scientific and technical enterprise by Renaissance thinkers (1989, pp. 169, 20).

Bateson also noted how this initial inquiry into mind and matter ultimately resulted in adherence to the present belief in scientific thought. He pointed out that the study of natural history and the naming and sorting of natural occurrences became submerged in relation to scientific thought but that it was carried forward by Gnostics, then alchemists (1972, p. 449). Bateson's observation offers an example of a subdominant belief system continuing to exist in a dominant paradigm.

Tarnas stated that there was a "constant interplay between the two partly complementary and partly antithetical sets of principles [which] established a profound tension." The Western culture that Greece initiated has, throughout history, attempted to sort out what was permanently valuable and what was problematic (1991,

p. 71). Anderson pointed out that Socrates' Allegory of the Cave and Plato's Noble Lie both hint that a suspicion was held at the time that different world views are possible (1990, p. 30).

The Greek city-states fell into battle, and Greece was conquered by Macedonia and then by Rome around 200 B.C. Sahtouris continued that the Apostle Paul then brought the new Hebrew-Christian religion from the east to Greece. Sahtouris noted that this new worldview fit Plato's ideas of the creation of the world by a perfect God and Aristotle's static view of nature. Anaximander's ideas of evolution were never taken seriously, and gaining perfection in God's eyes by seeking forgiveness (for the fall from grace in the Garden of Eden) and obeying God's laws became the accepted belief system. (1989, p. 171).

Hubbard saw the evolutionary, cyclic aspect of the universe reiterated with this move in history. By adopting the story of the fall, human beings perceived themselves as separate from nature and the God force with which they wished to unite. This period of self-consciousness permitted an objective and conscious relationship with the Creative Intelligence which could then be strengthened, first through spiritual then through scientific knowledge, which would ultimately lead to unity (1982, p. 45).

Ferkiss also saw this now separate belief in hope for individual salvation through redemption in terms of cyclic ascendance. This perspective was a move away from the ancient culture's static view of the future and a connecting link with the Enlightenment which followed (1975, p. 259).

This shift was not without its stresses, which continue to reflect the two elements of major transitions described by Harman. As Sahtouris pointed out, early Christians were tortured and killed under Roman rule, the Romans dealt in slavery, and the holy texts of the new religion were rewritten to suit the priesthood of the new church and to adapt to the dominant society. When the Roman and Byzantine empires split in 395 A.D., the church's revised Christian worldview was adopted by both, ancient scientific discoveries about the living nature and about curing ills with medicine and surgery were destroyed, and all ideas that did not conform were outlawed for over a thousand years. Latin became a dead language, and along with

math and logic, was only used to educate men and boys (1989, pp. 171-172).

Even this cursory review of the Classical Period of history suggests its importance to our time. Tarnas noted that Western culture has built upon the Greek legacy, "transforming it, criticizing it, amplifying it . . . negating it, yet never, in the end, ever leaving it" (1991, p. 71).

Contemporary theorists have not left the Classical Period either. Being aware of its links to present time, they have returned to humanity's childhood to examine, for example, the beginnings of the scientific paradigm and the emergence and survival of religious and naturalistic thought. The period provides vital information for today both in terms of its place in the evolutionary development of historical traditions and in terms of its impact on today's belief systems. Theorists continue to trace those threads through the Dark Ages.

Prepubescence: The Middle Ages

The Middle Ages are of particular interest to students of today's transitional times because they reveal both a strong turn toward secular interests as well as the preservation and enhancement of certain religious beliefs.

Clancy (1988, p. 10), Elson (1992, p. 18), Harman (1988, p. 7), Mumford (1955, p. 11), Sahtouris (1989, p. 172), and Simmons (1990, p. 31) described this period, from roughly 400 to 1300 A.D., as one of sweeping change with the forces of history moving from the golden empires to the Christian west.

These authors described this period as essentially an agrarian society. Humans supervised and dominated nature as an impersonal mechanism to produce a surplus of food and wealth which enriched the few who controlled the social order and who provided some centralized government. Feudal lords battled to rule the land and the forests. They subjugated their peasants, but at the same time their castles provided refuge from wild animals and barbarians. The people lived in simple huts with their animals, worked hard, and died early from terrible diseases.

The authors said that later in the period, permanent settlements developed and grew into the first cities--small, dark, disease-ridden and dangerous places which offered economic opportunity and adventure. Mobility increased during this time, and

inventions supporting agriculture were devised. The people developed full-time specializations and formed guilds. They acquired leisure time, and they took an interest in time itself--erecting belfries to record passing hours. They were interested in the economic and political matters of life on earth but also lived daily life based on belief in the spiritual and the longed-for-yet-feared hereafter.

The Dark Ages ended around the year 1000 A.D., and the turn of this first millennium was of special interest to theorists as today's culture approaches the close of the second. Morrow noted that dark meanings still reverberate from the first millennium, a time when humanity pondered without panic the last days predicted in the biblical book of Revelations. It was a time when the four horseman of the Apocalypse, war, plague, famine, and death, were riding unimpeded (1992, p. 8).

Elson described life in 999 A.D. as "a grim struggle" with people holding little interest in the terrors of the apocalypse since they were already shrouded in darkness (1992, p. 18). Naisbett and Aburdene noted that, although many believed the world would end at the year 1000, it was actually a historical milestone: Europe was united under Otto III who was guided by the ideal of reforming the world in genuine Christian spirit (1990, p. 309).

Medieval Europe began the new millennium, around 1100 A.D., with the Crusades, which illustrate both the secular and religious interests of the time. As Elson noted, "The Crusaders had mixed motives: religious zeal blended uneasily with unabashed greed" (1992, p. 19). New avenues of trade were established (leading to the Age of Discovery) which stimulated a taste for oriental luxuries in Europe.

Campbell (1972, p. 15) and Elson (1992, p. 19) described how the Crusades also brought to the West scholars and detailed knowledge of some of the lost learnings from ancient Greece which had been translated and preserved by Arab sages (and which ultimately fueled the western revival of classical learning known as the Renaissance). As a result of Eastern travel, according to Mumford, known boundaries of the physical plane were enlarged and people knew the visible earth as being definite and secure, bounded by a narrow strip of seas with an infinite golden canopy overhead (1955, p. 10).

Campbell noted that from this movement of Islamic knowledge to the West,

the development of history can be observed through the brilliant Western minds who have quested for boundless truth, with Eastern change coming, from then on, only through conquest and collision (1972, p. 15). Theorists conclude, now, that the Crusades succeeded through usurping knowledge and through inflicting cruel forms of human violence which created animosities between Christians, Jews, and Muslims, beginning a legacy carried forward to the present day.

The evolution of religious beliefs is one of the most important aspects of the period. Anderson (1990, p. 31), Bateson (1972, p. xxiv), Campbell (1972, p. 15), Elson (1992, p. 19), Ferguson (1980, p. 46), and others noted that medieval Christian society, founded in part by Greek philosophy, kept alive throughout the Dark Ages, by monks who preserved whatever fragments of ancient learning were available, ultimately came under the unifying force of Roman Catholicism and eventually covered immense territory.

Anderson (1990, p. 31), Elson (1992, p. 19), and Keen (1992, n. p.) pointed out that the revival of Christianity and the power of the Roman Catholic church resulting from the Crusades are evident in the Gothic cathedrals of Europe, which Anderson described as attempts both to recreate the glories and symbolism of Greek and Roman architecture and to depict the immensity of the human soul connecting with God. As an example of the secular interest in such creations, one-third of the national income of France during this period came from building cathedrals. Elson pointed out the secular interest of the popes of the time who "vied with equally ambitious kings," in the name of spiritualism, to determine who would hold sway over the land (1992, p. 19).

Simmons noted that during this period a powerful, "righteous" priestly caste kept the scriptures and created dogmas, coopting teachings from spiritual masters and interpreting spirituality for the masses so that organized religions became human versus spiritual religions (1990, p. 226)

Bateson (1972, p. 449), Ferguson (1980, p. 46), and Sahtouris (1989, p. 172) all observed that during this period of papal control, such groups as the Gnostics and alchemists continued to keep alive beliefs in human freedom, in the ability to develop natural, inner resources, and in the need to achieve a higher dimension of mind

(Ferguson, 1980, p. 46).

Anderson wrote of the church's authority ultimately eroding, partly due to the decline of the medieval church states as definers of the cosmic truth along with the loss of the feudal system's hold on the social order and the increase in social mobility, and partly due to the increasing awareness of different versions of beliefs for priests and ordinary people and of the church's greed and its failure to operate on Christian principles. This erosion released many energies which were searching for certainties and which then resulted in a massive historical transition throughout Western civilization (1990, p. 31).

Siegfried suggested that regardless of its weakening, the church led to new thought. "If not for Christianity, modern science might not have originated as it did". As long as mysticism and mythology were ready explanations, there was no need for scientific answers. By decreeing that a single God had created a rational world, Christianity opened up the study of nature (1991, p. DD-3).

Harman saw the Middle Ages as one of the most important periods in history. During this time, traditional religious values shaping social choices were increasingly influenced by materialistic and economic factors, how they ultimately became impersonal and utilitarian, and how transcendental spiritual values and goals grew steadily less influential (1991c, p. 2).

As Harman suggested, this medieval period was seen as highly significant to current theorists. As could be expected in a period of preadolescence, profound changes occurred during this time. The period began with a relatively quiet and self-sustaining society and closed with a society having experienced such new influences as urban centers, travel, trade, vocational specialization, and architecture, to name a few, as well as having accepted, then partially rejected, a completely new set of religious beliefs. The locus of power and knowledge shifted from the East to the West, and the threat of total destruction at the millennium passed without any consequences. Besides the direct influences of those occurrences on today's beliefs and practices, the period opened the way for even more profound influences which developed in the next historic period.

Adolescence: The Renaissance

Although some aspects of new thought, such as religious incertitude, began earlier, and some remnants of medieval practices, such as the feudal bonding of serfs to the soil, remained after, theorists generally suggested the 1300s as the transition period between the Middle Ages and the Renaissance. Mumford called the time the "fatal fourteenth century" (1951, p. 114), Sahtouris described it as the "rebirth in Europe of human curiosity and culture" (1989, p. 173), and Anderson suggested that this period of time was illustrated by the first modern novel, *Don Quixote* published in 1605, about a knight of old who tries to live out his dream in a new world he doesn't understand (1990, p. 32).

Study of this period is another of those times when one wishes for instant and total comprehension of multiple ideas. The many aspects of human development described as taking place during the Renaissance from 1300 to the end of the 1600s seem to thread their way through the time, sometimes forming common bonds and other times operating in conflict, but always leading forward.

Elson noted that one of the earliest identifiable strands of development was the emergence of capitalism, with Italian merchants developing accounting and banking practices including the use of currency and interest-bearing loans, which the church, fearing loss of control, vehemently opposed as usury. Church reform brought more lenient attitudes, and by the late 1500s, a few great centers of commerce were established, especially in Protestant Holland and England, and innovations such as futures trading, paper currency, and checking accounts became well established by the end of the period (1992, pp. 16, 20).

Capitalism was supported by navigation which also furthered interest in science, but, like capitalism, may have undermined the church. Mumford noted that with mapmakers able to chart the earth's surface and mariners able to calculate their positions in time and space, people became aware of open seas and a wide world, and they lost their need to dream of heaven or to believe in eternity (1955, p. 15).

Elson wrote that by the early 1400s, the rediscovery of Ptolemy's second-century calculations and maps, along with improved riggings, larger ships, and better instruments, curiosity about other lands, the need for new avenues of trade due to

animosities with the Middle East and the closure of land routes, and a desire to get rich, all combined to launch the Age of Exploration. "European civilization gradually became the dominant intellectual and political force in world history" (1992, pp. 16, 19).

Politically, exploration and discovery contributed to European imperialism, establishing rival port cities, stimulating acquisition of foreign lands, and supporting the rise of modern nation states with centralized bureaucracies and armies. For example, in 1492, Spain, which had previously established peaceful coexistence between Muslims, Christians, and Jews and which had held the seat of learning in medieval times, became a Christian nation--driving out the Muslims and Jews (many of whom relocated in Italy) and sending Columbus to compete with rival Portugal for acquisition of new lands and wealth (Elson, 1992, p. 19).

Exploration also had its dark side. Elson pointed out that by the mid 1400s, Portuguese adventurers were dealing in African slaves and that later Spanish conquistadors "ruthlessly suppressed the imposing cultures of Aztec Mexico and Incan Peru." In addition, the bubonic plague had been carried to Europe, and by the end of the 1400s it had killed 40 million people, one-third of the Continent's population (Elson, 1992, p. 19).

Mumford noted that the Black Death caused a rapid disintegration throughout Western Europe but that there was also a rapid recovery, an "outburst of human energy" in such areas as colonization, science, productivity, and spiritual creativity (1951, p. 114).

At this time, in Florence, Italy, one of those historic periods that Mumford suggested as having high vitality and human and social wholeness came into being (1951, p. 115). Sahtouris noted that the Medicis of Florence, who had become wealthy from travel and trade, led the rebirth in Europe of "human curiosity and culture" with their desire for knowledge and splendor and their support of art and science (1989, p. 173). Elson described Cosimo de Medici as "the prototype of the men who created Western civilization, both as the embodiment of its ideals and the nourisher of its institutions." Renaissance art, supported by such patrons, reflected the tenor of the times. It was both secular and spiritual--employing Greek-inspired

notions of beauty to portray biblical subjects (1992, p. 20).

The Roman Catholic church continued to lose favor throughout the Renaissance, beginning with "the Great Schism from 1378 to 1417, when rival popes held sway" (Elson, 1992, p. 20). Ferguson (1980, p. 46) and Fox (1988, p. 237) pointed out that Meister Eckhard, Hildegard, and other monks and mystics subversively kept alive old beliefs which ultimately inspired church reformers. Elson observed that reform was also inspired by Gutenberg's invention of the movable press type in the mid 1400s, which, aided by tons of plague-ridden garments available for shredding into rag paper, stimulated circulation of over 15 million books by the end of the 1400s. Besides the Bible, many of these were Greek and Roman classics which, based on the ideals of republican city states and of "man as the measure of all things," challenged both the "absolute monarchies of Europe" and the church's "theocentric portrait of the universe" (p. 20).

Elson noted that the print revolution assured the success of the Reformation. Wide and rapid spread of Luther's teachings prevented "the church and its attendant secular forces from crushing the reformers" (1992, p. 20). Tarnas described several causes of the Protestant Reformation: political secularism undermining the Catholic Church's spiritual integrity, sharp contrast between the socially and economically privileged clergy and the deep piety and poverty of the faithful, resistance to Greek and Roman influence on biblical foundations, and an "emerging spirit of rebellious, self-determining individualism" coupled with a growing impulse for intellectual and spiritual independence (1992, p. 234).

According to Tarnas, the Reformation reflected a major shift in belief systems—from people needing to earn salvation, believing in the church as having the power to dispense God's grace and to erase particular sins in return for money, to humanity having free access to salvation and grace and believing in only Christ as having the power to directly grant redemption of the whole human soul in return for faith and good works (1991, p. 235). Mumford summarized that the Protestants "rejected the outcomes of the history of Christianity but not its inception" (1955, p. 14).

Religious wars took place throughout Europe, and by the end of the 1500s, freedom of worship was officially granted the French Huguenots and "the spiritual

unity of the West had been permanently shattered" (Elson, 1992, p. 20). Harman noted that by the close of the century, values had turned from spiritual to practical, with interest in capitalism and efficient methods of production--limited mass production had already begun in England, according to Elson (p. 21)--and in science (Harman, 1992c, p. 2).

The rising interest in science was seen by several theorists as another reason for religious upheaval. In the middle 1500s, Copernicus became dissatisfied with Ptolemy's system of a geocentric universe and speculated a revolutionary image of the sun as the center of the solar system. This heresy suggested that Aristotle's belief in a fixed earth as the center was incorrect and that, therefore, belief in humanity as holding a favored place between angels and lower animals with events occurring by divine purpose, might be wrong! Priestly authority to determine what was true and divine was eroded. The courage to doubt stimulated systematic questioning of beliefs and a thirst for knowledge, and secular and scientific authority began to rise (Anderson, 1990, p. 33; Elson, 1992, p. 20; Harman, 1988, p. 4; Nicoll, 1984b, p. 15; and O'Hara, 1988, p. 153).

Confirmation of Copernicus' theory by Galileo's telescope in 1609 began the scientific revolution which, according to Tarnas, was "an epochal shift, a primordial event . . . a shift in the fundamental metaphor for the entire modern world view." Naivete was destroyed in favor of critical recognition of an objective world, and humanity was relegated to a "relative and peripheral position in a vast, impersonal universe" (1991, p. 416).

The scientific revolution was a drive to discover the laws of nature and the means to control it. Early scientists saw their work as a sacred quest to understand the rational orderliness of the mind of God, without which Christian miracles would have no meaning (Siegfried, 1991, p. DD-3). They also adhered to the biblical injunction for humans to have dominion over every living thing (Sagan, 1992, p. 12).

According to Sahtouris (1989, p. 172) and Wilber (1983, p. 15), within roughly a 60-year period around the turn of the seventeenth century, Galileo, Kepler, and Newton had discovered laws of earthly and planetary motion and their relationships, and Bacon had formulated the basis of the scientific method, that is,

inducing general laws from numerous specific instances. From that, the scientific method was perfected to the process of proceeding from an unproven hypothesis through devising experimental situations controlling all but one variable, measuring any changes that occurred, and thereby developing proof of an empirical fact. Measurement was the key to an "objective, reliable approach to the structure of nature After 1600, mankind was in possession of a systematic method of research . . . never before available" (Wilber, 1983, p. 16).

Rene Descarte formulated his logical philosophy during this period, and it became the basis not only for scientific exploration at the time, but also for scientific modes of thought up to the present. The following authors contributed to a composite picture of Cartesian views: Anderson (1990, p. 33), Capra (1982b, p. 19), Clark & Cohen (1992, p. 35), Henderson (1992a, p. 9), Sahtouris (1989, p. 174), Sheldrake (1991, p. 75), Pascarella & Frohman (1989, p. 138), and Tarnas (1991, p. 417).

According to these writers, Descarte believed in the existence of God, but he questioned how He worked and for what purpose humanity was created. Descarte saw science as a search for certainty, predictability, and control, and he suggested that God had created a grand, cosmic clockwork in which nature is determined by strict mathematical laws and in which plants, animals, and people are mechanical inventions no different from human-made machines. God's purpose for the world, to move toward an eternal state of bliss, was constant, so the final cause need not be studied, but the formal cause of why things happen in the universe, i. e. the laws of nature or the mathematical principles which give formal structure to the world, must be investigated.

Descarte also believed that, in humans, one small part of the brain, the soul, being separate from the mechanical body, is the only nonrational, nonmechanical thing in existence. He believed that mind, with its power to reason and its belief in God, is separate from matter, with its atomistic structure and adherence to mathematical laws. The self is distinct and separate from the objective, external world and that reason could therefore discover ultimate truths. Later philosophers added that if the only reality the human mind has access to is its own experience or its subjective, reasoned interpretation, then there can be no guarantee that the human

mind could ever accurately mirror the world. Philosophers concluded, therefore, that an objective approach is necessary for studying the physical world and developing empirical facts, an approach separate from the mind's seeking philosophical or psychological insight or contemplating spiritual wisdom.

Harman noted that this division in realms between the subjective and the objective precluded science from clashing with religion and freed it to pursue physical discovery through its limited mechanical means, "leaving discovery of the ultimates of existence to theologians, philosophers, and poets" (1988, p. 16). Fields et al. saw this division as focusing on knowing the universe by cold-heartedly manipulating inanimate matter in its smallest components, as relegating feeling "to the back burner," and as debunking spiritual beliefs as "primitive superstitions" (1984, p. 205).

Descartes' thinking, along with Locke and others, founded what was to become known as the Age of Reason or Enlightenment. Its impact on ages to come was noted by several writers. W. T. Jones, for example, observed that during its tenure through the following century, the Enlightenment gave rise to advances in education, philosophy, politics, medicine, science, and mathematics (1984, p. 129).

Capra wrote that scientists and philosophers of the 1600s, from Galileo through Descartes, firmly established a mechanistic world view (1982b, p. 19), and Elson said that as a result of these men having clarified the principles by which machines work, "mechanical inventions led inexorably to . . . the Industrial Revolution" (1992, p. 21). Henderson observed that Descartes' "dismal deterministic view of the universe" led to that great "outpouring of technological hardware and managerial virtuosity" (1992a, p. 9). And Mitchell noted that the mechanistic worldview has been the Western model of reality for the past 300 years (1992b, n. p.).

Mumford wrote that as a result of the Enlightenment's dualist philosophy, individuals were abstracted from society and ceased to be known by their relations to family, guild, or city and became new units of political society (1955, p. 20). Cetron and Davies noted that by the end of the 1600s, human rights and the wellsprings of the French and American revolutions had appeared and the settlement of the New World had begun (1989, p. 322).

Bellah et al. (1955, p. 29) and Ferguson (1980, p. 123) pointed to Puritan settlements as resulting directly from the Age of Reason and noted that Puritan desires for an ethical, spiritual community kept spiritual values alive when science began to dominate beliefs. Elson noted secondary effects of the desire to escape total reason. As a result of colonization native Americans were victimized and millions died of imported diseases such as smallpox (1992, p. 20). Colorado wrote that native American oral history tells of this period as the Dark Sun, during which a policy originating in Mexico in the mid 1500s guided the natives to cease their spiritual and scientific communities, to hold their knowledge in the families, and to scatter for 500 years, which, according to Colorado, explains why European settlers in the 1600s found native hostility when they arrived (1992, p. 20).

Capitalism steadily increased throughout the 1600s, and Mumford wrote that widespread use of paper currency in place of trade or barter created an abstract pursuit of wealth (1955, p. 19). Farming to meet family needs was still by far the most common lifestyle, but entrepreneurs bought raw materials, paid families to manufacture food and clothing goods in their homes, then sought markets in the cities. Monarchs were influenced by great landowners, rich merchants, and the clergy, with workers and farmers having no voice, even in England where the Glorious Revolution had made the monarchy accountable to Parliament but where only the heavily taxed could vote (Lampard, 1984, p. 187).

The Renaissance, as can be expected of adolescence, can be seen as another period of profound change--moving from limited socialization through the Black Death to widespread rise in mobility, learning, and individualism. The period offered current theorists the opportunity to review major transformations in belief systems and practices such as the scientific revolution and the Reformation, both of which have directed Western society's thinking up to the present time. The period also offered opportunities to observe leaders in transformational times by reflecting on such men as Luther, Medici or Descarte.

The period closed with its interwoven threads continuing to move ahead, hinting at the development of human rights, colonization, democracy, and capitalism, for example, all of which had a heavy impact on American society from the next

period forward.

Youth: The Industrial Revolution

Theorists reviewing this period, the 1700s and 1800s, focused initially on the Age of Reason, which began during the Renaissance and carried forward to the end of the 1700s. They described it as the primary influence for separating science from religion and for solidifying science as the basis for the prevailing belief system to the present time.

Authors such as Anderson (1990, p. 33), Bell (1980, p. 326), Mumford (1951, p. 232; 1955, p. 18), Tarnas (1991, p. 333), and Wilber (1983, p. 21) together said that the Enlightenment attempted to solve a dominant conflict between faith or religion and reason or science, both of which attempted to find "truth." The power of reason to understand the natural order formed new universalism. The external world was reduced to order because phenomena could be observed, measured, and predicted, so religion, which was viewed as superstitious protection from fear, was expected to disappear. Evidence supporting a sustaining purpose for all life was overlooked in favor of belief in blind and accidental purpose. Ultimately, as Naisbitt and Aburdene put it, from the Enlightenment on, science has been "worshiped as a religion" (1990, p. 293).

Theorists such as Capra (1982b, p. 19), Von Glaserfield (1984, p. 33), and Wilber (1983, p. 6) noted that from the mid-1700s, belief in science as the means to determine universal truths began to exhibit subsets of beliefs as to how that determination is possible. Locke and Hume, for example, departed from Descartes' beliefs in innate ideas and in the mind as the supreme discoverer and organizer of reality and suggested that thought is instrumental only for understanding experience. Locke's extreme position--scientism--held that only that which could be verifiable by the five senses existed and that knowledge gained by other approaches such as contemplation was invalid. Hume believed that the course of nature did not change and that, therefore, experience such as that derived from scientific experimentation could be used to infer the future.

Kant, on the other hand, according to Anderson (1990, p. 59) and Von

Glaserfield (1984, p. 33), departed from both Locke and Hume and from Descartes as well. Kant said that cognitive science was not possible and that the mind does not reason truth from observation, but rather, creates reality. It imposes its own structure and form on the representation of reality it receives as stimuli through the senses; it constructs experience. Thus Kant opened the door to postmodern thought.

Mumford (1951, p. 233) and Tarnas (1991, p. 384) wrote that romanticism, which appeared in the late 1700s, was the chief challenge to scientific thought. Its proponent, Rousseau, protested utilitarian humanity and attempted to return to the continuities of history and to simple societies. He believed religion was "intrinsic to the human condition" and that the "exaltation of reason had neglected humanity's ultimate nature," that is, feelings, intuition, and "spiritual hunger that transcends the abstract" (Tarnas, 1991, p. 312). Although many people had become concerned with the unconscious structure of the mind by this time, Romanticism was unsuccessful.

During the 1700s, according to Ramos, social science arose as a separate study under Hume, Adam Smith and others who saw reason as a characteristic of society rather than of the individual, and who conceived of rational laws governing society. Ramos reported that Adams' belief in an "invisible hand," a providential force affecting humans through their instincts, and Hume's belief in human membership in society as the ground for moral conduct became the bases for studying the processes of social forces which order human associated life (1981, p. 29).

Mumford suggested that part of the interest in social science at the time was due to a need to restore the individual to society. People had been "abstracted" from society due to emphases on mastering the external environment and on gaining worldly success. He noted that this displacement had been prompted by the rise of Protestantism and that it "made America inevitable" (1955, p. 20).

Mumford described the influence of Protestantism as initially joining with science to destroy the old symbols and activities of art, literature, music and myth-making and to prevent new symbols from developing (1955, p. 21). Fields et al. reported Calvinistic theology, for example, as reflecting the deterministic philosophy of the 1600s which suggested that worldly success was a sure sign of being one of a certain number of people who were chosen by God (1984, p. 108). Pascarella noted

that John Wesley purported industry and frugality as leading to wealth, which, if not guarded against, could create pride and desire. Accumulation of wealth for the purpose of sharing it, however, was a means to grow in grace. Ultimately however, according to Pascarella, people "lost sight of the postworld payoff," and material success became an end in itself (1984, p. 30)

Mumford, who believed that people's disassociation from society led inevitability to the birth of America, recalled that Rousseau had developed a solution to disassociation: individuals should vote their natural political rights as shareholders in the society (1955, p. 20). Elson noted that Rousseau's notion, coupled with Locke's theory that government depended on the consent of the governed, led the way for Jefferson's Declaration of Independence which averred people's inalienable rights, including the right to overthrow a government which denies them life, liberty, and the pursuit of happiness (1992, p. 2).

America's image of the individual's place in society was described by Bellah et al. (1985, p. 37), Harman (1988, p. 161), and Pascarella (1984, p. 32). In sum, these authors said that the nation's founders, influenced by Enlightenment thinking, provided a liberal philosophical base emphasizing humanitarianism and morality. The founders were principally Deists and Freemasons who believed that a supreme power had created the world but was no longer acting in its unfolding. They believed, however, that there are transcendental realms of reality which play a role in shaping human events. Their belief in spiritual bases of moral governance can be seen in the symbolism of the Great Seal, adopted in 1782, which shows, for example, an unfinished pyramid capped by an all-seeing eye signifying the need to incorporate divine insight to complete the work of human beings.

The founders also believed that people had Christian values, however they officially recognized no particular religion--leaving churches the freedom to address salvation and to require strict rules of conduct. Instead, the founders focused on the development of human knowledge and on formation of a democratic government. Tocqueville saw individual conduct and the belief systems it reflected as the key to American success. The mores, opinions, and habitual practices that shaped the mental habits of religion, politics, economics, and so on, were the bases for

maintaining a free republic and avoiding despotism (1969, pp. 305, 287).

Several theorists also noted that the democratic ideal contributed to a focus on material success. They are Bellah et al. (1991, p. 66), Cetron and Davies (1989, p. 296), Harman (1988, p. 139; 1991c, p. 1), Henderson (1988, p. 96), Mumford (1955, p. 26), and Pascarella (1984, p. 96). According to these writers, the new land was inspired by an image of being guided by God toward moral purity and also toward personal industry, an image emphasizing the values of labor, industriousness, diligence, sobriety, and thrift which led not only to the perpetuation of democracy but also to two centuries of economic expansion.

The above authors stated together that Enlightenment thinking meshed well with industrialism, and the intellectual revolution was ignited by Adam Smith's Wealth of Nations. All men were created equal, and with proper material and social conditions their equality could become fully realized. Nature was reduced to scientific machinery, and it was humanity's place to master machines and to produce wealth. Founder, Benjamin Franklin, as a scientist, inventor, and businessman, personified these beliefs. Both Franklin and Jefferson disapproved of individuals amassing superfluous wealth and property at the expense of humanity, however, and both expressed concerns about the abuse of such power to defy the laws of the country. Nevertheless, the United States' unbounded resources promised material gain along with freedom for full realization of personal potential.

Thus the Protestant ethic and the democratic ideal led directly into the Industrial Revolution of the early 1800s. Tocqueville had suggested that certain mores were the bases for democracy, and Bell, who defined those "patterned ways of life" or "modalities of responses to core questions" as culture, pointed out that the American culture shifted as its society moved into industrialism (1980, p. 332).

Bell described a Great Profanation during which the relationship between individuals and the existential questions of the culture shifted (1980, p. 334). Bell, together with Habermas (1970, p. 97) described this shift as follows: Reason gave way to instrumental and purposive rationality; radical individualism took over the focus on community; secularization and fear of nothingness replaced systems of magic and myth as well as hermeneutic interests in a hereafter; technical order substituted

for natural order; and the goals of science and capitalism subsumed those of justice and freedom. Without a social context, positivist science, technological progress, adherence to institutional authority, productivity, and consumerism became legitimate bases for political systems.

Tarnas noted that Hegel's belief in the divine unfolding of humanity toward unity with a divine spirit, which he wrote about in the early 1800s, became "the last culturally powerful metaphysical system claiming existence of a universal order accessible to human awareness" (1991, pp. 380, 383). By the end of the nineteenth century, according to Keen, Hegel had given way to Nietzsche's "God is dead" philosophy which included the belief that without God's guidance of human history, all things are possible, including any evil which humanity might impart (1992, n. p.).

Toffler saw the shift to industrialism as the second of three great waves in the technological advances of society (the first being the shift to an agrarian society due to the discovery of agricultural technology) (1980, p. 13). Harman suggested that the shift was an historical revolution with value and life-style changes which accelerated Western societal trends but that it was not a profound transformation involving new metaphysical and ideological bases such as occurred at the end of the Middle Ages, for example (1979, p. 33).

Various views of this move to industrialism were described by Bell (1980, p. 279), Bellah et al. (1985, p. 39), Elson (1992, p. 21), Fields et al. (1984, p. 214), Ferguson (1980, p. 46), Gardner (1990, p. 10), Harman (1987, p. 116; 1988, p. 139; 1991c, p. 2); Henderson (1992c, n. p.), and Simmons (1990, p. 31).

According to these authors, one view of the Industrial Revolution is as a spiritually liberating force in which new technology produced unparalleled growth and prosperity, material comforts, freedom of choice, cultural participation, and awareness of new possibilities for the future. It could be seen as a time when people focused on self-improvement and control of personal destiny through discipline, self-reliance, industry, self-denial, and deferred gratification. Abraham Lincoln served as a noble personal example. Also, Westward expansion across the United States reflected the belief that life was not easy but that future improvement could be gained through external acts.

Another view purported by these writers was of a time when science and technology promoted positivism and reductionism and produced the tools for controlling nature and managing society. The period could be seen as a time when prosperity was unevenly distributed and when materialism eroded transcendental bases and neglected inner human experiences such as wholeness of vision, creativity, spontaneity, intuition, values and meanings. The male role personified the ethic of achievement while women bore the ethic of moral ecology and were denied equality as independent citizens.

Asimov (1987, p. 26), Bellah et al. (1991, pp.46, 67), Bennis (1989, p. 30), Bleeker (1987, p. 6), Cordell (1988, p. 41), Elson (1992, p. 21), Harman (1988, p. 26; 1991a, n. p.), Heller (1984, p. 90), Henderson (1988, p. 6), and Simmons, 1990, pp. 30, 97) contributed to a picture of business and industry which emerged at this time.

The Industrial Revolution began in England with the first assembly-line mills. Thereafter, adventurers and entrepreneurs built on the inventive geniuses of the 1700s to develop technology into dark, satanic factories where reductionism dictated the fracturing of knowledge and skills into muscle-versus-machine-type tasks to be performed with slavery-like repetition. Bosses were uncaring father figures, and this paternalistic, professional management developed into bureaucratic hierarchies. Industrial plants were initially special purpose agencies which competed against one another, replacing individual competition, and ultimately developed into large manufacturing enterprises and corporations which operated as private governments. In contrast with the former production-replenishment focus of agriculture, industries focused on extracting, using, and discarding raw materials and energy in mass production, shipping, and transportation. The use of huge quantities of cotton supported growth of slavery in the south and contributed directly to the Civil War.

With the proliferation of goods and services as well as with the technology to support them, sprawling metropolises grew and created greater density and social interaction among people. Ultimately, industrialism generated the two phenomena which Tocqueville (1969) saw as threats to the moral balance of democracy: the slave society of the south, plus the industrial system itself, with its large numbers of

poor and dependent workers (namely, women and immigrants) and its aristocracy and unbalanced communities.

Although industrialism dominated the culture at this time, some individuals and groups such as the Quakers and other sects clung to spiritual beliefs and made the industrial revolution more tolerable, according to Handy (1985, p. 187) and Simmons (1990, p. 56). For example, Bellah et al. (1985, pp. 34, 73), Ferguson (1980, p. 47), and Harman (1991c, p. 4) described a group of idealists who gathered around Concord, Massachusetts in the mid-1800s. These Transcendentalists rebelled against dead intellectualism and promoted an American renaissance. They sought a life rich in experiences and feelings, identification with nature and other people, and freedom to express themselves. They thought of themselves as responsible for their own destiny, and they suggested that people withdraw from utilitarian materialism and from the masses of urban life to isolate themselves among family and friends. Mumford considered the transcendental movement one of those vital periods in the history of human and social wholeness (1951, p. 232).

Science and industry found common ground in the submission of transcendental beliefs, as well as in the development of technology, and in the support of Darwin's 1859 Theory of Evolution, according to Anderson (1992, p. 24), Bateson (1972, p. 462), and Sahtouris (1989), p. 177). Industrialism validated the notion of natural selection and survival through successful competition for limited resources. In addition, the search for coal and minerals necessary for manufacturing led to geology as a branch of science. This geological search led to finding the existence of a prehistoric world, and the connection of such a theory to science and manufacturing led to its acceptance. In addition, Elson noted that Karl Marx found corroboration for his class-struggle theories in Darwin (1992, p. 21).

By the close of the 1800s, according to O'Hara, scientific truth was accepted as "reality" (1988, p. 153), but Anderson noted that there was a growing awareness that science kept revising its own truths and that the "old reality refused to acknowledge defeat and go away." There was an inkling that science might be a process rather than a single revelation and that there might be different kinds of truth (1990, p. 34). This awareness, like those concerning sweat shop labor and women's

rights, for example, began to ferment as the headlong impetuosity of youth approached maturity.

The most notable impact of the Industrial Revolution on present time has been the solidifying of a science-based belief system which stimulated both the growth of technology and capitalism and the submersion of transcendental beliefs--issues which are confronted directly in examination of the more recent past.

Early Maturity: Modern History

Modernism, according to Bell, is a cultural temper which began with the Industrial Revolution (1980, p. 276). Put another way, Bellah et al. said that the Industrial Revolution "continues to shape our way of relating to American society" (1985, p. 44). Authors such as Bellah et al. (1985, p. 43; 1991, p. 74), Bennis (1989, p. 30), Bolman and Deal (1971, p. 4), Cetron and Davies (1989, p. 319), Erickson (1985, p. 40), Harman (1979, pp. 24, 112, 115; 1988, p. 140), Schon (1984, p. 37), and Stewart (1989, p. 9) described various aspects of this influence.

In general, these writers described the outset of modern time, a period from approximately 1900 to 1925, as a grand movement in history which surged forward with economic growth and bursts of creativity as scientists and inventors developed new technologies under the dominant industrial paradigm. On a personal level, people were positive about the future and filled with inspiring goals and unflagging motivation.

According to these authors, interests by this time had shifted from the inner to the outer world and the focus was on: (1) acquisitive materialism, with the establishment of a material standard of living and interest in personal gratification, (2) mechanization, with emphases on production of goods and services, on replacement of human labor by machines, on organization and subdivision of work, and on the rise of management science, (3) scientific methods, with adoption of a utilitarian search for knowledge, a supreme mode of inquiry focused on understanding, predicting, and controlling the universe, and the goals of technological power, efficiency, and progress, and (4) pragmatic values, with an emphasis on the will to win and on success as an end in itself, along with attention to individual self-interests, pursuit of

practical outcomes, free enterprise, and freedom in the marketplace.

At the social level, these writers noted new forms of social order and political control. Private wealth developed on an unheard-of scale, and large-scale business organizations dominated the social landscape. Capitalist owners, bankers, and investors pursued economic interests without social justice, and corporations competed with regional, ethnic, and religious interests. Large cities filled with factories and slums grew with new technology and national markets. Life became divided--public from private, home from work, white collar from blue collar, and so on.

Bellah et al. (1991, p. 76) and Gardner (1990, p. 10) suggested that by the outset of World War I, in 1914, people felt sure of a good future. Labor movements began demanding worker rights, and governments began to develop and apply public standards to corporations and to the economy through such agencies as the Federal Trade Commission and the Federal Reserve.

Bellah et al. (1985, p. 46), Campbell (1972, p. 47), Clancy (1988, p. 16), Harman (1986, p. 106), and O'Hara (1988, p. 153) described how the hope of infallibility for scientific objectivity dominated the external world. A bias toward positivism, reductionism, and belief that what is real is measurable was useful for creating technology. According to Pelletier, the universe was seen as a rational system of logical laws which could be used for the betterment of the race, and science had "replaced religion as the basis of a comprehensive and compelling belief system" (1978, p. 13).

The techniques of logic and observation and the applied use of rational brain power to discern cause and effect were accepted as sufficient to explain the complexity of the world. Story tellers, messengers, prophets, and rituals were no longer necessary to name elemental forces or explain creation.

Several theorists observed that the high tone and optimism of the period were not without their problems and were not destined to last. Ferguson (1980, p. 48) and Harman (1992c, p. 4) both recalled William James' caution during this period that existence of the inner, human, subjective, spiritual, and mysterious experiences must be included to avoid premature foreclosure on reality. Harman also observed that an overemphasis on science and the industrial paradigm led to "neglect of human

experiences--the intuitive realm from which creative and noble impulses and the sense of ultimate values and meanings come" (1986, p. 106).

Bellah et al. described the absence both of a normative culture of morality and of religion as bases for human experiences during this period. They saw morality as relegated either to aesthetics or to the role of women and family, and they saw religion as a revivalist emotion. They noted the evolution of the therapist, along with the entrepreneur and the manager, as needed to help people cope with lost expectations of what made life worthwhile. Therapists attempted to affect the "cure" of self-enhancement and empowerment by helping people create meaning and intimacy between themselves and their external roles (1985, p. 46).

Tarnas described Freudian therapy, which was developed during this period, as the third wounding blow to humanity's pride and self--the first being Copernicus' theory that the earth was not the center of the universe, the second being Darwin's theory that humans had merely evolved and were not the privileged focus of creation, and Freud's being that the unconscious exerts decisive influence over human perception and behavior (1991, p. 423).

In Europe during this period, according to Anderson, revolutionary and counterrevolutionary ideas such as Marxism, nihilism, and fascism were ridiculing classical European civilization and emerging with new social structures of reality. Sartre, Freud, and Einstein had developed new views of reality, the human psyche, and the physical universe. "These ideas fostered loss of certainty, alienation, and anxiety--attempts to make sense of the world with no fixed points of reference" (1990, p. 33).

World War I had begun in response to the revolutions and wars of the late 1700s and 1800s which had realigned boundaries and ultimately stimulated strong feelings of nationalism. By its end, the Russian revolution had led to communism, and European nationalism, with the right of each nation to determine its own system of government, was even more firmly entrenched. The new League of Nations was poorly supported, and according to Elson, "faith in the beneficence of progress [had] died" (1992, p. 21).

Erickson (1985, p. 40), Gardner (1990, p. 10), and Henderson (1988, p. 314)

described the period that followed as foreshadowed by Spengler's gloomy Decline of the West, published in 1918. They noted that a wave of prosperity (the latest of four approximately fifty-year cycles which were later observed by Russian economist Kondratief as beginning with the Industrial Revolution) took its inevitable cyclic downturn beginning in 1929. Theorists described each wave as consisting of a period of prosperity accompanied by overbuilding and overproduction which leads to the inability to pay debts and ultimately to a period of recession or depression.

Theobald saw the American Depression as caused by the loss of the relationship between personal and public roles, which other theorists also observed about the period. It was the result of an "overwhelming commitment to economic growth which . . . devalued the importance of citizenship" (1987, p. 68). Bellah et al. observed that the government responded to the downturn by enhancing its role and establishing additional initiatives (1991, p. 76); and Harman noted that businesses responded similarly--focusing on mass consumption as the means to create employment and distribution of purchasing power (1988, p. 141). Bell defined the modern era as "the shift in the character of economics from supply to demand" (1980, p. 214).

Writers such as Anderson (1990, p. 37) and Hunter (1991, p. 11), who examined the 1930s and 1940s, saw the period as one in which the majority of people remained focused on their own needs and desires--establishing a high consumption, high credit lifestyle and paying little attention to the future. Sociologists searching for a culture found that different people had constructed entirely different value and belief systems. Mumford described it as an age that rejected the function of personality and attempted to achieve statistical certainty through mass phenomena, an age in which the sense of reality and the possibility of renewal were undermined by a prevalence of mechanistic and behavioristic ideology. Western culture "no longer represented man; it [was] mainly outside him" (1951, pp. 107, 13).

de Chardin (1964, p. 126) and Morrow (1992, p. 8) noted that optimism and self-confidence had begun to return by the end of the thirties. Industrialized nations had grown stronger around the Pacific rim as well as in Europe, and the growth and speed of communication had begun to mold humankind into economic and social

relationships as well as into a psychically communal existence. The theme for the 1939 World's Fair was "Building the World of Tomorrow."

Anderson (1992, p. 23) and Erickson (1985, p. 44) described what followed. In Europe, nationalism, class struggles, and anarchic views had developed strong followers of communism, fascism, and nazism. Germany's industrial power had grown strong. In keeping with studies of the waves of economic dominance which show that economic strength is connected to military power (as though flourishing countries feel an "obligation or temptation to exercise military power on the world state," Erickson, p. 43), just after the World's Fair opened Hitler invaded Poland. The United States, seeing the opportunity to further develop its own economic strength, stepped in, as it did in World War I, to continue to flex its power and to police the world.

Many theorists noted the impact of that United States action on the present time. Bell (1980, p. 211) and Schwartz and Saville (1986, p. 32) wrote that, economically, the period following World War II through the 1970s was a boom in the United States and world economies greater than that of any previous period in history. Bellah et al. described how American institutions and government agencies were influenced for decades after the war by government initiatives which stimulated economic development. The government established agencies to act as funders, underwriters, and regulators of publicly funded projects concentrating on military spending and on certain industries such as aerospace, electronics, and atomic-energy development (1991, p. 76).

Henderson noted that from World War II the Gross National Product, which focuses mainly on consumer activity, was established as the main indicator of economic well-being. She emphasized that the GNP began by valuing bombs and bullets over people and environments (1992c, n. p.). Anderson (1990, p. 44), Bell (1980, p. 211), and Naisbitt (1982, p. 105) wrote that World War II, by stimulating mobilization for victory, created a period of political centralization for the United States. There was for a time great awareness of American symbols, myths, and beliefs.

Bell also noted, as did Hall (1992, p. 14), that the war ended with Europe as a

house divided, with many new states of diverse size and resources--a situation which Bell said could ultimately create difficulty in achieving international stability. Harman added that one of the post-World War II goals of industrialization for underprivileged countries was to develop cash crops and end world hunger. He noted, however, that having less well developed countries become industrialized by abandoning their cultural roots and adopting such alien Western cultural practices as the use of fertilizers and pesticides was "not necessarily the best for the developing country" (1991a, p. 126).

Clancy et al. (1988, p. 22), Harrison (1984, p. 102, and Yanklovich and Immerwar (1987, p. 16) commented on social impact of World War II. They said that powerful forces of change were begun at that time which supported personal freedom, human and civil rights, and democracy and equality. Society became more open and egalitarian with greater freedom in culture and morals. Many people who grew up in postwar prosperity took security and affluence for granted and placed great emphasis on personal expression. They unleashed enormous amounts of personal power to attain their dreams, and they became takers, causing them to increase their differences and conflicts with others and to become issue- and litigious-oriented, careless of relationships, and personally stressed.

Mumford described World War II and the postwar period, particularly with the development and use of the atom bomb to end the war, as "a point in history when man [became] his own worst enemy." He said that the moral breakdown had been long under way (1951, p. 11). Mumford saw the A-bomb as appearing at a time when moral disintegration was already well under way. "The act of fighting the war meant that we had already succumbed to the enemies' principles," and after the war all principles of restrictions and inner and outer limitations were removed (1955, pp. 236, 238). This moral breakdown gave authority to animal reflexes, with human minds engrossed in machines and the exploitation of nature. This externalism, idealizing progress and overconcentrating on machines, accompanied the failure to make sacrifices to save civilization. It devalued the personal--arresting inner creativity, deadening emotions, neglecting proper education, and permitting moral values to lapse (1951, p. 11).

de Chardin suggested another view. He said that, although the advent of the atomic bomb brought a "new sense of power to manipulate the forces," it made "the mind of man open to meaning, responsibility, and aspiration of comprehending the cosmic functions of the universe" (1964, pp. 142, 144). Hubbard reflected this belief, perceiving the period as the "beginning of a Conscious Evolution [when] the collective egos of nations and races were signalled to cooperate or die" (1982, p. 44). Clark also saw the period as the beginning of a search for order, but he saw it as focused on the development of scientific legitimacy (1985, p. 44). Schon agreed, describing the need for order as stimulating a rise in the prestige of science and technology (1984, p. 37).

Pelletier described the major changes in the fields of science which began after World War II as reflective of the paradigm shift which Kuhn defined in the early 1960s. Following World War II, new scientific discoveries were found to be unacceptable by scientists in the dominant paradigms until enough unexplainable data arose to force a decision to amend the old model (1978, p. 15).

Pelletier, along with Anderson (1990, p. 36), Bradshaw (1988, p. 50), Clark and Cohen (1992, p. 35), Mitchell (1992b, n. p.), Riedl (1984, p. 73) and Tarnas (1991, p. 338), contributed to a description of that shift. They saw it as a period during which a new view of the universe and new methods of research challenged common sense reality and completely surpassed the limitations of Newton's mechanical laws, causing the ultimate logic of the universe to be questioned.

They said that the change began with Einstein's theory of relativity which was first published in 1916 and which established the basis for the A-bomb. Einstein showed Kant's perceptions of space, time, substance, and causality as absolutes to be erroneous and Newton's principles of matter to work only for particles of normal sizes and speeds but not for large, fast particles of matter. His theory indicated that previous observations had been limited and that beliefs about the structure of the world had been only approximate.

Einstein's discoveries began an expansion of scientific thought which has continued up to the present, according to Tarnas (1991, p. 383) and Wilber (1983, p. 26). His theories stimulated a re-evaluation of metaphysically inclined scientists such

as Bergson, Whitehead, and Russell, who had been averring since the early 1900s that pure science was a limited view of reality. These early believers in an alternate view emphasized that the scientific search for quantitative answers omitted qualitative and value concerns, thereby rendering the empirical-scientific world view unbelievable and without intrinsic value because it works only with a disqualified universe.

Wilber and Tarnas, along with Vaill (1984, p. 27), noted that these early views were carried forward through the 1950s and 1960s by such theorists as de Chardin, Maslow, and Mumford, and that these ideas have now increased in impact due to the turmoil of recent times.

The 1950s were described by Boulding (Coates and Jarratt, 1989, p. 105), Harman (1980, p. 14; 1988, p. 141), Naisbitt (1982, p. 105), and Stewart (1989, p. 9) as the continuation of the great era of change begun by the Industrial Revolution. They described a growth surge similar to that of the early 1900s and a recession of the centralization of the 1940s which had been brought on by focus on the war. During the 1950s the ethic of consumption flourished along with increased international trade and a policy of urging world nations to get more technology as the Cold War and arms race escalated.

Industrialism, scientism, and post World War II events led in two directions in the 1960s. One observed by Bellah et al. (1991, pp. 54, 60), Bolman and Deal (1991, p. 5) and Kinsolving (1992, p. G-3) was the beginning of the American Dream, personified by the Kennedy era and enhanced by Johnson's Great Society legislation. With the universal middle-class ideal of prosperity and with institutional arrangements which aimed at forestalling another depression, raising standards of living, educating the work force, assisting the aged, and benefiting the stockholders. War was waged on poverty, the welfare system was begun, exclusion of the black minority was confronted, the global marketplace was established, and democracy flourished. As a result, affluence and the image of the happy, stable family became a way of life.

The other direction of the 1960s was toward an upheaval according to Pelletier, who saw it as "symptomatic of a profound evolutionary transformation of human consciousness" (1978, p. 1), and according to Harman who saw it as

pinpointing the beginning of the post-modern era (1992c, p. 1).

Many authors contributed to a description of this period: Anderson (1990, p. 44), Campbell (1972, p. 253), Ferguson (1980, pp. 19, 126), Harman (1991c, p. 1); 1992c, p. 1), Heller (1984, p. 91), Hine (1984, p. 11), Hubbard (1982, p. 100), Kiefer and Senge (1984, p. 69), O'Hara (1988, p. 146), Morgan (1986, p. 302), Pelletier (1978, p. 16), and Ramos (1981, p. 83).

According to these writers, the 1960s was a time when attacks on old belief systems and revolts against established institutional power generated profound changes. Formerly powerless people became disenchanted with a worldview based on the white, middle-class male and disillusioned with materialism. They determined that the dominant culture was tainted, and they organized themselves into a counterculture aimed at social change. They questioned external authority, rebelled against giant, totalitarian power structures serving only the interests of the elite, warred against false consciousness, and refused mindless conformity. Their social activism and turbulence generated adherents and disruption around the world.

Members of the counterculture, according to the above authors, having experienced bankruptcy of material satisfaction, desired a different form of gratification. They had an apocalyptic vision of the laws of earth and the power and spirit of God as residing within humanity and of inner wisdom and intuitive truth as the only trustworthy authority. Having experienced humanity's landing on the moon, they had a holistic view of the universe. They envisioned a new idea of consciousness, the unity of humankind, and an integrated culture with balance between the material and the spiritual.

The new thinkers challenged classical physical, behaviorist, and Freudian orthodoxies, and, based on their ideas of a worldview, applied for a more humanistic consideration of values, emotions, meanings, and human potential. They renewed interest in the functioning of the mind and pushed for a new approach to science which would include the fundamentals of human perception and consciousness. The power of these new belief systems resulted in some integration of new thought into science paradigms. Some practitioners of scientific inquiry acknowledged a degree of subjective involvement, humanistic psychology was born, and human relations

approaches to management were developed.

The ability of the counterculture to bring about massive change was limited, according to Anders, who noted that the movement underestimated both the staying power of dominant cultural myths and institutions and the complexity of human consciousness. He noted, also, that there was no established new culture for adherents to move to had they been able to move away from the old one. Anderson acknowledged, however, that many of the counterculture ideas lived on in new ways (1990, p. 17).

The postmodern period continued into the 1970s and 1980s, extending the ideas and methods of the Industrial Age into the Postindustrial or Information Age. Theorists considered this a unique period because of the rapid change and the "scope, pace, and interrelatedness of growth" that took place (Wishard, 1987a, p. 23). Others who wrote about this period include Bateson (1972, pp. 229, 474), Bell (1976a, p. 116), Bellah et al. (1991, p. 64), Campbell (1972, p. 87), Cetron And Davies (1989, p. 92), de Chardin (1975, pp. 177, 181), Ferguson (1980, p. 19), Fields et al. (1984, pp. ix, 206), Harman (1986, p. 106; 1992d, p.3), Henderson (1986, p. 56; 1992a, p. 8), Keifer and Senge (1984, p. 69), Raymond (1986, p. 15), and Toffler (1980).

According to these authors, the Industrial Age ideas which carried forward into this period centered around mass production, efficiency, and competition. Several writers described the period as a third wave--of technological competence, of economic cresting, and also of new thought. Emphasis on productivity continued but with a more proactive and controlled orientation. Baby boomers (those born about the time of World War II and after who comprised the largest segment of population ever known), who had become the hippies of the '60s and had moved on to become the yuppies of the '70s, became the career-oriented condo dwellers of the 1980s and contributed to the largest segment of the population of the time being over 45 years old. They had outgrown consumerism and were concerned not only with a comfortable life style but with appropriate use of technology.

Technology for greater dissemination of information and widespread learning was considered appropriate, and the label "Information Age" came to describe the on-going restructuring of industrial societies into the communications era. Theorists and

knowledge workers replaced experimenters and physical workers. Information as an abundant resource became widespread. Soon networks of citizens were crisscrossing old power structures. Cities, communities, and nations became empowered with planetary awareness. This resulted in the awareness of a global culture, in the decline of hegemony in the west, and in the postwar social and political world adjusting itself--all of which demanded new, cooperative rules at local and global levels.

Theorists continued that the period engendered views of both holism and unity. With the focus on communications, Bertalanffy's general systems theory and other theories about the interrelationships of parts with a whole received attention. So did de Chardin's belief that, with the burgeoning population occupying all free space on the planet, the compenetration or consolidation of humanity leading to the Omega point had begun.

The view that this period reflected a new wave of thought was voiced by many. Hubbard, for example, described it as a "noological" revolution, "a period during which the human mind comes to understand the laws and processes of nature and learns to create as nature creates, that is, through innovation, synthesis, and transformation (1982, p. 107). Harman said that a change was taking place at the most fundamental level of the belief structure of Western industrial society (1988, p. ii). Colorado said the Indian oral history pronounced 1987 as the end of the dark sun and the beginning of the time when native American knowledge of nature could begin to reemerge (1992, p. 12).

Others of those authors listed above described this period as a consciousness revolution during which time larger numbers of people became aware of increasing problems, began to feel insecure about the future, and began to reassess their values--moving away from focus on self-aggrandizement toward more self-responsibility. Some observed the period to be one of renewed interest in perennial wisdom, religion, spiritual, and psychic matters with a wholesome search for self-understanding. Others suggested it as a period of historic synthesis during which personal transformations began to stimulate social transformation.

New directions of thought and events of the Information Age were closely intertwined with the progress of science during the period. Clark and Cohen (1992,

p. 35), Gelb (1991, p. 39), Guba (1985, p. 80), Harman (1988, p. 106), Henderson (1992a, p. 9), Mitchell (1992b, n. p.), Sheldrake (1991, p. 70), Tarnas (1991, p. 418), and Zukov (1979, p. 313) described a progression of occurrences in new areas of science which contributed to new thought: Einstein's relativity was followed first by Heisenberg's study of quantum physics and his uncertainty principle, then by field theory and its relations to formal and final causes, and ultimately by chaos theory. All of these and other explorations into physics and related sciences led to the belief that natural behaviors are so complex that prediction is beyond the capacity of science to totally compute them. These theories plus new evidence of the Big Bang and overwhelming evidence of evolutionary progress suggested that belief in eternal mathematics was questionable.

As discoveries showed that science couldn't deliver absolute certainty, positivism as a world view was seen as a contradiction. The notion of a world ruled by change, without intrinsic meaning, and devoid of spiritual purpose was rejected. People lost some faith in science since it was no longer totally embedded in world consciousness. Some advanced thinkers even suggested that science, as it was previously known and practiced, would end when higher dimensions of human experience were reached.

As a result of its own discoveries and shifts in belief systems, scientists matured and began to accept the need for different models of reality. Far from dying out, the powerful influence of the scientific worldview remained and even prospered. Sagan pointed out for example that scientists discovered, called the world's attention to, and continue to lead the way in the environmental crisis (1992, p. 12). Guba noted that positivism still exerts its influence. He said:

The hold that positivism has had on our minds is well illustrated by the fact that we describe the emergent period as that of post-positivism; the new has insufficiently formed character to have a name of its own. It is only with reluctance that we give up our cherished former basic beliefs. (1985, p. 80)

O'Hara suggested the need for a continued belief in the objectivity of science because with it, humanity is vulnerable to subjectively-determined authority based on any source (1988, p. 154). Wilber stated that, although many say scientism is dead,

empirical verification (that is "verification by the senses or their extension") is pervasive and still rules the day (1983, p. 28).

Harman summarized the close of this period in history by suggesting that it reflects C. P. Snow's conclusions that modern society is attempting to do the impossible, that is, to live with and ignore the contradictions between two conflicting belief systems—one, scientific-based for economics, and the other, humanistic and spiritual for personal concerns (1992c, p. 3).

This contradiction, having resulted from earlier experiences and having become focused in our early steps toward social maturity, carries forward into the present time, and theorists suggested that the need to resolve it and related issues is the cause for today's turmoil. The security of adult maturity is reached by examining the lessons of life from birth on, evaluating the bases of currently held beliefs, and making new and studied decisions based on a desired future.

Summary

The cursory review of history presented here, reflecting the incidents and interpretations which theorists studying our current transitional time found relevant and significant, suggests the foundations of our present-day beliefs.

This review suggests that throughout history belief systems have revolved around humankind's need to understand the natural order of the world and humanity's relation to it. The questions of whether the universe is a meaningful or an accidental occurrence, and whether humans have a meaningful purpose or a mechanical existence, have led to basic issues of how humankind will meet the challenge of survival and how it will relate, or not, to some higher order. Variations on these themes occurred as ideas about science and religion evolved and developed and as topics such as human development, human industry, human accomplishment, human rights, human ascension, human consciousness, and social interaction emerged and demanded attention. People's beliefs have shifted as yearning, evidence, or some other persuasion has enticed them toward particular answers to the compelling questions of their time and place. Basically, transformation seems to have occurred according to the precepts presented earlier. A shift occurs when it is perceived that

current needs are not being met and a new vision is perceived as better able to answer those needs, with tension ultimately creating a shift to a new set of beliefs and practices.

It is not difficult to follow the two main issues through history--first with the dominance of religion, then with science, and finally, during humankind's early maturity, a resurgence of focus on religious beliefs--and to see how they have ultimately come to a head in our present time.

The present, then, is a period of tension during which people are in different stages of feeling dissatisfied, are examining their currently-held beliefs, and are exploring the possibilities of a new vision holding greater promise. The contradictions of this period are examined in the next chapter.

CHAPTER IV

THE PRESENT

Transition

Sahtouris, who characterized the historical development of human knowledge as paralleling the stages of human growth, described our present age, the beginning of maturity, as a period of pessimism and depression brought on by awareness of our earlier lack of perspective and by our inhuman behaviors and a period of recognition of the need to make choices affecting the rest of our lives (1989, p. 207).

Nearly every theorist examining the present time agreed that we are in a period of stress and change--a time of transition. Authors suggested, for example, that we are: "undergoing radical change" (de Chardin, 1964, p. 239), "in an era of transition and transformation" (Lincoln, 1985a, p. 32), "in the process of paradigmatic change--a change in world views, a transformation" (Tannenbaum in an interview with Jamieson, 1982, p. 32), "facing the demise of a major worldview" (Schaeff & Fassel, 1988, p. 38), in a "radical transformation" of our basic values and our fundamental world view (Rost, 1991, p. 100; Swimme, 1984, p. 18), in the process of "one of the greatest leaps of human spirit" and of "a transformation of the mythological field" of our culture (Campbell, 1990, pp. 252, 255), in a unique period of "metamorphosis" (Harman, 1979, p. 4), "in macrotransition" (Cleveland, 1982, p. 169), "living in the 'time of parentheses,' the time between eras" (Naisbitt, 1982, p. 279), and, simply, in a period of transition (Erickson, 1985, p. 40; Sinetar, 1991, p. 6).

There was less agreement on the degree of progress society has achieved in its transition. Most authors reflected beliefs that the transition is just beginning, stating, for example, that: "a new paradigm is being born" (Bennis & Nanus, 1985, p. 14), "this is a nascent period of nonorthodoxy, [and] a period of construction is just beginning" (Clark, 1985, p. 76), "a change is germinating" (Popcorn, 1991, p. 3), "a new civilization is emerging" (Toffler, 1980, p. 9), "the present is detaching itself

from the past" (Ferguson, 1980, p. 62), and that we are: "standing at the dawn of a new era" (Naisbitt & Aburdene, 1990, p. xvii), "approaching a turning point" (Capra, 1982b, p.25), "on the verge of fundamental transformation" (Harman, 1979, p. 21), and "on the verge of a quantum leap" (Clancy et al., 1988, p. 10).

Several theorists suggested that we have achieved some degree of progress in the transitional process. Buckley and Perkins, for example, said that a "massive shift in the perception of reality is underway" (1984, p. 58), and Ferguson (1980, p. 62), Nicoll (1984b, p. 5), Plummer (1989, p. 10), and Theobald (1987, p. 82) all agreed that we are currently "in the midst of," "close to mid-point," "in mid-stride" of, or "at the heart of" a paradigm shift or a great transformation. In 1964, de Chardin said that "taken as a whole, there has been a basic transformation of the human state" and that humankind is "approaching its critical point" (p. 39). In 1985, Lincoln said, "We are in between stories. The Old Story . . . is not functioning, and we have not learned the New Story" (1985a, p. 30). In 1990, Anderson wrote that a long period of transition was nearing completion (p. 8), and in 1991, Rost stated that a new paradigm had not yet become dominant but would "presumably become the mainstream paradigm sometime in the twenty-first century" (p. 100).

Differences of opinion concerning society's exact position in the transition process likely stem in part from the inability to identify a specific point at which a shift occurs and in part from the particular time and point of view from which the author was writing. Several theorists agreed that the accomplishment of a transition takes a span of time--Morrow suggested the ten year period of the 1990s as the "transforming boundary between ages" (1991, p. 65), Naisbitt said the shift takes only two decades (1982, p. 7), Hubbard gave it a 20-30 year time frame, to be accomplished by 2012 (1982, p. 99), Kiefer and Senge said 30-50 years (1984, p. 69), and Keen suggested one lifetime for a shift to take place (1992, n. p.). They also agreed that it is occurring very rapidly (Naisbitt, 1982, p. 7; Mitchell, 1992b, n. p.; Raymond, 1986, p. 17). Several agreed with Harman that, not only is the transition occurring rapidly, but that it is the "most rapid change ever" to occur in history (1992c, p. 1). Tarnas wrote that during the twentieth century there has been a sense of urgency and a recent awareness that "history has been accelerating at an

accelerating rate" (1991, p. 411).

Indecision about society's position in the transition is reflected in the problem of naming it. Most labels reflect the period only in terms of its movement away from some previously held belief system. Anderson, for example, referred to a "postmodern" revolution (1990, p. 55), and Lincoln said, "We are moving from a positivist era to a postpositivist era" (1985a, p. 32). The old belief system most frequently related to is the industrial paradigm, which Harman saw as still dominant. He referred to the movement toward new perceptions of reality as "transindustrial" (1979, pp. 4, 8, 24). More commonly, the period has been entitled "postindustrial" (Cleveland, 1982, p. 169; Henderson, 1988, p. 6; Rost, 1991, p. 181), a label which Cleveland saw as very restrictive and suggesting only where we're coming from. Henderson agreed, saying that the label has no context and that it connotes "looking into a rearview mirror and pretending it's a crystal ball" (p. 6).

Ramos saw the term as undermined by current disenchantment with industrialism (1981, p. 37). Corrick (1990, p. 60) and Simmons (1990, p. 32) suggested that we have moved beyond a postindustrial age to an information age. Henderson rejected that term as a metaphor for restructuring the industrial society on the grounds that it extends industrial ideas, methods, and economic models. She offered instead, the "Age of Light," connoting a shift to a holistic view of humanity's relationship to the universe as well as to advanced technology (1992a, p. 8). Simmons concluded that the period cannot yet be named because it has not been fully experienced.

Several authors noted other unique qualities of the current transition period, agreeing with Ramos, that "no society in the past has ever been in this situation" (1981, p. 100) and with Simmons that this is a "never before emergent evolutionary level of social order, the threshold of a qualitatively new historic spiral" and that "we the current population of the planet are the transition people, . . . the explorers and adventurers" (1990, p. 24).

One unique aspect, noted by Harman (1991c, p. 1), Hubbard (1982, p. 52), Nicoll (1984b, p. 5), and Tarnas (1991, p. 411) is that we are the first generation to be conscious of our own evolution and that, as such, we are aware of our own ability

to cause or prevent our own destruction and aware of our responsibility for the future as a whole.

Another unique aspect of this transition noted by several writers is that it is taking place at the time of a new millennium. Cetron and Davies (1989, p. 317), Morrow (1991, p. 65; 1992, p. 6), and Naisbitt and Aburdene (1990, p. xx) together described this phenomenon as merely an arbitrary mark on the calendar calculated by an obscure monk around 525 A.D. which signifies a new century or civilization's most spectacular birthday. This 1000-year anniversary has happened only once before, in the year 1000, and it represents the passage of an old volcano and the forming of a new embryo, bringing the promise of a new age or an apocalypse along with almost unprecedented qualities. This new millennium is being accompanied by special metaphysical and spiritual significance. Biblically, it generates ideas of the second coming of Christ or the establishment of the kingdom of God on earth, which may hold little significance for non-Christians. Mythologically it stimulates metaphysical predictions of a cataclysmic shift of the earth and of new religious experiences. And secularly it suggests time to embark on a new era, a golden period during which new themes spring from the human spirit and creativity flows with special freedom.

Many theorists wrote of this transition as a golden period of new themes. As Hubbard put it, "A powerful movement of action for life is spreading throughout the world" (1982, p. 14). Several authors suggested that this powerful movement has begun with what Guba (1985, p. 138) and Plummer (1989, p. 8) observed as a re-examination and reappraisal of long-held, basic beliefs or an altering of the way people see and think about the nature of the world. Anderson (1990, p. 55), Capra (1982b, p. 24), and Tannenbaum (in an interview with Jamieson, 1982, p. 32), said that people are looking at what they mean by reality and are moving from the current view of it to a new vision.

One new view of reality cited by several theorists as appearing in the new age is a move toward a transcendent mind, which Campbell (1990, p. 255), Harman (1991c, p. 4), and Sinetar (1991, p. 6) described as an acknowledgement of humanity's deep, inward mystery and a move from focus on the finite, on dependency

on others, and on problems to focus on belief in the unlimited and boundless, in self-reliance, and in solutions.

A number of writers felt it necessary to clarify the concept of a new age of beliefs as being different from the concept of "New Age," which Simmons described as a catchword, a convenient term, or a marketing label which distorted thinking and focused on the bizarre, glitzy, and superficial aspects of the human potential wave (1990, p. 247). Balmer (1991, p. AA-5) and Simmons described the "New Age" as a pop religion of the 1960s to the 1980s which lacked a strong moral base, which embodied individualism, self-aggrandizement, isolationism, and alienation, and which reflected cynicism, instability, rigidity, and shortsightedness. They said the new paradigm view, on the other hand, is a phenomenon of the 1990s and the twenty-first century which has a strong moral base, is concerned with compassion, social orientation, unity, and a world view, and reflects personal power, individual responsibility, spirituality, creativity, flexibility, constructive change, and progressive vision. Ferguson concluded that the new society is not a counterculture or a reaction but is an emergent culture and a coalescence of a new social order (1980, p. 38).

Capra (1982b, p. 23), Ferguson (1980, p. 59), and Harman (1991c, p. 1) suggested that this initial shift of view about humanity's transcendence leads to changes in the total quality of human existence which ultimately subsumes the larger minds of the Western social and ecological systems, the basic premises of the civilized cultures, and the values of civilization under a higher order. de Chardin (1975, p. 185), Ferguson (1980, p. 57), Harman (1979, p. 32), and Hubbard (1982, p. 101) all saw this is social change with a new spiritual perspective.

Ferguson went on to suggest that the present transformation is a reiteration for America of the transcendent beliefs on which it was founded and that it serves as a prototype nation for world revolution (1980, p. 125). Swimme saw the impact on the world of a shift toward human awareness of higher order as "something tremendous occurring in our time, something with the power to break up this impasse," and he saw the shift as including a perception of the universe as a whole (1984, p. 18). Capra (1982b, pp. 19, 24) and de Chardin (1964, p. 239), who perceived this transition as moving from a mechanistic to a holistic conception of reality, expressed

it as a process of unification and planetary socialization which gives up exploitive and divisive practices on all fronts and turns toward a united and harmonious living system.

Anderson stated that the result of newly emerging beliefs is that we are "now thrust rudely into a new climate of freedom and stress" (1990, p. 8). This turmoil and the reactions to this climate are cited by theorists as evidence that a transition is indeed occurring.

Turmoil

Ferguson (1980, p. 219), Keen (1992, n. p.), Raymond (1986, p. 16), and Simmons (1990, p. 70) together suggested that the collapse of the industrial era and the demise of its social structures and values are wrenching and demanding, that they have thrust the world into upheaval, turmoil and troubled times, and that transitions toward the birth of a new paradigm includes labor pains. Morrow said, "Regeneration is always cleansing and usually dangerous" (1991, p. 66).

Anderson (1990, p. 90), Campbell (1972, p. 9), Ramos (1981, p. 38), and Stephens and Eisen (1984, p. 189) pointed out that people exhibit a high degree of resistance in response to threats to their belief systems or their "absolute realities" and that the prevailing beliefs in society and the social theory of today are still based on the old structural-functionalist myths. They noted that parents and teachers (the "guardians of society") are still on the side of outdated illusions and against searching for new, disturbing truths. Bradshaw pointed out that the prevailing rules of parenting, for example, which are carried by families, schools, churches, and governments, are destructive--repressive, flagrantly anti-life, undemocratic, and glorifying obedience, power, rationality, and male supremacy--yet these rules are the "core beliefs of the modern 'consensus reality'" and are considered "normal" (1988, p. 166).

Anderson noted, however, that a "new worldview is latently present among us but is yet to discover itself" (1990, p. 27). Thus, Stephens and Eisen concluded that we are operating within a society trying to do a superficial overlay of new perspectives on an old structure; old forms don't work and new forms haven't emerged yet (1984, p. 189).

Many other theorists agreed with Stephen and Eisen that we are now living in a time of competing realities which are causing discomfort and dissonance. Morrow offered an analogy.

The First Law of Wing Walking cautions, "Never let go of what you've got until you've got hold of something else." But sometimes getting to the New Paradigm involves spending a certain amount of terrifying time in midair. And so we are pin-wheeling now in black space. (1991, p. 66)

Simmons (1990, p. 49) and Mumford (1951, p. 220) noted that there is decisive allegiance to either old or new world views, so that the overall pattern is disintegrating--old guiding themes have become exhausted and are no longer meeting people's needs but many people are resisting the challenge of the new. Campbell (1990, p. 251) and Handy (1989, p. 5) attributed the current confusion, disturbance, and dissolution of thinking and behaviors to this discontinuity.

This breakdown of civilization, according to Mumford, is insidious. He saw the erosion of values, the dissipation of human purposes, the loss of restraint, and the denials of distinctions between good and bad as a reversion to sub-human levels of conduct and a relapse into a "natural self" or barbarism and as a "nihilistic order [with] a complete unconsciousness of guilt" which becomes visible in philosophy, politics, and ethics (1951, pp. 148, 221). Schaef and Fassel likened the social breakdown to the personal characteristics of addiction: denial, confusion, self-centeredness, dishonesty, perfectionism, belief in scarcity, illusion of control, frozen feelings, ethical and spiritual bankruptcy, and crisis orientation (1988, p. 66).

Feinsilber, in a nationwide survey, found that people were reflecting the theorists' beliefs. Results showed widespread anxiety, dread, fear, anger, frustration, and so on (1992b, A-3). Bellah et al. said that many people are aware of problems such as the weakening of moral meaning in everyday life. They have not been finding personal satisfaction and are trying to improve their alternatives in and to transcend their limitations (1985, p. 290).

Many theorists noted a wide variety of stress behaviors exhibited by individuals attempting to deal with the current instability. In sum, Bellah et al. (1991, p. 273), Bradshaw (1988, p. 172), Campbell (1972, p. 9), Grumwald (1992,

p. 73), Harman (1991c, p. 3), Mumford (1951, p. 152), "Outlook '92" (1991, p. 60), and Skorneck (1991, p. A-3) reported fear, exhaustion, despair, chaos of manners and speech, shattered homes, sex and child abuse, battered women, insensitivity, callousness, escapism, isolationism, voter apathy, domination and control, aggressiveness, greed, psychopathic behaviors, eating disorders, mental disorders, suicides, easy availability of drugs, high numbers of addicts and dealers, violent gangs, decadence of morals, sexual hedonism, pornography, availability of deadly weapons, record carnage, vicious crimes, and terrorism as reflections of tension in our transitional times.

Writers also noted turmoil observable at the social level, where, according to Harman, one of the signs of transformation is that the institutions of the old society begin to work less well (1991c, p. 1). Together, Feinsilber (1992b, p. A-3), Fox (1988, p. 13), Harman (1979, pp. 26, 113), Mumford (1951, p. 169), Pelletier (1978, p. 1), and Simmons (1990, p. 216) reported such signs of societal failure as political systems overrun with special interests, control by the wealthy, a market-centered society with uncontrolled big business interests, misuse of welfare, income failure to cover the cost of living or medical care, and failure of schools to educate. In organizations, he saw excesses of regulation and routine, fossilization of rituals, impersonal determinism, failure of human initiative, and white-collar or corporate-executive crime. Stresses noted at the world level included ecological disasters, pollution, depletion of resources and high use of energy, population glut, world famine, technological control, governmental crimes and atrocities against the people, and volatile cultural and political situations.

Both Mumford (1951, p. 220) and Simmons (1990, p. 50) saw these signs of unrest in our present situation between an old belief system and a new view in terms of tension, and both said that this tension seems to be a catalyst propelling people forward. de Chardin (1964, p. 61) and Nicoll (1984b, p. 15) predicted more trouble before we successfully move forward, and they and others (Ferguson, 1980, pp. 25, 415; Mumford, 1951, p. 102; and Pelletier, 1978, p. 2) suggested that it is necessary to confront painful knowledge to achieve clarity. They said that stress, temporary chaos, or crisis (if it doesn't harden into a pattern of disorder) can be helpful by

serving as an impetus for unprecedented mapping of internal realms and by thrusting human development forward to a new, higher order. Mumford said that a seed must be buried and must rot for growth and that organic disharmony and psychological conflict are requisites for development. But Hunter concluded that the American people's threshold of tolerance for relative discomfort may have passed (1991, p. 15), suggesting that Clancy et al. were right when they said that the "rumblings of excitement and anticipation" are growing (1988, p. 10).

Reactions

Stress and turmoil at the personal, societal, and world levels gives evidence of transitional times, and the responses to such unrest offer further evidence. Theobald said that there is a great ferment generating new ideas, but that emerging ideas are not really visible to the mainstream (1987, p. 69). Huffington (1989, p. 76) and Tannenbaum in a conversation with Jamieson (1982, p. 312) suggested, however, that it is difficult to recognize the signs of a turning point when you are living through them and that we can be so close we don't see the full implications.

Anderson (1990, p. 27), Guba (1985, p. 87), and Vaill (1984, p. 19) agreed that new paradigm thinking is infiltrating every level of society and that demonstrations of new values, attitudes, and interests are emerging tentatively. Mumford (1951, p. 93), Harman (1979, p. 1), Huff (1985, p. 161), and Simmons (1990, p. 25) said that in response to the outward pressure of stress and crisis, the world is slowly exhibiting the characteristics of an emerging paradigm, that modern society has broken with the past in a number of important respects, and that change is becoming the norm.

Harman (1992c, p. 6), Henderson (1992a, n. p.), Nelson and Burns (1984, p. 241), and Simmons (1990, pp. 235, 237) said together that the overall picture is bright and that new generations of leaders--wild card individuals and a wide range of previously suppressed groups--are emerging with new ideas and with leading-edge activities and are forming a minority countercurrent whose network has spread exponentially in the last decade and who are moving toward a critical threshold to become tomorrow's prevailing mainstream beliefs and practices.

Anderson (1990, p. 6) and Harman (1979, p. 114) described the essential signs

and observable characteristics of a new paradigm in terms which reflect major areas of reappraisal of belief systems mentioned earlier. Together they said that the three major processes shaping this transition are (1) the breakdown of old ways of beliefs and a move to a new (but simultaneously old) image of humanity as transcendent, (2) the emergence of social dilemmas and a re-examination of the nature of social truth, and (3) the birth of a global culture.

Those who have explored the changes in individual belief systems (Ferguson, 1980, p. 137; Harman, 1992c, p. 1; Mitchell, 1992b, n. p.; Morrow, 1991, p. 65; Nicoll, 1984b, p. 5; and Simmons, 1990, p. 236) reported that the paradigm shift is boiling up from people's deepest levels of belief, that people are making profound changes and are developing new patterns of beliefs, intentions, thoughts, behaviors, and lifestyles. Harman said that these changes are evident in books read, groups joined, self-development activities engaged in, use of leisure time, themes of plays and movies, magazine topics, and concern with frugal and naturalistic lifestyles (1979, p. 28).

Cetron and Davies (1989, p. 297), Guba (1985, p. 87), and Simmons (1990, p. 24) together noted a general shift to conservatism with new levels of consciousness about self-realization and personal freedom along with responsibility for personal actions. Several authors (Cetron & Davies, 1989, p. 296; Harman, 1979, p. 3; and Simmons, 1990, p. 237, for example) perceived an emphasis on the frontiers of the mind and on spiritual experience, with a new interest in traditional religions, philosophy, and mysticism.

Simmons noted that new thought forms at the individual level subsequently penetrate into mainstream culture (1990, p. 236). Ferguson, echoing Prigogine's theory, put it in terms of open systems. She saw social structures as "dissipative," that is, as involved in continuous exchanges of energy with their environment, which, as the continuous flow increases, creates instability and dissipation of energy within the systems and which forces them to reorganize and ultimately to move to a higher order (1980, p. 163).

Many authors reported social changes which support the notion that individual changes and actions stimulate social change. As Simmons put it, that with increasing

awareness and collective shifts in the overall climate of opinion within societies, isolation is untenable and society as a whole becomes enlightened (1990, p. 66). Henderson (1992a, n. p.), Naisbitt (1982, p. xxi), and Popcorn (1991, p. 6) all described positive shifts in public perceptions--a throwing off of the shackles of the industrial base, an end to denial, and a transfer of energy from gloom and anger to positive actions.

Bellah et al. (1985, p. 50), Cetron and Davies (1989, p. 97), Erickson (1985, p. 41), Harman (1979, pp. 1, 3), Henderson (1979, p. 82; 1988, pp. 119, 147, 347), Morrow (1991, p. 65), Norberg-Hodge (1991, p. 60), Nicoll (1984b, p. 5), Theobald (1987, p. 69), and Vaill (1984, p. 19) together described citizens participating in such positive social actions as: confronting abuse, homelessness, and abortion and calling for expanded human service programs; demanding human rights and equal opportunity for ethnic groups, indigenous groups, and women as well as seeking representation for these groups in positions of influence; demanding better and more reasonable health care and focusing on prevention and wellness; believing in learning as a prime concern and holding higher expectations for better education. Citizens are desiring institutions to serve the people (versus the reverse); becoming civic volunteers and revitalizing communities; and becoming dissatisfied with the use of technology to solve social problems. People are moving away from an emphasis on the empirical, objective, instrumental, reductionalist rationality of the hard sciences and moving toward an interest in subjective, value-focused, qualitative, and metaphysical inquiry, toward adoption of new science discoveries about man and nature, and toward new understandings in the humanities. They are taking responsibility for and participating in public interest activities--forming activist movements, study groups, consciousness-raising activities and other heterarchical communication networks aimed at transforming society. People are acquiring deeper knowledge of organic complexity and bioecological systems and becoming involved in environmental problems. They are becoming more politically skillful and showing dissatisfaction with political domination by special interest groups. People are becoming disillusioned with material growth, are re-evaluating the economic order and realizing the power to change it, are changing their consumer habits, and are buying carefully as a political

act. Regarding organizations, the populace is calling for corporate responsibility and innovative actions regarding uses of energy and resources, human development and participation, and management and communication styles. People are supporting businesses competing to be more socially conscious and environmentally friendly and are turning away from big businesses and large bureaucracies toward entrepreneurial organizations and self-employment.

Harman saw current movements and innovations as society-healing impulses (1991a, p. 128). Capra saw rising social movements as ultimately taking over and assuming leading roles in a new culture (1982b, p. 24). Morgan noted, however, that capitalism is resilient and ingenious in managing conflicting demands (negating the negations) and that accumulation of wealth has stood the test of time. He said that the primary negations of capitalism which may ultimately promote qualitative change will come from pollution, the working class, and the third world (1986, p. 261).

The impact of the third world on Western capitalism points to the close relationship between separate social-cultural entities and the world at large. Simmons pointed out that the striving for a better life is a collective, pervasive urge occurring throughout the world (1990, p. 65). Several authors noted that the move toward world unity is a natural result of our living in an information society, that not only has the improved technology of communications increased personal, organizational, national, and international transactions and created substantial linkages, but the technology itself--the creation, processing, and distribution of information--has become a strategic resource and is therefore treated as capital in the international market (Bolman & Deal, 1991, p. 3763; Naisbitt, 1982; p. 15; Schwartz in an interview with Coates and Jarratt, 1989, p. 154; and Tannenbaum in an interview with Jamieson, 1982, p. 32).

Guba (1985, p. 87), Lincoln (1985, p. 34), and Nanus (1989, p. 41) together noted that increased global interconnectedness also increases complexity, that what were once simple systems are now seen as interactive parts in heterarchical and holographic world order consisting of dynamic networks of interference patterns, mutual and symbiotic causality, and morphogenetic creation of new forms. As a result of this complexity, there has been a shift in general understanding of the nature

of world affairs (Guba, 1985, p. 87).

One shift, according to Harman, is the alteration in our worldwide economy (1979, p. 1). Bolman and Deal described globalization as changing the status quo through international employees, cross-national markets, and multinational management (1991, p. 373), but Henderson (echoed by Harman) described it as the end of a global economy based on world trade, petroleum, and the GNP as a growth measure with a shift to focus on environmental problems, resource management, and third-world needs.

Another shift toward global unity was suggested by Hall (1992, p. 14), McFeatters (1991, p. A-1), and Morrow (1991, p. 65) who pointed out that the cold war and communist and socialist ideologies aren't working anymore and that a new era of alliances has begun. Evidences include national visions of a common world destiny such as glasnost and perestroika, which led to summit conferences and treaties for arms and missile reduction, to the movement toward democracy in the Soviet states, to cooperation in Persian Gulf and Arab-Israeli conflicts, to the reunification of Germany, and to the Single European Act.

The re-examination of thoughts and beliefs leading toward personal transcendence, social advancement, and world unity is based on the underlying shift in beliefs about the nature of the world and humankind's relations to it. Recall from the last chapter that in early maturity, humanity continued to be dominated by a scientific view of that relationship but was experiencing a resurgence of focus on religion and that the initial shift toward this new vision was concluded to be the basis of our current tension. Changing views about science, then, as our underlying belief system, deserves special attention here.

Shifts In The Science-Based Paradigm

Nicoll (1984b, p. 15) and Sullivan (1992, p. 82) agreed that scientific concepts control our daily existence and its underlying philosophy and that science has long been the source of authority in our modern world. Sullivan added, however, that we are becoming aware that such an authority "is based on shaky assumptions." Cleveland reported that "Stanford Research Institute has determined that present and

future problems are surface manifestations of an underlying macroprobem: acceptance and belief in certain underlying premises" (1972, p. 131).

Old Paradigm Science

Harman noted that present day assumptions and premises have resulted from historic tensions between science and the church and of Western culture having, by the mid-twentieth century, accepted scientists' assumptions as the proper ontological and epistemological grounds for existence (1991b, p. 111).

Harman (1988, pp. 30, 118; 1991b, p. 111), Lodge (1987, p. 34), Pascarella and Frohman (1989, p. 133), and Zukov (1979, p. xxix) summarized today's underlying assumptions as based on logical empiricism, that is, on the belief that all knowledge is based on experience. Based on that belief, the basic stuff of the universe is seen as matter or as fundamental particles which are interrelated in fields of energy, and human behavior is perceived as caused by external forces, with consciousness and mental activity a result of physical and biochemical processes in the organism. Evolution is considered the result of physical causes. The activity of science is held to be the attempt to explain and develop theories about reality by testing, analyzing, and applying rational thought processes exclusively to develop publicly validated knowledge.

These underlying assumptions or basic constellation of beliefs give rise to related generalizations and practices, in keeping with the definition of paradigm given earlier. Harman (1988, p. 85; 1991b, p. 111), Kidder (1988, p. B2), Lodge (1987, p. 35), Sahtouris (1989, p. 176), and Schaef and Fassel (1988, p. 38), then, suggested positivism as the basis for scientific methods. Together they defined positivism as an emphasis on physical matter and on the assumptions that only that which is physically observable or measurable, within the limits of known devices and computational skills, is scientifically real and that the only possible knowledge of reality is by description of its measurability.

Related to that generalization are several others. For example, Harman (1988, pp. 30, 85; 1991b, p. 111), Helgeson (1990, p. 227), Kidder (1988, p. B2), Lodge (1987, p. 34), Schaef and Fassel (1988, p. 38), and Sullivan (1982, p. 82), defined objectivism as the belief that the phenomena of the world are fixed objects which exist

"out there." They can be clearly demarcated, held at a distance, and, through rigid distinction, studied apart from the subjective experience or participation of scientists by applying the processes of scientific inquiry through the measurement and quantification of mathematical laws.

In congruence with objectivism is the belief, described by Harman (1988, p. 29), Mitchell (1992b, n. p.), and Wilber (1983, p. 4) that all reality is perceived and all knowledge is acquired by experiencing the external world of time, space, and matter through the physical senses and that all information is organized and can only be described in accordance with the schema of the five mechanistic senses.

Cleveland (1972, p. 132), Harman (1988, p. 85; 1991b, p. 111), Lodge (1987, p. 34), and Sahtouris (1989, p. 176) described another related belief system, reductionism, as the assumption that understanding and explaining complex phenomena comes from studying them in their most elemental parts or events in order to perceive how they comprise the whole. Related to this approach, according to Harman (1991a, p. 127; 1991b, p. 112), Mitchell (1992b, n. p.), Sheldrake (1991, p. 74), and Sullivan (1992, p. 82), is the need to separate particles or isolate events in order to observe and measure them or to deduce the effects of a single cause.

Many theorists suggested that these generalizations and assumptions, particularly the need to isolate and separate parts from the whole, have had a direct impact on humankind's personal and social behavior. Harman, for example, said "separateness thinking" comes directly from the scientific belief that reality is made of up separate particles (1991a, p. 127).

Cleveland (1972, p. 131), Harman (1988, p. 118; 1991b, p. 112; 1992c, p. 3), Mumford (1951, p. 185), and Schaeff and Fassel (1988, p. 39), together described various effects of this point of view. They said that humans have become separated from the matrix of life and have lost meaning and have become estranged from their own experience, and that the balanced person has dropped out of existence. Separateness has destroyed perceptions of equality and democratic participation and has created caste divisions with emphases on local causes, competition, superiority, and unregulated growth and consumption. Harman said that daily, individual microdecisions based on separatist beliefs add up to unsatisfactory macrodecisions

affecting the total society (1979, p. 80). The consensus of belief was that due to the focus on personal acquisition and affluence, capitalism and economics are dominant in today's society.

Sahtouris suggested another effect of separation, that of scientists seeing their job as the "positivist task of describing natural mechanisms and passing knowledge to engineers to control nature and human society with managed technology" (1989, p. 179). Cleveland observed that "knowledge, once it is known, must be applied," and that science requires new decisions daily, either because inventions and innovations are available to solve problems or because problems are created by science. Sagan noted, however, that developed knowledge goes into the hand of the "highest bidder without thinking of consequences" or without a "moral compass" (1991, p. 10).

Several theorists noted the effects of separatist views on organizations settings. Together, Fox (1988, p. 30), Kanter (1983, p. 34), Mumford (1951, p. 185), Pascarella and Frohman (1989, p. 134), and Schaeff and Fassel (1988, p. 38) noted that specialization has led to segmenting work, has lessened personal significance of tasks, and has isolated people so that communication has become stifled and vague and teamwork difficult; motivation, innovation, and entrepreneurial spirit are quashed; and courage, trust, hopes and dreams have been replaced by competition, secretiveness, ethical deterioration, and reliance on systems, structures, and masculine authority.

Harman pointed out that these behaviors reflect the basic scientific assumptions which Western society holds about reality which includes a pathological belief that science deals with reality (1988, p. 101; 1992c, p. 3). He and others (Lodge, 1987, p. 34; Mitchell, 1992b, n. p.) went on to say that inconsistencies are now being seen between the theories of science and the world we live in, that premises are changing and that there is recognition that it is impossible to create a well-working society on a knowledge base which is fundamentally inadequate.

Sahtouris pointed out a sense of inadequacy when she said that we are learning that we can no longer "believe in a mechanical universe," that there are "fundamental distinctions between living organisms and machines," and that "machinery is the antithesis to life." The differences between life and a machine are these: Living

systems are self-produced and remain functional only with continuous change whereas mechanical systems are other-produced and remain functional only with no change (1989, pp. 26, 182). She agreed with Mitchell (1992b, n. p.) that scientists' explanations of evolution don't hold and that perception of the human brain as a mechanical process ignores human intention.

Sahtouris also agreed with Bateson, who said that "the fundamental structure of science is inappropriate to problems of biologists and behavioral scientists" (1972, p. xviii). Sahtouris pointed out that scientists don't agree on what life is and they have had to divide the study of matter, for example, into physics (inanimate matter) and biology (animate matter) and the study of chemistry into two branches (organic and inorganic) (1989, p. 38).

Harman (1992c, p. 3) and Zukov (1979, P. 263) agreed with Sahtouris (1989, p. 184) that science doesn't deal with reality, it deals with representations. It merely constructs models--artificial constructions or abstractions of dead symbols to mimic live experience--and that models are only that: models. They can only model certain measurable aspects of nature; they can't substitute for experience. Problems occur when scientists confuse models with reality. Ramos added that the "theoretical validity of science is undermined by its lack of understanding of the specificity of its roles" (1981, p. 23).

Harman (1991c, p. 3)), Lodge (1987, p. 36), Sullivan (1992, p. 82), and Vail (1984, p. 23) echoed these fundamental inadequacies of science when together they stated that the way to understand reality is not by analyzing parts and subsystems but by recognizing that everything must be considered in relation to everything else, that nature is all one, and that the picture changes when you begin by assuming that everything is connected.

Bateson (1972, p. xviii), Berman (1984, p. 270), Helgeson (1990, p. 223), Lodge (1987, p. 34), and Tarnas (1991, p. 360) added that reliance on digital knowledge and logical reasoning is incomplete, that all data are subjective--edited and transformed by human observation and experience, that the idea of an independent observer is an anomaly, that theory is human-made interpretations of data, that truth is subject to human circumstance, and that science can never produce knowledge that

can be perfectly corroborated. Helgeson noted that female scientists use a more subjective approach than males and "understand life as connected, the knower as part of the known" (1990, p. 222), and Lodge added that there is a need for "a new tenderness for the value of the human being and humanity" (p. 36).

A major inadequacy in the science paradigm noted by several authors (Harman, 1991c, p. 4; Fields et al. 1984, p. 205; Mitchell, 1992b, n. p.; Sahtouris, 1989, p. 185, for example) is that it doesn't account for humankind's deep inner experiences. In sum, they said that science hasn't addressed such inner ways of developing information as intuition or creativity and that it does not respond to the human search for meaning, purpose, values, or moral truths by which to live. Anderson added that the scientist as a person of will (the explorer, healer, or revealer of hidden knowledge) is "impervious to intuition, inspiration, or the creative impulse," and the scientist as mastered by external elements has thoughts and emotions derived only from body chemistry (1992, p. 25).

Comic strip character Calvin illustrated these shortcomings of science when, in bemoaning to his tiger friend, Hobbes, that scientists couldn't find a more evocative name than "big bang" to describe all the matter of the universe exploding out of a dot smaller than the head of a pin, said, "That's the whole problem with science. You've got a bunch of empiricists trying to describe things of unimaginable wonder" (Waterson, 1992, p. Comics-2).

Harman stated that the scientist's view of the nature of reality is "like exploring a cave with a flashlight and, being only able to see one level, treating the unseen level as though it doesn't exist" (1992c, p. 3).

A great many theorists suggested in many ways that the unseen level is becoming illuminated. Berman (1984, p. 270), Harman (1992c, p. 1), Ramos (1981, p. 23), and Zukov (1979, p. 313) said that we are approaching the end of science, that Western civilization, which suppresses reality with its reliance on reason and functional rationality as the design for personal and social life, is, in its own time and in its own way, learning that former beliefs are flawed. It is coming into the higher dimensions of human experience and into a belief in the human psyche as the proper site of reason and the proper referent for ordering social life.

Wilber stated that "an overall knowledge quest is beginning to emerge" (1983, p. 1), Guba and Lincoln noted that scientific inquiry "has served poorly when applied to social behaviors" and that "it is time for a new paradigm which takes account of the nature of social experience" (1987, p. 329), and Grumwald concluded succinctly that "we have come to distrust science" (1992, p. 73).

Anderson (1990, p. 73) and Tarnas (1991, pp. 361, 438) reminded readers that the current move away from empiricist science illustrates a classic paradigm shift--a prevailing social construction of reality lurching ahead in a radical shift of vision to a new cognitive pattern which resonates with the current state of the evolving culture at that moment in its evolution.

Onset of New Science

Bellah et al. (1985, p. 283), Campbell (1972, p. 15), Lincoln (1985a, p. 35), Pascarella (1984, p. 73), Ramos (1981, p. 38), Sahtouris (1989, p. 21), and Zukov (1979, p. 312) together described the newly emerging scientific view as a journey from modern science to postmodern science, from intellectual entrenchment to intellectual openness, and from focus on a science based on "how" to a universe based on "why" and on the meaning of existence. They saw the new view as perceiving the world as a whole, live, planetary system from a multiple-perspectives (versus objective) posture and as understanding science as a continuous search for information and a tentative organization of working hypothesis (versus a pronouncement of final truth).

Ferguson (1980, pp. 145, 151) and Simmons (1990, p. 228) noted that neither the conventional scientific establishment nor present day society has altered old beliefs to correspond with the new view. Morgan (1980, p. 606) agreed with Ferguson, saying that moving beyond conscious awareness to question basic assumptions is a qualitative shift--a transformation--and that it is difficult to accept alternative ways of seeing.

Zukov concluded that it is time for society to alter its beliefs and to move to a new paradigm. He said, "We have relinquished our authority to scientists," assumed the role of mindless impotence, and given them "responsibility for probing the mysteries of creation, change, and death." We cannot continue to "disown our part

of the universe" (1979, p. 92).

Wilber suggested that the greatest issue involved in shifting to a new scientific view is addressing the nature and meaning of empirical science and philosophical knowledge compared to the essence of transcendental or spiritual knowledge and understanding the relationship between them (1983, p. 2).

Several theorists suggested that new scientific explorations and discoveries are successfully confronting that issue. Davies, in a conversation reported by Clark and Cohen, said that "science (especially physics) is undergoing a revolution which will transform the way we all, scientists and non-scientists alike, understand reality" (1992, p. 35). Capra concurred, saying that new concepts in physics which emerged at the beginning of the century are reflected in new value systems, new forms of social organization, and new institutions (1982b, p. 21).

From Ackerman (1984, p. 117), Capra (1982b, p. 21), Davies (in Clark & Cohen, 1992), Fields et al. (1984, p. 207), Harman (1992c, p. 3), Kidder (1988, p. B2), Mitchell, 1992b, n. p.), Sahtouris (1989, p. 186), and Zukov (1979, pp. 16, 19, 260) come a description of the new physics.

Beginning with the study of the subatomic world generated by Einstein, quantum physicists determined that matter and energy are not as they have been characteristically defined. Quantum theorists, who began with the theory that nature comes in bits and pieces, and who applied quantum mechanics to study that theory and measure the motion of quantities, learned that there is no such thing as substance or material or form, that atoms are not hard "bits," and that there is no neat mechanical order. They learned, instead, that particles have mass only as bundles, networks, or interconnections of energy which are unique, tiny masses of perpetually juggling, whirling, inseparable, intrinsically dynamic sets of relationships or patterns. These "quantums" or pieces-of-action can look like energy waves or like particles, depending on the scientist's vantage point, but they are neither. Their wavelike interactions and exchanges are called "fields."

As a result of these discoveries, the material world is no longer seen as resting passively or inertly "out there" but is now seen as a complex, all-encompassing realm of wavelike fields or quantum energy in continuous processes of creation,

transformation, and annihilation. The distinction between the living and inanimate world has been broken down. All objects are now perceived as fundamental particles connected without a connecting mechanism. The idea of separate aspects no longer has validity, and the ultimate reality is now seen as patterns in an inseparable cosmic process.

As with the old paradigm, this view includes related generalizations. Fields et al. (1984, p. 206), Senge (1990, p. 238), Wilber (1983, p. 133), and Zukov (1979, pp. 16, 304) noted that modern physics begins with the premise that, although the universe consists of separately existing parts in the explicate realm, in the implicate realm there is an indivisible wholeness where everything is fundamentally interconnected, interrelated, and interdependent. As Capra stated, "Quantum physics forces us to see the universe, not as a collection of physical objects, but rather as a complicated web of relations between various parts of a unified whole" (1982b, p. 21).

Capra went on to say that "all physical particles are dynamically composed of one another in a self-consistent way and in that sense can be said to 'contain' one another," which Fields et al. noted reflects Bohr's view that the physical universe "seems to be a giant hologram, with each part being in the whole and the whole being in each part" (1984 p. 207).

Another related new belief, according to Davies, is that the universe, rather than being a prefixed machine "running down toward heat death," is open, progressing, and evolving and is exhibiting some degree of spontaneity as it explores and moves along various pathways from simple, rudimentary structures to richness and complexity (in conversation with Clark & Cohen, 1992, p. 36). Mitchell agreed that the universe is now seen as evolutionary, but he perceived the concept of an open universe to mean that continuous expansion of energy would lead to an ultimate void or nothingness. He said that, on the other hand, new physics has recently discovered that there is enough matter in the universe to cause it to close in on and destroy itself so that it will ultimately return to the pure energy from which it came (1992b, n. p.).

Mitchell noted that this theory requires supporting beliefs about the origin of the universe. Mitchell and Wilford (1992, p. AA-2) explained that the Big Bang

theory is the belief that before the universe existed, incoherent energy of infinite density and temperature existed in a speck smaller than an atom. Something (likely a higher intention, according to Mitchell) caused the energy to cohere which resulted in a huge flash or explosion from which all matter and anti-matter expanded in nanoseconds and from which all elements have been expanding, thinning, and cooling ever since. All matter known today (the first 92 or stable elements of the periodic table and all the existing molecules, for example) have always existed and have continually exchanged energy for billions of years.

Wilford reported that density and temperature fluctuations believed to have originated in that explosion have recently been identified. Davies added that this theory of the origin of creation suggests that creation is perpetually occurring and that it is intrinsic to the process of progressive organization and to more complex levels (Clark & Cohen, 1992, p. 36). Mitchell noted that this theory has important implications for religious beliefs.

Along with Davies, Harman (1991a, p. 127) and Senge (1990, p. 239) pointed to another changed point of view, that of a "participatory universe," or the universe as a gigantic information processing system, which contradicts the concept of observers as separate from the observed. Here, the perception and the action cannot be separated. Pascarella and Frohman (1989, p. 133), Vaill (1984, p. 23), and Zukov (1979, p. 9) supported this point of view, saying together that personal passion and purpose are inseparable from science because scientists elect to study what they personally desire to know about, that penetration to the meaning of a thing or process involves participation by the knower in the known, and that advances come as results of intuitive leaps which are then supported by experimentation and reasoning.

Certain scientists are most frequently credited with having developed theories which particularly have influenced a new view. Huffington (1989, p. 76), Lincoln (1985a, p. 33), Mitchell (1992b, n. p.), Morgan (1986, p. 223), Nicoll (1984b, p. 15), Pascarella and Frohman (1989, p. 136), Senge (1990, p. 240), Sheldrake (1991, p. 81), and Zukov (1979, p. 304) contributed to the following summaries of those scientists' work.

Albert Einstein's Theory of Relativity (1916): Matter is only the appearance

of energy which is only the name for what causes things to move. Energy cannot be seen except through matter which does not exist. Light, like all aspects of nature, has the characteristic of both particles (matter) and waves (energy). There is no fixed form of reference from which to measure events in time-space.

Werner Heisenberg's Principle of Uncertainty (1927): At submicroscopic levels there are limits beyond which there is no such thing as exact measurement of position and momentum of a moving particle at the same time. At that level there exists an ambiguity barrier beyond which measurement is uncertain.

Neils Bohr's Principle of Complementarity (1927): The relationship between particles-as-patterns-of-energy is so inextricably bound that they seem to "know" when something happens elsewhere in the universe. These entities have separateness and unity at the same time.

John Bell's Theorem of Nonlocality (1966): Mathematical calculations prove that separate parts of the universe are connected in an intimate and immediate way and that information can be communicated at superliminal speeds. The principle of local causes fails, which suggests that all acts are a result of superdeterminism and that free will is an illusion. This theory leads to the belief that common sense ideas about the world are profoundly incorrect.

Ilya Prigogine's Theory of Dissipative Structures (1980): System fluctuations are not random errors but sources of a new order and become essential elements leading to dynamic change and evolution.

David Bohm's Implicate Order (1980): There is a hierarchical order of nature. Human thought takes place in the context of societies and culture, which, in turn, is within the context of earth, within the solar system, the galaxy, and ultimately within all-that-is or God. The explicate order feeds back to influence the implicate world, so that creativity or thought, for example, are the results of downward causations and are largely collective phenomena which cannot be improved individually.

Rupert Sheldrake's Hypothesis of Formative Causation (1980s): There are fields which contain a memory or habit due to a morphic resonance or influence of like upon like so that once a form has occurred it is likely to occur again. But nature is changing, so the causal patterns of nature must also be changing, which explains

how nature remains stable through evolution.

Zukov (1979, p. 92), Ferguson (1980, p. 149), Kidder (1988, p. B1), and Tarnas (1991, p. 361) noted that the new science seems strange at first--confusing and half understood--because it is based on different sets of data with different sets of interpretations from the old. They pointed out that, as science, it undermines its own original foundations. Ferguson suggested that because these major discoveries seem so incredible, it may take at least fifty years for them to penetrate public consciousness. Kidder stated that physicists, themselves, are divided about the impact--some ignore the new ideas, some support them as a means to prove their own ideas (particularly the proponents of Eastern religions), and some are concerned that the new generalizations may be stretched too far. Pascarella and Frohman emphasized, however, that to be truly scientific, we all need to "heed the new findings of science and update our views of the world" (1989, p. 135).

Davies anticipated that new physics and cosmology will become "highly influential in the way we organize our society, and . . . current findings will extend into every area of our cultural and economic life" (in conversation with Clark & Cohen, 1992, p. 36). Kidder added that science historians say that these new ideas are so revolutionary and have affected so many areas of thought that their full impact won't be assessed for some time (1988, p. B2). Fields et al. suggested, however, that "at this time in history, scientific and mystical views are converging [which] may be key to the transformations of human consciousness" (1984, p. 203).

Return of Spirituality

Obviously, a major area of thought affected by new science is that of religion. Davies (in Clark & Cohen, 1992, p. 36), Ferguson (1980, pp. 148, 176), Fields et al (1984, p. 209), and Zukov (1979, p. xxvii) together said that new science removes inconsistencies between science and religion and that physics has allowed spirituality to be reintroduced back into scientific views of the cosmos without conflict. Advanced science sounds mythical, or symbolic, or even magical, and discussions of quantum physics sound very much like theological discussions. Davies added that, although many scientists have a deep distrust of mystical thought--it being the opposite extreme to rational thought--many of the world's finest thinkers, including

such notable scientists as Einstein and Heisenberg, espoused mysticism (1992, p. 226).

The relationship between new scientific and spiritual thought has been perceived in many ways. Campbell, for example, stated that he saw no conflict between religion or the mystical and its realization and science. The problem lies in the difference between the science of 2000 BC and the science of 2000 AD. We have "a sacred text that was composed somewhere else a long time ago and it has nothing to do with the experience of our lives. And so there is a fundamental disengagement" (1989, n. p.)

Miller suggested that the complex relationship between science and religion has been viewed through the years from three points of view. Dualists, for example, see no conflict between science and religion because they are so fundamentally different that they have nothing to do with each other--different questions, different languages, different attitudes, different methods, and so on (in a speech reported by Siegfried, 1991, p. DD3). Sagan may exemplify this approach. He reported on a recent meeting of science and religious leaders at which it was determined that science and religion could "bridge [their] ministries"--science purifying religion from error and superstition and religion purifying science from idolity and false absolutes (1992, p. 12).

The second view of the science-religious relationship, according to Miller, is one of imperialism in which a close connection is perceived, with one side subordinate to the other--fundamentalists asserting that science should conform to religious teachings or positivism claiming the only access to reality, for example.

Miller described the third view as a more sophisticated, a more "fertile, contemporary way of relating science and religion" which encompasses a wide variety of views, from simple interaction to inseparability. This last view has been most often supported by such theorists as Anderson (1992, p. 27), Berman (1984, p. 190), de Chardin (1975, p. 193), Pascarella and Frohman (1987, p. 138), and Zukov (1979, p. 312) who said that new science emphasizes the fundamental connectedness of all things: first, the unity of mind and body or of the spiritual and physical worlds; second, the fundamental unity of human consciousness with its own nature and with

the divine purpose or the universal consciousness which guides intelligence; and third, the ultimate return to union with self, others, and the divine guide.

Davies emphasized the need for mystical approaches in relation to science. Even if the concept of infinity, for example, can now be grasped using rational thought, the ultimate explanation of things still cannot be understood without mysticism. Knowing that all things are included in a hierarchy of unity includes knowing that any Absolute must include itself within the ultimate unity and become a member of itself. At that point, the limits of rational thought are reached and the Absolute "thus can only be known through a flash of mystical vision" (1992, p. 230).

Colorado (1992, p. 20), Fields et al. (1984, p. 183), and Harman (1992b, p. 29) pointed out the close relationship of science to the spirit in healing, with belief systems having been proven to affect results, for example, and with new understanding of the body as energy reflecting the beliefs and practices of early cultures. They noted that with Native Americans and other indigenous peoples, the powerful and esteemed positions of medicine men, shamans, and priests were often held by the same person, that medicine, magic, and religions were all practiced as one discipline.

Fields et al. (p. 210) and Zukov (p. 312) also suggested that science has become related to spirituality as a powerful metaphor for self-transcendence, although Zukov noted that physicists have little patience with metaphors. "Quantum leaps" represent spiritual transformations in consciousness to a higher level of integrative awareness, for example.

Several authors perceived a relationship between modern science and Eastern philosophy and saw a new world view emerging from "the seemingly incongruous yet perfectly logical marriage between science and Eastern mysticism's insights," as Fields et al. reported it. They and others (Anderson, 1992, p. 20; Chopra, 1991, p. 15; and Huffington, 1989, p. 76) recalled that ancient mystics, spiritual masters, and sages experienced matter as a condensed, stable form of energy (with the latent spirit in matter as a great transforming power), the world as a whole, and the concept of limitless time and a constantly evolving universe.

Zukov wrote that Chinese physicists--masters of wu (matter/energy) li (organic

patterns or universal order)--know that they are not explaining the universe but that they are only dancing with it. The message of the dance is: "To dance with God, the creator of all things, is to dance with ourselves," which, Zukov adds, "is a recurrent theme of Eastern literature" and the direction in which new physics seems to point (1979, pp. 6, 91).

A number of theorists cautioned against perceiving new scientific thought as congruent with spiritual beliefs. Harman stated that new paradigm people are justifying their insights on quantum physics and holon theories and so on, but that, although new scientific thought shows interesting parallels with Eastern religions, for example, it doesn't prove the theories are correct (1992c, p. 3).

Kidder suggested one problem is that "nonphysicists are trying to make reality of the metaphor" and that the problem lies in language (1988, p. B2). O'Hara gave an example, saying that the term critical mass was "taken out of the specialized language of nuclear weaponry and into the language of the new age" (1988, p. 163). Wilber explained that the language that physicists and mystics use to talk about their realities is the same but that the realities aren't.

Wilber went on to say that physics and mysticism are two different levels of reality which are not complementary. The three "eyes" of truth are: the eye of flesh (empirical fact), the eye of reason (philosophical or psychological insight), and the eye of contemplation (spiritual wisdom), and one eye cannot see into another. Tying any one to another is a category error (1983, pp. 17, 135).

de Chardin suggested a different kind of category error. The science of physics is not a single science. It includes the extremely small, the middle order, and the extremely large (from subatomic particles to the universe, for example) and that evolutionary laws cannot be assumed to be uniform for all levels (1975, p. 174). O'Hara suggested that not only is science separated by levels of focus but that scientists tend to study in depth within their own areas of interest and accept the rest on faith. Adherents to spiritual disciplines do the same, and each must trust the integrity of the other. However, pseudoscientists wander in many fields, disregarding traditional methods of inquiry and basing their assertions on individual views of reality. Professionals (such as humanistic psychologists, which is the author's field)

must guard against being vulnerable and gullible to claims of such nonsense as the miraculous, magical, or paranormal (1988, pp. 145, 155).

Capra noted that it became fashionable in the late seventies to claim that quantum theory had been anticipated by the insights of mystics, that Eastern wisdom could be interpreted in terms of modern physics, and that physicists and Lord Krishna were both trying to convey a sense of nature's wholes. The physicists and Eastern seers were equally dismayed and soon decried the notion. The physicists saw the quantum field as hard fact and mystic's visions as the extremity of softness while Eastern sages saw little relevance in quantum physic to their focus on consciousness and salvation of the soul (1982a, p. 15).

Wilber added that mystics would not want to be reconciled with science because scientific discoveries ceaselessly change with time and further experimentation, and that if Buddha's enlightenment, for example, needed factual corroboration, new facts would immediately nullify it. "To hitch a religious philosophy to a contemporary science is a sure route to obsolescence." Temporal scientific facts cannot be confused with timeless contemplative realms (1983, p. 137). Kidder noted that some future generation may find that the laws of physics and the laws of psychology overlap, but that "when people say that is already the case, they are using very flimsy arguments" (1988, B2).

Harman (1991b, p. 112; 1992c, p. 3) and Mitchell (1992b, n. p.) together acknowledged that science has modified previous assumptions which precluded the union of science and metaphysics. Harman, for example, stated that there has been a shift in Western societal beliefs from matter-energy as the basic stuff of the universe to a belief in mind and consciousness as primary and that, although some scientists are quietly accepting the latter, most are committed to the former (1988, p. 33). Both authors concluded that more fundamental changes are still needed for science to include certain aspects of reality.

Harman and Mitchell asserted, for example, that science has not addressed our feeling ways of gathering and organizing information, that is, through systems beyond the senses. They said that quantum physics doesn't teach about human consciousness or address the concept of mind, and that to new science some metaphysics--such as

reality as particle/waves or as holistic structures--is acceptable, but that other metaphysics--such as reality as mind--is not. For example, subjective involvement in observation is not extended to placebo effects, hypnotic perceptions, out-of-body experiences, or intuition or to action-at-a-distance events such as telepathy, clairvoyance, responses to prayer, miracles, or psychic phenomena. These authors suggested that science needs to be reformulated to take in new ways of knowing and that it needs to recognize humans as spiritual beings.

Fields et al. (1984, pp. 210, 213), Harman (1992b, p. 29), Naisbitt and Aburdene (1990, p. 321), and Pelletier (1978, p. 63) all suggested that quantum physics need to encompass a more holistic approach. They said that new scientific knowledge must combine logical deduction with, and reaffirm as realities, direct experiences and higher states of consciousness such as intuition, inspiration, creativity, and aesthetic and spiritual senses as valid means to achieve a more balanced quest to better our lives.

Gelb said that new physics is already embracing holism and touting it as a more adequate account of reality than the old mechanistic model. The new physics is claiming that it now encompasses more than science, that science has now shown nonrational perspectives to be legitimate, and that it now includes nonrational ways of knowing which are compatible with mystical and artistic vision. Adherents of holism, in seeking emancipation from the natural science model and in claiming to represent a new vision and age, are suggesting that science proves or disproves matters of spirit. In addition, such adherents are claiming that the world has been despoiled by one scientific view but that a new scientific view can save it, thus they are "trapped within the authority of science as they try to dismantle it." Gelb concluded that this thinking actually continues the worship of science and is not a helpful way to build a better future (1991, p. 38).

Several authors suggested that the old authority of science should be maintained. O'Hara, for example, said that scholarly communities must hold themselves to high standards of research and critical judgment rather than merely succumbing to the social need to trust or be taken in by illusion. She said that science is a way of apprehending truth; it applies processes that have validity across

belief systems and offers ideas based on sound research so that people from multiple constituencies can maintain a scientific attitude and can think critically to avoid being fooled and to allow truth to prevail over prejudice (1988, pp. 148, 151, 161).

Anderson (1990, p. 77), Bellah et al. (1985, p. 283), Davies (1992, p. 226), Sahtouris (1989, p. 185), and Zukov (1979, p. xxviii) agreed that to fully enter a new world of thought it will be necessary to reverse any tendency to obliterate all previous culture. They noted that the methods of experimentation of modern science are just as important in the postmodern world as ever, that mysticism is no substitute for scientific inquiry, and that scientific methods should be pursued up to the point where logic becomes incapable of answering the ultimate questions. Certain laws of science such as geometry, for example, would no longer work with flexible rules, and there will continue to be groups of people who prefer exploration requiring the precision of logical processes just as there are those who prefer a less logically rigorous approach. Bolles reminded readers that constancy is as important as change, that although the novel lends challenge and excitement and forces us to move beyond stagnation, it also creates anxiety and implies the uselessness of our earlier wisdom. Constancy, on the other hand, ensures safety and stability in the face of risk (1983, p. 8).

A number of theorists urged not only incorporating old paradigm thinking into a new science, but also, as Harman put it, developing a complementary science based on new attitudes and assumptions about different perceptions of reality (1991b, p. 114). Harman and others (Bateson, 1972, p. 453; Berman, 1984, p. 190; Clarke, 1984, p. 36; Davies, 1992, p. 230; Murphy in a conversation with Miller, 1992, p. 7; and Pascarella, 1984, p. 73) suggested together that there is no reason for science to split with theology or for reason to be abandoned in favor of the nonrational. In an effort to humanize life and help take responsibility for the future, scientific reasoning can be brought into better balance with nonscientific reasoning. It is short sighted to reject unusual phenomena because they don't fit certain standards of research; there is a need for nonlinear, intuitive approaches as well as rational approaches to knowing; and that it is reasonable to suggest that nonscientific reasoning belongs to a new domain with unique approaches.

These authors suggested that a meta-physic framework for synthesizing both

scientific and unconscious knowing could be developed under the ontological assumption of oneness or interconnectedness and the epistemological choice to include all evidence and the assumption that we contact reality in two ways. The first is developed through the hard science, external approach--determining facts through the physical senses by observances and use of rational thought and logical reasoning--and the second is acquired through deep "inner knowing"--receiving information through metabolic energy by subjective means such as aesthetic, intuitive, spiritual, and mystical senses. Data from logical empiricist measurement could continue to be validated within physical parameters, and data from metaphysical receptors could be validated by consensual review and acceptance of expert and skeptical judges.

Murphy said that data from many disciplines should be involved and subjected to rigorous, critical scrutiny (in Miller, 1992, p. 8). Henderson suggested a new system of inquiry with three paradigms, based on the laws of causality (unidirectional, random, and mutual) (1988, p. 338), and Wilber suggested an overall transcendental paradigm drawing freely from the empirical-analytical or nomological sciences (with data from the domain of the senses) and from the mental-phenomenological or rational sciences (with data from the domain of intelligence) but grounded in the translogical, transpersonal, contemplative sciences (with data from the domain of transcendence (1983, p. 31).

In general, theorists supported an integrated, holistic science. Bateson pointed out that in order to develop a holistic science, we must restructure our way of thinking. "The most important task today is, perhaps, to learn to think in a new way," and it is not easy (1972, p. 462). Fields et al. put it this way: "We must all be kids today We need a beginner's mind" (1984, p. 213).

Bellah et al. (1985, p. 283), de Chardin (1964, p. 211), Pelletier (1978, p. 5), and Simmons (1990, p. 58) all suggested that there is a new sense that divergent glimpses of nature can and must be integrated and synthesized, that we are now leading multidimensional lives and facing transdisciplinary problems, that science and faith require each other, and that we must progress toward a new world of relationships, toward totalization or some irreversible unity.

Campbell (1979, p. 9), Fields et al. (1984, p. 211), Naisbitt and Aburdene

(1990, p. 293), and Pelletier (1978, p. 10) suggested that such unity can be built on the mutual goal of more clearly understanding the nature of reality or "truth" and that there is some point of wisdom beyond the conflicts.

de Chardin pointed out that there is no one definitive framework of truth anyway and that there is no exhaustive presentation of it. He saw truth as a cluster of axial lines of progression that develops indefinitely (1975, p. 164). Senge suggested that the development of scientific theories of truth is not the important focus, in any case, because all scientific theories are eventually proved false. He said that the real purpose of science is to create "mental maps that guide and shape our perception and action" (1990, p. 239).

Campbell noted that the scientist sets out on a vision quest to obtain truth, but that every individual becomes engaged in that quest, attempting to find and relate to the truth in their own being (1990, p. 164). Anderson (1990, pp. 9, 25, 77) and Tarnas (1991, p. 439) saw science as a form of social reality construction; the evolution of scientific paradigms directs all form of human thought. The foundation of scientific truth, then, is ultimately a social or human foundation--science with a human face.

Anderson (1990, p. 58), Kidder (1988, p. B2), Mitchell (1992b, n. p.), Sahtouris (1989, p. 92), Schaef and Fassel (1988, p. 38), and Wilber (1983, p. 295) together concluded that people are currently looking for what they mean by reality, are attempting to identify a model which fits with the scientific pursuit of truth and which also satisfies their own experience of it, and are seeking images for reorganizing human society. The governing laws of the world are there--they might surprise us by being simple and obvious--but that because we are too close and have no way to stand outside to observe, we cannot define or describe them. Kidder added that the muddle concerning scientific and spiritual beliefs may need to become permanently tolerable. "We have come to the end of human capacity to form sharp pictures about what is going on" (1988, p. B2).

Zukov pointed out that discovery of the governing laws of the world may actually be an act of creation (1979, p. 313). He, along with Bateson (1972, p. 465), Bellah et al. (1985, p. 283), and Harman (1979, p. 123), suggested that the discovery

of new realms of experience, human potential, and means to assist society in forming new cultural goals may be through the domains of philosophy, literature, and the arts as well as through science. There are many bridges between kinds of thought, that artists and poets are specifically concerned with combining internal and external pathways to the mind, and attempting to separate the internal emotion from the external intellect could be dangerous.

Anderson added that dividing the ways of knowing creates incompleteness, that religion, art, philosophy, and science, each in their complete forms, embrace all the others. He noted that the key to convergence of all the forms of knowledge is a new understanding of consciousness (1992, p. 28). Campbell saw both art and science as expressions of the structure of consciousness, saying that, as such, they are in harmony and adding that both are spiritually rewarding (1990, p. 66).

Together these theorists concluded that perhaps nature as perceived by the poet, theologian, and scientist is the same thing, that distinction between them is unclear, and that such people may be the ones whose gift it is to take commonplace things and re-present them to us in ways to help us expand our self-imposed limitations. If so, the ultimate responsibility for scientific thought may be better understood by poetic intuition than grasped by the intellect. Science may have already created the means for humanity to have total awareness, and humans may not know how to use it.

Anderson (1992, p. 25) and Zukov (1979, p. 313) concluded that science has not yet found its true purpose (of helping individuals toward transcendence and society toward higher goals) and that it won't do so until it is guided by an image of humanity's wholeness and need for unity.

A shift to a new paradigm science, then, is seen as halting and confusing, but occurring nonetheless. Some perceive it as the opportunity for personal transcendence, the impetus toward social advancement, and the support for world unity should humankind become aware of those possibilities. At present, humanity seems to be tentatively beginning a transition, and with it visionaries are beckoning from ahead toward a new horizon and with tension building between an awareness of an old, unsatisfactory stance and the shadowy awareness of a possible new view.

New Views

Harman (1979, p. 114; 1992c, p. 2), Mumford (1951, p. 48), and Land and Jarman (1992a, p. 95) all wrote that we are at a point in history when the industrial society is beset with threatening and disturbing dilemmas which call for radical improvement and which cannot be solved by merely reversing the dominant forces of the traditional worldview or by adhering to existing interpretations of newly discovered laws of physics. They said that change must come from a new paradigm, a new understanding of what is happening at the deepest laws of nature.

Inner Awakening

Feinsilber stated, "Deep down in our hearts we believe that we have been accomplices to doing something terrible and unforgivable to this wonderful country, [and] we have given our children a legacy of bankruptcy" (1992b, p. A-7). Handy said that times are changing and that we must change with them, that we need to look at everything in a new way and to release new energies which can make "all manner of new things possible" (1989, pp. 23, 45). Erickson called this a time for "high thought" (1985, p. 21).

Mumford stated that to re-establish the foundation of our humanity we must reacquire the essential capacities of feeling that will direct us toward the right (1951, p. 151), and Harman wrote that such change is now taking place at the most fundamental level of the belief structure of Western industrial society (1988, Introduction).

Harman (1979, p. 22) and Simmons (1990, p. 21) noted that neither direct measures for dealing with today's problems nor simplistic faith that they will solve themselves have been successful because the problems are too fundamental--they lie with basic assumptions and require transmutation of individual and institutional attitudes and values. The authors noted, however, that current attempts at superficial solutions, shifts in social trends, and changes in societal and planetary infrastructures promote changes in beliefs and ultimately in collective thoughtforms and historical tides.

Mumford said that like most great changes, this one is preceded by a preparatory reorientation of concepts and ideas, that there is a period of self-

fabrication, with chaos becoming order, which forms the basis for purposeful transformation, and that to come forth with a new vision we must withdraw and contemplate (1951, pp. 8, 69, 165). Ferguson saw this reorientation as a series of discoveries which included awakening to awareness of ignorance, self-deception, and automatic responses and to the tyrannies of culture, habit, and fear of change; moving to a new understanding of personal responsibility for causes and solutions and cognition of universal truths; and accepting the freedom to challenge old assumptions, the power to change positions and to choose new models of participation in the world, and the ability to create a higher plane of reality (1980, p. 97).

Ferguson (1980, pp. 19, 125), Mumford (1951, p. 291), Schaeff and Fassel (1988, p. 37), and Simmons (1990, p. 68) all agreed that such inner awakening and awareness are increasing, that a new paradigm is emerging, that a faint glow of a new day is dawning with a healthy sense of expectancy and purpose, and that new beliefs are spreading worldwide as awakened personalities unite to form a conspiracy to create transformation and to change social institutions.

Naisbitt noted that changes in thinking and attitudes are so subtle that we tend to overlook or ignore them (1982, p. 3). Anderson (1990, p. 9) and Coates and Jarratt (1989, p. 19) wrote that even as old beliefs collapse, we have psychological tricks to help us remain safe and socially conventional so that changes occur within a framework of continuity and we keep the basic shape of society as we know it.

Even though shifts may be subtle and initially occurring only at superficial levels, "consciousness of the nature of life has been transformed," according to Vaill, and people are in the process of "understanding and repairing the excesses of human thought" (1984, p. 18). Harman (1992b, p. 29), Huffington (1989, p. 76), Morrow (1991, p. 66), O'Hara (1988, p. 162), and Theobald (1991, p. 59) agreed. Together they said that people are struggling toward a new model for a new age, that a certain utopianism or belief in the possibility of renovating society has been resurrected from earlier influences. People have changed their beliefs about what is in their best interests. People are moving away from perceptions of being externally limited and controlled--by economics, for example--toward more fundamentally optimistic sets of beliefs that focus on expanded consciousness, openness to spiritual beliefs, and human

transcendence as well as on a total restructuring of society and on global peace.

Values

Evidence of some movement toward a new model and toward focus on humanity's best interest is reflected in shifting values, according to Cleveland (1972, p. 130), Lipnack and Stamps (1987, p. 25), Mumford (1951, p. 226), and Plummer (1989, p. 8). Together they said that the way to identify reactions to change is to examine shifts in values, that values are central to human experience, both as inner forces and as unifying ideas which integrate basic tenets and stimulate shared commitment. Humans, as value-shaping and value-sharing beings, either seek or avoid new ways and regulate their values accordingly, so a fuller understanding of human life in all dimensions can be observed through these changes in values.

Bellah et al. (1985, p. 21), Mumford (1951, p. 126), Nelson and Burns (1984, p. 234), and Vaill (1984, p. 19) all saw values as beliefs which are determined intuitively and somewhat arbitrarily by individuals on the basis of personal preferences--needs, interests, priorities, choices, purposes--depending on what feels right to each person. Values then become the standards which influence choices of actions and become the determiners of personal satisfaction and fulfillment. The authors said that values are also expressed through wider sharing with society and become normative standards.

Morgan stated that shared values help individuals believe they are part of patterns which continue well beyond the bounds of their own lives (1986, p. 219), and Ferguson pointed out that the patterns of shared values are actually the conditions out of which we awaken to a conscious understanding of our options and what we want. Our values come unconsciously from this conditioning (1980, p. 337). Mumford added that since humans are born into a world of established values, the "production and conservation of those values is one of the main concerns of human existence" (1951, p. 127).

According to Simmons, values can serve as a form of social control--circumscribing and constraining individuals by stifling human spirit and repressing full expression through the tyranny of prevailing mass thoughtforms. Society condemns those on the leading edges who experiment with alternatives, and values are

therefore the means to identify and measure the ideals and beliefs of the culture (1990, pp. 74, 220).

Simmons went on to observe that today's society is loosening the boundaries--regulation of the populace through laws and public opinion--of what is acceptable and that the freedom for individuals to design their own lives and the social order is increasing. Bellah et al. (1991, p. 43), Harman (1988, p. 132), Mumford (1951, p. 129), Rost (1991, p. 175), and Sahtouris (1989, p. 223) all contributed to the following picture of the times.

Society in the 1990s suffers from the typical response of a disintegrating civilization. There is no adequate tradition or philosophy to provide moral meaning or to guide an ethical social vision of the common good, public interest, or civic virtue and there are no standards on which to make sense or to judge individual, immediate actions. As a result, according to Dart (1991, p. A-3), Hart (in conversation with Lear, 1992, p. 18), and Henderson (1988, p. 172), Americans are looking for meanings; they are yearning for absolute values, are aching to do the right thing, and, without normative guidelines or moral consensus, are making up their own moral codes.

Foster (1986, p. 80), Henderson (1988, p. 172), Mumford (1951, p. 122), Naisbitt and Aburdene (1990, p. 287), Sahtouris (1989, p. 223), Wilber (1983, p. 27), and Zaleznik (1987, p. 8) together pointed out that the basic factor accounting for today's lack of adequate tradition and philosophy is the result of the old paradigm split in which the need to control, predict, and reduce the uncertainty of the forces of nature belongs to the worldly realm of empirical science. On the other hand, the sphere of morals, values, and ethics, which were dismissed or ignored on the basis of positivism as not being meaningful, were placed outside of science and seen as merely culture-bound social preferences which belong to the subjective or spiritual realm or as means to dictate people's obedience which belong to religious authorities.

Deal and Kennedy (1982, p. 27), Foster (1988, pp. 36, 40), Nanus (1989, p. 38), and Rost (1991, p. 75) all noted that the pervasive uncertainty about values holds implications for leadership. As the lack of adequate tradition becomes apparent, as society loosens, and as people seek values, there is a need for leadership to

reconstruct our understanding of common good, our belief in civic virtue, and our responsibility for personal participation in the public interest and to provide a genuine narrative based on the democratic ideals of equality, liberty, and justice. Foster added that although it is important to recognize diversity and to remain neutral, such democratic ideals often depend on religious beliefs.

Fields et al. (1984, p. 242), Mitchell (1992b, n. p.) Naisbitt (1982, p. 36), Plummer (1989, p. 13), and Simmons (1990, p. 75) all suggested that a raised consciousness enables people to see and evaluate the standards they have been living by and that personal value systems are evolving which compensate for the former impersonal nature of science and technology. New value systems are emanating from inner-directed, religious, and spiritual motivations and are focusing on self-actualization and inner harmony as well as on social harmony and the well-being of others. Edgar (1992, n. p.), Hart (in Lear, 1992, p. 18), and Pascarella (1984, p. 73) together said that changing values reflect multi-cultural dimensions as well as a return to basics, a focus on hope, and a wave of timeless truths. Rost stated that,

No one knows with certainty what values will form the core of the postindustrial paradigm; but if the shift is going to have any significance of note, the values will have to be quite different from, and even opposed to, the core values of the industrial paradigm (1991, p. 181).

Our values are changing, he said, and they are moving beyond those built into the industrial paradigm. (p. 100)

Noting that values are a matter of choice but are socially conditioned, Mumford noted that the availability and selection of values become major tasks (1951, p. 128). Bellah et al. added that, in order to get what we want, we should be able to define it, but that it is difficult to discuss the ends of a good society in modern circumstances because there is no vocabulary for it. The commitment to democracy seems to be without content (1985, pp. 21, 24).

There is currently no accordant definition or description of postindustrial values, however there are a number of trends which are frequently mentioned by theorists. One is an increased emphasis on individual fulfillment--attainment of potential and of a high quality of life. Bellah et al. said that such fulfillment is

achievable through personal success along two paths and that it is "only possible when self-interest has been transcended to some degree" (1985, pp. 27, 38).

Bellah et al., along with Coates and Jarratt (1989, p. 290), Nanus (1989, p. 93), and Yanklovich and Immerwahr (1987, p. 16) described the first path, expressive individualism, as enjoyment of both a successful personal and private life (education, self-expression, self-assurance, spiritual attainment, and so on) and successful relationships (family, friends, and community participation, for example). They described the second path, utilitarian individualism, as achieving more public success (career, security, wealth, power, and so on) within the context of concern for others, egalitarian ethics, and community responsibility.

In addition to personal fulfillment, several authors described an increased focus on the value of personal freedom. Bellah et al. (1991, pp. 9, 23, 38), Ferguson (1980, p. 103), and Simmons (1990, p. 33), for example, described personal freedom as freedom from others' imposed control, values, constraints, arbitrary authority, demands for conformity, denial of social mobility or tyranny and also from danger, ignorance, or disease. It included freedom to be left alone, to be one's own person, to express needs, to inquire, learn, create, or change, and to exercise free will, aesthetic sensitivity, and symbolic expression.

Ferguson (1980, p. 198), Hubbard (1982, pp. 91, 114), Mumford (1951, p. 143), and Pascarella (1984, p. 104) all noted that the paradox of freedom is that it is meaningless in a closed system, that freedom is undermined by immersion in private pursuits, and that at some point, consciousness must become holistic and co-creative, that citizens must look beyond themselves and must take responsibility for being an integral part of society.

Although there can be no mutual reconciliation of all values, Bell thought that reason can dissolve conflicts if there is a unitary set of generalizable interests, a set of rules which allow people to negotiate freely from equal conditions to arrive at fairness and equity (1980, p. 243). Berman noted that when superficial independent freedom is surrendered, a much more comprehensive freedom is revealed (1984, p. 258). And Mumford saw the reward of freedom as leading to higher choices, toward the ultimate ability to align with a guiding purpose and create a meaningful and valuable world

(1951, p. 143).

The value of justice has been supported with new vigor. Bellah et al. (1985, p. 26) and Theobald (1987, p. 75) described justice as occurring within an open society in which personal freedom of diversity along with a sense of personal and social responsibility are supported so that people are guaranteed fair and equitable distribution of goods and resources.

According to Fields et al. (1984, p. 242), Mumford (1951, p. 224), and Rost (1991, pp. 176, 181), then, movement toward the adoption of new personal values reflects a focus on wider shifts such as acceptance of diversity; more compatible, universal, and spiritual values; and freedom to interact and dialogue in order to achieve a common good. Thus new values seem to reflect the major themes of this transition period, calling for personal fulfillment and individual freedom and moving to social equity and justice.

In keeping with this shift in values, a movement toward a new model has stimulated new views of the relationships among the world's inhabitants.

Holism

Buckley and Perkins (1984, p. 55), Capra (1982b, p. 21), de Chardin (1964, p. 214), Fox (1988, p. 19), Pelletier (1978, p. 3), and Wilber (1983, pp. 125, 133) together noted that out of Einstein's modern empirical physics has come the discovery of a universal interpenetration and interdependence in which everything appears to be interconnected and exists as a function of the whole in a vast temporal-spatial system. This realization has stimulated an emerging awareness of humanity and its planet as one interdependent organism and has prompted a fundamental reorientation of worldview. The appearance of fundamental interrelationships of physical reality has been accepted as a greater truth, and it has been extended beyond physics to all phenomena--living organisms, mind, consciousness, and social phenomena.

Berman (reviewing Bateson's work, 1984, p. 236), Harman (1992c, p. 3), Mumford (1951, pp. 103, 187, 204), and Senge (1990, p. 68) emphasized the importance of this shift in perception, saying that for survival, it is essential to adopt a new philosophy which absorbs contradictory elements and perceives separateness as oneness. Mumford emphasized that every personality bears the imprint of the

universal and that when people ignore this universal aspect, their lives break down. Both he and Senge said that the inability to perceive wholeness and the need to cling to specialization directly relate to the hostility and unhealthiness of today's world.

Senge, along with Fields et al. (1984, p. 183) and Garfield (1992b, n. p.) pointed out that the old English root for "whole" is *hal* from which the words hale and hearty also stem. In addition, the word salvation is derived from the latin *salvus* meaning "heal" and "whole." Fields et al. concluded that salvation is achieved through healing and a re-establishment of the whole.

Bellah et al. (1985, p. 283), de Chardin (1975, p. 209), Fields et al. (1984, p. 26), Mumford (1951, pp. 78, 117), and Sahtouris (1989, p. 189), together noted that the notion of man and nature as a necessary unity and the cosmic sense of oneness are evolving worldviews which originated as universal and fundamental mystical, religious, and spiritual teachings--Gaia and creation myths, as examples--which increasingly became scientific ones, and which are now reconnecting with old beliefs.

Many theorists emphasized that a new perception of life as a whole and a worldview of holism is a transition force. de Chardin said that humanity is presently experiencing a "vital need to unify, . . . looking for something that will draw us together," and desiring a "common philosophy on which men of good will can agree so that the world may continue to progress" (1964, pp. 190, 191). Buckley and Perkins (1984, p. 58), Campbell (1990, p. 170), Capra (1982b, p. 19), Harman (1988, p. 125; 1991a, p. 127), and Sahtouris (1989, p. 146) said a new perception is "now forming," "beginning," "beginning to come in," "becoming visible," and "gaining strength."

Gelb noted that holism is not in keeping with the concept of a paradigm shift. New paradigms exclude other ways of knowing, lead away from vital connections between ideas, substitute new rigidity for old, and cannot accept plurality. Holists, on the other hand, are attempting to bring about a new age of connectedness, harmony, and peace through a "unifying grasp of reality" (1991, pp. 37, 40).

Anderson suggested that holism may be thought of as ultimately encompassing opposing views. He said that:

One reason it is so hard to tell when true cultural revolutions have occurred is

that societies are terribly good at co-opting their opponents; something that starts out to destroy the prevailing social construction of reality ends up being a part of it. Culture and counterculture overlap and merge in countless ways (1990, p. 49)

Ferguson suggested that holism needs an "all-encompassing paradigm" which demonstrates that the transcendental is part of nature (1980, p. 179). Bateson said that holism is transitional and could be the mental framework of the emerging civilization. If it is, and once it has matured, people will find present-day ways of thinking almost incomprehensible (1972, p. 236).

Most theorists wrote from Ferguson's point of view. Berman viewed holism as coming from a "variety of sources which cut across traditional axes" (1984, p. 281), and Fields et al. said that Western society had previously violated and obscured a sacred unity by addressing only "the world of abstract, verbalized knowledge" and that it is "the business of humans to make the best of both worlds" (1984, p. 27). Both Guba (1985, p. 86) and Lincoln (1985a, p. 34) wrote of shifts in the dominant scientific paradigm to whole world views and said that such a view is consistent with everyday experience.

Many authors perceived the shift toward holism as achieving balance. Together, Clancy et al. (1988, p. 12), Henderson (1992a, p. 9), Mumford (1951, pp. 183, 187, 204), Naisbitt (1982, p. 36), Simmons (1990, pp. 52, 55), Theobald (1987, p. 17), and Whitman (1987, p. 81) described balance the following ways: The lesson we must learn is that we must have balance. Equilibrium is necessary to humans to exercise higher functions and to grow. Imbalance is being out of control and is always destructive. We must offset any tendency to overprize any single element, structure, or way of life or to allow any fundamental polarity to become pre-eminent over another. Balance is achieved by transforming polarities, blending and combining them into a transcendent fusion, and creating integrated power.

The only conceivable balance is a dynamic balance, that there are no absolute answers, and that there must be a place for negative moments and change as well as for competition and cooperation, with a middle ground for everyday experience. We are most alive and dynamic when we are exquisitely in balance--alert and poised in

readiness for action. Maladjustments can occur and must be endured for growth, as equilibrium is never a final state. Tocqueville noted that if social or political equality and stability became too strong, every new theory would be considered a peril and that great intellectual and political growth would be both difficult and infrequent (1964, p. 227). The authors concluded that the overriding concern for the next century is the search for balance. Simmons added that transitional forces are impelling growth, that imbalances are changing, and that the resultant wholeness will develop a different kind of human who can create a different kind of world (1990, p. 61).

Holism as a worldview is based on the assumption that there is only one reality which is whole and unified and consists of communities of all sorts which are inseparable from the whole and which operate as the whole, according to Harman (1991a, p. 127), Kidder (1988, p. B2), and Zukov (1979, p. 256). This perception includes several subordinate notions.

Harman (1992c, p. 5) and Land and Jarman (1992a, p. 30), for example, emphasized that, from the view of holism, meaning is derived by starting with a perception of oneness--that is, solving a puzzle by constantly referencing the pieces with the picture of the whole rather than focusing solely on the pieces, for example. Mumford saw the focus on wholeness as the key to personal fulfillment (1955, p. 30). Fox illustrated that idea when he noted that "'university' originally meant a place where one went to experience his or her place in the universe [i. e.] to find wisdom." Therefore, "the understanding of the whole is wisdom" (1988, p. 22).

Ferguson (1980, p. 228), Fields et al. (1984, p. 26), and Kidder (1988, p. B3) emphasized the wisdom of perceiving the pattern which connects the interdependent arts of the whole and of perceiving one's point, and every other point in the whole, as its center. These ideas lead to another notion related to holism: the holon.

The term holon according to Garfield (1992a, p. 19), Lipnack and Stamps (1987, p. 23), and Sahtouris (1989, p. 35), was coined by Koestler from the Greek *holos*, meaning "whole-part." According to the authors, holons are systems of nature in which each whole-part is also a part of a larger whole. Thus, each holon has two opposite tendencies--integrative (to function as part of a greater whole) and self-

assertive (to preserve its autonomy by producing the parts it is made up of and keeping them constantly renewing themselves). The entire universe of holons is a "holarchy" or whole of wholes with smaller wholes within itself. Wilber noted that within the universe, the dynamic drive to produce higher- and higher-level wholes--ever more inclusive and organized unities--is holism (1983, p. 84).

Back and Lang (1985, p. 25) and Senge (1990, p. 212) explained a hologram, from the Greek meaning "whole message," as a three-dimensional image in which each part shows the whole image intact. The component pieces are not identical, but each represents the whole image from its own point of view. According to Nicoll (1984b, p. 8), Morgan (1986, p. 95), and Wilber (1983, p. 125), holograms have become common metaphors for systems in which one part of the system holds and is capable of transmitting all data within the system. Such systems are called holographic systems and often refer to organizations or to the brain--brain research having contributed to the understanding of holons.

From brain research, according to Back and Lang (1985, p. 28), Ferguson (1980, p. 179), Morgan (1986, p. 95), and Nicoll (1984b, p. 8) comes the understanding that different regions of the brain specialize but are interdependent and capable of acting on behalf of one another when necessary. Memory, for example, is both localized and distributed and information is known to be distributed throughout the system simultaneously with information about the information. From these understandings theories are developed which suggest that the world is structured on the same principle as the hologram and that the brain, as a hologram, constructs or creates the reality of the whole holographic universe.

This last point brings us to the use of hologram as a metaphor for creation reality through perception of the unity of mind and matter. As Clancy noted, mind and matter are intimately intertwined, and reality is altered by the perspective of the viewer. Our beliefs allow us to paint our view of the world, therefore reality is more than just the physical world (1988, p. 16).

Considering the mind as part of the total whole, Berman (1984, p. 242), Campbell (1972, p. 275), and Harman (1991b, p. 114) stated together that all minds in the universe are linked together by participation in a system-as-a-whole or a

universal mind or source in which each is the center. Berman, echoing Bateson, noted that this means that large parts of our minds are outside our bodies--as part of the thinking network. As Campbell put it, "We are the children of the planet; we are not delivered to it but come from it; we are the mind of space" (p. 274).

Campbell went on to say that "waking individuals to the knowledge of themselves as mind-at-large" will require a new mythology. Pelletier noted that paradigms will be significantly revised as researchers turn more toward interactions between mind and matter (1978, p. 20). Murphy said that a new culture of practice will be needed to draw on the collective wisdom and to assimilate a full range of metanormal abilities (in a conversation reported by Miller, 1992, p. 11). Murphy also said that stimulating the full range of abilities by creating a whole-person approach, that is by drawing on spiritual traditions and contemplative practices in addition to physical practices, insures transformative behaviors and supports the emergence of extraordinary abilities and personal transcendence (p. 13).

By stimulating whole-person development and assimilating collective wisdom, holism serves social advancement. Simmons pointed out, for example, that each individual exists within a dense web of relationships and that it has been demonstrated that each person in the United States, for example, is only six or eight interpersonal links from every other person in the United States and that less than ten more links would carry any phenomenon to any single person on the globe. There is an interpersonal network linking together every person on the planet (1990, p. 17).

Thanks to multifold channels of communication and technology, according to Simmons, de Chardin (1964, p. 166), and Mumford (1951, p. 186), this web is increasingly dense, interconnected, and fluid, and it is manifesting a universal heightening of consciousness. Millions of minds are awakening to humanity's dilemma. This wholesale quickening of minds--millions of individuals thinking collectively--generates interwoven consciousness or social thought which has the power to restore collective balance and achieve a higher level.

Anderson (1990, p. 9) and Harman (1979, p. 120), said that social institutions are human creations, and that as individual awareness rises, the need to restructure social institutions increases. de Chardin (1964, pp. 40, 74), Harman (1988, p. 125),

Etzioni (1987, p. 70; 1991, p. 35), Keyes (1982, p. 136), Land and Jarman (1992a, p. 197), and Simmons (1990, p. 402) together saw the greatest task of our time as settling the I-and-we issue, that is, ridding ourselves of separateness thinking, depersonalization, and alienation and widening our circles, moving beyond vested self-interest, seeing others as parts of ourselves, and searching for and embracing relationship and community. Our humanity must move away from simplistic notions of either state or individual, must come together inwardly, and must begin to experience a sense of commitment to the wholeness of life. Progress can only be made by perceiving the social responsibility of uniting, and we cannot continue to exist without transformation of the multiplicity into a whole.

Ferguson (1980, p. 98) and Mumford (1951, pp. 186, 192, 224) emphasized that transformation of society must come from an organic change, that there must be a change in our whole system of thinking and social order--a reunification and connection with the larger self and a fit between individual purposes and larger organic and cosmic purposes. Wishard said that humanity's primary need at this time is "a vision of our future on the planet as one family with a common destiny" (1987a, p. 28).

Mumford stated that "no system of philosophy, no religion, no social movement has yet fully exhibited the characteristics of wholeness and autonomy and universality that will be sufficient to save mankind" (1951, p. 205). Cleveland (1991, p. 22), de Chardin (1964, p. 193), and Ramos (1981, p. 71) pointed out that as humankind becomes collectivized by planetary forces, a conflict or tension arises between people's personal rights and worth and the needs of their social affiliations, communities, and social structures. Simmons suggested that crime, which increases during periods of transition, is an example of this tension and of an imbalance between self-centered and collective interest (1990, p. 215).

de Chardin said that this conflict is one of appearance, that humans are not self-sufficient or capable of living in isolation and that individualization and collectivization are not opposing principles (1964, p. 193). Harman agreed, saying that individuality and unity go hand in hand, that people need each other spiritually as well as practically, that is to say, the more efficient and specialized they become, the

more helpless and in need of others' specialties. Society or culture is the place for self-transformation, where people experience new values and the success of new selves through natural processes (1979, p. 120). Mumford noted that "to achieve unity in the person, the balanced man has need of a community that is equally full and complete" (1951, p. 275). de Chardin concluded that the challenge is to ensure that "human totalization is brought about through the internal workings of harmonization and sympathy" (p. 194).

The common term for this harmonization and sympathy, expressed by many authors is love. For example: "This shift in consciousness can only occur . . . by extending our love and mutual support to another (Land & Jarman, 1992a, p. 19). "The chief thing is to love" (Simmons, 1990, p. 402). "We need . . . the energy of wholeness and cooperation--of friendship and love" (Keys, 1982, p. 142). And "this is the only possible way: love one another" (de Chardin, 1964, p. 75).

Bellah et al. (1985, p. 285), Clancy et al. (1988, p. 77), and Mumford (1951, p. 117) together said that we have failed to remember ourselves and our community as members of the same body, that what is needed is a new ethic which accepts one another's differences, which creates an environment that extends to all life and reflects inner harmony and which judges social action on the basis of its impact on the universal community. Mumford said:

To create a man of truly human dimensions one needs the cooperation of a universal society; to create a universal society, one must begin and end with men who seek fullness of life These are two aspects of the same act; and with that act, a new world will come into being (1951, p. 275).

Harman (1979, p. 133) and Simmons (1990, p. 66) agreed that as tolerance of others increases and society becomes more enlightened, individuals who naturally want to align with society's goals will have incentives to adopt behaviors consistent with self-realization ethics and will find it easier to evolve.

In the holarchic system, Guba (1985, p. 86) and Simmons (1990, p. 402) reminded readers, there is a wider paradigm of relationships beyond self-contained communities. Simmons, along with de Chardin (1964, pp. 83, 113), Ferguson (1980, p. 157), Lincoln (1985a, p. 34) saw the surface of the globe as growing more

restrictive due to population growth, information and technology diffusion, financial and political interaction, advanced psychic awareness, and evolutionary development. They perceived individual awareness as becoming exalted by the forces of collectivization beyond self and community toward unity with the larger living whole. These authors saw the world as a great organization in which everything and everyone is interconnected and wholly dependent on one another and in which all destinies have become inextricably intertwined.

In this worldview, according to Cleveland (1991, p. 22), Fox (1988, p. 33), Kidder (1988, p. B4), Mumford (1951, p. 8), and Simmons (1990, pp. 66, 406), people are brought into direct contact, and isolation is untenable; provincialism is eroding, domestic-international lines are blurred, and individual political nations give way to more universal interdependence; there are ultimately no nations and the whole earth is a borderless country. There is a profound paradigm shift to a paradigm of humanity.

Campbell stated that "we are at the end of civilization [and] at the beginning of a global age. All horizons are broken." The society of the planet is the only valid one now and that the only question is: "To what society do you belong: the U. S., or the planet, or mankind?" The answer must lead to a planetary society and its success depends upon the answer to a related question: "How do you feel about people, not how do you think about people? What is the feeling system?" (1990, pp. 209, 224).

Mumford (1951, p. 3) and Schmookler (1991, p. 19) agreed that the insatiable civilizations need to be healed, that we must awaken in time to create an active partnership in a universal community, and that the world will not be made whole unless we see it as whole. Campbell pointed out that mythologies have built civilizations and that, at present, there is no mythology of a world community, that present mythological systems are oriented to parts of the totality, and that this can't last (1989, n. p.).

Cleveland (1991, p. 23), Harman (1988, p. 125), Mumford (1951, pp. 10, 240), and Simmons (1990, p. 97) together saw the promise of worldwide community as an age of balance or symmetry occurring at a higher level of development based on concentration of energies, globalization of issues, planetary interchange of people,

international systems, and global cooperation.

Global cooperation in terms of human existence on the planet is the focus of a number of theorists. Fields et al. (1984, p. 26) and Swimme (1984, p. 72) both stated that humanity has focused solely on its own power and on survival, has seldom stopped to reflect on its relationship to the earth system, and has lost the larger perspective of the unity of humankind with stars and planets and other life forms and of the beauty of the biosphere.

de Chardin said that as the human populace increases, the surface area of the earth becomes more restricted, leading to the social phenomenon of "compression" and the development of a higher degree of self-arrangement. A correlative effort is demanded of consciousness (1975, p. 182).

Harman (1992c, p. 5), Mitchell (1992b, n. p.), Sahtouris (1989, pp. 192, 203), and Swimme (1984, p. 34) all perceived this raising of consciousness as an evolving world view. Together they described a new, larger perspective of a unified field of existence underlying all creation--a view that we can't separate ourselves from the planet since we are all the body of humanity and the earth is a total organism, a total environment. Mumford (1951, p. 6) and Pelletier (1978, p. 2) said that such awareness calls for integration and enlightened interdependency so that humans can become interactive with the environment and the ecological systems in order to command resources and in order to better live and help one another and for the benefit of all humankind.

Kidder (1988, p. B4) and Sahtouris (1989, pp. 19, 24, 223) suggested that we seek help from nature as the best source of guidance on what is wise and unwise to do in relation with one another and with nature. They said we could learn a great deal from biological and ecological clues from the parent planet about cooperation, mutual interdependency, and ourselves as living beings within a larger being. Colorado added that Native American oral history says that ancient knowledge of the earth is due now to rise again--through integration (1992, p. 21).

Two characteristics of nature to be applied by humanity in a new worldview were described. One is that "everywhere we look in nature we see nothing but wholes. And not just simple wholes but hierarchical ones" (Wilber, 1983, p. 83).

The other is that the balance of nature is continuous, with recurrent patterns in the process of whole forms being created out of old ones through synthesis of separate parts and even greater whole systems being generated out of those whole frames (Hubbard, 1982, p. 32).

Mumford said that humankind has not found it easy to throw off its tribal mold and work within a more universal mold and that life flourishes when humanity follows the fundamental morality of nature and maintains a dynamic balance between the external and internal environments. Fox noted that in a new cosmology, humans fitting harmoniously into the order of things from whence creation comes is what wisdom is all about. And wisdom will count more than knowledge (1988, p. 240). As Swimme put it,

When you take the story of the universe as your basic referent, all of your thoughts and actions are different. All professions, all work, all activity in the human world finds its [sic] essential meaning in the context of the cosmic story. (1984, p. 67)

Several theorists suggested that the essential meaning found in the context of the cosmic story is that of uniting with a higher power. Bell (1980, p. 300), Berman (1984, p. 240), Campbell (1972, p. 274), Harman (1979, p. 121), and Wilber (1983, pp. 84, 293) described this relationship as follows. As the human ego disengages from "my" needs in favor of the more mature stance of identifying with higher integration, there is an erasing of boundaries and a transcendence, a listening to the inner voice and an identification with the center of highest consciousness or an at-oneness with God. They saw this surrendering to a higher power as creating holism, and the Absolute as both the highest state of being and the ground of all being. Mumford added that all religions attempt to give humanity a cosmic perspective (1951, p. 76). Campbell put it this way:

God is an intelligible sphere whose center is everywhere and circumference nowhere. Each of us is then the center, and within him is that Mind at Large—the laws of which are the laws not only of all minds but of all space as well. (1972, p. 274)

The approach toward holism, then, is a step forward in the transition toward

personal transcendence along with social advancement and global unity.

Systems Theory

The shift in worldview toward holism includes the notion that the interdependent wholes function together in a systematic way. According to Bolman and Deal (1991, p. 2317), Capra (1982b, p. 22), Harman (1992c, p. 4), Remen (1992, n. p.), Senge (1990, pp. 6, 68, 74), and Tannenbaum (with Jamieson, 1980, p. 34), systems theory is a powerful conceptual framework or discipline for thinking holistically or seeing the world in terms of the interrelationships of the whole. It provides a set of general principles, a body of knowledge, and a language with which to shape and enable perceptions of connections and patterns, to derive meaning and purpose from them, and to determine how to affect them.

Ferguson pointed out that it was the aim of Bertalanffy (who published General Systems Theory in 1968) to "understand the principles of wholeness at all levels" (1980, p. 157), and Ramos noted that Koestler's concept of the holon was a significant attempt at refining systems analysis (1981, p. 71). Morgan added, however, that "it is not always possible to define systems with total certainty or completeness Its importance is as a mode of thinking" (1986, p. 252).

Together Bolman and Deal (1991, p. 317), Capra (1982b, p. 22), Foster (1987, n. p.), Harman (1992c, p. 4), Morgan (1986, p. 238), Nicoll (1984b, p. 8), Senge (1990, p. 70), and Tannenbaum (in Jamieson, 1980, p. 34) described systems as complex sets or networks of interacting and interrelated parts and interdependent functions. Each element has boundaries, independent properties, characteristics, and identities which distinguish it as a whole separate from its environment. Each element contains many subsystems with their distinguishing characteristics, and each also exhibits the dependent properties of its membership within the larger system with its distinguishing identity.

The structure of the whole is heterarchical, that is, it has multiple, overlapping hierarchies with no controlling principle over all. The logic is of an integrated whole with each unit axiomatically containing knowledge of the whole and of a whole which cannot be understood as merely a combination of separate parts.

Capra emphasized that such integrated wholes are living systems or organisms

and are not to be confused with machine systems. He noted that machines are constructed, they are assemblies of precise and well-defined parts, and their activities are pre-established by their structures. Organisms, on the other hand, grow, their structure is determined by their processes, and they exhibit a high degree of internal flexibility (1982a, p. 268; 1982b, p. 22).

Harman (1988, p. 43; 1991a, p. 127), and Mumford (1951, p. 140) illustrated organic systems with the human body, noting that the body has a hierarchy of functions designed to protect and maintain the health and well-being of the system and that it functions well only when the subordinate organs are in harmony with the higher processes. Good health depends on the constant, coordinated effort of lower centers such as the nervous system and the immune system, for example, to do their jobs, to get what they need, to not cadge nutrients from one another, and to communicate with one another, to perform appropriate functions without conscious effort and to supply energy and vitality in support of the higher center or the mind.

The mind, in turn, makes use of the available energy to bring the organism into fuller relationship with other humans, the environment, and the more universal processes. Capra emphasized that human minds are embedded in the larger minds of social and ecological systems which are integrated into a planetary mental system and ultimately in a universal or cosmic mind (1982b, p. 23). Harman made special note that the mind's role in creating illness is well known and that its role in creating healing may also be known soon.

Like Harman and Mumford, Bolman and Deal also saw the human body as illustrative of a system, and they used that analogy to describe most common properties of systems. The human organism is arranged in multilevel systems, its properties interrelate and become more than the sum of the parts, it is capable of surviving and growing by working out mutually beneficial and open relationships with its environment, and it tends to maintain its natural property of dynamic equilibrium by identifying change in its environment and employing adaptive processes such as resource adjustment to maintain its steady state. They concluded that the important elements in systems theory are the boundary-spanning roles and processes, the intergroup and large-group dynamics, and the organism-environment linkages (1991,

p. 317).

Several authors focused on the boundary-spanning, multilevel aspects of systems. Harrison (1984, p. 99) and Land and Jarman (1992a, p. 174) said that each organism in the system is formed around a nucleus which can reference the common vision of the whole and which maintains the integrity of the organism, its relationship with the universe, and ultimately the integrity of the entire system. From there according to Capra (1992b, p. 23) and Nicoll (1984b, p. 9), there is a stratified less-to-more or simple-to-complex order of multilevel structures which each interconnect in mutual support and interact with their total environment. Berman pointed out that it is a homeostatic system and that no one variable can be maximized or the system goes into runaway. Cancerous cells are an example (1984, p. 257). Tannenbaum emphasized system interdependency, saying that what happens on one level will have varying and unpredictable degrees of impact on other levels (in Jamieson, 1980, p. 34).

The intergroup/larger-group dynamics is another major aspect of systems. Berman (1984, p. 245), Capra (1982b, p. 23), and Senge (1990, p. 42) all saw as one of the criteria of a system, the key interrelationships and interdependence or an aggregate of interacting parts which form the structure of the whole. Ramos resisted wholesale acceptance of this concept, however. He said that emphasis on simple dependence of parts in an organic system takes for granted that operative rules override internal independence of the constituent parts. The true nature of systems is dynamic, that there is a tension between individuals, for example, and social structures. The holistic system view doesn't express that individuals have laws unto themselves and that they are not essentially functional constituents of a system. He concluded that "systems models have a utility when structure-maintenance functions are legitimately monitored and nurtured" (1981, p. 70).

Harrison addressed this issue when he emphasized that the parts of a system have unique qualities and are different from one another--each developing its own purpose in relation to the unified whole. He saw the keys to harmony and integration as alignment and attunement. He defined attunement as the subtle energies which serve to bind parts to one another and to the whole which creates resonant or

harmonic relationships among parts of the system and between parts of the whole. Harrison described alignment as parts choosing to serve and enhance the well-being and evolution of the whole which is achieved when subordinate values and purposes are expressed through superordinate values and purposes so that parts become integrated into the whole. The role of leadership in aligning human purposes with those of their organizations is crucial (1984, p. 99).

Understanding the logic of the linkages between each element of the system and its larger environment is the key to systems theory, according to Bateson (1972, p. 450) and Morgan (1986, p. 236). They began a description of this relationship by focusing on a single whole element of a system. Each elementary unit, with its sub-systems, has a closed circuit system of circulating information based on its own memory and data banks. The system focuses on economics of material and energy within its natural boundaries and aims at self-production.

Bateson pointed out, however, that an organism focusing solely on its own survival will destroy its environment and ultimately itself. He and Morgan emphasized, then, that each whole-system's boundaries enclose it but do not cut it off from its environment, that as a whole within wholes its system of information flow is actually open and part of a larger circuitry. As Morgan put it, "transactions with the environment are really transactions within the self" (p. 238). Bateson illustrated this concept by noting that a blind man has an internal perception system of his surroundings, but it must include the larger input of information from his walking stick and the pavement, which are beyond his organism.

Bateson, Morgan, Senge (1990, p. 284), and Tannenbaum (in Jamieson, 1980, p. 35) described the larger, open system as a total, interconnected system which includes two-direction pathways, transactions, and information with a degree of permeability. Each unit holds its own implicate order or basic reality of the universe but without it flowing into or being manifested by a larger explicate order, it lacks a sense of purpose or larger explanation for its existence.

Several authors (Bateson, 1972, p. 461; Berman, 1984, p. 237; Bolman & Deal, 1991, p. 317; Morgan, 1986, pp. 20, 84; and Senge, 1990, p. 70) made special note of the system of feedback from the environment to the organism: cybernetics.

They described cybernetics as a term borrowed from nineteenth-century engineering theory and the study of the set of symbols and codes for transmitting or controlling information and communication within the complex causal circuit of a system.

The importance of cybernetics is its use for engaging in self-regulating behaviors. Henderson (1988, pp. 324, 331) and Nicoll (1984b, p. 9) and Senge (1990, p. 70) described two types of cybernetics. The first is negative feedback loops (the original cybernetic system) which help the organism adjust by "deviation-damping" or applying brakes in order to maintain its goal orientation and its balance or stability over a period of time. The second is positive feedback loops (a more recent adaptation of cybernetics) which stimulate more movement in the same direction by "deviation amplifying" processes to produce growth or structural evolution.

Bateson (1972, p. 451), Berman (1984, pp. 237, 241), Foster (1987, n. p.), and Morgan (1986, p. 233) discussed possible impact from the environment on systems. The world is in a state of flux, a state in which change creates no impact or causes no difference. A river continuing to flow at the same rate changes its water but creates little difference, for example. Some changes do create differences, however, and in systems, change is an underlying property as well as a fundamental attribute of reality. So, in systems, even though differences may have no dimension or no linear causality in the reality of whole time and space, change creates effects--effects which create attention and unpredictable reverberations. Systems react with awareness to differences; change in any single component is felt throughout the system.

Capra (1982b, p. 23) and Morgan (1986, p. 236) noted that each whole then deals with feedback as a self-organizing system, maintaining its autonomy while interacting with the environment--coupling with, adapting, and subordinating environmental differences to its own system. The unit sees the environment as part of itself and maintains continuous circular patterns of interaction--always with itself as the referent.

Change unfolds, then, according to Morgan, through circular patterns of positive/negative feedback and interactions which shape the system--causing system elements to evolve or disappear along with changes in their context (1986, p. 247).

Morgan added, along with Nicoll (1984b, p. 8) that changes in system elements occur in response to dense sets of alterations and multiple causes, but the changes themselves occur from internally, self-generated changes chosen in relation to system change. Berman added that organisms "escape change through change . . . by incorporating continual change into themselves" (1984, p. 245).

Berman (1984, p. 248), Land and Jarman (1992a, p. 174), and Morgan (1986, p. 245) noted that, in addition to changes in response to the environment, system units can also be self-actualizing--evolving their own identity, engaging in self-discovery, developing system wisdom, and ensuring self-preservation by utilizing inner sources of energy through autopoiesis, that is, energy stemming from each organism holding a blueprint for the future whole. Land and Jarman called it "future pull."

Weick (1982) determined that the nature of the organism's change in response to external feedback is determined by how loosely or tightly it is coupled with its environment--with boundaries either confining energy or allowing it to flow freely. He said that loosely-coupled systems result in freedom to respond or flexibility to adapt in small, continuous changes. Such changes may also preclude integration, coordination, and adoption of more difficult, major, or stable changes which could result in discontinuity and inferior outcomes for the system.

Morgan stated that for organisms to meet challenges and demands of the changing environment and to be innovative they must be designed as learning systems--open to inquiry and self-criticism. Systems must be able to scan the environment and to make sense of significant aspects as well as to detect significant variations. They must then be able to relate information to their own operating norms and to take corrective action. In that process, systems can learn or read input for decisions based on their operations, but they are unable to change the norms if necessary. Systems must learn how to learn. Such learning must be accompanied by a major change in attitudes and values (1986, pp. 86, 105, 107).

Argyris and Schon's (1974) and Argyris' (1982) double-loop learning model reflects the deep level learning suggested as necessary by Morgan. These authors described double-loop learning as making corrections by examining and altering governing variables--which are identified by observing individuals' actual behaviors,

that is their theories-in-use, rather than their espoused theories. This is in contrast to single-loop learning in which corrections are made without questioning or altering underlying values. The authors noted that single-loop learning is appropriate for routine, repetitive changes but that double-loop learning--which may require the difficult change in theories-in-use--is more relevant for structural changes.

Morgan also offered, as a means to fully understand the logic of change, and as a means to move beyond bounded rationality, the use of dialectic analysis as a method for learning to change. He noted that the dialectic view suggests that the world evolves as a result of the resolution and transformation of internal tension and that the dialectic is an attempt to understand the tension of flux and whole and the logic of change. Recalling that systems theory provides a means for deriving meaning and purpose from holistic interrelationships, the dialectic view may stimulate the deep learning necessary to perceive those relationships and provide a means to identify the deep structure of reality.

According to Senge, deep, generic learning requires a conceptual framework of systems thinking and the ability to discover structural causes (1990, pp. 53, 94). Berman added that in systems theory the only way to know something is in context or in relation to something else (1984, p. 249). Berman and Senge, along with Capra (1982b, p. 23) and Morgan (1986, pp. 235, 254) together described a means to develop a conceptual or contextual framework and to generate deep learning. The best way to develop "systemic wisdom" and to attempt to influence the relations defining a system is to identify and understand a system's patterns. The principle of self-organization is patterning and such order is established by the system itself, not imposed by the environment. Therefore the key to understanding the organism is to understand its structural patterns. The authors stated that wisdom is achieved through knowledge of the circuitry. Since circuitry is the way the world is constructed, a focus on the circuits, beyond being immersed in them, provides knowledge of the patterns and gives information and meaning which can then be related to unknowns that follow similar patterns. Understanding patterns is, therefore, a means to know the world.

Bateson emphasized that knowledge of pattern and form are mental processes

which were thrust out or submerged in the ancient dichotomy between form and substance, when substance and matter became the focus of science. Systems theory provides a formal base to again think about mind and to see the world holistically (1972, pp. xxv, 449). Berman went one step further reflecting that Bateson's systems theory, which reunites digital knowledge (intellectual analysis which lack emotional commitment) and analog knowledge (nuncognitive knowing), "is the best thing we have for resolving the need to get the sacred and the secular back together" (1984, p. 267).

The implication that systems theory is directly applicable to social interaction has not been fully accepted or resolved. Morgan stated that systems theory was originally developed for biology and that "authors of the theory have strong reservations about applying it to the social world" (1986, p. 239). Senge, however, saw it as "a set of general principles spanning the diverse fields of physical and social sciences" (1990, p. 68). Bolman and Deal (1991, p. 317), Capra (1982b, p. 22), Sahtouris (1989, p. 157), and Tannenbaum (in Jamieson, 1980, p. 35) agreed. Together they said that the systems thinking aspects of wholeness are exhibited as social systems and are widely applicable to many social levels, with interlinking elementary particles of the universe being observable from atoms, molecules, cells, person, families, groups, organizations, communities, and societies through ecosystems, the universal mind, and supernatural systems.

A number of authors were less inclined to see social interaction in terms of systems. Plummer, for example, saw the social world not as a system but as a paradigm. He said that "a social paradigm is that constellation of values, beliefs, and experiences that--because they are shared by the majority of the members of society--enable people to . . . communicate with one another with some degree of success" (1989, p. 10). Kuhn, however, suggested that society does not meet the criteria of a paradigm as established by science: achieving consensus on a single paradigm and experiencing progress through repudiation of a previous paradigm (versus accepting competing views), focusing on solvable problems (rather than on social needs), learning by direct experience from historic members (instead of reading textbooks), submitting to evaluation by members of the profession (versus appealing to heads of

state), and so on. He concluded that social interactions cannot be viewed as total belief systems or paradigms (1970, p. 159).

Mumford agreed that life does not consist of a single set of principles and that a community cannot divorce itself from its past or be wholly concerned with its future. He said that "this is oversimplification, like a system, [and] life cannot be reduced to a system No organism, no society can be reduced to a system or be effectually governed by a system" (1951, pp. 176, 178). de Chardin, in describing human socialization, said that it is "not characteristic of a cyclic system" (1975, p. 180). Bell stated emphatically that "society is not an integrated whole complex system" (1976a, p. 116).

A closer look at each of these authors, however, along with an awareness of the time at which each wrote, suggests that they were all rejecting the notion of society as a closed system. Bradshaw described the impact of a closed system on society as "dictating the roles and behaviors the individual can choose from [and] calling forth characteristic behaviors and processes in the individuals who make it up" (1988, p. 167). Closer examination of each of the above author's sentiments suggests that each actually viewed society as reflecting the characteristics of a holistic, open system.

Mumford (1951), for example, said that "what holds true for the individual holds likewise for groups and communities: in some measure the person operates at all levels" (p. 230). "We must live by open synthesis--inclusive and completely sufficient to nourish all nature and be balanced" (p. 180). "There must be at the central core, an organic form of associations" (p. 276). "The balanced person is the ideal: he no longer belongs exclusively to a single culture Through deep roots in family, neighborhood, region, he is tied with other men Larger communities, ideally, should be formed by federation of smaller units" (pp. 276, 280, 288).

de Chardin described social totalization as "the direct equivalent (at higher levels) of the associations which produce molecules or protein (at lower levels) Every being acts on its environment through the totality of its self (lines of force are established between living elements, or between thinking elements, and so on)" (1975, pp. 178, 189). Bell said that the problem with models of society is that their strength

lies in closed systems whereas we "have some insights into how society changes [and] society is increasing in openness" (1976a, p. 116).

Ramos (1981) contributed thinking which suggests that the acceptance of social interaction as an open system depends on one's theoretical view of society. He suggested "substantive theory" as a view of social systems based on old paradigm beliefs. It is based on social science as a separate and unique scientific (facts versus values) study of human associations; on reason as the cardinal category of analysis and foundation of meaning; on rational laws and standards as the basis for norms governing society; on political regulation as the fundamental condition of social order; and so on.

Substantive theory reduces people to social beings whose order is granted extraneously and whose actualization is understood as their total socialization, with the paramount feature of human nature being economic motivation. With an emphasis on the marketplace, the world is an arena for maximizing gains. Material property is the main concern, individuals' immediate interests are moral justifications for their actions, concern with matter rules out concern for intrinsic ends, and values become secondary properties of things. Under influence of the marketplace, cognition and politics are joined and become its tools so that language and ideas are consciously or unconsciously distorted, by advertising and the news media, for example, to induce people to define and interpret reality in terms of personal rewards.

Ramos stated that in this view, "the sanity of man's desires matters more than their means of accomplishing them" (p. 36) and that "every society where the market has become a centric agency of social influence has community bonds and specific cultural traits undermined and destroyed" (p. 78). "Reducing the individual to a purely social being is equivalent to claiming that his main concern in society is his sheer self-preservation" (p. 32). This view of social science "works only as long as circular causation linking market and behavior conformity of individuals is undisturbed . . . Such conformity is open to question now; individuals are tending to become more than totally socialized" (p. 36).

As an alternative view, Ramos offered the "formal theory" of social systems based on the belief that the study of social science includes the issues and values of

natural science, that reason and rationality are mutually determined, and that standards of order are socially given. The supporters of the newer view have called for a "reexamination of the popular notion of 'environment'," a systems design involving concern for consequences evaluated from a human values point of view, and a social system which includes a theory in which internal and external realities are interpreted and practically treated (p. 103). Ramos added that such a theory--setting out the way the world is, who we are, what we're doing, and what we should be doing--is the core dimension. It provides a basis for interpreting changes or disruptions and for adjusting goals and behaviors.

Berman (1984, p. 258) and Tannenbaum (in Jamieson, 1982, p. 35) both noted that the old paradigm view of social systems focuses on the system itself--its structures, functions, rules, and so on--and a new view increases awareness of environmental wholes and allows individuals to locate themselves in the larger context. Bellah et al. pointed out that the old system has engendered a "common moral vocabulary [or] 'first language': American individualism," with little focus on the relationship between the individual and society--how living things, including human beings, exist in relation to one another and to their common habitat" (1985, pp. 20, 284).

Capra emphasized that a whole-systems view has great consequences for society and daily life. Whole-systems views are reflected in holistic health, ecological concern for the environment, antinuclear sentiments, focus away from materials consumption and on voluntary simplicity, a spiritual quest for meaning, and human potential-feminist awareness, for example. The current paradigm shift is moving in this direction and is emphasizing these new views of reality (1982b, p. 22).

Bellah et al. echoed those thoughts, noting, for example, that "ecology as a science has a close connection to ecology as a philosophy and as a social movement." Social ecology is simply relating to natural ecology and retitling moral ecology. "Human beings and their societies are deeply interrelated, and the actions we take have enormous ramifications for the lives of others" (1985, p. 284).

Ferguson agreed, saying that people are seeing that our social institutions have violated nature and that they are changing their minds and claiming their personal

power. Power is a central issue in social and personal transformation and power in service to life is appropriate power. The self and society are inseparable and personal change begins social transformation (1980, pp. 148, 189). Huffington stated what she saw as an ancient truth: "The moment we begin to change and regenerate our lives, the world starts changing with us" (1989, p. 76).

Fields et al. added that the impetus for social action is a challenge to society based on a deep desire for change which is now motivated by personal moral and spiritual goals (versus material interests). Since society is in constant flux, people are in the continuous process of adjusting and thereby creating new societies (1984, pp. 237, 242). Brewer noted that transformation in local communities around the world is its foundation for all other changes" (1986, p. 14). Simmons emphasized that as societies move forward there is also a need to move on to unify the world society (1990, p. 105).

Initial interest in and early adoption of a holistic systems view, then, may reflect the foundation of these transition times, beginning with personal reorientation and spreading through interactive linkages toward adoption of a world system view.

Summary

Many theorists saw these initial moves toward new views as evidence of early transition and indications of continued transformation. de Chardin noted that life has flourished for 300 million years, that the modern world was created in less than 10,000 years, that it has changed more in the past 200 years than in all the preceding millennia, and that it is far from having completed its evolution. "We cannot continue to exist without undergoing a transformation which will in one way or another forge our multiplicity into a whole Progress is a force. It is the consciousness of all that is and all that can be" (1964, pp. 19, 40, 71).

Harman strongly emphasized the force of consciousness. We know how to change our society long range: the mightiest force for social change is the power of society's citizens to challenge and withdraw legitimacy from society's institutions. This process needs inner work and a change in the most basic views about the meaning of human experience, but the most important happening in the twentieth

century is a change of mind (1979, pp. 32, 116; 1988, Introduction; 1992a, n. p.).

Colorado (1992, p. 21), Land and Jarman (1992a, pp. 11, 73), Nicoll (1984b, p. 16), and Schaeff and Fassell (1988, p. 38) together emphasized that mere modification of our thinking patterns will not work, that societal change will require nothing less than a radical rethinking and a basic and massive fundamental change in the way we view the world and how it fits together and works. A paradigm shift is a move away from the certainty of what may currently be believed to be the right answers, and we must come with beginner's minds and hearts to develop new perspectives and basic propositions. de Chardin said that he foresaw the probability of ultra-reflection ahead (1975, p. 214).

Henderson said that in order to move into a new Age of Light we must take a holistic view of the entire human family and adopt systemic thinking--focusing on coexistence and globalization (1986, p. 56; 1992b, n. p.). Harman said that the key to resolving our dilemmas is transformation to a whole-system view. de Chardin saw this view as emerging in response to the stirring energy of the cosmos which is stimulating a heightened awareness of the inner knowledge that life is not a state but a directed movement leading us toward social unification and world-group cohesion in which each human molecule on the globe coexists with the whole surface of the globe (1964, pp. 131, 225).

In general, then, theorists perceive our present time to be a period of transition, showing the evidence of growing stress and tension which reflects both an awareness of the dissatisfaction with the current state and a new vision based, not on old paradigm, science-based thinking, but on a more spiritually balanced view. Early moves toward future possibilities are evinced in tentative adoption of new views: values based on personal transcendence, social advancement, and world unity as well as understanding of the world as a whole interactive system which supports those values.

In moving on to examine the theorists' prognoses for the future, focus on advancement and survival suggests that individuals will need to accept even more advanced personal, societal, and world views.

CHAPTER V

THE FUTURE

Future Purpose

"Who can know where the future goes? The only surety is that what we think today will be a part of the past tomorrow" (Zukov, 1979, p. 8). Cornish (1987, p. 58), Grumwald (1992, p. 73), Harman (1988, p. 168), Morgan (1986, p. 272), Mumford (1951, p. 135), and Simmons (1990, pp. 61, 257) all echoed this sentiment, saying together that there is no such thing as the future--no one knows what transformation really means. The authors said that the future is more than just an extension of the present and that we are unable to conceive of a major belief-structure shift. They noted that previous predictions have missed the mark and that the change process itself modifies goal attainment. Wilber added that "we might eventually discover that the new paradigm is really nothing but the quest itself; that the only constant is the search" (1983, p. 293).

If basic assumptions are shifting, as previously suggested, society will be different, we can only intuit the possibilities of where the future will ultimately lead, and the final results will include elements of surprise. Theorists have intuited, for example, that by the year 2000 there will be a transfer of power to a new generation and the crises will be over (Cetron & Davies, 1989, pp. 7, 267), that we will be earth-space species (Hubbard, 1982, p. 70), and that change will not be complete but that, thanks to widespread communication and initial acceptance of the need for a shift, its direction will have become apparent (Harman, 1992c, p. 6). Harman also suggested that disruption will be inevitable. The shift will be "more wrenching because of the rapidity with which we are approaching it, more extensive because it involves all parts of the globe, and more thorough because of the depth at which cultural premises are shaken" (1979, p. 21).

Land and Jarman (1992b, p. 25) and Mumford (1951, p. 137) emphasized that even though we may be unable to foresee the future, there is a blueprint or a grand

design. There is an internal picture of a universal purpose which serves as a propelling force pulling people toward a powerful vision of the future so that all life is purposive and goal-seeking.

Several authors suggested that a new awareness of this propelling force is arising. Clancy et al. (1988, p. 65), Ferkiss (1984, p. 10), Hubbard (1982, p. 13), and Simmons (1990, pp. 61, 259) said that there are powerful trends in evidence today. We are at the dawn of a conscious evolution and we are entering an Age of Light. Individuals and the collective are becoming enlightened or more fully and consciously aware. Our society is experiencing a certainty of purpose in the universe—the ultimate mystery of the process of creation which is at the heart of human existence. Although this purpose is not yet fully understood because we lack a broad perspective, we are beginning to participate deliberately.

According to Ferguson (1980, p. 2), Hubbard (1982, p. 12), Mitchell (1992a, p. 30), Swimme (1984, p. 159), and Wishard (1987b, p. 60), we are living in a period of enormous promise. The key to the task ahead is to restructure our fundamental vision, to experience certainty of the purposefulness of the universe, and to seek new perspective and meaning in the context of the enduring purpose of the human journey. We must expand our understanding of who and what we are in relation to the universe and our awareness of what we can become. Mumford noted that "by entering into purposes that transcend the limits of any single life . . . , man endows his own limited needs and values with a meaning that outlives their temporary satisfaction or equally temporary defeat" (1951, p. 139).

Theobald pointed out that,

Fortunately, we do not have to invent the wisdom we need. It is available in the world's oldest and deepest spiritual traditions. It can also be found in the newest understandings of system theory and leadership. Each person's approach will depend on the journey taken, but we shall all draw from the same deep well. (1987, p. 82)

Ferguson said that we can foster our own healthy change because "new paradigm principles have been present all along but unknown" (1980, p. 28).

Theobald added that "these conclusions have been reached by great spiritual leaders

over millennia and the same ideas are now being confirmed by modern secular thinkers using very different language" (1987, p. 128)

Harman, in tying the notion of a universal goal to modern thinking, asked rhetorically, "What's the picture of reality that underlies the whole system?" Then he answered that the new directions of holism, balance, a new relationship with nature, a new sense of spirituality, societal appreciation of different cultures, and a restructuring of global economy all suggest that outlooks on the world are coming together (1992b, pp. 28, 30). de Chardin observed that "seeing order and continuity makes new interpretation of the world possible" (1975, p. 168).

Campbell (1990, p. 153), de Chardin (1964, p. 122; 1975, pp. 165, 175), Hubbard (1982, p. 114), Mumford (1955, p. 297), Simmons (1990, p. 29), Tarnas (1991, p. 380), and Wilber (1983, pp. 85, 132) all subscribed to the concept of stages of increasing complexity, integration, and unity in a process of involution and evolution of the world. They all contributed to the following description of that phenomenon.

According to these authors, mankind, through exploration of self-determined elements of behavior, has developed new insights into the nature of its organism. As a result, the world is seen as a history of ever progressive and divine unfolding motivated by the unifying principle of the universe--consciousness, spirit of mind, unfoldment of thought, or the power of ideas--in a constant process of becoming totalized. The whole process not only plays itself out over centuries in complex organisms but also repeats itself moment by moment, ceaselessly and instantaneously, through the evolution of atoms and molecules. A person's growth from infancy to adulthood is a miniature version of cosmic evolution, unfolding in ever higher unities and integrations.

Once begun, the process of totalization cannot stop. Because it carries out a set pattern based on unification, centration, and spiritualization it is infallible and irreversible. It climbs steadily upward toward an Absolute or Omega point or pole around the Omega axis, becoming more tightly involuted and conjoined as it evolves. Totalization is not accidental. At every point in space-time, consciousness and reflection are flowing according to the design based on a center. Life is carrying the

process through to the end, and the designing intelligence that organized the universe is continuously at work.

Each spiral around the axis has major and minor themes. Each contains resonances with similar historical points in earlier spirals, and each carries forerunners of future spirals. Society may not be immediately uplifted by a new spiral's themes which can be due to lack of opportunity or due to high resistance. The authors said that we are now approaching a critical point in our society's maturity: we are approaching the highest stage or humankind's fullest point of development.

According to the theory, at the climax of a long evolution, humankind reaches the ultimate pole or convergence point with the Omega. Through the ability to completely reflect upon itself, humanity rises above the chaos, becomes aware of the profound holistic, evolutionary, co-creative order of things, understands the Absolute's quest for self-revelation, achieves possession of absolute truth, and recognizes unity with the divine spirit. From there, through spiritual metamorphosis or supreme syntheses, the last step is a convergence with all consciousness.

According to Murphy there is evidence that transformation occurs through a limited number of "transformative modalities," which are dynamic by-products of religious practices and which are means to step up to higher consciousness. He said that if metanormal abilities were realized by enough people, our society could become less materialistic, more alert to the supreme goodness in the world, and more in tune with evolutionary vision (in an interview with Miller, 1992, p. 7). Ferguson noted that "there is a possibility of human metamorphosis, a world hospitable to creativity and mystical experience" (1980, p. 56), and Hubbard said that "it is natural that we transcend our present condition, for the nature of nature is to transcend limits" (1982, p. 104).

Mumford said that "when the situation is ripe, . . . a whole series of changes will come about with remarkable swiftness," and humanity will turn from the familiar to a new sense of direction and purpose (1951, p. 97). He added that "such a change has never occurred in the past, but conditions which make it imperative have never existed either" (p. 118). It is through common purpose that "all mankind rises to our

utmost height" (p. 190). For four centuries humans have been displaced, and that it is time to give weight to all aspects of life including potentialities that lie beyond the scientific order. Given its fullest expression, "Western society may be on the verge of a crucial transformation" (pp. 190, 230).

Ferguson (1980, p. 28), Henderson (1992a, p. 8), and Theobald (1987, pp. 19, 138) all agreed that although the specific steps to reaching the goals of including all potentialities and achieving common purposes may never be fully clear and that we may have to embrace uncertainty as fundamental and accept the inevitability of mystery, that our culture should be self-affirming and that we must challenge some old assumptions.

A number of authors offered suggestions for reaching higher goals. Hubbard (1982, p. 106) and Wilber (1983, p. 196) said that we must become a self-actualizing society by developing social policies which help humans evolve through stage-levels of existence and achieve transformation to higher levels. Such policies must support the full spectrum of human abilities and the fulfillment of individual potential. Bellah et al., however, emphasized that we must take steps to repair the damage to our social ecology and "the subtle ties that bind human beings to one another" (1985, p. 284). de Chardin agreed, saying that "if human particles are to group themselves centrically, they must love one another" (1975, p. 187). The theory of divine purpose, then, suggests that both individual transcendence and social unity are imperative.

Gore suggested that we need to become less preoccupied with the crises of the present days and become better prepared for the future (1990, p. 22). Bell (1980, pp. 219, 225), Coates and Jarratt (1989, p. 284), Ferguson (1980, p. 29), Harman (1979, pp. 27, 33; 1988, pp. 137, 160; 1991a, p. 128; 1991b, p. 115; 1992c, p. 6), Henderson 1992a, p. 8), Hubbard (1982, p. 103), and Simmons (1990, p. 251) contributed the following suggestions for creating a better future. Individuals should have the opportunity to achieve meaningful self-fulfillment or self-realization; they should experience life as meaningful, purposeful, and having direction; and they must develop knowledge, imagination, inner resources, growth, and transcendence. Society should maintain the framework of democracy, respect for constitutional rights, and

focus on order, peace, and justice; it should support central values, meanings, purposes, and a worldview; ensure equal rights, minority group consciousness, equality of the sexes, and a feminine perspective; and develop citizenship goals, social responsibility, a fulfilling place for everyone, and concern for the unity of reality. Society should also provide reasonable health care and should improve schools, stimulate better minds, and appeal to higher levels of thinking in the mass media.

In the areas of politics and economics, society leaders need to eradicate poverty and the national debt and de-emphasize economic growth and decision making based on market-economic factors. They also need to redistribute incomes and focus on emotional versus consumer security. Political participants must move beyond special interests and such ideologies as capitalism, communism, and so on, and should stimulate local participation, institutional fairness, and equitable interconnections among groups and societies.

Ecologically, people need a more holistic view, greater concern and awareness of the need for alignment and balance between competition and greater concern for the effects of competition. They need to develop attitudes of deep ecology, maintain the planet, care for the environment, align themselves as stewards of resources, and demand greater socially responsible management of technology. Science practitioners should emphasize understanding and should be more open to subjective experiences, alternate means of data gathering, and other dimensions of reality. Society should place more emphasis on spirituality and perceive it as the basis for values. People should be able to experience open opportunities for spiritual development and fundamental transformation of mind without fear.

This laundry list of challenges for personal and societal future development covers a wide variety of perceived needs. Basically, however, they are responses to stresses being currently experienced in this transition time, and, as such, reflect what Gore cautioned against--a preoccupation with present day's crises--rather than more advanced thinking.

Personal and Social Needs

In keeping with the image of a grand design for personal ascendance and

social cohesion, many theorists repeatedly emphasized the importance of personal transformation as key to the equally important social movement necessary to accomplish the vision of the future as a universally fulfilling and rewarding world.

Mumford stated that "man's entire spiritual, intellectual, economic, and heroic integrated complex psychological nature must be understood for general happiness and welfare" (1951, p. 191). Many theorists attempted to develop that understanding of human nature.

To begin, Campbell (1990, p. 182), Harman (1992b, p. 29), Mumford (1951, p. 281), and Sinetar (1987, p. 22) focused on the importance of individuals' inner drives. People are driven by an inner locus of authority and that the first rule of autonomous development is to provide for one's own wants. People are guided by inner prompting of their wants and needs which lead them toward making the best use of their potentialities, pursuing their private dreams, and achieving self-reliance and self-actualization. Theobald noted that people operate in their perceived self-interests and make choices based on what they think will be satisfying and beneficial to themselves (1991, p. 59).

Bell noted that "industrial-era success has brought an extraordinary degree of personal freedom, with strong attention to self [and] self-fulfillment" (1976b, p. 19). Holt argued that the message has been that the way to be a great American was to do your own thing and to make as much money as possible (in an interview with Frances Lear, 1992, p. 17).

Harrison noted that Americans feel that they owe it to themselves to develop their own sense of significance and self-worth and that they should have the freedom to pursue whatever they find rewarding. This belief can lead them to becoming preoccupied with a selfish and endless quest for happiness and personal satisfaction (1984, p. 100). Nanus added that this human need can lead people to having an impact on the world regardless of consequences (1989, p. 18). Sahtouris said that these egotistical attitudes stem from our belief that the world is "out there," so we can do as we please and that such an attitude has brought us to a crisis (1989, p. 24).

Wishard wrote that this alienation between personal needs and the consequences of personal actions is the "byproduct of trends toward mechanization,

standardization, quantification, and uniformity that constitute the core of industrialization" (1987b, p. 60). Wishard, along with Pascarella (1984, p. 6) and Schmookler (1991, p. 18) noted that in the capitalist system, the marketplace has created exchanges by contract and has eroded noncontractual bonds between people. In the American society, where people deal with massive mechanisms and bureaucracies, they have become separated from family and community and from the deepest fulfillment derived from meaning, from loving contact with others, and from links with some larger significance. Being unable to get their psychic needs met and not knowing how to achieve autonomy, meaning, reassurance, love, or higher levels of being, people have sought compensation in symbols of gratification and have turned to fulfillment through material possessions or through personal advancement. Ultimately, when they cannot achieve nourishment, satisfaction, or significance through economic growth, they begin to feel less than human and to exhibit frustration and hostility.

Berman (1984, p. 260), Bradshaw (1992, p. 50), and Gardner (1990, p. 12) said that people are something more than robots and that this something doesn't spring from reason; the scientific intellect (the basis for mechanization and industrialism) has led to the inability of human beings to locate themselves within the larger context of the world. Recovery from this existence and a return to humanism are based on the lessons of myths and the wisdom of primitives--that the reality of human nature is that we spring from spirit, from a need for one another, and from a belief in a truth greater than ourselves.

Interestingly, the science-based economic system which has stimulated, then frustrated, egotistical attitudes has also provided the impetus for greater personal awareness, according to Naisbitt and Aburdene, who said, for example, that technology and consumerism will enable people in the new millennium to feel empowered--freer to determine their own fate (1990, p. 323). Bennis stated that "never before have individuals wanted and been able to seize so much power" (1989, p. 60). Harman emphasized that individuals now have the power of personal liberation. Because of the development of self-reliance and self-emancipation, people have the power to take legitimacy away from bureaucratic systems, oppression,

prejudice, and dehumanization by the industrial society. At present, they may not know how to use such power or to believe that they have it but it does exist (1991c, p. 3; 1992c, p. 7). Ferguson said that as individuals develop inner knowledge, they will recognize that they can take back the power they have given away, challenge old precepts, and withdraw legitimacy (1980, pp. 222, 225).

Ferguson, along with Brown and Isaacs (1991, p. 9), Harman (1992b, p. 29), and Hubbard (1982, p. 9) suggested that people are capable of developing this kind of inner knowledge. The self is not a fixed entity and the human organism is always developing--responding to its hunger for meaning, a sense of purpose, and a transcendence beyond self-fulfillment. Mumford said that those who constantly seek to achieve self-knowledge and apply it in their daily living "are capable of overcoming their automatic reactions and to reaching their own ideal limits." The lack of inner convictions make us easy prey to chance stimuli--"lacking an inner life we lack an outer life worth having too." But this "restoration of the human soul is of utmost importance; until that change takes place no effective regeneration can be brought about" (1951, pp. 250, 261, 276).

Several theorists emphasized the importance of this restoration. Hubbard stated, "Deep in our consciousness is the need for purpose. We yearn for significance--over and beyond all personal goals. It is for relatedness to a higher order that the flame of expectancy burns All of human culture can be interpreted as the effort to transcend--the driving dream of the human psyche is to go beyond the bonds of animal life" (1982, pp. 5, 43).

de Chardin (1975, pp. 73, 88), Fields et al. (1984, p. 2), Goldberg (1989, p. 74), Harrison (1984, p. 100), Hubbard (1982, pp. 68, 89), Mumford (1951, p. 274), Pascarella (1984, p. 8), Sinetar (1987, p. 22), and Wilber (1983, p. 73) wrote that evolution is a consciousness-raising experience and that humans, with their brain complexity and psychic development, are at the spearhead of evolution. Even so, cosmic individuals only use about five to ten percent of their body-mind potential--they continue to slumber in the sleep of separation, trusting as real only what their five senses report. This period of people feeling unrelated to each other and to a universal process is a time of learning in preparation for the next phase, that is, for

taking their rightful place as co-creators of universal affairs.

These theorists continued that the cosmic individual and the cosmic consciousness is a natural complement--inner and outer aspects of the same thing--and that unity with the cosmic consciousness and knowing the Absolute through direct experience rather than reason is the highest and most satisfying way of knowing and is the realization for which we all thirst. The impact of this unity is that the subject-object duality dissolves, the ego disappears, humanity's dark side is ignored, all cognitive faculties are upgraded, and the worldview is changed. This transcendence is the ultimate identity of the individual as truly one with creation and is a noumenological or mystical experience.

Maslow wrote that persons who had experienced this end-state of perfection, which he labelled "peak experiences," tended to describe something like mystical experiences. The following conditions have been described in transcendental experiences: The experience was seen as a whole, detached from any useful purpose, and was egoless or ego-transforming; it was completely absorbing, perceived with caring and without judgment, and experienced as fully rich and fascinating; it was felt to be intrinsically self-validating, perfect, complete, and desirable. In addition, the experience included a disorientation of time and space, and it simulated an emotional reaction of awe, reverence, and humility. The world was seen as a single, rich, live, unity and the abstract and concrete were perceived simultaneously. Polarities and conflicts such as selfish/unselfish, rational/irrational, and individual/social were fused and transcended, and there was a complete loss of fear, anxiety, or need to control. The person experiencing the peak felt complete, loving, and Godlike. Maslow noted that the experience was more common than he had expected (1968, p. 71).

Bateson (1972, p. 277), Ferguson (1980, p. 62), Pascarella (1984, p. 8), and Wishard (1987b, p. 60) all stated that there is a new kind of autonomous human being and a growing network or ethic of commitment aiming to achieve this kind of ideal centeredness, inner authority, or spiritual connection and to bring meaning and wholeness and greater unity to their lives. Mitchell (1992b, n. p.) and Nicoll (1984b, p. 6) noted that there is a fundamental understanding that our beliefs about who we are and what it means to be human are changing and that we must revise our belief

system and develop a new paradigm from a new perspective. Mitchell added that this change must begin with the self.

Harman (1988, p. 120), Hubbard (1982, p. 43), Naisbitt (1982, p. 51), Simmons (1990, p. 244), and Sinetar (1987, p. 22) together suggested that there is a collective psychic stirring which responds to the need for balance between physical and spiritual reality and which advocates discovery of our potential as we participate in the evolution of the human race. This movement is seen in a range of self-realization activities which encompasses and fuses a multitude of traditions from conventional psychology to esoteric spiritual practices and employs a wide variety of tools such as nutrition, psychotherapies, affirmations, meditation, shamanism, and so on. Mumford (1951, p. 253) and Sinetar (1987, p. 22) both noted that the first step in personal discovery and restoration of initiative to the human soul is to go inside. Self-examination in order to develop sensitivity to inner stirrings, personal consciousness, and spirituality is a private matter requiring withdrawal and solitude.

Hubbard noted that there are always those transcendents among us who reach for the next step (1982, p. 43), and Popcorn reported that, although she sees evidence of those who continue to focus on their "me-ness" or on what they deserve and those who choose to escape through isolation or fantasy-building, she also perceives those who are examining the psychic costs of current behaviors, who are refusing to be bound by tradition, who are protesting immoralities, and who are focusing on survival and on personal and social responsibility (1991, p. 27).

Naisbitt and Aburdene stated that the great unifying theme at the close of the twentieth century is the triumph of the individual and that the principle of the new age is individual responsibility and the recognition that individual energy matters. Society is entering a renaissance based on placing greater value on the individual, is emerging from the dark ages of industrialization, totalitarianism, and technology, and is being guided by a reviving spirituality. (1990, pp. xxiii, 323).

Simmons pointed out that the thrust of developing human potential is to raise the collective conscience, to focus diverse currents on the betterment of humanity, and to overcome social problems (1990, p. 248).

de Chardin (1975, p. 211), Etzioni (1987, p. 70), and King (in an interview

with Coates and Jarratt, 1989, p. 177) agreed that in our excessively me-istic society, however, we have been so caught up in our own individuality that we have neglected our sense of community. Fear, aggression, and greed ensured survival in primitive societies, and we have had some difficulty ridding ourselves of the point of view that sought oneness too exclusively, a point of view, that is, that seeks singleness rather than universality. They noted that these attitudes are now obsolete and actually work against achieving the balance needed for a well-functioning society and for survival.

Many theorists emphasized that, as Foster put it, "It is an enduring feature of human life to search for community; to attempt to establish patterns of living based on mutual need and affection, development and protection" (1988, p. 18). Argyris (1982, p. 83), Bellah et al. (1991, p. 279), Brown and Isaacs (1991, p. 9), de Chardin (1975, p. 179), Ferguson (1980, pp. 387, 392), Flashman and Quick (1985, p. 158), Fox (1988, p. 206), Garfield (1992a, p. 317), Huffington (1989, p. 76), Mumford (1951, pp. 92, 252), Pascarella (1984, pp. 9, 79), Simmons (1990, p. 240), Swimme (1984, p. 66), Vaill (1984, p. 29), Wishard (1987b, p. 60), and Zukov (1979, p. 92) contributed to the following picture of the human need for society and the impact human beings have had on socialization.

Humans are more than just rational thinkers or response mechanisms, and they are not finished products. Human purposes are deeply rooted in a belief in the higher truth that individuals are not complete within themselves but are fundamentally social beings who are connected with the world and who are striving to progress toward civilizing themselves. They are walking social structures genetically designed to be useful to one another. They have an instinctive need to make themselves more than animals and to go beyond survival and self-aggrandizement to focus on things outside themselves, and to build a strong community or to fabricate and transmit a culture.

Humans have an innate awareness of their interdependence with others and a strong desire to enter a community, to be of use, and to give back the fruits of their labor to the community. They experience an instinctive desire to cultivate the self-knowledge and to build the wholeness of self which leads to the humility out of which is born cooperation and mutual aid. Ultimately people are seeking a spiritual transcendental connection which links them to the future drive toward wholeness and

a place within the greater unity. The hunger to belong is so intense that people don't normally behave in ways to undermine their position in society. At times, the inner message to participate can be drowned out by societal noises--such as those generated by thermonuclear missiles, for example--but the message is still there and waiting to be heard.

Personal transformation impacts these relationships. Cooperative relationships are an infinity of interplay between the individuals and their relationships or between their specialness and their commonness. The observer cannot observe without altering what he sees; access to the world is through experience and experience is an interaction with the world.

There is now occurring an increasing number of individual insights, more rapid coordination of transformative relationships, and a convergence toward growth. The key to the increase and comfort in these relationships is for every part of people's inner selves to become integrated with every part of the world. The socialization process is one of the main axes of evolution.

A number of theorists cautioned against an overemphasis on socialization as the major thrust of humanity's transcendence. Harman (1986, p. 106) and Mumford (1951, p. 264), noted that oversubmission to societal interactions leads to a neglect of human inner experience and attention on values and meanings. Mumford (1951, p. 251), Naisbitt and Aburdene (1990, p. 323), and Sinetar (1987, p. 22), emphasized that individual change is necessary before societal change, that individuals must transcend society and achieve emotional independence from societal influences in order to embark on uncharted journeys, and that self-transformation is the final goal of human effort.

Pascarella (1987, p. 7) and Zukov (1979, p. 93) concluded that future success must begin by adopting a worldview which restores people both as individuals and as members of the human community and it must include a fundamental assumption of complementarity. Korten suggested that there must be a commitment to integrative values--that distinctive qualities of citizenship include the ability to think independently and to make critical judgments about societal interests. This focus suggests an "active application of critical consciousness" (1990, p. 107).

Foster described a similar search for basic norms, suggesting that the "search must be somewhere other than preferences if the values are to be universally significant" (1986, p. 81). Individuals need to be assisted in expressing their desires without constraint and in becoming involved in a dialectic process of self-criticism and self-clarity along with criticism of societal traditions. Such critiques would include the raising of conscious awareness and the search for meaning and would result in a "genuine narrative" or thematic unity to serve as a guide for change. Foster emphasized the importance of leadership in this interactive process (1988, p. 34). Such a process would be a never-accomplished "ongoing and creative enterprise" (p. 18).

Mumford summarized: Through the new concept of human evolvement, humans are seen as the highest development of the organic world and the organisms out of which emerge creativity and divinity. Human beings are now resuming "the place they abdicated three centuries ago" and are taking their creative properties to further their own development. The future holds the creative emergence of a dynamic equilibrium with humans re-established as the primary focus (1951, p. 242).

Aspects of Human Emergence

In keeping with the perception of the universe as an interconnected, interactive whole is the understanding that the transformation of belief systems to new worldviews is a total shift, beginning with certain individuals and ultimately reverberating throughout the universe. Also in keeping with this perception is the understanding that the whole human organism evolves as it transcends to higher levels of insight. The following are specific aspects of human transcendence most commonly addressed by theorists. Again, it not being possible to address all aspects at once, the reader should keep in mind that, although presented independently, the discussions frequently reflect one another since all are inextricably intertwined.

The Mind

The mind became a valid subject of scientific inquiry in the 1950s, according to Anderson, when neuroscientists, in a shift away from behaviorism, began looking at the way the brain works (1990, p. 85). Since then brain research has led to the

understanding, according to Capra (1982b, p. 23), Kidder (1988, p. B2), Pelletier (1978, p. 22), and Vaill (1984, p. 30), that the brain and the entire nervous system are the biological structure or center through which the dynamic of mind or consciousness is carried out.

Capra and Mitchell explained mind or consciousness as the name for the fundamental energy or essence of being alive--the dynamics of the self, the total activity of which makes up the human psyche. Capra, who wrote extensively on Bateson's work, reported that Bateson established the criteria which systems must satisfy before the phenomenon of mind--developing memory, thinking, learning, and so--can occur. Bateson defined mind as "an inevitable consequence of a certain complexity" or as immanent in the large biological system, that is, organized in multilevel structures of activity involving DNA-in cells, cells-in-tissues, tissues-in-organs, organs-in-body, and body-in-environment (1972, p. 460). Pelletier noted that electronic instrumentation supports this theory of interconnectedness by demonstrating that consciousness is distributed in muscles, organs, and body systems as well as the brain (1978, p. 22).

Capra noted that Bateson's focus was on the upward stratified order--human minds "embedded in larger minds of social and ecological systems and integrated into planetary systems or the universal or cosmic mind" (1982b, p. 23). Capra, along with Berman (1984, pp. 242, 258), Campbell (1990, p. 153), Clark and Cohen (1992, p. 36), and Mitchell (1992b, n. p.) saw the cosmos as an open, holistic system with consciousness as the central, eternal unifying principle essential to nature. The laws of the universe and human existence are completely interlocked in an integrated whole, the universal phenomenon of life is a manifestation of the same systemic process which represents the phenomenon as it is locally experienced in the dynamic of the self, and the mind is always within the mind's or person's subunits of the whole. Mental characteristics such as self-awareness, conscious experience, conceptual thought, and symbolic language are immanent in the ensemble, animals have these characteristics in rudimentary forms, and full unfoldment of these characteristics in humans and the emergence of humans as intelligent, conscious beings are inevitable as it was written into evolution.

This basic precept of this theory includes some additional related and interrelated notions. One, pointed out by Morgan (1986, p. 212), Sahtouris (1989, p. 146), and Vaill (1984, p. 30), is that the human evolution of consciousness means that humans are the only species which are conscious of consciousness--the only animal aware of its own death and of its ability to think about and try to understand its own reasons for existence. Humankind is aware of its unique freedom to inspect its own consciousness and, therefore, to make conscious choice about its beliefs.

Another related aspect of the basic premise, then, which was discussed by Bateson (1972, p. 465) and Mitchell (1992, n. p.), is that consciousness, with the attribute of being aware, has intention. According to these theorists, intention is the active end of awareness. Consciousness has the ability to receive energy or to perceive impulses or information; it also has the ability to choose to send out energy or pulses or information. Further, the primary intention of consciousness is reality--to create the physical out of the energy or to create meaning out of perception. Bateson emphasized that mental determinism is "in no sense supernatural" or that it infers "receiving information by channels separate from earth," but that it is a function of the macroscopic relationships of the human mind as immanent mind which "receives the same information without separate, unearthly channels" (1972, p. 465).

This leads to another related notion. Bateson stated that Western society has attempted "to build the bridge to the wrong half of the ancient dichotomy between form and substance," and that, rather than explain mind, Western science has explained it away (1972, Introduction). Berman (1984, p. 235), who also wrote extensively on Bateson, Campbell (1990, p. 153), Capra (1982b, p. 23), and Mitchell (1992b, n. p.) supported this notion, stating that mind and memory have been attached to physicalness and that humans have been committed to forgetting this unity but that mind and matter are not two separate categories and are only different aspects of the same thing. Consciousness is the unifying principle of the universe and that separateness is secondary--it is only a function of the conscious experience within time and space. Mind-consciousness is a real element inherent in the real world, that it is who we really are. Mitchell stated that "we are spiritual beings creating a physical experience versus physical beings yearning for a spiritual experience."

Another point related to the original premise of human consciousness as one with a whole was made by Bateson (1972, p. 459), Berman (1984, p. 445), and Mitchell (1992, n. p.) who said that the human mind with its memory, data banks, value systems, and so on functions as a simple elementary system within a complex mental system of total circuits. The mind system is triggered by an awareness of differences (seen as information). Differences are not locatable in space-time and have no linear causality. In fact nothing (that which is not, such as not paying your taxes) can be a cause. Differences are encoded, are transmitted among the complex loops of the mind system, and generate responses. Any information which does not fit with fundamental observations registered in systems is considered to be either wrong or a major discovery leading to revision of the fundamental data (Bateson, p. xv).

Several theorists expanded on this awareness-and-response process. According to Anderson (1990, p. 74), Boulding (1975, p. 5), Eoyang (1983, p. 114), Harman (1988, p. 21), Riedl (1984, p. 72), and von Glaserfeld, data banks of information and knowledge systems, as well as patterns of perception, can be transmitted from one generation to the next (by myths or fairy tales, for example) or can be shaped by present society (through training, experience, and so on) and become the contents of memory or human consciousness which form the mind's testing ground for ideas and the key to opening new paths. The processes of understanding, attributing meaning, or learning are the result of active engagement (versus passive receipt) by the mind of recalling existing knowledge and connecting it to new information by either translating the new information into the context of the familiar or by elaborating and transforming the familiar in terms of the new. Whether the new or the familiar is adjusted is determined by attitude--the perceptual filter which accompanies the understanding or meaning attributed to the information. The authors noted that our beliefs determine our reactions and that those actions reflect the true state of our consciousness.

Mitchell stated that when ideas are "deeply infused into the mind-body, supported by knowledge, and charged with the power of emotion they take the shape of reality" (1992a, p. 30). Adams (1984, p. 203) and Harman (1988, p. 27) stated

that reality is perceived as conforming to the belief system.

Since most futurists are exploring the notion of mind change as it related to transformation, many focused on the rigidity of the mind's reception to new information. Together Adams (1984, p. 203), Campbell (1990, p. 66), Ferguson (1980, p. 279), Fields et al. (1984, p. 192), Mitchell (1992a, p. 30), Riedl (1984, p. 72), Sahtouris (1989, p. 152), Simmons (1990, p. 75), and Wilber (1983, p. 4) described the following possibility: The mind is free and trainable, as can be seen in the fact that different people see things differently, and, as such, it is capable of being trained to be self-limiting. Worldviews are created through personal experiences. Early messages, about "correct beliefs" are inherited or socialized by the environment--by continual and collective reinforcement from families, communities, and so on--and are followed in maturity by self-confirmation through expressed attitudes and behaviors. These messages are limited to what can be gathered through our sensory mechanisms and are only a sampling of the infinitesimal amount of information available to us. Our beliefs, then, are not statements of reality but are statements about reality, and our maps of reality are fixed reflections of this conditioning.

Reality provides boundaries and constricts our growth by prompting us to filter out information and by preventing us from being aware of alternative ideas. Our beliefs, then, are strongly self-fulfilling and controlling. We operate on expectations of cause--predicting causes and outcomes in spite of the fact that we are often mistaken, and accepting as truth only that which we can provide with supporting evidence. Weick expressed the boundary constriction as a closed cycle. "Beliefs are cause maps that people impose on the world after which they 'see' what they have already imposed Believing does control seeing, but . . . the seeing in turn conditions further beliefs, which in turn constrain seeing, and so on" (1979, p. 74). The issue, then, according to these theorists, is that nothing can be changed without a changed perception of reality. The mind is capable of endless change but that it takes awareness, examination, and effort.

The challenge of changing perceptions of reality stimulated two avenues of thought. The first path follows the intellectual direction, addressing the possibility of

stimulating deep level learning through such methods as dialectic interaction. The second moves toward more inner ways of knowing and examines such realities as constructed reality, intuition, creativity, and so on. We will take the first path first.

Deep Learning

Reflecting the notion that reality is a product of emotion-laden ideas which are accepted as knowledge and against which new information is judged, Mitchell stated that consciousness or mind intends reality, that is, it gathers data and creates memory with the purpose of shaping a belief system. The mind is the important focus--it creates its own unique map of reality and can redo it. It can learn to use a different or larger map to explain reality, and if it fails to do so, there will be no growth (1992b, n. p.)

Simmons pointed out that a certain paradox exists, that it is necessary to some degree for the mind to align with the prevailing collective thoughtforms, but that questing for new understanding is also essential. He advocated a balance (1990, p. 175).

Anderson (1990, p. 74), Elmandjra (1987, p. 60), Naisbitt (1982, p. 17), and Simmons (1990, p. 71) emphasized the importance of change by noting that the growth in science and technology has stimulated an explosion and overflow of information (it now doubles every seven years), and that, although we are drowning in information, we are starved for knowledge. A knowledge gap exists because the present population has been socialized to live in times which are now outmoded. Past knowledge and experience remain useful but cannot serve as valid guides to new realities. Further, as Naisbitt put it, "knowledge is not subject to the law of conservation; it can be created and destroyed" (p. 7).

Anderson described the growth of knowledge as "an ever increasing ocean of mutually incompatible . . . alternatives" (p. 74). Simmons noted that it is this continual stimulus to change knowledge which creates the innocence that prevents self-determination. Huxley said that knowledge is a function of the being, that "a change in the knower [stimulates] a corresponding change in the nature and amount of knowing," and that this results in a transformation--a revolution in the "way of knowing and the amount and character of things known" (1945, p. vii).

Zukov clarified the meaning or central focus of the idea of reality, noting that the word reality is derived from the Latin roots *res* meaning "thing" and *revi* meaning "think" and that therefore its core idea is: "everything you can think about." When new information doesn't fit the prearranged patterns which we have superimposed on reality, it is "only a judgment from the intellect [and] we have only to find a point of view from which it makes sense." We need to change our intellect or our rational minds, and he suggested openness as the first step. (1979, pp. 117, 306, 310).

A number of theorists discussed the difficulty in bringing about this intellectual shift. Senge noted that new insights often conflict with the mental models we have derived and which affect what we see and do because those models are deeply held internal images which exist below the level of awareness. A change or shift in those mental models, or metanoia, is the deepest meaning of learning (1990, pp. 14, 174). Ferguson reflected Prigogine's theory, saying that the brain is a dissipative structure, that brain waves reflect fluctuations of energy, and that small fluctuations are suppressed but larger ones reach critical levels at which the energy cannot be contained. It ripples throughout the system, causes perturbations and new connections, and changes to higher levels of organization (1980, p. 168).

Argyris (1982) developed a two-model theory to suggest the means to affect change to higher (or deeper) levels of understanding. When people construct reality as a basis for determining meaning, they are unaware that they establish two levels of meaning. At the deepest level are their socialized or programmed beliefs which are the basis of the reasoning processes they follow as they construct reality and which stimulate their automatic and tacit behaviors. These theories-in-use must be observed in people's actions in order to infer the embedded meanings which drive them. The second level of meanings are those which people espouse as their beliefs, and these may be inconsistent with their actual behaviors.

Argyris said that people don't necessarily correct inconsistencies even when they become aware of them or even if they wish to. Programmed beliefs and automatic reactions are so strong that they inhibit the deep examination of old values which must be unfrozen in order for deep level learning (double-loop learning) to take place. Single-loop learning more easily occurs when people choose to adjust their

espoused theories or to make surface adjustments in behaviors, but double-loop learning requires perceiving a new model from an alteration of reasoning.

Senge emphasized that we must become open to challenging our own views and to developing skills in order to inquire into our own and others' ways of thinking and to look at the larger picture. We must learn to reflect on current mental models and to bring prevailing assumptions into the open (1990, pp. 9, 203). Adams (1984, p. 206), Fujiwara (1992, n. p.), Mitchell (1992a, p. 30), and Theobald (1987, p. 18) agreed that in order to preserve a free and open society we must listen to those who disagree with us, that critical issues stem from common causes and will only be resolved by common solutions which occur when multiple claims on values and different perceptions of causes are addressed. Dehypnotizing ourselves takes awareness, examination, and effort which can best be accomplished in a highly verbal interactive setting. Barnard noted years ago that "When it is difficult to attain mutual understanding between persons or groups, it is because there is a difference in mental process or in points of view" (1938, p. 301).

Senge offered dialogue as a means to air differences in mental processes and attain mutual understanding as well as to identify Argyris' "defensive routines"--which are ways of acting to protect ourselves. It is an interactive process introduced by quantum theorists, David Bohm, who developed the idea on the basis of a systems or holistic view of nature. These interactions can be between perceptions and actions or between thinking and internal models (1990 p. 239).

Senge noted that dialogue comes from the Greek *dia* meaning "through" and *logos* meaning "word" or "meaning" and that its original definition was "meaning passing or moving through" or "a free flow of meaning between people" (pp. 10, 238). Senge included with dialogue the idea of discussion, which, having come from the same root as percussion or concussion, he described as hitting and rebounding one's point of view back and forth in a group with a purpose to winning a group decision or a group supported view (p. 240).

Collectively we are more insightful and intelligent than we can possible be individually and that conversations are the basis of collaborative learning (p. 238). Dialogue and discussion are the means to access freely and creatively a large pool of

common meaning and to explore complex and subtle issues from many points of view through suspension of personal views and deep listening. The purpose of the interactions is to help people become observers of their own thinking by revealing incoherence in thought, forcing abandonment of personal standards of reference, and engaging in participative tracking of reality.

Closely related to dialogue is the dialectic of Hegel and Marx, which Henderson described as giving resolution to opposite tendencies and recognizing their simultaneous coexistence" and which she saw as permeated with the "cyclic, organic view of human affairs. Marx's simultaneous coexistence of opposites reflects reality (1988, p. 172).

Foster described dialectic analysis as a means to perceive the logic of change. He described change as a developmental process in which the tension of opposites is worked out through their mutual interpenetration (a process of negating previous negations) until a point is reached at which the opposites are ultimately transformed into a qualitative outcome (1987, n. p.).

K. K. Smith related this process to personal transformation. He reflected the theory that individuals develop from encoding internal and external stimuli through experience, language systems, metaphors, myths, and so on, their own memory and maps and codes of reality which they use for discerning meaning and determining behavior. When they subsequently receive information--discerned differences which become forms-in-action--those differences form relationships with the individuals, who are already inseparable from their meaning maps. Meaning, then, is a constantly interacting complex structure of relationships, and new information is questioned when it enters the system and realities clash.

The central issue, according to Smith, is that change requires a core change of code--individuals must examine their own systems while they are still a part of those systems and while remaining unaware of constraints, such as linguistic frameworks, for example. Smith noted that change depends on examination of the relationships of individuals to their contexts and that it reflects the dialectic process, which, as a process of interaction, ultimately results in a transformation (1982, p. 345).

Foster went a step further and related the dialectic process to human change

which results in social change. He said that humans can use social scientific knowledge to intervene in, change, and reorder their own affairs. He saw all of social science as critical, beginning with critical inquiry into community affairs, for example, which stimulates findings which are circulated and adopted or incorporated into a new set of knowledge which is then used in a continuous, spiraling critique of affairs. Foster said that the critique of traditions becomes dialectic as community members strive for a sense of community based in traditions while still searching for the ultimate traditions of justice, freedom, and equity (1988, p. 23).

Tarnas took an even further step. He saw the dialectic as reflected in the great "epistemological journey of the Western mind [or as] one long multitrajectory which subsumes all smaller sequences" (1991, p. 440). The unfolding and transformation of the expression of nature and the sequence of human mind's apprehension of reality are the authentic expression of an archetypal dialectic process impelled by forces beyond the human.

Tarnas said that this dialectic process began with the primordial, undifferentiated participation-within-consciousness mystique. From this mythological base, he saw the universal mind-spirit as positing itself in the immediacy of its own inner consciousness, as negating this condition by expressing itself in the finite world, then as negating the negation in order to recover itself in its infinite essence. Only through the last negation, then, can the Absolute achieve fulfillment.

After beginning in primordial unity, then, the world experienced dualistic alienation. As knowledge evolved, consciousness of the subject separated from the object, creating the dichotomy which was experienced as separation. During this profound dualism, the outer world was aggressively objectified, exploited, and submitted to as the only reality, and inner feelings were repressed and denied.

Tarnas perceived this state to be extended through modern times, with nature and history ever progressing toward absolute knowledge and unity of the knower to the known. The evolution of human consciousness is now reuniting the dualism, moving to participatory epistemology, and reaching a critical stage of transfiguration. There is not yet a consensus on the nature of reality but the modern psyche is attempting to escape contradiction, insisting on the pluralism of truth, and demanding

a new interpretation of the world. The dialectic is the means to achieve cohesiveness out of fragmentation and as the challenge to an evolving cultural vision. And he saw the final condition of redemption, reunification, as the fulfillment of the dialectic process.

The focus on intellectual avenues of changing perceptions of reality has ultimately revealed a holistic view and has suggested that deep learning and the inner exploration and interaction necessary to achieve it include an emotional element and a subjective approach to transformation. We now explore that path.

Causal Reality

The first step toward examining inner perceptions of reality as a road to personal transcendence is a review of how the mind develops meaning. Harman suggested that a new view of human consciousness may begin with a shift in the sort of knowledge valued by society. A self-limiting knowledge system is the product of a society focused on science and technology (1988, p. 27).

Nicoll stated that there is now greater awareness that our knowledge is only partial, that meaning comes from context, that interpreting and knowing are dynamic acts in which learners choose to create what they want to know, and that there is more than one reality. There are many ways of gathering data. Along with logical, rational thought and personal experience, data can be obtained by direct knowing from the collective unconscious (1984b, p. 11).

Ferguson expressed similar notions, emphasizing that minds are bits of a greater hologram and that they construct reality by interpreting frequencies from a greater dimension (1980, p. 182). Nicoll's understanding of the new paradigm's concept of reality is that it is independent of ideas concerning it and that it transcends perceived experience.

Sahtouris foresaw a shift based on the mind's need to make sense of the world, which she said can only be done with a worldview which reflects the mind's experience of reality. She perceived a shift in worldview from the scientific belief that the world creates and runs itself without conscious purpose to a more spiritual view that the world is run with the conscious purpose of its creator. The view of the human brain as mechanical replaces focus on the human mind as a copy of God's.

"This century we are coming to believe that the world is not just 'out there' to understand but that we create it from our own experience, our own understanding of our relation with it and with each other" (1989, pp. 152, 183).

Anderson agreed, noting that the mind represents the external world to itself in two ways. One is the objective notion that the brain-mind is a "mirror of nature" which enables the organism to get information about the physical environment. The other is the idea that the brain-mind is only partially involved in direct perception through the five senses and is mostly connected to a larger brain-mind. The brain makes sense of the environment by creating categories or sets of information. Objectivists say that these categories reflect properties of the external world while constructivists believe that the categories are social constructions of reality (1990, p. 61).

Anderson, along with von Glaserfeld (1984, pp. 19, 30) and Watzlawick (1984, pp. 7, 15), described constructivism as reflected in Von Foerster's statement: "When we perceive our environment, it is we who invent it The environment as we perceive it is our invention" (Von Foerster, 1984, p. 42). Watzlawick said, "Every man's world picture is and always remains a construct of his mind and cannot be proved to have any other existence" (p. 7).

These theorists said that Kant's search for "foundational knowledge"--beyond the historical and cultural--and his perception of the mind as an active organ that only experiences representations of reality and imposes its own structure on external stimuli--opened the door for postmodern thought. Constructivism agrees with traditional thought that a real reality or objective universe with its own properties exists beyond what we know. The world is not just within the mind and not all human perception is experienced only inside each person's head.

Constructivists also agree that human consciousness reflects social coupling--that the mind holds language, memories, myths, social norms, and so on from evolution, human history, and cultural learning. They disagree with traditionalists, however about how reality is constructed. Constructivists believe that people engage every second in an active process of constructing a reality (versus the reality because there are many realities). They believe that knowledge is a way to understand reality

and that it is sought as a key to understanding. Constructivists believe that people create meaning in the raw material they have gathered by interpreting it according to their own goal-directed consciousness. In this way, humans are considered responsible for their thinking, and human truth is what people come to know as they build it--shaping it by their action.

Ferguson said this understanding of the mind as constructing reality is a new state in evolution, "an unlocking of potential comparable to the emergence of language" and added that "researchers are shaken by their findings about changes in conscious functioning because of its implications for widespread social change" (1980, p. 67). Sinetar said that "people today have awakened consciousness" (1991, p. 6), and Hubbard opined: "We are the first generation to awaken to the awesome fact that we are affecting the future by our every act" (1982, p. 13). Harman agreed. Recognition of conscious awareness as a causal reality is a new paradigm idea. The fundamental premise of causal reality is that the subjective mind is the cause of everything and that objective reality is the effect (1988, pp. 11, 81).

Harman said that awareness of such anomalies as affirmations, spiritual healing, psychic phenomena, and other evidence of the mind affecting the physical world challenge the biases of society's science-based knowledge system and the restrictions of positivism and reductionism (1988, pp. 14, 58, 77). We are now learning the extent to which we create our destiny and our ability to image solutions (1991c, p. 4); we are beginning to hear people say that there are no coincidences and that we create our own reality (1992b, p. 29); and we are coming to realize that what we affirm and program into the unconscious belief system, we tend to bring about (1988, p. 77).

Many authors confirmed their support of the causal reality point of view. Together Adams and Spencer (1986, p. 6), Argyris (1982, p. 69), Ferguson (1980, pp. 49, 310), Land and Jarman (1992a, p. 103), Mitchell (1992b, n. p.), Morgan (1986, p. 130), Nanus (1989, p. 59), Nicoll (1984b, p. 10), and Senge (1990, p. 231) said that humans have intention, that is, they have impulses to do something, and that this intention precedes action and creates everything. The unique feature of the human brain is that it creates images or visions of what it wants in the future and

becomes an active force in translating them into reality--the images have the power to become self-fulfilling. Stephens and Eisen explained that humans "are creatures of our own myths; what we think is what we are and what we create. The context, myths, and environments we place ourselves in determine our behaviors, attitudes, and self-concepts" (1984, p. 186).

Nicoll emphasized that a fundamental condition of nature is ambiguity about the future but that the power of expectations, confidence, and love are critical aspects of the highest level of cause: human conscious intent (1984b, p. 10). The scholars wrote that the mind holds conscious and collective unconscious attitudes, beliefs, values, expectations, and so on which are the bases for people's actions and what they get. By taking in new data, making inferences, and creating causal explanations, we create how we perceive. We unconsciously play a pro-active role in constructing our world and enacting our reality. Zukov illustrated this idea by relating it to scientific inquiry, stating that the "experimenter's choice of experiment determines which aspect of a phenomenon will manifest itself" (1979, p. 305).

Sheldrake saw the power of our thoughts and beliefs to influence reality. Our habitual ways of perceiving and behaving being organized into morphogenetic fields which can be changed when different resonances are brought to bear on them (1982, p. 78). Illustrating in terms of science, Kidder noted that the concept of created reality has given rise to discussions of "observer-created reality," that is, that the world is "composed of probabilities rather than definite, fixed states" and that reality shifts and changes when it is observed or measured (1988, p. B3).

William James emphasized the absolute certainty of created reality when he said that the essential achievement of the will is to hold the desired end "fast before the mind. The so-doing is the fiat; and it is mere physiological incident that . . . immediate consequences ensue" (1950, p. 561).

A number of theorists urged support for causal theory and the importance of utilizing it as means to a better future. Harrison said that humankind is now becoming aware of the transformative process in which we are involved and that we can participate voluntarily to influence the quality of our lives by changing our perceptions and focusing on an improved quality of existence (1984, p. 98). Harman

cautioned that if we don't accept the reality of free will, we will "have to abandon such concepts as liberty, moral action, rational behavior, and so on" (1988, p. 19).

Martin Buber (1970) expressed the belief that, in order to overcome today's oppressive submission to fate, humankind must believe in the existence of a destiny and that people must tune in to their own existence within the world in order to make the changes necessary to bring about a desired reality.

Adams and Spencer (1986, p. 6), Land and Jarman (1992a, p. 103), and Mitchell (1992a, p. 30) agreed that since the operating premises in our minds create the reality of each moment and since we have almost unlimited capability to reshape those beliefs, then the way to bring a new world into being is to alter our operating premises. Adams and Spencer said that "the creative state of consciousness is our natural birthright, that spiritual traditions throughout history have suggested the true nature of the human race is to become co-creators of reality, and that we must now consciously choose to enter this creative state" (p. 9). Clark and Cohen (1992, p. 36) and Pelletier (1978, p. 31) said that it is important to remember that human consciousness has a role in evolution and that there is a link between bringing about more complex thought and improving social conditions.

Senge noted that only if people believe can they shape their future (1990, p. 231). Ferguson said that "just behaving 'as if' might show us the way home, might prove the step toward justice, order, and real community." She also noted that "paying attention to our attention," that is, "shifting to a mindful, watchful state" has the power to reorder thinking to higher levels (1980, pp. 54, 69). Nicoll suggested that just "making intentions clear then standing out of our own way and letting the world act is important" (1984b, p. 12).

Ferguson (1992, n. p.), Fields et al. (1984, p. 136), and Harman (1988, p. 77) suggested that we should begin programming into the unconscious belief system what we want to bring about by using such advanced forms of positive thinking as visualization and affirmation. Fields et al. also recommended Peale's original method for ensuring successful outcomes. Peale gave the following instructions: "Formulate and stamp indelibly on your mind a mental picture of yourself succeeding. Hold the picture tenaciously. Never permit it to fade. Your mind will seek to develop this

picture" (1950, p. 24).

Adams and Spencer (1986, p. 7), Nicoll (1984b, p. 36), and Senge (1990, p. 360) noted the importance of leadership adopting new sets of principles, creating awareness of the ability to create reality, and helping others to manifest good things. Nicoll reminded readers that in addition to our creative intention to move toward an envisioned future, we must also maintain and integrate a receptive intention, that there is a universal intent with holistic interaction. We must try to influence the world in fundamental ways that will work for us. We can also relax and surrender to the world in the knowledge that there is truth in human affairs (1984b, p. 14). Land and Jarman reminded readers that "we are still unfinished species" and that it is an exciting prospect to contemplate the kind of world we can make once we allow the possibilities of development to asserts themselves (1992a, p. 102).

Intuition

The next step on the path toward changing perceptions of reality through inner knowing is to recognize that, according to Vaughan, the belief systems which shape our experience are chosen intuitively, not rationally, and that our whole set of assumptions about how the universe is put together and how it functions is a metaphysical system. Examining the belief system and perhaps changing our assumptions includes expanding our intuitive awareness (1989, p. 60).

Ferguson pointed out that "ordinary consciousness filters out awareness of the mysterious, enlarged dimension" of the mind. She labeled the brain's "other mode of knowing" as a "kind of transcendent logic" (1980, p. 47). Mumford said that "rationalism doesn't plumb the lower depths and falls short of assessing the heights that are possible in self-analysis" and that a wholesale commitment to rationalistic rules prevents self-expression (1951, p. 246).

Block (1990, p. 58), Chopra (1991, p. 16), and Harman (1986, p. 107) said that the small fraction of mental activity which is conscious has been conditioned and limits abilities. Harman emphasized that "prescientific societies believed that mind could affect others at a distance, and sages through history have said that Western culture hypnotizes its participants from infancy." Capra and Harman continued that the intellect has reduced the supra-conscious experiences of intuition, creative

imagination, aesthetic senses, symbolic dreams, and spiritual experiences to empty mysticism. Harman stated that it is now the task of adult life to become dehypnotized or enlightened and to "know thyself."

These authors noted that there is now some realization that the mind is far more vast than the ego-mind and that each individual mind has potential awareness of the whole, but they agreed that the notion of trusting the larger mind meets resistance. There is a negative stereotyping against inner knowing--notions of mystical irrational, subjective approaches are unacceptable in a world of scientific models, accountability, and rationality.

Over fifty years ago Barnard said that logical thinking has been overstressed--primarily due to misconceptions concerning the nature of logical reasoning plus the need for people to justify their actions by rationalization when real motives are concealed or unconscious--and that the result is that nonlogical modes of knowing have been deprecated (1938, pp. 303, 305). This deprecation continues today, according to Kiefer, who said that, at present, inner knowing must be confirmed by rational analysis in order for it to be accepted as plausible and to prevent its being overruled by rational approaches (1986, p. 196).

Pascarella and Frohman (1989, p. 133), Kautz (in an interview by Sullivan, 1992, p. 44), and Tarnas (1991, p. 368) all pointed out that scientific knowledge is limited and provisional, that facts are relative and can never be perfectly corroborated. At the same time, however, science requires inner knowing--great breakthroughs and advances come as the result of intuitive leaps or flashes which could not have been rationally deduced from knowledge but which must later be supported by experimentation and reasoning. Kautz noted that Einstein said that he did not arrive at his understanding of the fundamental laws of the universe through his rational mind.

Berman stated that although intellectual analysis is a very important tool and not without its survival values, Western society has reached its limits and ego-consciousness must be placed in the context of the larger mind (1984, pp. 271, 179). Anderson (1992, p. 28) and Pascarella and Frohman (1989, p. 133) noted that a closer look at the true aims of intellectual knowledge and the real purpose of science

reveals that they are to raise humanity to higher forms of knowledge and that, therefore, they should be viewed in that larger context.

Anderson (1992, p. 28), Barnard (1938, p. 302), and Wilber (1983, pp. 3, 31) all pointed out that there are two types of intellectual processes or forms of knowledge: intellectual or logical (which Wilber and Anderson saw as composed of sensory observation and reasoning) and contemplative or intuitive. Logical or intellectual knowing is the sensory experience or philosophical ideating connected to conscious thinking and expressed through reasoning whereas contemplative, intuitive knowing is transcendent reason and inexpressible in words. It is knowable only through action, possibly because it is unconscious and so rapid and complex that it can't be analyzed.

Many writers emphasized the importance of integration and balance between the two ways of knowing. Together Agor (1989a, p. 12), Chopra (1991, p. 16), Harrison (1984, p. 216), Henderson (1988, p. 173), Kautz (with Sullivan, 1992, p. 82), Kiefer and Senge (1984, p. 72), Kiefer and Stroh (1984, p. 181), Kinsman (1986, p. 26), Land and Jarman (1992a, p. 158), Murphy (in an interview with Miller, 1992, p. 8), O'Hara (1988, p. 162), Senge (1990, p. 167), Simmons (1990, p. 4), Simon (1989, p. 38), and Wilber (1983, pp. 31, 196) said that the world of the unconscious and the world of reality must be brought together, that humans are capable of extraordinary functioning, that dichotomy of thinking cuts us off from our full wave of potential and ultimately from our full creativity, and that bilateralism is the design principle underlying the evolution of advanced organisms. Henderson suggested creating an "ontological reason," fusing Tillich's philosophy of humankind's intuitive knowledge of God and belief in God as the basis for all reason with rationality.

These theorists emphasized that there is not just one way to acquire knowledge, that there is no complete model, and that it is a fallacy to contrast analytical and intuitive ways of knowing. Instead, they advocated integrating and harmonizing the traditional with the new as a synergistic, full range of thinking skills. Intuition is not available and complementary to the right-brain rational mind which guides analysis of facts. The left-brain approach builds on and transcends facts and

experience to stimulate, inspire, and empower greater thought. Intellectual reasoning is an important means to reinforce intuitive conclusions and the unity of the two creates a balance of awareness.

Ultimately these writers foresaw a new overall transcendent paradigm which would include all ways of knowing, with old ways of knowing giving way to and integrating with intuitive knowing. They noted that there is high interest in a positive tone toward extraordinary human capacities. Mumford said that "man has a moral obligation to be intelligent and an intellectual obligation to further his own moral development" (1951, p. 125). Senge reminded his readers that the key to such development is creative tensions between the rational view of reality and the inner knowing or vision of greater possibilities (1990, p. 227).

Agor described the act of intuitive knowing as actually being a convergence between old and new ways of thought. Intuition is a rational and logical brain skill which is not paranormal although it has not been quantified by hard science. It is the product of a series of input sources which include factual and feeling cues. The more receptive people are to cues from all levels--the greater their "consciousness of reality"--the greater is their potential intuitive ability (1989a, p. 15).

Agor reported on research conducted at Stanford University which suggested that intuitive knowing occurs at four levels: physical (the body produces sensations and awareness in particular situations), emotional (strong feelings are experienced about people or situations), mental (patterns or order are perceived among seemingly unrelated data), and spiritual (an awareness of meaning occurs based on transpersonal experiences of oneness with life) (1989a, p. 12).

Goldberg described six functional types of intuition: discovery (the mind can be programmed to generate an answer to a need or problem), creativity (imagination), evaluation (outcomes from analysis of information), operation (gentle guidance of behaviors), prediction (foreseeing or forecasting), and illumination (self-realization or transcendence). The first five types interact with each other to comprise a full range of intuitive experience and the last one "has intriguing implications for the other five." (1989, p. 62).

Agor, however, in other materials (1983, p. 50; 1986, p. 18; 1992, n. p.),

along with Anderson (1992, p. 28), Block (1990, p. 58), Ferguson (1980, p. 107), Rowan (1989, p. 84), and Vaughan (1989, p. 64), some of whom emphasized the importance of integrating the two ways of knowing, saw intuition as reflecting a definition Kautz repeated to Sullivan: "a welling up into awareness of data that doesn't appear to derive in a linear fashion from normally perceived data" (1992, p. 42).

These authors described intuition as an instant knowlege or an inner knowing process of acquiring knowledge for which any plausible explanation would require retroactive reasoning. They emphasized the immediacy of the knowing, describing it as sudden, unforeseen, a surprise, spontaneous, swift, instant, a bolt of lightening, or a sudden flash. They also focused on the lack of ability to explain where inner knowledge comes from, noting that it is an act or process which occurs from a slippery and elusive mystical power, a magical facility, a smarter-than-we-are guardian angel, a gut-level feeling, a sixth sense, an inward guidance, an awareness just below the conscious level, a connection made outside of awareness, an immediate apprehension or cognition, a direct knowledge without reasoning or inferring, or knowledge gained without rational thought.

The feeling of knowing beyond doubt that the idea received is correct or that the answer had been found, which is often described as the eureka factor or a knowing for sure without knowing for certain. This surety is accompanied by feelings of euphoria, enthusiasm, harmony, energy, confidence, or commitment. In addition, intuitive knowing seems to include an ability to sense and find the inner qualities of things--to recognize patterns, to identify connections among contradicting components, or to discern the consequences of alternative actions.

A number of theorists emphasized the importance of intuition as a means to advance toward transcendence. Campbell said that "the greatest steps in the progress of mankind have been the products of acts inspired by awe" (1972, p. 249). Einstein wrote that "The most beautiful experience we can have is the mysterious. It is the fundamental emotion which stands at the cradle of true art and true science. Whoever does not know it and can no longer wonder, no longer marvel, is as good as dead" (1982, p. 11). Autry stated that after the data, facts, and information have been

developed as knowledge and perceived in terms of truth, that it is still necessary to "reach way down deep in your gut . . . for wisdom" (1991, p. 89).

Together Agor (1992, n. p.), Buckley and Steffy (1986, p. 233), Campbell (1972, p. 249), Chopra (1991, p. 16, Tarnas (1991, p. 434), Vaill (1984, p. 32), Vaughan (1989, p. 58), and Zukov (1979, pp. 255, 312) suggested that allowing the mind to escape the confines of the intellect and to move beyond rationality into openness, new perception of reality, integration of thought and context, and a larger spectrum of awareness is the beginning of enlightenment. Changing perceptions, shifting to whole-brain knowing, and perceiving the ultimate nature of reality directly creates energy redistribution and transition toward the indivisible whole. The authors urged people to tap into themselves for answers within, to accept their feelings as facts, to learn to interpret what those feelings mean, and to come to believe in their inner knowing as an implicit vision of order and rightness even when it can't be proved.

These authors emphasized that we must trust our inner knowing to lead us past boundaries into what is new and unknown and act on our subjective perceptions to lead us to transformation. The enlightenment or spiritual experience of perceiving undifferentiated reality and experiencing pure awareness creates renewed vitality and excitement and engagement with life. Kautz, in his discussion with Sullivan, offered personal testimonial that embracing a more holistic view of the nature of reality and working with intuition have changed the way he looks at life (1992, p. 82).

Tarnas pointed out that in addition to the personal realization of a new worldview, active participation of human minds in imaginative, intuitive, and creative processes is actually an unfolding of nature's truth. The mind is a participant in the world's knowledge and it is ultimately the organ of the world's own process of self-revelation. The spirit of nature speaks its meaning through human consciousness and brings forth its own order through the human mind. Tarnas emphasized the importance of human development as the evolution of the world's self-revelation (1991, p. 435).

O'Hara stated that "new powers of the mind are about to become manifest as humankind makes a large evolutionary leap" (1988, p. 162). Harman (1988, p. 129)

and Mitchell (1992a, p. 30) agreed, saying that we are in a peculiar point in history, a paradigm shift, where we are aware that human behavior is determined at the deepest level of beliefs and that transformation is what happens when humans perceive a larger, more encompassing reality. Harman pointed out that we are a society which emphasizes learning and bringing all members to the fullest development of their highest powers and that we are just now beginning to see acceptance of the terms intuition and creativity. A generation ago we wouldn't have thought about looking into areas such as intuition and a generation from now people will wonder what all the fuss was about.

At present, research shows that intuitive knowing is becoming acceptable in work settings where there is a high level of uncertainty, limited time, several options, and little precedent so that nonrational techniques are required, according to Agor (1989a, p. 12) and Schon (1984, p. 38). There is also evidence of correlation between high level management and the ability to use intuition, according to Agor (1986, p. 15) and Block (1990, p. 59). Also, both Harman (1986, p. 107), and Kiefer (1986, p. 196) noted that most successful leaders seem to report the use of intuition to help formulate vision and to establish empathy and rapport in relationships.

Kautz reported to Sullivan that those who successfully tune in to their inner knowledge have learned to do so in "a deliberate, focused, and conscious way" (1992, p. 78); Agor reported that actualizing the inner mind takes practice (1989a, p. 15). Huxley stated that "when the mind is subjected to certain rather drastic treatments, [its] divine elements become manifest" to other minds and are reflected in behavior (1945, p. ix).

Block (1990, p. 59), Harman (1986, p. 107), and Kautz (in Sullivan, 1992, p. 78) noted that intuition training courses using self-suggestion, inner imaging, affirmations, and so on to access the intuitive mind are now being conducted under the guise of developing leadership creativity. The authors noted that such methods challenge the principles of a rational, mechanistic view of reality, are unsettling at first, and have a high "giggle factor."

Kiefer and Senge noted that new age organizations use processes to enable

members to "go inside" to consult their hearts and to invoke the power of love in decision making (1984, p. 102). Mumford stated that lack of self-love is an obstacle to self knowledge. "To shape a new self one must first know the properties of the raw material one must make over," and to "achieve self-knowledge one must become as a little child--breaking down pride and spiritual deformities" (1951, p. 244).

Continued and expanded use of intuitive knowing as a step toward personal transformation is encouraged by such authors as Agor (1989b, p. 23; 1992, n. p.), Buckley and Steffy (1986, p. 235), Harman (1986, p. 108), Kinsman (1986, p. 26), Mitchell (1992a, p. 30), and Murphy (in conversation with Miller, 1992, p. 8). The authors encouraged people to get in touch with inner knowledge by expanding their awareness, anticipating new insights, remaining open and flexible; by requesting the intuitive subconscious mind to assert itself, by referring choices to the deep mind, and by making self-suggestions regarding need for information and answers; by focusing and listening for information, by freeing the mind of left-brain activity, and by stopping mental dialogue and mind talk; and by trusting the process, accepting intuitive answers, appreciating and acknowledging the subconscious, and by observing the resultant actions. The authors suggested tuning in to subtle signals such as fleeting thoughts and ideas, and attending to dreams, day dreams, images, feelings, and so on. They also suggested practicing transformative disciplines such as yoga and the martial arts as training to focus inward.

Changing the perception of reality by acknowledging that the human mind creates its own worldview and by tuning in to the inner knowledge of greater minds are precursors of the next step toward personal transcendence.

Creativity

Land and Jarman defined creativity as "bringing something original and unique into being." Most people in Western cultures subscribe to the notion that "the creator resides outside of them. This results in not accepting the fact that they are inherently creative" (1992a, p. 152). Mitchell said that "the more an organism is aware of how events are tied together, the more informed is its creativity." As we acknowledge our minds within the context of the larger mind, we become aware that we have choice and that we have inner knowing. He noted also, however, that lower species accept

their collective unconscious and their intuition without thought, but that humans have the increased ability to collect our intuitive information and to organize it into new information (1991b, n. p.). Land and Jarman said that "creativity is not only a natural process; its the natural process (1992a, p. 34). Mitchell added that humans may not yet be aware of their native capacity.

Norman Lear said that one of the most distinctive traits of humankind is our mysterious inner life--the invisible realm that is the wellspring for our species' creativity, the portion of ourselves that gives rise to our sense of awe and wonder and impels us to create. "For lack of a better term, one could call it the spiritual life of our species" (1990, p. 6). Goldberg wrote that the emergence of creativity from the inner mind is similar to intuition and is different only in that intuition deals with alternatives, options, or possibilities whereas creativity deals with the imaginative (1989, p. 65).

Simmons saw creativity as an impetus to move to a higher spiral and as the life-affirming energy which provides the thrust to strive toward a more beneficent future (1990, p. 260). Mumford said that humankind is "more than merely an adaptive mechanism" and that we have superfluous energy beyond that needed for survival--energy for playfulness, exploration, and creativity--which is important to humanity's development" (1951, p. 34).

Bradshaw (1988, p. 170), Fox (1988, pp. 18, 22), and Mumford (1951, p. 124) bemoaned the lack or loss of creativity energy in our society, saying that conformity to external knowing and rationalism is hostile to the creative process, that death and underdevelopment of the mystical right brain that embraces holistic thought has resulted in lack of intuition, creativity, spontaneity, delight, revelry, playfulness, hope of renewal, and the full phenomenology of the human experience. Fox noted that several philosophers have suggested that without imagination we have apathy, powerlessness, despair, psychosis, wars, and death of the soul. Mumford concluded that nonconformity to external patterns is a necessary condition for human development. He said that "loss of the capacity for insight and contemplative reconstruction is loss of the possibility of re-formation and self-direction" (p. 266).

Land and Jarman suggested that the first step to moving beyond conformity is

to open up to the areas of self-knowledge beyond the conscious mind and to accept our unique imaginative and creative ability wherein ninety percent of our potential lies (1992a, pp. 152, 156). Fox stated that "creativity is a divine power in all persons" (1988, p. 199), and Senge suggested that we must begin to perceive ourselves from the point of view of personal mastery, that is to live from a creative viewpoint, to see one's life as creative work, and to continually generate and sustain creative energy (1990, p. 140).

Adams and Spencer (1986, p. 8), Anderson (1992, p. 22), Berman (1984, p. 277), and Land and Jarman (1992a, p. 213) together said that an impulse to create is inherent from the larger mind, that it is the social ground on which to understand and live in our world, that we need to raise it to consciousness and choose to act on it, and that it is the means to respond to powerful and natural forces drawing us forward.

Anderson (1992, p. 152), Bradshaw (1988, p. 170), Fox (1988, p. 199), Land and Jarman (1992a, p. 152), and Murphy (in Miller, 1992, p. 11) pointed out that as we learn more about our consciousness we will learn more about creativity. We will need to develop all our potential and capacities for inventiveness and creativity. They said that without creativity there can be no renaissance and that the world disparately needs creative people who want to move forward toward transformation.

Land and Jarman emphasized that "natural creativity lies within everything and everybody," that even atoms, molecules, and cells invent novel forms and shift to new behaviors "that could be defined as 'creative'" (1992a, p. 34). Primary creativeness comes out of the depths of the unconscious--from a "place where you really have to dig"--and not developing this area means that we are giving up a huge portion of our deeper selves (p. 155).

Land and Jarman, along with Ferguson (1980, p. 105), Ramos (1981, p. 149), and Zukov (1979, p. 118) observed that because of our present society, few people slip the bonds of the known or step beyond the barriers of the obvious to move from the closed into the open. To challenge old assumptions, to accept the humility of ignorance, and to venture far into unexplored territory in order to engage in the creative process and to speak out in a confused world takes firm confidence and inner strength. People must be willing to experiment and to live with mystery in order to

unleash their primary creativeness.

Autry (1991, p. 78), Deal and Kennedy (1982, p. 62), and Fox (1988, p. 199) noted that new ways of thinking and behaving such as meditation, guided imagery, expressive dance, soft martial arts, spiritual reflection, and play help ease tensions, encourage innovation, create new visions, and awaken the divine powers of creativity in all persons. Better reported that new methods of brain-enhancing such as "brain wave synchronization" centers are coming into being (1992, p. 38). Fox called attention to the importance of learning to "honor the child within," of learning self-love, and of becoming vulnerable (p. 182). Zukov noted that it takes a childlike ability to see the world as it truly is--a beginner's mind. "The mind of the beginner is empty, free of the habits of the expert, ready to accept, to doubt, and open to all the possibilities" (1979, p. 118).

Land and Jarman reported that much of the research confirms that nearly all children are creative and gifted in unique ways and that successive testing shows that they gradually lose their creative abilities as they mature. "The socialization process restricts natural creativity "Retaining or recapturing the simple playfulness of a child opens a person up to creative possibilities (1992a, p. 153).

Naisbitt, in predicting the move toward artistic and creative abilities in the future, noted that we are currently "between eras" and that it will be some time before we have definitive creative output (1982, p. 267). Sinetar agreed, saying that we are currently lacking techniques to develop people's ability to think creatively (1991, p. 6). Henderson suggested that before creative forces emerge, our society will have to undergo a cathartic moral and spiritual shift and that such a shift will usher in a period of creative construction (1988, p. 172). Hubbard agreed, saying that we are in a passage where people don't feel needed but that as the planetary culture becomes integrated, an abundance of new, vital functions will open up to attract human genius and draw forth untapped creativity (1982, p. 91).

Symbolism

Joseph Campbell saw myths as a natural part of art and that "a new, global mythology is in the psyche of today's creative artists, a synthesis of science and spirit" (1972, p. 195). He supported the notions that our current society is between

eras and that people are unsure of their roles, and he suggested that the problem is reflected in our current lack of appropriate symbols and myths. Life requires supporting illusions and symbolic forms are the supports of civilization--supporting moral order, cohesion, vitality, and creative powers. The loss of symbolic forms means "uncertainty, disequilibrium, no moral law, nothing secure to hold on to" (1972, p. 9).

Without myths, for example, we cannot relate "the order of acceptable ideas about the cosmos" and we have only ideology. "A nation with no mythology is not a nation. Its a congery of disparate people, not even a civilization" (1990, p. 43). There is a difference between a mythology which is a petrifact--old and dried up--and a working mythology which gives people meaning. Mythology must work--"it has to deal with the cosmology of today; its no good when its . . . out of date. And that's one of our problems." Campbell concluded that we've lost the symbols and that we need them desperately (1989, n. p.; 1990, p. 164).

In an interview reported by Jacobs, Terry Gilliam, director of a 1990s art-myth movie entitled The Fisher King, said that the whole point of myths is that they are "not simple, pat things. They all resonate. We in modern society seem to have lost respect for them, lost belief in those stories. But they still apply." The materialistic philosophy "hasn't produced the results people were dreaming of. I do think people have really lost their way" (1991, p. A-13).

Stephens and Eisen agreed, saying that our "society is in a crisis of vision," that there is a split between personal experience and mythically-based cultural norms and consensual reality, so that there is dissonance between conflicting realities--such as between beliefs about child rearing and standards of living, for example. We need congruence between the smaller myths about our daily lives and the larger more abstract or implicit ones, but the prevailing resonance is still based on old myths (1984, p. 86).

Bolman and Deal stated that cultures are propelled by their symbols--myths, stories, heroes, rituals, ceremonies--which emphasize meaning and bring some semblance of order (1991, p. 10). Zukov said that "everything (every thing) is a symbol" (1979, p. 255), and Morgan, Frost, and Pondy said that objects, actions,

events, utterances, ceremonies, physical arrangement, ritual, or anything that contributes to an image is a symbol (1983, p. 6).

Zukov emphasized that symbols create illusory reality, that they are descriptions of experiences but not the experience. The experience of happiness, for example, is different from the label "happiness." The differences between experience and symbol is the difference between *logos* and *mythos*. Logos ("word" or "reason") attempts to replace the experience or to mold a perception of it by constructing a dead symbol to replace or replicate the live experience. Logos is the language of science. Mythos, on the other hand, alludes to or points to the experience but doesn't replace it; mythos endows the experience with vitality, originality, and value. "It is the opposite of intellectualism" (1979, p. 263). Campbell classified mythology slightly differently. "What's made up in the head is fiction; what comes out of the heart is myth" (1990, p. 70).

A number of theorists emphasized that, as Tarnas put it, the "myths that the human mind produces ultimately come from something far deeper than a purely human source" (1991, p. 436). Merton said that

A true symbol does not merely point to something else. It contains in itself a structure which awakens our consciousness to a new awareness of the inner meaning of life and of reality itself It is by symbolism that man enters effectively and subconsciously into contact with his own deepest self, with other men, and with God "God is dead" means, in fact, that symbols are dead. (1968, p.11)

Morgan, Frost, and Pondy (1983, p. 5) and Tarnas (1991, p. 436) said that symbols and symbolism play roles in sacred and highly ritualized realms of human life and that they come from the wellspring of nature itself, from the universal unconscious. Campbell said that myths are "the masks of God through which men everywhere have sought to relate themselves to the wonders of existence." Mythology is a statement of the "energies that move the consciousness. It has to do with harmonization of one's consciousness in relation to the ground of being in nature" (1990, pp. xii, 139).

Daft saw symbols as useful in expressing both logos and mythos, saying that

symbols express two kinds of information: instrumental and expressive. Instrumental symbols serve rational purposes and depict logical explanations, conveying meaning where phenomena are concrete and well understood and which involve unambiguous interpretation. Expressive symbols, on the other hand, serve more emotional purposes and depict more core dimensions and underlying feelings, conveying meaning where phenomena are abstract and poorly understood (1983, p. 202). The expressive function is the one most commonly implied in discussions of symbols and symbolism.

A symbol, then, according to Morgan, Frost, and Pondy, "denotes something much greater than itself and calls for the association of certain conscious and unconscious ideas in order for it to be endowed with its full meaning and significance [Symbols are] created or recreated whenever humans vest the elements of their world with patterns of meaning and significance beyond their intrinsic content." They pervade and influence "every aspect of human existence" (1983, p. 4).

A number of theorists described symbols as human creations "to bring meaning out of chaos, clarity out of confusion, and predictability out of mystery," as Bolman and Deal put it (1991, p. 253). Together Morgan (1986, p. 213), Morgan, Frost, and Pondy (1983, pp. 24, 30), and Smircich (1983b, p. 55) saw symbols and symbolic processes as the medium through which humans give form and meaning to their own lives and their world and through which they develop and sustain shared meaning and engage in meaningful exchanges with others.

A number of authors noted that myths are one of the most important mediums for symbolically establishing meaning. Anderson (1990, p. 74), Berman (1984, p. 160), Bolman and Deal (1991, p. 154), Campbell (1987, n. p.), Garfield (1992b, n. p.), Mitchell (1992b, n. p.), Morgan (1986, pp. 213, 227), Owen (1984, pp. 211, 217), Pelletier (1978, p. 231), and Stephens and Eisen (1984, p. 187) described myths as likely stories which have emerged from a group's life or history which enable the group to understand its past and present and therefore to project its future. Each story or myth is part of a collection which, through competition, forces greater and greater articulation and thereby contributes to the development of thought and

meaning. These stories are the traditional vehicle for taking facts beyond the levels of attitude and belief structures and placing them in the broader context of a whole picture of collective values and a larger purpose. Myths, then, create meaning and lead to ways of understanding, and they become the stories that we tell to explain the nature of our reality.

Myths are explanatory tales for how the world works and for our place in it. Further, since myths encompass all that is basic and fundamental and depict significant truths, they protect us from uncertainty and defend us against vulnerability by becoming touchstones to which we look when deciding how to conduct our lives. The patterns of our lives are created around the structures found in myths, that myths coordinate people and their lives--providing guiding tracks for moving along in the environment and in society--and that the lessons of myths are the bases of humanism. Myths are the stories of who we are and where we are going; they contain the elemental responses of the psyche to the eternal needs and longings of the human experience; they put the mind in touch with the experience of being and they tell what that experience is. Hooker stated that everyone in society should be educated in the humanities--the literature, philosophy, and poetry--because they tell the truth, because they add meaning to people's lives, and because having words and stories is what makes us human (1987, p. 33).

Bolman and Deal (1991, p. 256), Cohen (1969, p. 340), DeForest (1986, p. 221), Morgan (1986, p. 225), and Pondy (1983, p. 159) wrote that stories and myths embody beliefs and values in ways that create inspiration and admiration and can easily be remembered. Myths are metaphors for relating to real events and that metaphors, which are means of relating subtleties which are difficult to describe in other ways, frequently involve fantastical elements which are not subject to the constraints of logic or empiricism. Mythology and literature are dominated by basic themes to help people make sense of experience and create patterns of meaning. They perform important functions such as supporting solidarity and cohesion, communicating unconscious wishes and conflicts, externalizing tensions and mediating contradiction, anchoring the present to the past, and providing reassurance and hope for the future.

Bolman and Deal noted that new entrants into a cultural group who have not been party to the construction of the symbols and myths which determine meaning may have a problem gaining access to membership (1991, p. 245). Morgan stated, however, that observing the surface clues of symbols, stories, mythos, rituals, and so on leads to clues about deeper meanings and about how the system is created and sustained (1986, p. 133).

Morgan, Frost, and Pondy pointed out that although metaphorical symbols are elusive and may not be totally shared, they can be used to view and interpret a cultural group. By focusing on how symbolic activity is created and how it continues to give shape and form to human life, it may be possible to determine how sense is made in situations, how individuals come to share realities, and how taken-for-granted aspects are constituted through symbolic processes (1983, pp. 12, 22). Vaill said that symbolic generalizations can be made by focusing on the ways that problems within a culture or paradigm are posed and solved (1984, p. 6).

Another means of understanding a culture is by observing its language, according to Morgan, who said that language can be a means to interpret symbols (1983, p. 22). Autry noted that words are the power symbols of ideas and are our most frequently used symbolic tool (1991, p. 73).

Mitchell (1992b, n. p.), Mumford (1951, p. 42), and Sahtouris (1989, p. 152) saw language as the heart of humanity, saying that its invention separated humankind from its environment, allowed thought to evolve, made it possible for humans to be observers and knowers of their world, and transformed society. Mitchell and Sahtouris, along with Lincoln (1985a, p. 33), noted that with the inception of language, human heritage has been continually to make thoughtful common sense of experience and the world, and that, although the human experience is valid, it can only be recalled or explained in terms of an existing vocabulary which is ever being composed and recomposed in the cultural experience. Words derive their meaning from relational contexts within the entire language and its cultural system, and we must recognize this limitation.

Ferguson said, "We can't grasp reality until we recognize the limitations of words" (1980, p. 149). As Zukov put it, "Words are only symbols, they re-present

things." He said that languages are useful tools for conveying information, but if we try to communicate experiences, they won't do (1979, p. 255). Bolman and Deal likened such symbols to metaphors: "They stand for something else" (1991, p. 266). Autry noted that as metaphors, words "aren't really true, or maybe true but not literally accurate" (1991, p. 73)

The problem, as Morgan expressed it, is that humans create the world of symbolic form and that the "symbolic world created by man is a self-laid trap" (1982, p. 25). Senge (1990, p. 74) and Wilber (1983, p. 194) together explained that language is the only tool for defining or creating reality, that is, it creates and limits the mental spheres by shaping perception; what we see depends on what we're prepared to see. Ackerman (1984, p. 135) agreed with Senge. If we are to see systems relationships, we need new terminology--a language of action, flow, circles, and systemwide interrelatedness.

Mumford said that language is the vehicle of emotions and feelings as well as thoughts and that humans underestimate both their creativeness and their language. The first step toward freedom must be a new respect for the symbol--a purification and clarification of language (1951, pp. 51, 144). O'Reilly said that the solution to the problem is more communication of "the kind that connects versus merely informing and transmitting--the spiritual kind, as in 'communion'" (1992, p. 57). Hubbard predicted that in the future, communication will be more holistic (1982, p. 79).

Awareness of the need for more connecting and communal languaging in the future raises the issue of planned use of symbols. Owen, for example, stated that myths can be powerfully used for manipulation, and he cited Hitler as having "built power on the mythic underpinnings of the Germanic culture of blood, iron, and race" (1984, p. 218).

Bennis and Nanus (1985, p. 39) and Wilkins (1983, p. 85) noted that leaders articulate and define what has previously been unsaid--a group's vision or mission, for example--by inventing images, metaphors, models, and so on to force new attention, appeal to a broad base of believers, to socially integrate the myth, and to stimulate energy to achieve the goal. Rost pointed out that "myths and rituals can serve either

to induce quiescence or to cause arousal," and that the same tactics can be used by opposing groups or by the same group at different times to stimulate satisfaction on one occasion and dissatisfaction on another. Interpreting what is happening within the system in terms of its myths and rituals is one key to determining how well the system is working (1991, P. 31).

Owens advocated ritual as a means of "getting new members into the old history." Ritual is the active side or dramatic re-enactment of myth and represents the myth in present time (1984, pp. 211, 219). Owen, along with Bolman and Deal (1991, p. 250), Campbell (1972, p. 188; 1990, p. 201) and DeForest (1986, p. 220) described ritual as growing from some commonplace activity which has assumed special significance as being essential to the present life. It encodes and translates the essence of the culture--an enormous amount of wisdom from the ages and a wide variety of meanings and messages which reflect and express the culture's values, beliefs, and practices. According to these authors, a ritual is a conscious celebration which allows individuals to participate in the original event, enables them to integrate the cultural myth in their own lives, and puts them in touch with the power that is within their own intention yet is greater than their own lives. DeForest noted that rituals in the form of celebrations particularly support personal transcendence. Celebrations, in their highest form, are spiritual experiences--individuals experience who they are and connect with an energy force beyond themselves (1986, p. 231).

Dandridge stated that symbols can be used to perform a number of functions--conveying information, controlling emotional energy, and maintaining the system--and that leaders who know how symbols works and what they communicate can plan and choose symbols to influence groups (1983, p. 72). Eoyang reiterated that attribution of meaning is an interactive process in which symbols become incorporated into our cognitive structures by becoming connected with and translated into the context of the familiar ideas and beliefs that are already there. The value of symbols and their impact on the people receiving and evaluating them is determined by how important people perceive the symbol to be, depending on its association with their inherent belief system (1983, p. 113).

Symbols which carry associations that are not important or surprising or which

have minimal effect on previously held beliefs evoke neutral or weak responses, explained Eoyang. Stronger symbols may be reinforcing and may confirm previous understandings. In either of these two cases, the interaction between the symbol and the belief system is fairly straightforward. The third possible reaction, however is more complex. Powerful symbolic interactions may impact established belief systems and affect values--inducing substantial changes in past and current understandings.

Eoyang said that the power of the symbol is relative to people's willingness to change their belief systems and that, except in extremely turbulent circumstances, they rarely experience dramatic changes. They may, however, significantly alter their worldviews as a "result of some insight, revelation, mystic experience or other profound learning These types of symbolic transformations may be initiated or facilitated by persons exercising transformational leadership" (1983, p. 113).

Foster described how such leaders develop narratives--stories of human lives that have a sense of meaning and continuity, that provide connectedness to the past, and that communicate a group's unique place in the course of events--to help group members learn and to raise their consciousness about social conditions (1988, p. 28).

Wilkins said that "narratives present the values of a society in concrete form." Stories are "important indicators of the values participants share, the social prescriptions concerning how things are to be done, and the consequences of compliance or deviance." He saw stories as symbols or scripts that teach vicariously approved behaviors and attitudes (1983, p. 82).

Ferguson expressed belief in the importance of creating new myths to teach new behaviors and the consequences of lack of compliance in a new paradigm. Creating myths is an "age-old strategy for cultures engaged in transformation" and that "we too, can create myths" (1980, p. 308). Theobald stated that we must learn more about the fascinating process of myth creation (1983, p. 53).

Spirituality

The concept. Harman stated that there are "levels and levels of meaning" attached to the notion of spirituality, and he began by describing it as "deep intuition," that is, as knowledge accessible from beyond the self which is bigger than the self. Intuitive knowledge is divine. It is associated with a wisdom that those who

receive it totally trust, knowing that it stems from the higher self (1992b, p. 30). Senge noted that early definitions of the term metanoia were given both as "awakening shared intuition" and "direct knowing of the highest, of God" (1990, p. 14).

Mumford saw this divine wisdom as ultimately becoming people's religion. He defined religion as a body of intuition and working beliefs which issue out of humanity's inner nature and experience (1951, p. 59). McKnight defined religion similarly--as a "set of beliefs, creeds, or rites" which form a "frame of orientation to an object of devotion [and] a vehicle for spirituality" (1984, pp. 145, 147). Vaill saw this vehicle as "accepted beliefs about what is real," and he said they were "metaphysical" (1984, p. 19).

Theorists' discussions of the religious basis of devotion or divine wisdom were presented as descriptions of religion, spirituality, mysticism, and metaphysics. The terms were used almost interchangeably, but they all reflected common phenomenon: a means for human connectedness with a larger whole. Sahtouris stated that the term religion comes from *re-legio* which is Latin for "re-connect" (1989, p. 224). Ferguson described "mystical" as coming from the Greek *mystos*, meaning "keeping silence" and explained that it came to refer to that inexplicable phenomena of whole-knowing which transcends our limited powers of description. She defined mystic as "direct communion with ultimate reality." She also spoke of "attunement of the brain to the larger domain" as spirituality (1980, p. 371). de Chardin defined mysticism as "the general directions that must be followed by the interior life as it seeks perfection" and as becoming one with all or attaining the universal and the spiritual, which, he added, is "the essential dream of the human soul" (1975, p. 199).

Davies noted that the expression "mystical experience" is said by those who have experienced it to be "hard to convey in words." It conveys an "overwhelming sense of being at one with the universe or with God, of glimpsing a holistic vision of reality The essence of the mystical experience, then, is a type of shortcut to truth, a direct and immediate contact with a perceived ultimate reality" (1992, p. 226).

Some authors described this holistic connectedness as occurring through an

inner search. Capra (1982b, p. 24), Davies (1992, p. 227), de Chardin (1975, p. 183), Fox (1988, p. 48), Mumford (1951, p. 86), Lattin (1991, p. C-2), Owen (1986, p. 113), Ritscher (1986, p. 61), and Vaill (1984, p. 31), for example, together saw religion or spirituality as a means to connect inwardly and a means to a transformative interior life. They described it as a quest for meaning and a quest for the substratum of reality or what is missing in us--a search of the depths of being and life, for the source, and for the inner person as the unique mirror of that source.

The authors said that through reflective thought and self-criticism people develop self-knowledge, insights into their personal development, an inner sense of peace, trust in the unity of their heads and hearts, and understanding of their relationship to the total reality.

Other writers described connecting with the whole as an outer thrust. Davies (1992, p. 228), Ferguson (1980, p. 361), Fox (1988, p. 48), Harman (1988, p. 83; 1991b, p. 111), McKnight (1984, p. 142), Mumford (1951, pp. 59, 86), Sahtouris (1989, p. 224), and Vaill (1984, p. 31) saw a spiritual or mystical experience as a search for a direct perception of unity, that is, an experience of nonseparation with nature, a divine creator, or a larger reality. Humans seek a reasonable account of the entire sum of things, and spirituality is a conscious awareness that there is a reality which lies beyond the boundaries between ourselves and the outer world of the material, the physical, the purely rational, and the lonely, selfish role of personal concerns and control. This higher reality imbues life with meaning and direction. It offers inspirational guidance which proclaims the sacredness of life, gives purpose and reason for events, helps humanity's higher self become aware of its coterminus with the operation of the universe, and connects people with their origins, affirming the power of wisdom from the world's combined spiritual traditions and ratifying the world as being attuned with the whole of creation.

Inward or outward approaches to connectedness with the whole are actually the same in a holistic universe, according to Mumford (1951, p. 59) and Pelletier (1978, p. 235), who concluded that the functions of religions are to reconcile aspects of inner and outer life, and to provide meaning for the concepts of infinity and eternity. The function of connecting humans with the whole is reflected in what Ferguson saw as

the two key principles of all mystical experiences: wholeness and flow--connectedness which encompasses all separation along with the freedom of movement within that relationship to form and reform, to relinquish aggression, and to avoid impedance of connections and reconnections with the living force (1980, p. 379).

Several authors emphasized that spirituality reflects the presence of a living force. Owen noted that the term spirit originally meant "breath of wind," and he defined spirituality as the "vital force or energy that underlies all meaning" (1986, p. 113). Ritscher said that "spirituality pertains to an experience of spirit" (1986, p. 61), and McKnight called it an "animating life force or energy" (1984, p. 142).

Harman (1988, p. 83) and Mitchell (1992b, n. p.) said that this vital force of energy is tapped through prayer, which, through belief in its force (i. e., belief that you will get what you pray for) is invoking intention or creating reality. They noted that the more energy invoked, the higher the intent, and the more likely the reality.

Bellah et al. said that the use we make of our psychic energy determines the kind of self we cultivate or the kind of persons we learn to be. When we call on all our energy resources, pay full attention, and become completely absorbed, we reach a high state of mindfulness during which we are likely to be most genuinely happy. Such attentive use of our psychic resources is a foretaste of religious enlightenment-- "a full waking from the darkness of illusion and full recognition of reality as it is" (1991, p. 214).

Chopra agreed that a spiritual experience occurs "when pure awareness reveals itself as the maker of reality," adding that reality is everyone's personal creation and that focus on the intellect has reduced direct spiritual experience to less than real and has made it difficult for people to realize how necessary spiritual experience is. "When we can control the reality that is pouring over us, we can put ourselves back in paradise" (1991, p. 16).

McKnight also believed that it is difficult for people to experience the pure awareness of reality and spirituality, saying that the crisis which society is currently experiencing is the painful cumulative effect of a "devotion only to non-transcendental materialistic purpose" and denial of spirituality (1984, p. 145).

Pascarella suggested that there is a rise in spirituality at the present time, a

growing sense that the material world is not all there is, a turning inward, an effort to find meaning beyond the rational and quantifiable, a recognition that humans must have a transcendental connection, a quest for individual spiritual meaning, and a drive for unity (1984, p. 75).

Ferguson stated that a spiritual quest begins with a search for meaning. Brzezinski, Chairman of the United States Security Council, once stated in an interview with Reston:

There is an increasing yearning for something spiritual in advanced Western societies where materialism has proven unsatisfying. There is a search for personal religion. Every human being, once he reaches the stage of self-consciousness, wants to feel that there is some inner and deeper meaning to his existence than just being and consuming, and he wants his social organization to correspond to that feeling. This is happening on a world scale. (1978, n. p.)

Harman agreed that a search for guided meanings and values as well as a release of full human potential are signs of spiritual revitalization (1992c, p. 3), and Ferguson reported that Huxley also emphasized the connection between spirituality and human potential, saying that when religion is transformed, it will become "consumed mainly with experience and intuition--an everyday mysticism" (1980, p. 375). Ferguson said that societal transition--which includes more direct experience with a larger reality and more mystical experiences--alters perceptions and values, creates awareness of "having betrayed the harmonious inner universe," ultimately creates its own culture, and demands ever greater changes (1980, p. 361). Theobald stated that spiritual values "require us to struggle to enhance the quality of the planet" (1987, p. 139). de Chardin noted that life cannot move forward without becoming mysticized and without acquiring morality (1964, p. 209).

Huffington agreed that spirituality links us with the future, moves us toward transcendence, and stimulates us to become and exceed ourselves (1989, p. 76). McKnight saw spirituality as a source of energy and enthusiasm, contributing to psychological and social well-being and, through simulating the intention to transcend personal concerns and connect with some higher good, stimulating a contentment and

satisfaction with moving toward transition (1984, p. 144).

To summarize the foregoing ideas, the notion of spirituality seems to align with the pictures theorists are presenting of this transition time. Spirituality is a set of intuitively held beliefs or experiences which provides people during this time with not only an understanding of their connectedness with a holistic universal system but also with a greater purpose as well as the energy to move forward and to create their desired reality, i. e., the intention to move toward a desired future. Although focus on the intellect has stifled spirituality, spirituality is now arising as people seek meaning in their lives and develop the intention to move toward higher levels.

Religious conflicts. Keen pointed out that the rise of a new spiritual paradigm focusing as it has on unity and on new ways of seeing, has created some conflict with authoritarian religions (1992, n. p.). Keen, along with Grumwald (1992, p. 76, Naisbitt and Aburdene (1991, pp. 294, 309), and Ogilvy (1983-84, p. 141), noted that mainline churches fare well in stable eras but decline in times of great change. There is considerable research that shows a high correlation between social consciousness and religious affiliation.

These authors, along with Cetron and Davies (1989, p. 196), Land and Jarman (1992a, p. 124), and Simmons (1990, pp. 229, 232) pointed out that during turbulent times or times of great change (and, history shows, during shifts to a new millennium), people seek a link between their everyday lives and transcendence. They move away from organized, insitutionalized religion and head for religious and spiritual experiences which are demanding and rigorous and which require active personal and emotional participation. The authors noted that this is reflected in the current groundswell of two religious vectors: fundamentalism and personal, spiritual experience. Ferguson noted that the United States has always attracted both mystics and evangelists, and that, emanating primarily from the transcendentalists, they have long influenced mainstream American thought (1980, p. 367).

Concerning the more authoritarian forms of religious thought, Cetron and Davies noted that a spiritual void, which started with World War II and its death camps in the 1940s and continued through the hedonistic 1960s and the worship of mass media and technology of the 1970s, began to be filled in the 1980s by a

"dramatic return to faith with a preference for conservative, authoritarian creeds" (p. 296).

Since then, according to these authors, orthodox mainstream and liberal religions such as liberal Protestant, reform Jewish, and Catholic churches are found to be either stifling or empty and have been losing members. At the same time tradition-minded churches, such as fundamentalist, evangelical, pentecostal, Mormon, and Baptist, have been gaining members because, in part, they seem to offer havens for the future shocked with their fixed truths and structures.

Bellah et al. reported the emphatic statements of one young female theologian about mainline churches. She said that such groups are not telling the truth about the suffering of middle-class existence. They simply reify what people get from newspapers and television, and they pacify people's emotions, stifle their imagination, and narrow and bind their human spirit (1991, pp. 206, 210).

Ayers (in an interview with Coates and Jarratt, 1989, p. 83), Coates and Jarratt, (1989, p. 291), Ferkiss (1975, p. 259), Fox (1988, pp. 27, 46), Hooker (1987, p. 32), King (in an interview with Coates and Jarratt, 1989, p. 177), Naisbitt and Aburdene (1991, p. 302), Pascarella (1984, pp. 27, 34), and Simmons (1990, p. 231) together described the fundamentalist movement as a response to a deep-seated sense of hopelessness, fear, and inability to deal with the break-up of cultural patterns and with forces beyond personal control. It is based on belief in an inerrant Bible and operates on the need to frame issues in black and white and to spell out answers so people don't need to think or make decisions alone. In this sense fundamentalism can be seen as exemplifying patriarchal oppression which is characterized by hierarchical power struggles and which lacks a serious focus on equality and justice. Fundamentalists are preoccupied with salvation, are narrowly concerned with personal morality, perceive society as corrupt, and provide stringent principles of personal behavior and tight rules for social conduct. They embrace the traditional humanist belief in human progress on earth, justify acquisition as a blessing, match material success with growth in wisdom, appeal to the poor-but-honest public, support ultra-conservative and right-wing political causes, oppose other Christian responses to society, and reject the notion of a worldwide spiritual awakening.

de Chardin pointed out the "the Judeo-Christian mystical current has had some difficulty in getting rid of a point of view which sought oneness too exclusively in singleness," that the mysticism of many of the saints and prophets was too narrow and not sufficiently universalist and cosmic (p. 210). Fox concluded that fundamentalism is so narrowly focused and immature that it does not qualify as spirituality (1988, p. 141).

Bellah et al. concluded that the church's greatest challenge in America is "to enable middle-class folks to recognize that their nice consumerist existence is killing them, plus killing the third world (1991, p. 210). King noted that these churches, with their lack of orientation to the future, have let people down (Coates & Jarratt, 1989, p. 177).

Cetron and Davies (1989, p. 196), Land and Jarman (1992a, p. 124), and Simmons (1990, p. 229) pointed out that there is a worldwide rise of new forms of fundamentalism, illustrated by the strength of Hinduism, the spread of Islam, the resurgence of Mohammedanism, and the rejection of communism and atheism in favor of fundamental religions. They also noted the rise in the ecumenical movement--a move toward welcoming all traditions and blending religious practices by such groups as the Church of Religious Science and Unity Faith to meet the needs of a complex population.

Naisbitt and Aburdene noted that some of the more orthodox churches are becoming aware of the success of the less orthodox ones and are getting more in tune with the need for more emotional religion. They said that Reconstructivist Jews, for example, "who edited the supernatural out of prayer books over forty years ago are restoring references to miracles, mythology, and the messiah" (1990, p. 310).

Lattin reported that as some people return to their religious roots they are bringing Eastern mysticism and meditation with them, inspiring churches and synagogues to "emphasize spiritual exaltation and to be more open to spiritual paths outside the usual doctrine" (1991, p. C-2). He reviewed a Gallup poll on religion which found that some Christians are engaging in practices considered counter to the teachings of their churches and that they believe that new age practices such as exercising mental powers beyond the five senses, tapping hidden sources of energy,

supporting notions of self-healing and reincarnation, and so on, are beneficial and compatible with established religions. Lattin also reported that there is still a lot of resistance to mysticism in the Protestant tradition and that the viewpoint of the traditional church is that there is "no direct way of communicating with God--no room for mysticism" (Christians, 1991, p. AA-5).

Land and Jarman reported, however, that the Catholic church sees changes, such as attempts to fuse Eastern and Catholic meditation or otherwise to merge different religious practices, as "dangers and errors" (1992a, p. 124). Beaumont reported that conservative and liberal sides of the Church of England are so divided on issues of alternative leadership, teachings, and worship that "there is no hope of compromise" (1991, p. AA-6).

Westerners are moving away from Judeo-Christian thought and from organized, institutionalized religions which are mediated by authorities, according to de Chardin (1975, p. 210), Ferguson (1980, p. 368), Murphy (in an interview with Miller, 1992, p. 8), Naisbitt and Aburdene (1991, p. 296), and Pascarella (1984, p. 34). These writers noted that the need for religious experience has exceeded what organized religion can provide due not only to an awakening to a spiritual crisis and to changes in the way humans are seeing themselves in relation to each other and to the divine but also due to current social changes. Research suggests change in the focus of spiritual life toward more contemplative Eastern traditions and more direct spiritual experiences as means for experiencing release from the stifling focus on the physical world, for achieving a larger, more liberating vision, and for experiencing spiritual realization and completion. The authors noted that an array of new religions is taking root.

Grumwald (1992, p. 76), Naisbitt and Aburdene (1991, p. 302), and Simmons (1990, p. 231) described the new age spirituality as pointing to the void that society has left in people's lives. They said that people are finding their existence to be meaningless and that they have lost the unity of such institutions as family, community, and religion. The search for personal, spiritual awakening, according to the authors, is humanity's direct response to a realization of ourselves as one with creation and as active agents and co-creators of our world. It is also a response to

our realization of the limitless potential of humanity, the possibility of transforming the self and today's world into a better one, and the need to develop insight, to cultivate one's own inner guidance, and to connect with spirit and an ultimate truth.

This spiritual path is based on a holistic belief system, with religion as only one aspect of an enormous spectrum involving body, mind, and spirit. Fox stated that deep ecumenism unleashes the wisdom of all religions, and he offered the notion of a Cosmic Christ as the "pattern that connects." Connecting is what wisdom is all about, and he called the new age the "age of wisdom" (1988, p. 160). This new spirituality appeals to well-educated people who have found their lives in Western culture to be less than fully satisfying. There are now many well-educated and affluent new agers who are clustering around metaphysical bookstores, educational centers, spiritual teachers, and megachurches; and corporations are using consultants to teach creativity, meditation, yoga, and so on.

A number of theorists cautioned against wholesale adoption of new age spirituality as a panacea for curing society's ills. Wilber stated that the notion is rapidly spreading that by merely adopting a new worldview, people are actually transcending. "That is a disaster," he said. Spiritual transformation takes years of contemplation and has nothing to do with merely learning another mental paradigm (1983, p. 198). Fox said that new age spirituality can be "all consciousness and no conscience, all mysticism and no prophecy, all bliss and no critique of injustice" (1988, p. 141). Berman agreed, stating that disciplines which claim to unite fact and value, such as yoga, the martial arts, and meditation, and philosophies which offer monastic ways of understanding the world contain wisdom, but they can wind up dispensing with thought altogether (1984, p. 188).

Murphy, in an interview with Miller, noted that even Eastern religions such as Hinduism and Buddhism are skeptical about metanormal abilities arising from spiritual development because such abilities can become temptations to focus on the physical over the spiritual and can lead to inflation of egos and abuses of power (1992, p. 10). Fox agreed that overadherence to such practices can fortify personal egos and can be an escape from responsibility for the present life, and he added that such adherence to religious leaders can create displacement of personal power (1988, p. 46). Berman

felt that disciplines which focus too narrowly "need something beyond insight into the unconscious" such as a focus on the relationships of people to nature, society, and each other (1984, p. 188).

de Chardin emphasized the last point. The Eastern road to spirituality leads to becoming one-with-all by suppression of the multiple--by focusing on individual identification with the spirit (through withdrawal and isolation, for example). It calls for a single unification with the Omega through personal differentiation and ultimately through dissolution of humanity. It suggests a relaxation of the cosmic tension needed for total unity and a loss of the effort and energy necessary for convergence. The Eastern path is without love. On the other hand, the Western path to becoming one with all focuses on unification and convergence of many elements to arrive at a central meeting point through concentration and hyperconcentration. Convergence is carried on in the spirit of tension and that the ultimate union can only be achieved by love. Only this road respects the history of consciousness which shows us the process of differentiation and synthesis and retains the drive and order of the spiritual human to move forward in unity (1975, p. 209).

de Chardin noted that confusion between the two approaches has delayed the ever-more urgent task of pursuing the spirit. A "passionate awareness of a universal presence and a thirst for unification" are now being aroused and we must choose a homogeneous form of spiritualization, a valid and powerful modern mysticism. The correct form will emerge from Western spiritualization--where humanity is becoming conscious of being the responsible axis for cosmic evolution. "The light is on the point of appearing not from the East but here at home, in the very heart of technology and research" (1975, p. 203).

To remain more conscious of the responsibility for choosing an appropriate spiritual path, and as a means to externally verify religious movements and determine their validity, Fields et al. (1984, p. 281), Keen (1992, n. p.), and Wilber (1983, p. 248) offered some rules of thumb for beginning a spiritual journey in troubled times. Together they suggested checking to see that the spiritual movement:

(1) Is legitimately anchored in tradition rather than in miracles or in a single leader--not headed by or subject to the domination of an authority figure or perfect

master who must be obeyed;

(2) Is based on a belief that spirituality is in all and is focused on bringing members to levels of understanding of themselves as co-creators of their own lives--helping people to focus on their own still, small voice, to develop their own gifts or calling, to find their own highest nature, and to develop wisdom and compassion;

(3) Is difficult to master--involves sustained concentration and will and supports individual discipline to find the sacred;

(4) Expects members to move beyond the need for the group--has no lack of graduates and no members who are never weaned, and encourages members to stay grounded in reality and to take refuge in family and friends;

(5) Rests on a moral foundation--includes appropriate personal regulations and requires no tests to prove loyalty by doing anything that violates personal ethics;

(6) Doesn't presume to have the only or the best answer to the world's needs--is not idealistic or altruistic and doesn't proselytize, has no delusions of holding the one and only view which is perfect and explains everything, has no arrogant stance of imposing ideas on the ignorant;

(7) Holds no secrets--has no information which is suppressed or guarded by an inner circle, has no taboo topics or questions which can't be asked, and presents its true face to the public;

(8) Encourages no groupthink that overrides human feelings--supports thinking and self-expression, treats individuals differently, expects no stereotypical or clone behavior; and

(9) Does not lack humor or irreverence.

Brewer stated that there are thousands of religious groups of all types which claim exclusive roads to spirituality and, as sources of spirituality and morality, they are probably the weakest and most divided forces. He described such groups as often having traditional strategies for dealing with problems, such as verbalizing and theologizing, withdrawing, and attempting to use ameliorative actions for selected problems. He believed that these communities need vast transformation (1986, p. 14). Brewer, along with Mumford (1951, p. 89), Sanders (1990, p. 34), and Simmons (1990, p. 229), noted, however, that such groups often hold similar, and

therefore nonexclusive, views about spirituality. They may see spirituality as being the basis of human nature, or as being more important than a material view, or as holding powerful influence in human lives--especially through direct and internal personal spiritual experiences. In addition, these groups often have common cultural values such as peace, hope, love, and enlightenment. Religions need to maximize their universal values and minimize their negative beliefs and actions and they must recognize that no particular religion has any special key. Judaism, for example, which is the oldest religion with major influence in the West, is related historically to Christianity and to Islam and that these three need to develop cooperative relationships in the face of the struggle toward a world community.

Bellah et al. stated that "institutionalism is always problematic, and nowhere more so than in the realm of religion." They continued:

If we are fortunate enough to have the gift of faith through which we see ourselves as members of the universal community of all beings, then we bear a special responsibility to bring whatever insights we have to the common discussion of new problems. When enough of us have sufficient trust to act responsibly, there is a change to achieve a good society. (1991, p. 286)

Campbell noted that Judaism and Christianity remain popular religions, particularly for those who are not yet ready to recognize the transcendent within themselves, and that these religions "ought to be a little more available to opening the door to transcendence" (1990, p. 43).

Perennial wisdom. Campbell pointed out that higher religions may seem to have little in common but that a closer examination of their symbols, which are expressions of the experiences or fulfillment of religious beliefs and practices, reveals that "often the symbols of different religions may have more in common than have the abstractly formulated official doctrines" (1972, p. 265). Harman saw this dichotomy as two forms of religion: the exoteric or public form, which may vary greatly from one religion to another and which is expressed in literature, architecture, and ritual, and the esoteric or secret form which is known internally, which usually involves meditative disciplines and holds the potential for personal enlightenment, and which is essentially the same in all religions. The inner understanding of most of the world's

spiritual traditions have a common core of potentially universal spiritual experience--a perennial wisdom (1988, pp. 37, 84; 1991b, p. 114).

Harman (1986, p. 110; 1988, p. 84), along with Fields et al. (1984, p. xii), Ferguson (1980, pp. 46, 362), Huxley (1945, p. vii), Mumford (1951, pp. 61, 67), and Pelletier (1978, p. 8) described the perennial philosophy. Religion is an attempt to perceive the universe. Humanity's deepest need for a rational account of its own acts and experiences prompts it to explore and attempt to understand the continuity between the known and the unknown. Each culture has developed its own way of asking about humanity's nature and fate. The answers differ in detail, but they all point to a common experience. Every adequate philosophy of human life has certain common elements which remain permanent contributions.

This perennial wisdom is found at the inner core of all great mystical traditions and world religions. Its rudiments are found among the traditions of primitive peoples in every region of the world, it is woven into institutionalized Christianity, and it has a compatible place in every one of the higher religious traditions.

The perennial philosophy, then, is a distillation of the experience of many inner explorers over thousands of years, predating science and remaining immortal and universal. It is a primordial tradition--a whole set of archetypal realities waiting to be discovered, at the highest reaches of the human consciousness, by all people. It has always been present, although it has sometimes been hidden. For example, the Hermetic, Cabalistic, Sufistic, and Rosecrucian forms affected the history of the Middle East and Europe; the Freemason form played a critical role in the American democratic experiment; and the transcendental form called attention to dead intellectualism and the need for understanding from experience and intuition during the early 1800s. Predictions have been made for the past two centuries that one day human beings would seek a new central focus in some form of perennial thought.

That focus, however, will not be new. The universal themes of the philosophy, which have been expressed in psychology, mysticism, and physics, for example, have been emerging with increasing strength and clarity over time. The perennial themes have been gathering impetus and are currently beginning to coalesce

in a consciousness movement or a new age spirituality. This movement may serve as the basis of a transformation, helping society to emerge from the present chaos of creeds and ideologies and helping it to express and shape its new personality and new culture. The authors noted that the philosophy is not in conflict with the spirit of modern scientific inquiry, and Harman added that leadership based in the roots of this ancient wisdom has "something going for it" (1986, p. 110).

The core beliefs of the wisdom was discussed by many authors such as Adams and Spencer (1986, p. 9), Campbell (1989, n. p.; 1990, pp. xv, 127), Chopra (1991, p. 15), Fields et al. (1984, p. xii), Harman (1979; 1988, p. 39), Hubbard (1982, p. 43), Huxley (1945, p. vii), Mitchell (1992b, n. p.), Mumford (1951, pp. 61, 67), and Simmons (1990, p. 247) all of whom contributed to the following composite description.

Concern with nature and fate prompts humankind to ask questions concerning whether humanity is lost in space, whether it is helpless to random forces, and whether it is going into nothingness with death. Other questions deal with whether humans are the center of the cosmos and whether they are the prodigal offspring of a loving Deity, errant children who are aware that they have lost their unity with creation and will ultimately enact a new role in another world free of earth's burdens and in bliss with God. These human beings also ponder whether or not people are chained to an eternal cycle of recurrences in which they backslide but climb steadily upward. While the cosmos prevents verifiable answers to these questions, we humans, in our need to confront these mysteries, to make sense of what lies beneath the irreducible irrationalities of life, and to understand the continuity between the known and the unknown, translate our questions into religious myths, rituals, and observances which give form and content to the human experience. The questions are those of all classic religions, and the answers, which are beyond the scope of religious myths, are based on a larger pattern with a focus on purpose over chance.

The greater significance of human existence has come to our conscious awareness because in every age there have been sages, mystics, saints, and visionaries who have chosen to fulfill the rigorous conditions necessary to receive immediate knowledge, and a few of them have left accounts. These sages, such as Buddha and

Christ, experienced the world beyond the binding influence of any single perception and achieved a pure awareness. They perceived something ahead of their time and grasped the significance of all of creation as a whole.

The perennial philosophy, then, suggests that there is a divine reality, a divine creator, a God, an Absolute, or an omnipotent spirit which is both the highest state of being and the ground of all being--completely transcendent and completely immanent. There is no point in time or space where the Absolute is not; it is a sphere whose center is everywhere and whose circumference is nowhere; and while it is nowhere, there is nowhere where it is not. There is nothing outside the nondual.

de Chardin sought clarity on the following point. He said that recent physics, which shows that matter and energy are one, enhances the idea that beings cannot be represented by a final, isolated entity, which the perennial philosophy infers, but that the ultimate reality must include movement and should be represented as a union. To be, then, according to de Chardin, one must unite with oneself and unite or be united with others (1975, p. 193).

The Absolute is substantial and knowable to the world of mind and things, although it cannot be directly or immediately apprehended unless individuals choose, as some mystics and sages have done, to subject the mind to the drastic elements and conditions necessary for reality to become manifest. The absolute reality, then, is reflected through those individuals' minds and behaviors. This awakening to the mystical dimension, where the self is suddenly perceived to be one with the ultimate forces of nature, is the secret and the transforming journey of human life. The message of the perennial philosophy is that we are the mystery which we are seeking to know, our personal energies are the energies of the universe, and the ultimate state of consciousness is no different from ordinary consciousness. As Zukov put it, "To dance with God, the creator of all things, is to dance with ourselves" (1979, p. 91). The authors noted that the most familiar formulations of this idea are, "As above, so below," and "The kingdom of God is within you."

Every great religion has been based on revealed truths beyond the five senses and has foreseen the reality of internalization of the universal law through voluntary alignment of individuals with patterns of creation. Special values and experiences

have been assigned to symbolize God, eternity, and immortality; deities have been symbolic personifications of the self; and myths have emerged--all as means to experience the oneness with God, at least vicariously in the here and now.

There are several implications included in the ultimate wisdom. For example, perennial wisdom suggests that the divine is inseparable from humankind's sense of destiny, that humanity's final end is placed in the knowledge of the immanent and transcendent. Although life doesn't reveal humanity's meaning and destiny and that human life is meaningful; it is a progressively intelligent part of the cosmic process. All existence has goals and ends. And since the eternal cannot change and the eternal character is not touched, we are redeemed. Further, since something in the soul is similar to divine reality, attunement with a higher life makes attaining higher knowledge and powers and achieving a higher morality possible. Humanity, through attaining higher awareness can become aware of guidance from the higher self and become selfless--setting aside material and ego needs and participating in the supreme purpose with a desire to participate consciously in the fulfillment of humankind.

Another implication connected with the perennial philosophy is that since the true nature of the human race is to evolve toward awareness of being co-creative with reality, the creative state of consciousness is our natural birthright. The out-of-consciousness collective mind is the creator of the world which the individual conscious mind experiences. As part of the universal mind, the individual mind is the co-creator of events. And since humankind is spiritually free, has choice, and can adopt any code people wish, we can choose to access this knowledge and power within ourselves, to move beyond self-chosen limitations, to utilize our limitless potential, and to create as a conscious act. Whatever change we effect is determined by what we choose to make of ourselves.

Theorists believe that human beings are in this time of transition choosing to make themselves more spiritual. Simmons, for example, said that a common premise is emerging. "There is a spiritual basis to humanity and the cosmos," but also a common aim, "an increase in human awareness and consciousness" (1990, p. 247). This new aim is reflected in two major areas of upheaval in current times: our personally-held, science-based, rational belief system and its resultant social-political

system.

Transition conflicts. The first conflict concerns the belief system. Harman stated that some people have concluded that a spiritual worldview is "more congenial to the totality of human experience than the positivistic, reductionist, scientific worldview" (1988, p. 39). Bell noted that religion was expected to disappear in the twentieth century due to succeeding points of view such as reason's focus on natural order, rationality's emphasis on technical order, and secularization accompanying institutional authority. As a set of coherent answers to the core essential questions that confront every human group, religion has survived (1980, p. 325).

Bell (p. 277), along with DeForest (1986, p. 215), Harman (1988, p. 28), Naisbitt and Aburdene (1990, pp. 293, 319), and Sheldrake (1991, p. 82) together said that scientific worldviews, mechanical theories of nature, and technical innovations, having discredited subjective experiences and utterly removed God, have created an age of spiritual exploitation and emptiness--a less religious certitude and a fear of a void and nothingness with death. The authors said that such a worldview hasn't worked in critical areas of individual and social life. It doesn't tell what life means; people get that from spirituality.

We are recognizing the limits of science. There is a growing sense of pessimism and dystopia--an end of our faith that science will master our problems. The global religious revival now occurring is a direct repudiation of blind faith in science and technology, and an emergence of spirituality is the basis for rediscovering the emotional sides of ourselves as well as for deep emotional and nonrational value commitment.

Davies (1992, pp. 226, 229), Ferguson (1980, p. 166), Harman (1979, p. 89; 1988, p. 12), Naisbitt (1982, p. 36), Pascarella (1984, p. 3), Pelletier (1978, p. 5), and Rubin (1992, P. A-10) together noted that the aim of both science and religion is to conduct a search for meaning in an effort to find truth. Science has long attempted to debunk religion. Most scientists still have a deep mistrust of mysticism, which is not surprising, both because it lies at the opposite extreme of the rational thought on which science is based, and because it tends to be confused with the paranormal. Ferguson pointed out that this essential conflict is a problem, not so much because of

contradictory data, but to contradictory states of consciousness (p. 376). Wilber noted that science and spirituality are two different levels of thought and that attempts to discuss spirituality with rational-mental statements "always eventually degenerate into contradictions or paradoxes" (1983, p. 75).

Although scientific approaches and logical reasoning remain appropriate means of inquiry for some problems, many people are using spirituality as a way of challenging science as a means to deal with the ultimate questions, to explore inner experience, and to seek truth about human nature. Scientists are becoming more accepting of knowing, and the authors cited two areas of research which are opening up: studies of consciousness (focusing on creativity, sleep, values, and so on) and studies of the nature of the mind (its effects on healing, for example). Scientists are moving toward a world of qualities, toward a more pluralistic outlook, and many recognize higher order forms. Simmons stated that those who are conducting investigations in new areas are "a new and very modern breed of human--people trained in both science and mysticism" (1990, p. 232). A new dialogue between the truth of the scientist and the truth of the poet is emerging based on a more collective vision and a realization that a comprehensive definition of human consciousness can only be expressed with a reconciliation and integration of opposites. A balance is needed between the material wonders of technology and the spiritual demand of human nature, and spiritual awareness must be allowed to guide the uses of science.

This brings us to the second major area theorists discussed as being affected by a shift to a more spiritual view: our social-political arena. Simmons noted that the perennial intermix of above and below, divine and human, has been the constant companion of humanity at every spiral, but that focus on the divine has been dissipated over time. This relationship can be seen from the time of hunters and gatherers--when humans were intertwined with nature and without separation--to the time of gardening--when elaborate rituals kept spirituality deep and direct--to early civilization--when priests took power for spiritual interpretation and secret societies remained beyond state religions--to industrialism--when science and rationality replaced religious and spiritual experience dwindled (1990, p. 225).

Bell (1980, p. 334), Campbell (1989, n. p.), Fox (1988, p. 41), Grumwald

(1992, p. 75), Harman (1979, p. 109), and Simmons (1990, p. 215) discussed the effects of spirituality having dwindled in our society. They said that the modern times reflect a growth of radical individualism and unrestrained self which began in the 1800s. Suspicion of the transcendental as a retreat from social responsibility, a view of religion as primitive, a denial of the mystical, a disregard for spiritual principle, and a focus on reason and on rationalization of life all led to secularism. The belief arose that religion would fade away in favor of humanism and that morality need not be based on the supernatural.

The result of these beliefs is that society is not now guided by any premise at all. Secularism has not led to humanism, humans have been viewed as merely objective, mechanical systems, ethics without sanctions of a higher authority have not been compelling, and society has experienced intolerable strains--becoming disjointed and showing signs of disintegrating. Campbell said that "there is no spirituality in any aspect of our contemporary Western society" (1989, n. p.). The authors noted that a civilization without spirituality experiences depression, it is separated from the true self and out of touch with its internal power, there is no hope, no joy, no challenge, and no healing. Instead, there is the presence of dark energies and collective madness. Such societies promote addiction, crime, consumerism, and unhealthy nationalism.

The authors saw crime as the result of exaggerated self-interest and lack of empathy for others along with the absence of a religious-based ethic. They saw consumerism as a misguided attempt to achieve excitement and satisfaction through the purchase of goods. Simmons emphasized that members of present-day society have become enmeshed in material games and goals and have been left stranded on a physical plane. They have been spiritually impoverished, causing them to lack awareness and aliveness and to be vulnerable to manipulation and demagoguery (p. 56). Kinsolving gave an example of the results of misdirected materialism when she reported how public welfare systems focusing on meeting the material needs of the impoverished are proving less effective than religious-based programs which are also attending to spiritual needs (1992, p. G-3).

The authors who discussed the effects of an absence of spirituality also noted a

resultant unhealthy zeal for national security and weaponry. But they suggested that the presence of a world community--through technological communication and growth of mass cultures--will be the starting point for new and shared responses to the need for spirituality and a return to the sacred, as people continue to seek answers to the universal existential questions.

Bellah et al. (1992, p. 179), Keen (1992, n. p.), and Pascarella (1984, p. 27), along with several other authors, discussed the role of spirituality in the American national and political scene. The United States Constitution insists on the separation of church and state--no religious groups can gain favor, but the right to public expression is guaranteed. Bellah et al. suggested that religion is thought of as a private matter, but that idea may have stemmed from a confusion about the term public. First, God's dominion is over all, and there is "nothing in the private or public realm that cannot concern such a religious tradition." Second, public has a broader meaning than just the citizenry who reflect on common concerns such as choosing their governmental representatives (p. 179). From American's early history time through the present time, religious beliefs have made an essential contribution to the formation of a responsible citizenry and that religious bodies and associations have shown concern over public issues and have entered the public scene. Gandhi once said, "Those who say that religion has nothing to do with politics, do not know what religion means" (1957, p. 505).

Harman pointed out that the foundation of American ideals and institutions were highly influenced by Freemasonry--a particular form of the perennial philosophy which originated in Egyptian mystery religions and which "played a leading role in the emergence of democratic philosophies of government and the development of Western civilization." The essential premise of Freemasonry is that the transcendental realms of reality, patterns, and forces exist which are not accessible to the physical senses but which are otherwise knowable to help shape evolutionary and human events. Fifty of the fifty-six signers of the Declaration of Independence and fifty of the fifty-five members of the Constitutional Convention were Freemasons (1979, p. 110).

The fundamental American symbols, such as the Great Seal of the United

States, reflects a transcendent vision of the future. For example, an unfinished pyramid with a radiant triangle and an all-seeing eye symbolizes that the works of humanity are incomplete unless they incorporate divine insight and that the nation will flourish only as its leaders are guided by supraconscious intuition (p. 108). Harman noted that the concept of transcendentalism, with the self as ultimately responsible, is basic to the judicial process and is central to democracy (p. 111).

Tocqueville wrote that religion, specifically Christianity, is an essential condition of democracy. The more the conditions of humanity are equalized, the more likely people are to become pantheistic (that is, to see God only as an expression of the physical forces of the universe) and to become prideful and indolent of mind. As this belief becomes strongly held as public opinion, religion, lacking strong external support, cannot withstand attacks. The stronger the equality, the more important it is for religion to run counter to prevailing ideas (1964, Vol. II, p. 33). Bellah et al. reported John Adams as having stated, "Our constitution was made only for a moral and religious people. It is wholly inadequate to the government of any other" (p. 180).

These authors noted that American democracy is now in decline, that people are questioning their civil liberties and the efficacy of the Bill of Rights, for example, and that the United States lacks significant goals. Edgar noted that rather than a separation of church and state, there is "now a separation of people of faith from their government" (1992, n. p.)

Foster stated that democracy depends on ethical values which depend on religious beliefs. There is a problem in a representative democracy with high diversity, and he suggested that the answer could be to focus on the basic social values of democracy, justice, and liberty (1988, p. 40). Harman suggested that the "central project" around which to unify is the perennial wisdom as represented by Freemasonry and its symbolism and traditions (1979, p. 111).

Transcendence. Theorists generally agreed that the central point of focus for a return to spirituality is initially the individual--doing "inner work," as Harman called it, to deal with the true self and its inadequacies--followed by dealing with societal beliefs, or, as he saw it, determining values from the spiritual picture. Harman stated

that recognizing that we are spiritual is an important part of everybody's lifework (1992c, p. 6).

Dart (1991, p. A-6), Fox (1988, p. 211), Harman (1979, p. 114), Lamm (1985, p. 143), and Lear (in an interview reported by Miller, 1991, p. 6), described the following situation: Americans are feeling the moral and cultural ground crumbling. They ache to do the right thing, but they need moral guidance. We have moved to reality theology or triage ethics, and we need a thorough renewal of religious thinking in the West if civilization is to redeem itself. The new image of humanity is one of seeking awareness, individual potential is only limited by beliefs, and people must challenge materialistic images and scientific worldviews. Answers to the search for new images must come from deep within ourselves and that the quest will reactivate forgotten meanings whose traces can be found in core experiences and which will substantiate new ideas and approaches. Fox suggested that the power of liturgy, which literally means "work of the people," can create and recreate people by allowing them to experience healing through feeling "deep wellsprings of reverence for being all we have in us" (p. 211).

Dart said that the 1990s will be marked by "very personal crusades in which individuals rather than institutions set the standards" (p. A-6). Institutions are reluctant to deal with issues of transcendence, but they must not be allowed to suppress the human imperative for rediscovery and reinvention of a common spiritual life. Simmons stated that the shared collective vision is the "spiritual awakening of humanity" (1990, p. 247). Lear suggested that we must find new ways of learning more about each other's values and spiritual traditions and we must begin by looking within "to that place where humans from the very beginning of time have shared the same sense of awe and wonder as they groped for meaning." Lear also emphasized that we must guide the next generation to look deeper within itself in order to prepare it for the future world (1990, p. 6).

Bradshaw (1992, p. 50), Chopra (1991, p. 16), Harman (1979, p. 29), Hooker (1987, p. 32), Simmons (1990, p. 4), and Vaill (1990, p. 34) opined that focusing on an inner spiritual journey as a means to personal and social transition must be based on the belief that humans are spiritual entities, that a spiritual life is as necessary as

air, and that the law of human development is that we instinctively seek to fulfill, as life's goals, to awake spiritually and to live life as a form of celebration. Further, ultimate reality must be found in the spiritual and mystical, versus the material and empirical. The questions about what makes life meaningful and what human purpose guides us are religious questions, and we must be able to reflect on ourselves to find transcendence. Through the inner search comes an expanded conception of the nature of humanness--a healing balance between the absolute self and the relative self--which comes through personal awareness and an understanding of the relation of humans to the universe, all of which places humanity in a spiritual depth. Inner knowledge of this multidimensional story stimulates the humility and acceptance of both the limitations and strengths which are prerequisites for a spiritual life and which makes open communication with the larger world instantaneous and automatic. Without going inward life is an other-oriented existence with stress and turmoil; with an inner life there are no limits on the possibilities.

Huffington noted that inner growth and self-knowledge have been mocked by those seeking personal perfection. She quoted Solzhenitsyn as having said, "No one in our time finds it surprising if a man gives careful daily attention to his body, but people would be outraged if he gave the same attention to his soul." The truth of the journey to discover self-knowledge and self-revelation is that it is far from self-indulgent. Instead, by bringing in the experience we need to discover who we really are, we go beyond self-centeredness to a more alive state of being, a more expanded vision of what it means to be human, a greater emphasis on interconnectedness with the whole, and an awakened sense of responsibility to others in society, to the world, and to future generations (1989, p. 77). Hooker reminded readers that the youth who wander the malls have nothing to keep them occupied. "They don't have the mental means to come to terms with either the meaningfulness or the meaninglessness of their lives" (1987, p. 31).

Vaill said that the spiritual journey must be approached as a pilgrim rather than a tourist. Instead of trying to make the trip as much like home as possible, we must expect to be changed by the experience. The journey is as important as the arrival (1990, p. 34). Huffington agreed and noted that there are many paths on the

journey to inner knowledge of self and wholeness such as religion, art, science, body therapy, relationships, service to others, and "a determination to turn loving and forgiving into a way of life" (p. 77).

Fields et al. emphasized service to others as specific evidence of personal growth and social responsibility. They cited Mother Teresa as saying that "being with one hungry, naked, lonely, unwanted one--a sister or brother," is an example of the difference one person can make in a world beset with problems and injustices. People must begin by taking full responsibility for the conduct of their own lives, then they must acknowledge the needs of the world before their eyes and the opportunities by which they are surrounded, and finally, they must take an opportunity and work to alleviate a need. They noted that it is impossible to do this without deep resources of natural spiritual love (1984, pp. 237, 280).

Fox saw a unity of art, science, and mysticism as necessary for full inner awareness. Science provides knowledge of creation, mysticism creates spiritual union between individuals and creations and its unnameable mysteries, and art provides a means for personal express of the awe of creation. This "holy trinity" is necessary for a paradigm shift to a "living mysticism" (1988, p. 78). Hooker stated that,

The real challenge is to provide a metaphysics that adequately subtends our changing conception of the universe and our place in it, and our conception of the nature of life and the nature of persons. These matters are inextricably linked to religion. (1987, p. 31)

Coates and Jarratt said that futurists have largely ignored religious beliefs as a motivation of human action (1989, p. 24), but Simmons said that "the overwhelming majority of writers on the subject [of future thought] see the twenty-first century as spiritual" (1990, p. 232).

Grumwald, for example, said that "we may be heading into an age when faith will be taken seriously, and when it will again play a major part in our existence" (1992, p. 76). Bell believed that "there is a clearing ahead" and that "we are now groping for a new vocabulary." The existential questions of culture are inescapable and "the direction our culture will move will be toward new efforts to regain a sense of the sacred" (1980, p. 353).

Bellah stated: "No one has changed a great nation without appealing to its soul Culture is the key to revolution; religion is the key to culture" (1975, p. 162). Ferguson said that only religion--the spiritual dimension that transcends custom and politics--can carry the load of the future. The translation of our lives into a spiritual form of communication might make the entire globe into a single human family of single consciousness beyond fear and isolation (1980, p. 54).-

Fox stated that we need a change of heart, an awakening, a metanoia, a revolution and that these cannot happen without a renaissance--"a new birth from a spiritual perspective." He saw the renewal of worship as "allowing healing through experiencing a deep well of reverence for being all that we are capable of being [and as] linking the microcosm and macrocosm through praise and amazement for the existence of the universe" (1988, pp. 141, 160).

Naisbitt and Aburdene emphasized that we must acknowledge the spiritual significance of the approaching millennium. It carries religious beliefs that reflect world-end prophecies along with beliefs that a new century is a good time to embark on a new era. The last time the United States experienced a deeply religious period was at the turn of the nineteenth century with the shift from agriculture to industry, during which were created "several made-in-America religions--Mormon, Adventist, Jehovah's Witness, and Christian Scientist--along with the rise of the Transcendentalists and the popularity of spiritualism When people believe the 'time is at hand' [or are] buffeted by hard times and social change," they need spiritual beliefs (1990, p. 292).

Mumford expressed the belief that "the universe may yet undergo a transformation What man still finds within himself only at rare moments he may yet project to establish the world outside" (1951, pp. 72, 91). The new way of seeing the presence of a divinity is through a sound philosophy of a creative God who is evolving as he discloses himself in the human heart and directs individuals toward greater fulfillment of life. In this view, God is not the foundation of human existence but is a faint glimmer of a design still fully to emerge and to culminate in creation--the result of the ultimate development of individuals, their realization of themselves as divinity, love, and transcendence.

Mumford added that "religion develops out of the faith in the meaningfulness of human experience and that a divine purpose will ultimately prevail" (p. 76). The notion of an emergent deity is fragile and "no religion has been able to preserve it without corruption" (p. 75). He added, however, that "religion has done much to transform primitive man; human development has taken place most rapidly and fully where higher religious consciousness has pervaded at least an enlightened minority" (p. 89). Mumford therefore projected that religion will form fresh mutations which will move from older formulas--specifically away from a single focus on Christianity, which he saw as perpetuating the past and therefore unsuitable for redirecting the "demoralized energies of Western civilization"--to a new synthesis of religions and philosophies which will include Christianity but which will provide more active involvement in self-observation. This new approach will re-establish humanity at the center of the universe, overcome hatefulness, and create a worldwide community through gracious love. (pp. 90, 111, 116).

A number of writers agreed with the notion of a reiteration of spirituality in a move toward greater unity. Together Bell (1980, p. 277), Ferguson (1980, pp. 56, 61), Murphy (with Miller, 1992, p. 10) noted that recent research suggests that the world is not static and that its evolutionary development serves as an arena for growth. Throughout history shifts in the number and density of people have occurred with large geographic and social mobility patterns that have ultimately brought people to the fundamental changes we are now experiencing, that is, to the spiritual sense of convergence toward human and world unity and to a matrix of linked beliefs. We are now erasing all boundaries--obliterating the line between self and others. As body and mind become more united and skills and abilities become more refined, we are also obliterating the line between mind and body or between spiritual and physical. We are ultimately aiming at the dissolution of self into an at-oneness-with-God through ascension to a unitive consciousness.

Tarnas reminded readers that these ideas reflect those of Hegel, who "spoke with the certainty of one who had experienced a vision of reality whose absolute truth transcended skepticism" (1991, p. 382). Hegel saw the world as the history of a divine unfolding of the universe--a constant process of becoming or a struggle to

evolve that is motivated by mind-consciousness in which the divine reveals itself. God's incarnation as man and man's achieving possession of absolute truth are the climax of a long evolution of religious truth (p. 380).

de Chardin discussed these basic ideas at some length. He, too, saw the phenomenon of humanity as a linked, developmental sequence. Since humans cannot regard creation as incomprehensible, our faith must include the worship of another—one who is higher than humans, a "mysterious reality that we can do no better than simply call God," and for whom we need look no further than within ourselves (1964, p. 188). Creation assumes the self-sufficient presence of a "first being" which, in order to achieve a desired existence, created its own opposition and then united with it in a negation of the negation. The unification ipso facto created another type of opposition—an external pole of being. The self-sufficient presence, then, is surrounded by the creatable nil or the pure multiple, of which humans are a part. For God to regain total unity, since He can only create through unification, there is a gradual unification of the multiple elements back to the source. God or Christ exists, then, at the apex or Omega point of a conical universe which operates on the principle of ascension and synthesis (1975, p. 194).

Biological evolution has continued in an ascension pattern and, once the ability to reflect was reached in humanity, we ascended into what de Chardin called a "universe of thought," and thereafter the upward impulse for knowledge and creation predominated over the need for survival. As planetary compression forces the human mass to organize itself and as humanity becomes more intensely organized and centered, human reflection moves closer toward ultimate coalescence. The organism, releasing an upward spiritual force, finally detaches consciousness from all material arrangements and transcends to ally with cosmic involution which ultimately finalizes in the deeper experience of a metaphysical union at which the Omega point, the core of consciousness, creates a perfect image of the God in its reflection as it reveals itself (1975, p. 183). de Chardin explained the Omega as the tide of consciousness, of which we are a part, which pulls us toward completion in union with our process of self-interiorization. The Omega or Christic point is the ultra point of personal energy toward which humanity is experientially converging (1975, p. 191).

This belief system encompasses and clarifies observable characteristics of the structure and processes of the universe. The central phenomenon in the universe is life, the central phenomenon of life is thought, the central phenomenon of thought is personal interrelationships, and the central phenomenon of interrelationships is ultra-socialization, which is in progress. Spirituality or religion is the central point at which interhuman affinities come together and is the central axis for this universal convergence (1975, p. 191).

Love. de Chardin's final point is that the spirituality which stimulates convergence can only be achieved through love. Love is required to maintain the evolutive effort to hominize, and Christian charity is the most active agent of hominization. The process of unification takes place in a purely human ambience, in this situation it is not possible to be exclusive or independent, and, therefore, the only relationships that are possible are love for self and love for others. As charity, such as loving one's neighbor, is introduced into the process of congruence, the elements of the universe draw closer together and closer to God. Such charity transforms the miseries of failure into positive factors. Understanding of the nature of the universe bathes the believer in light and warmth and makes everyone a fit object for love and worship at a deeper level of the self. Love is the only way the full depths of psychic reserves can be released, and attitudes and passions meet and multiply at the upper limit of totality--the Omega point (1975, p. 203).

A number of authors agreed with de Chardin's emphasis on love as humanity's unifying factor. Campbell (1972, p. 160), Ferguson (1980, p. 383), Handy (1989, p. 203), and Mumford (1951, p. 160; 1955, p. 233) together saw compassionate, charitable, higher order spiritual love--love of self and neighbor, for example, versus passionate physical love--as the principle of all integration, the dynamic, creative, harmonious energy which causes humanity to focus outside itself, to accept in others' conduct the tendencies we see in ourselves, to be open to experience, to achieve deep satisfaction, and to discover our identity in the larger format. Fox noted that the word compassion comes from a word signifying mother love, and that it invites humans to let go of their fear (1980, p. 83).

Mitchell said that the attraction of love is the purpose for which the universe

organizes (1992b, n. p.). de Chardin reiterated that the true unity of heart and spirit liberates and super-personalizes humankind. People "on all the earth must acquire the consciousness of becoming one and the same and must learn to love one another" (1964, p. 119).

Autry (1991, p. 13), Harrison (1984, p. 101), Land and Jarman (1992a, p. 205), and McKnight (1984, p. 149) noted that connecting with others through loving and trusting one another is one of the most important things we can do. An example of such love can be found in the powerful and positive relationships of caring organizations, which are peaceful and sane refuges which reflect good management, worker comradery, high loyalty and dedication, and so on. The "L word," however, is a closet word in most organizations, as it causes discomfort, trepidation, fear, suspicion, and other strong reactions. Love could be called by other names such as caring, consideration, and open communication, but doing so causes it to lose its power. In the end, the notion of love needs to come out of the closet.

Harrison (1984, p. 101) and McKnight (1984, p. 149) saw love as an element of attunement. They said that in order for attunement to occur, people must open their hearts to one another, and through caring, empathy, understanding, mutual support, and forgiveness, they will see the needs and concerns of other individuals and of the whole and will unite in peace and harmony.

A number of authors stressed the importance to our future of recognizing and utilizing the unifying factor of love. Simmons stated that love, as seen in our acts toward others, is "a great social and spiritual force in the universe," and he reminded readers that it has endured over time in the face of every sort of catastrophe or disaster. The fundamental conflict of humanity is not between good and evil but rather between love and fear (1990, p. 262). Mumford opined that our civilization today needs inner renewal and that there is an increased need to cultivate sensitivity, tenderness, and the ability to feel (1951, p. 153). Ferguson agreed, saying that love or fraternity, once ideals, have become crucial to our survival (1980, p. 402).

Fields et al. said that the survival of humankind depends on love which is an emotional and a spiritual quality as well as a mind power native to all humanity. The spiritual development of love and trust in God is essential for casting out fear and

enabling the love of other humans which will then enable healing, effective social action, and world peace (1984, pp. 194, 237, 244).

Mumford expressed similar beliefs, stating that "only through a vast increase of effective love can the hostilities that now undermine our civilization be overcome" (1951, p. 284). The key to salvation is human beings discovering how to generate love, making ourselves capable of loving, and becoming ready to receive love (1951, p. 285; 1955, p. 301). Mumford concluded that love is concerned with nurturing life at every occasion--bestowing life on other creatures and receiving life from them. For "personal and social integration we must daily nurture and further life, repair some deficiency of love at some level, and make some payment to the common debt by daily expressing the delights of love and beauty" (1951, p. 286).

Summary. The place and importance of spirituality for the future, as noted here, has been of high interest to many theorists. They suggested that spirituality is a set of intuitively held beliefs or experiences which provides some understanding of human connectedness with the universe and its greater purpose. Our present state of transitional stress is stimulating people to search for human understanding--primarily in those competing and evolving religious systems which require their active participation. The spirituality that may emerge will be less likely to stem from a single or exclusive point of view than to emerge from the reiteration of the universal answers to existential question about human existence which have been asked through the ages--answers which hold that humanity is co-creator of a purposeful universe and is evolving toward an ultimate unity with a divine source.

The authors suggested that such a belief system will begin with personal human searching for connectedness and will move forward to create social connectedness, encompassing and uplifting current scientific and political beliefs and practices, for example, as it evolves toward universal coherence and convergence. The importance of such a spiritual vision of unity as a means to stimulate the energy and the intention to unite, through love and harmony, in the co-creation of higher levels of existence cannot be overemphasized. The creation of such a love-based spirituality is absolutely necessary for the future survival of humankind.

Future Choice

Creating the Future

A number of theorists suggested that humankind has the power to create the spiritual vision and unity necessary for survival. Morgan, for example, said that "As human beings who are able to make choices, we have in principle the ability to shape and influence the future, at least to some degree" (1986, p. 272). Popcorn expressed, the same thought with a bit more certainty: "Anticipating a new reality is the beginning of the process of creating it" (1991, p. 22).

Pascarella noted that among other values which are changing at this time is a new belief that our view of the future determines what we get (1984, p. 83). Vaill said that when we make choices or see what ought to be we are calling up an implicit vision of the future (1984, p. 32). Kiefer and Senge asserted that there has been a metanoic shift toward belief in the power of visioning and of individuals to determine their own destiny--an "emerging belief that we can collectively envision and create the society we want" (1984, p. 82).

Bell (1980, p. 65) and Theobald (1987, p. 5) stressed the belief in individual power to determine destiny, stating that human nature includes the capacity to alter or reorder the future by our own efforts when there is a commitment of will to do so. As Senge put it, "The only thing that can become fate for man is belief in fate. The free man is he who . . . believes in destiny and believes that it stands in need of him" (1990, p. 358).

Bell saw the matter of free will along with the need for rational cooperation as the fundamental and recurrent question of all political and social life. The problem with the future consists of defining priorities (1980, p. 65). de Chardin said that humanity, as master of its and the world's destiny, is a noble concept but that there is a dilemma. The fundamental impulse is finding "dual expression in two incompatible spiritual forms: the spirit of sacrifice and union . . . , and the spirit of self-worship" (1964, p. 188).

Simmons stated that "because of free will, our future is open to artistry" (1990, p. 5), and Nanus noted that "once it becomes possible to design key aspects of the human future, it becomes necessary to decide whether and to what extent to do

so" (1989, p. 59). Anderson (1992, p. 22) and Edgar (1992, n. p.) both stated that we are now living in a time when we can alter our future and we can mutilate it--ideas can be used for the destruction as well as the renewal of civilization--and that the outcomes depend on current ideals of civilization and on our images of what humanity should be. Kiefer and Senge emphasized that humans can participate responsibly and create a life that is meaningful and satisfying for everyone (1984, p. 82), but Cornish asked, "How can we possibly decide what we really should do?" He noted that there is little global agreement on goals or on how we should achieve them (1987, p. 58).

Foster stated that no model for the future exists. There may not be a model, as change may be a generic aspect of life. For the present, we must follow the emerging paradigm. The need for transformational leaders to facilitate these new processes is paramount (1987, n. p.). Harman, Senge, and Tocqueville all agreed with the need to be in tune with emerging thought in order to create a satisfying future. Harman said, "If you're part of a moving, evolving system and you're an organ in that organism, you act, but you take your direction from the whole organism and the evolution it's trying to go through" (1992b, p. 30).

Tocqueville stated that "it is not necessary that God himself should speak in order that we may discover the unquestionable signs of his will. It is enough to ascertain what is the habitual course of nature and the constant tendency of events" (1964, Vol. I, p. 7). Senge said that the man who believes in his creative role in destiny "listens to what is emerging from himself, to the course of being in the world; not in order to be supported by it but to bring it to reality as it desires" (1990, p. 358).

In Principia Mathematica, according to Davies, Whitehead and Russell suggested that God is responsible for ordering the world but He doesn't compromise the essential openness and indeterminism of the universe. God is a participator in the creative process who influences and is influenced by the unfolding reality of the universe. Davies illustrated this notion by telling of a game of Twenty Questions in which the group had no predetermined answer and had decided to answer the questioner's questions purely at random, subject only to consistency with previous

answers. When the questioner guessed "cloud," he was told "yes." Davies pointed out that, although the answer was not predetermined, it was not arbitrary. Its nature was determined partly by the questions asked and partly by chance. Davies made the analogy that "God determines what alternative worlds are available to nature, but leaves open the freedom of nature to choose among alternatives." He concluded that the world is not wholly determined or arbitrary but that, within a directed framework, there is openness (1992, p. 183).

Morrow reported a corresponding point of view. He said that "where certainties are absent, we make do with probabilities, and where probabilities are beyond our power to calculate, we seek refuge from insupportable ignorance in a future of our own imagining" (1992, p. 8). A World Future Society report stated that "we cannot know what will happen in the future" and that "futurists suggest things that might happen so that people can decide what they want to make happen" (1986, p. 1). Rost suggested, for example, that "we are not sure that the postindustrial era will be any better than the industrial era" but we need to give the new paradigm a chance. New thoughts about leadership, for example, must utilize postindustrial assumptions along with large doses of critical thought and methodology (1991, p. 183).

Gardner stated that humanity is well fitted for the effort of determining probabilities and creating realities. Human beings are "problem solvers--happiest when engaged in tasks of mind and heart"--as well as problem seekers. If there are no problems, we invent them. Games, for example, are invented problems. This attitude about problems reflects how people feel about their ability to influence their world (1990, p. 10).

Nanus suggested that humans can tune in to what is emerging, can create images of the future, and can construct and evaluate potential models. It is possible to obtain raw material for images and judgments of the future by tuning in to information such as existing societal structure, published forecasts, and so on, and by observing the impact of societal values and prevailing ideologies on choices of images. Rather, the data are used as a framework against which to feedforward and project possible futures on the stage of the mind--playing out alternatives,

assumptions, interventions, and so on. Images can then be identified as possible futures (everything that can evolve from the present state), probable futures (those possible ones which seem most likely), and preferable futures (those probable ones which would lead to desirable outcomes) (1989, p. 60).

Many theorists emphasized the importance of projecting positive images of a preferable future. Bellah et al. pointed out that, historically, there have been extremely negative views of humanity. They noted Hobbes, for example, as saying that "the general inclination of mankind is a perpetual and restless desire of power after power that ceaseth only in death (1985, p. 295). Simmons stated that such negative thoughts and "articles about transition times that focus on negative and alarm" become mass thought forms, stimulating the population to become agitated and alarmed, and producing self-fulfilling prophecies. Such ideas "miss the abilities of ordinary people to adapt and cope successfully," to understand the "interpenetrating spiritual events," and to recognize the "stupendous accomplishments and bright possibilities of the future" (1990, pp. 11, 14).

Berman said that we are living on a dying planet. Without radical shifts in consciousness "our children's generation is probably going to witness the planet's last days" (1984, p. 271). Ferguson said that we must respect the wake-up calls of our planet and our society. "If we continue to act as we've always acted, we're going to get what we've always got" (1992, n. p.).

Handy expressed the need to change in terms of Shaw's statements that progress depends on the unreasonable person--the reasonable one adapts oneself to the world and the unreasonable one persists in trying to adapt the world to oneself. Handy stated that this is the "age of unreason." The future is there to be shaped by us; it is a time for bold imaginings, for thinking the unlikely and doing the unreasonable" (1989, p.5). Theobald concluded that the "visualization of hopeful futures will help bring them into existence, both in personal lives and in societies" (1987, p. 44).

Grunwald (1992, p. 76), Morrow (1992, p. 6), and Naisbitt and Aburdene (1990, pp. xxii, 321) suggested that not all visualization of the future is likely to be hopeful. They pointed particularly to the symbolism and psychological power of the

millennium, which they saw as a metaphor for the future. These authors noted that the millennium is an event of imagination and it represents a dichotomy of vision--the ritual of world's end and death, with fear and depression, and of rebirth to a better world, with a sense of hope. It stimulates a focus on both vulnerability and wonder.

In the last quarter century, millennium visions have grown darker, with anxieties about the God-is-dead philosophy, skeptical attitudes, concerns about the worship of science and technology which culminated in the creation of weapons, and withdrawal from the promise of a consumer society and its plenitude. On the other hand, these anxieties and fears have resulted in a re-emergence of spirituality and aesthetic values which are signs of great hope and of readiness to embrace the two sides of human nature. In addition, small hopes are found in the daily lives of many people--some success in material gains, social crusades and elections, for example--as well as in the underlying belief that humanity moves in a steady ascent upward. The authors predicted that the emotional views of the future are likely to swing between ebullient hope to utter despair. A major national effort of will could create another Century of America or could preclude total disaster. The outcome is up to us.

Possible Scenarios

Harman wrote that predicting outcomes is normally done on the assumption that social systems change smoothly, remain self-consistent, behave similarly in similar circumstances, and are goal oriented and destiny seeking. At the present time, however, the old order is being challenged, so futures research and forecasts are difficult due to the need to predict a fundamentally different society with unpredictable value-laden positions (1979, p. 13).

Ayers (1979) theorized that there are two approaches to viewing outcomes of the future. The alpha approach predicts that the future is either positive and improving or negative and headed for disaster. The omega approach assumes the ideal future is already accomplished by a transformation, and it projects that vision.

Ayers, along with Berman (1984, p. 188), Boulding (in an interview with Coates and Jarratt, 1989, p. 105), Coates and Jarratt (1989, p. 21), de Chardin (1964, pp. 149, 232), Foster (1987, n. p.), Harman (1979, pp. 10, 35, 118, 128, 142), Henderson (1988, pp. 7, 333), Keen (1992 n. p.), Kidder (1988, p. B5), Mumford

(1951, p. 19), Popcorn (1991, p. 20), Sahtouris (1989, p. 198), and Theobald (1983, p. 54) adopted the alpha views and contributed to the following composite of those views.

The authors suggested that this time of rapid change, conflict, and confusion signals that we are at a crossroads in the evolution of Western consciousness. There are two likely responses to the dilemma--depending on either negative, pessimistic, dystopian or positive, optimistic, utopian points of view--and there is a fundamental attraction among human beings to both so that scenarios for future development could give way to either.

The negative view--of humankind as squandering resources, reaching critical points of famine and suffocation, being controlled by a surplus of technical complexity, and so on--has optional scenarios. The most common one is: As people become aware that they are building an unhealthy humankind, they are likely to move very slowly to change the beliefs and values which have evolved from their experiences and circumstances. They are likely to continue to move forward within a framework of continuity and with the same beliefs and behaviors as in the past, dealing with flair-ups by muddling through and giving no effort to reconstitute overall patterns. Rather, they are likely to rigidify, exhibit inertia, and redouble their efforts to maintain the present course, with the dilemmas not strong enough to generate change.

This lack of action would lead to what Henderson called a hyperexponential future--one which the theorists agreed would be based on assumptions that there is no real crisis and no need to change, that the old paradigm and past methods which got us into trouble are sound and can get us out of these problems, that salvation is through continued dominance of the old paradigm and through continued scientific revolutions, technological growth, industrialism, materialism, and increasing prosperity.

This view reflects both a lack of understanding of the need to change and the lack of a positive vision for the future. Strong resistance to change gets in the way of implementing new techniques which could improve human lives so that society would continue to be plagued with the same problems and disasters as in the past.

Realization of the vast damage we are doing to the planet, of the power we have to destroy the human world and end the species, and of the need and desire for change would come too slowly and too late--leading to the end of Western, and likely all, civilization.

A second possible negative scenario, according to the authors, is the total failure of society to respond to a realization of the need for change. This lack of reaction could occur in conjunction with resignation and belief that nothing can be done to change the economic-political relation of society--a belief, for example, that there is no way to deal with toxics, exhaustion of resources, or nuclear conflicts. This belief could lead to the total squandering of resources, famine, suffocation, collective genocide or suicide, and a deservedly undesirable end to the world.

Another response to late acceptance and realization of need for change, according to the theorists, could be an attempt to arrest the situation by instituting totalitarian controls and authoritarian regimes to dominate the social, political, and economic systems. This compulsive attempt to stabilize without radical renewal or reorientation of beliefs is a vain attempt to return to the safety of the feudal age. Many individuals bound externally by coercion would despair over the loss of their private, inclusive, ordered selves, and the ruling classes would generate irreconcilable catastrophes and ultimately wipe out all societies.

A final pessimistic scenario suggests an obscure future with the goal of preservation of the environment by creating a decentralized political autonomy, and returning to tribal ideals, regional cultures, and organic structures with fixed customs or with undisciplined individuals feeding on free fantasy. The authors foresaw intensive individualism as ending in irresponsibility, deterioration, and regression, leading to disintegration and total failure of the society at large.

Positive scenarios for the future described by the writers focus on transformation--reconceptualization of the situation, redefinition of the problem, similar operations based on significantly different goals, shifts in direction, radical restructuring, major systems change, or total metamorphosis. There may be substantial pain and breakdown before the realization that transformation is critical and before necessary changes are made, but the pull of clear signals, such as the

paradoxes generated by industrial innovations and the failure of old premises and old logic, will be enough to generate a shift.

Human beings have developed higher orders of survival than others species. In addition, the United States is highly adaptive. Therefore, people of good will can and will particularly be able to get themselves together to respond to needs and to achieve a nondisruptive transition to a new dream.

With the rapid spread of knowledge and learning, humankind will recognize critical issues such as population, poverty, crime, war, and so on, and will break down rigid determinism and free people from the limits of fatalism. With higher order thinking, people will perceive wholeness and completeness, will realize that they are endowed with a much larger role, and will take steps to raise consciousness and to reconstruct a socialization process of caring and connecting. A desire for connectedness versus self-orientation will motivate people to move toward a sane, humanistic, ecological future with greater individual responsibility for the consumption of goods, preservation of resources, and concern for ecology, for example. Spontaneous social movements and experiments have arisen, and people are now sensing at an intuitive level that humanity is on the threshold of its existence, that there is a need for major change, and that with such change the earth has many years of habitability ahead of it.

The writers concluded that human beings can make the transition, can emerge to a new level of existence where there are no rivals and where people are free to love and to dream. de Chardin emphasized that only through love and mutual affinity will humankind find and shape itself and that people must learn to love one another in drawing close.

de Chardin (1964, 1975), of course, initiated the notion of the Omega point of view, which Ayers (1979) described as perceiving the ideal future and projecting that vision. de Chardin said that "we can advance if we are clear about the direction in which progress lies and are resolved to take the right road The attitude of doubt will prove fatal. Destroying the love of life also destroys the life force of mankind" (1964, p. 61). He added: "To march ahead we need a great hope held in common-- an essential impulse to . . . greater synthesis and unity The more we allow

ourselves to believe in the superorganization of the world, the more we will find reason to believe in it, and the more numerous will become its believers" (pp. 73, 258).

Several other writers adopted de Chardin's view. Henderson, for example, stated that a positive view is essential if we are to move to a desired future (1988, p. 334), and Hubbard said that by holding positive beliefs and values we can have "holistic consciousness, synergistic cooperation, and a universal environment, among other things" (1982, p. 104).

de Chardin recognized that a positive view of the future and of humanity's ability to achieve it is not commonly projected: "A deep rooted change of heart is required to bring about the transformation of instinctive faith in Man into rational, constructive faith in Mankind" (1964, p. 186). Mumford agreed. "Man possesses enough life-furthering impulses and life-directed goals to save himself, but only on the one condition that a change in attitude overcome his inertia and make those impulses and goals operative" (1955, p. 248).

Bell offered a more pragmatic view, suggesting that we hold an attitude of liberalism toward other persons and society, which, he said, consists of three elements: a commitment to look critically at all social institutions with a view to reconstructing them, identification of values which emphasize humanism over extremism or mindless political or cultural activism, and emphasis on the value of liberty, particularly concerning self-regard and autonomy (1980, p. 229). Grumwald also held to the importance of an optimistic view and stated that "we are witnessing the end, or at least the decline, of an age of unbelief and beginning what may be a new age of faith" (1992, p. 74).

Many theorists discussed the importance of recognizing optional scenarios and their outcomes and of realizing the impact of today's choices. Swimme stated that we are living in especially exciting times due to "the vision of the death of the species and of the planet as a whole." This terrifying vision "gives us the power to ignite the deepest riches within us [and] brings us the energy to re-enact ourselves . . . , to create and change the essential dimension of things" (1984, p. 118).

Mumford stated that "the destination of this society at present is death" (1951,

p. 252). He noted, however, that the invention of the atom bomb and the fear of worldwide destruction, stimulated a moral recoil which holds unexpected hope for changes to "keep our knowledge from causing life to disappear from the planet" (pp. 228, 246). He opined that "people have never before been so close to losing the very core of their humanity" (p. 3) and that "the question is whether mankind has enough imagination to mobilize on behalf of peace and cooperation Unless the crisis produces such a dynamic will, man himself is lost" (p. 228).

de Chardin suggested that such will is possible, saying that the fear of destruction rendered by the atom bomb now discloses that pursuing the forces of life is the supreme purpose (1964, p. 147). An opportunity now exists for super-creativity, as humankind possesses "a reserve--a potential of concentration, of progress The future is seen as a period of positive becoming and maturing, one which man can advance in and shape through solidarity" (pp. 70, 186). de Chardin added that "we are in an hour of choice We must adopt a new point of view" (pp. 255, 258).

Obstacles to Change

The following authors discussed whether or not humanity might adopt a new point of view: Allen and Kraft (1984, p. 36), Anderson (1990, p. 8), Bellah et al (1985, p. 295), Fields et al. (1984, p. 205), Harman (1979, p. 4), Mumford (1951, p. 216), O'Hara (1988, p. 159), Simmons (1990, p. 265), and R. B. Smith (1986, p. 22).

These authors suggested that the future is not all good or all bad, that human consciousness implies free will and the necessity of choosing good over evil, and that the future will be what we make it by our actions today. We are now in the process of moving toward a new social construction of reality and for the first time, we are aware of the process. We are aware, for instance, that as we live our belief system, we are free to choose a different one, that we must now choose the direction our evolution will take.

We have now developed the capability of destroying all life, and we must be aware of the possibilities of tragedy and death as well as growth and liberation resulting from our choices. The coming transformation is not predictable, automatic,

or even probable, and disintegration is also possible. The choices are multifaceted and that those choices raise difficult ethical, moral, and religious questions. Tarnas concluded that

As a civilization and as a species we have come to a moment of truth, the future of the human spirit, and the future of the planet, hanging in the balance. If ever boldness, depth, and clarity of vision were called for, from many, it is now. (1991, p. 413)

Gardner saw a clear and motivating vision of the future as made up of two ingredients: positive attitudes toward what one can accomplish through intentional acts and a "recognition that life is not easy and that nothing is ever finally safe Positive attitudes about the future call for recognition of realities" (1990, p. 9). Harman agreed, saying that to begin developing a future vision, "we need to look at the obstacles to see what we can accomplish." He viewed society's dominant belief systems as a powerful obstacle to change, saying that by buying into those beliefs, we have become disempowered (1992c, p. 2).

de Chardin (1964, p. 250), Ferguson (1980, p. 353), Handy (1989, p. 59), Hubbard (1982, p. 46), Hunter (1991, p. 12), Mumford (1951, p. 110), Norberg-Hodge (1991, p. 60), O'Toole (1992, p. 30), Rappaport (1990, p. 2), and Simmons (1990, p. 35) expressed similar observations. Together they said that a major inhibitor to change in our society is that it is present-centered--it focuses on day-to-day existence, on immediate and superficial concerns, disregarding long-term thinking and not fostering long-term goals. The society of the science age lacks an imaginative conception of direction and an evolutionary perspective and is without grandeur of spirit. There is no purpose and there are no goals to stimulate energy. Therefore, the society exhibits strong behavior patterns of a closed, stable system, and its members hold vested interests in prevailing cultures and fixed ideas.

The authors stated that to Americans the future feels alien--they are shortsighted, they deny problems, and they mandate only marginal change. Although opportunities for growth are always present, they are coopted and compromised by American's coarser desires and their exploitation of the present. As a result of this present focus, Americans fear change as loss of control. They respond to new and

unexpected circumstances with upset and disbelief, and they greet long-term change as impending disaster--focusing on what they will have to give up or sacrifice and exhibiting anxiety, disapproval, resentment, and resistance in response to concerns that their lives would have to be changed.

These personal responses to possible change suggest the second obstacle of a transformed future: the human ego, which was discussed by Anderson (1992, p. 23), Mumford (1955, p. 301), O'Toole (1992, p. 32), Sahtouris (1989, p. 232), and Zaleznik (1987, p. 4). They described the human ego as having been initiated when humanity set itself apart from nature. Such separatism induces fear which leads to selfish, individualistic, secessionist, me-first behaviors and a belief in taking care of the self because no one else will. As people experience their self-interests diminishing, due to changes or disintegration of their situation, their innate drive for aggression is heightened and they become antagonistic in what they believe is a matter of survival. People use the past to bolster their self-esteem and to find justifications for their grievances, and, even if they have knowledge of how to move forward smoothly, they lack the will to do so.

Fields et al. noted the effects of me-first and aggressive attitudes. "We are so anxious to achieve some particular end that we never pay attention to the psycho-physical means whereby that end is to be gained" (1984, p. 162). de Chardin considered individual ends and aggression a misuse of human energy. He said that disorderly turmoil is the result of pursuing conflicting aims which leaves an excess of accumulated energy which is "the greatest enemy of man" (1964, p. 146). Hopkins said that humans have a surplus of psychic energy which can only be used successfully by turning it toward religion and glorification of God (1985, p. 50).

Mumford concluded that human self righteousness is "the chief mark of a dying civilization" (1951, p. 171) and that, due to a feeling of omnipotence and to an unconscious life, "the most dangerous enemy we now face is ourselves." He called for "reorganization of our personal conduct" (1955, p. 246).

The lack of a spiritual focus and its replacement by a mechanistic view were mentioned by other theorists as obstacles to a new future. Mumford noted that in recent history religion has failed to provide a place for many people and for many

aspects of personalities and that misrepresentation by false messiahs has led to distrust (1951, p. 109). He, along with Norberg-Hodge (1991, p. 60) and Sahtouris (1989, p. 233), agreed that spiritual impoverishment has been due primarily to adoption of a scientific, mechanistic view of the world, which, based on the beliefs that the conquest of nature and the focus on mechanical inventions will automatically bring improvement in the human state, has left us with no ethical guidance.

Mumford saw this loss of spiritual focus to a mechanistic view as leading society to "sophisticated barbarism and purposeless materialism," which other writers also saw as bars to transformation. Etzioni (1991, p. 39), Norberg-Hodge (1991, p. 60), O'Toole (1992, p. 32), Rappaport (1990, p. 2) and Simmons (1990, p. 35) together noted that fear of change stems from ego-based greed and is a set of habits and thought patterns brought forward from previous spirals of scarcity.

Selfish and greedy emphasis on instant gratification--exhibited, for example, by insistence on low taxes and high incomes and by insistence on maintaining individual control over economics while being willing to pay others to take care of such noneconomic matters as health and education--has led to decaying cities, poverty, and crime as well as to the collapse of public services such as education. The authors suggested that we must review the price of economic growth and prosperity.

Another obstacle to change, which Mumford saw as a result of focusing on a mechanistic view, is what he called the "simulated life of automatons" (1951, p. 252). de Chardin (1964, p. 250), Etzioni (1981, p. 3), Handy (1989, p. 58), Norberg-Hodge (1991, p. 60), O'Toole (1992, p. 32), Pelletier (1978, p. 2), and Theobald (1987, p. 15) also discussed the blockages caused by formal organizational structures, which they saw as robbing people of initiative and spawning servitude. Imposed structural rules stem from beliefs carried forward from the 1800s that humans are idle and irresponsible and would loaf if not controlled, as well as from a belief that impersonal rules will guarantee fairness. These assumptions have three results: there is little open dialogue or community support, dependency is fostered, and the belief prevails that there is little need for individual initiative or creativity. As a consequence of these assumptions, people experience social and psychological insecurity--futility, self-doubt, inability to stand on their own, and a pernicious fear of

success. They experience put-downs, which give rise to antagonism, and they perceive impersonal forces as presiding over their destiny, which leads to a denial of higher capacities and to an attitude of fatalism.

An outgrowth of these beliefs and behaviors point to another bar to a renewed future: institutionalism. According to Handy (1989, p. 57), Mumford (1951, p. 171), Norberg-Hodge (1991, p. 60), O'Toole (1992, p. 32), and Theobald (1987, p. 15), reliance on institutional direction has led to a declining interest in social participation and democratic justice. Institutions, with their inaccurate and incomplete information--Campbell even suggested propaganda, which he saw as having the main function of suppressing compassion (1990, p. 220)--block growth and health. They lead people to experience indifference, complacency, passivity, and a leave-it-to-them syndrome, to a lack of knowledge about how to mesh personal needs with others', and ultimately to a severe loss of cultural vitality.

Having explored the obstacles to a transformed society, according to Harman, people can apply the medical model and patch up the problems, if possible, by treating the symptoms, or they can go for a cure (1992c, p. 2). Berman stated that insights into reality, such as knowledge of the obstacles to a new future, need to be perceived in harmony with the total environment and must be recaptured in a mature form, that is, in the context of the larger mind (1984, pp. 189, 279).

As Sahtouris saw it, we gather together pieces of information or human ideas called "memes" which we then use to determine the nature of a new body of humanity or a common worldview (1989, p. 221). Ferguson (1980, p. 61), Hubbard (1982, p. 44), Huxley (1945, p. viii), and Theobald (1987, p. 5) agreed that societal changes or a new paradigm are built on individual choices and decisions at the grass roots--choices about what innovations or transformations, if any, we elect to make in ourselves to begin organizing and integrating toward higher, more complex levels. Ferguson noted that choice to make changes is based on the ability to explore our fears and to trust in ourselves and in possible outcomes (p. 116). Simmons added that "choices made by individuals stem from their basic predispositions; change the predispositions and you change the choice and the world" (1990, p. 265).

Attitudes About the Future

Bellah et al. suggested that, at present, predispositions in our society are somewhat ambivalent. They said that there are those who maintain their enthusiasm about the future and speak of a "new paradigm in which disassociated individuals will reach final fulfillment," and that there are also those who have uncertainty and express the desire to turn back out of anxiety for what is ahead (1985, p. 276). As Theobald put it, in a speech reported by Ferguson, "We straddle the 'functioning' present world and the new universe which we should like to bring into existence" (1980, p. 353).

A number of authors provided examples of expressions of uncertainty about the future. For example, Gelb wrote that there is "no evidence that a new post-mechanistic consciousness will rescue us, . . . no evidence of an age of peace descending, . . . no evidence that change will be for the better" (1991, p. 39). Bellah et al. said that there is a "feeling that enlightenment and liberation leads to ideological fanaticism and political oppression" and that there are those who "see progress to an abyss" (1985, p. 276).

Mumford stated that "with the insights and methods now in use, unity . . . is inconceivable" (1951, p. 223). Harman wrote that a "profound change in the dominant image of man seems unlikely," but he added, hopefully, "but it may occur" (1979, p. 118). Cleveland noted that ability to change assumes that modern humans have awareness of their responsibility in society, care about their destiny, and "would not possibly accept the fate of external rulers." This is a comparatively new state of mind, and the responsibility for revising things to achieve this premise is unclear. He wondered who the "we" are who must rethink our goals, re-educate ourselves, and conceive new states (1972, pp. 127, 132). Lasch pointed out that changes which will be necessary to achieve a new future, such as "forcible redistribution of income on a massive scale" are unattractive alternatives to the status quo and may not be found acceptable (1992, p. 71).

In spite of such expressions of uncertainty about the future, many theorists expressed confidence in a new worldview and saw humanity as having a noble side which makes people "capable of great acts," as Pascarella put it (1984, p. 175). Mumford, in fact, saw adversity as introducing "an element of tragic struggle into the

world; it rouses life to fuller effort It is essential to human growth and renewal" (1951, p. 157). Campbell (1990, p. 219), Hopkins (1985, p. 50), and O'Hara (1988, p. 159) said that humans are innately compassionate and basically trustworthy, they will move toward growth and health, they face and solve mighty dilemmas, and their accomplishments are impressive.

Ferguson saw the whole evolutionary pattern as "a drive toward greater order--a fundamental principle of nature called 'syntropy' which is an inherent drive for self-perfection" (1980, p. 161). de Chardin (1964, pp. 153, 196) and Mumford (1951, pp. 30, 125, 133) described this inherent drive as evidenced in the basic human behavior of people exhibiting hopes, aspirations, goals, and plans for life development. They saw these future visions as then serving to modify the impact of people's past experiences, to change their present perceptions, and to operate causal mechanisms in the creation of their desired futures. Humankind reflects a universal role as it exhibits a tendency to climb upward and raise itself to greater heights of consciousness, freedom, and ultimate achievement of totalization.

de Chardin (1964, pp. 202, 253), Ferguson (1980, pp. 52, 117), and Henderson (1988, p. 173), all saw humanity moving to greater consciousness as a process of acquiring new experiences, new powers, new sensibilities, and new tools and gifts which make people more capable of leading a fully conscious life. They saw achieving totalization as developing the mind to the degree that it is capable of continually fusing the cognitive (the intellect) with the emotional (love) to correct current models and form new ones as needed in order to continue evolving under constantly changing conditions.

Further, de Chardin perceived humanity's process of totalization as being so fully a part of the evolution of the whole as to be infallible. As humanity is forced together by the common power of planetary pressures driving us to unite, the people of the future will form a single conscience. We cannot escape collectivity and the universe, by its very structure, cannot fail to achieve peace (1964, pp. 149, 152, 306). This assertion is reflected in Cetron and Davies' strong positive statement that the American people will recognize the need to achieve consensus, will accept desperation measures as workable solutions, and will change. They believed that a

new society will emerge (1989, p. 322).

Mumford echoed de Chardin's positive beliefs, saying that at certain times in history, universal society becomes possible (1951, p. 106). Humans are the only creatures who are aware of their own death and that they are willing to make some sacrifices and renounce some satisfactions based on the belief that "the great use of life is to spend it for something that outlasts it" (p. 130). At certain times they exhibit a willingness to "stand deprivation for the sake of distant consummations" (p. 80).

Harman offered a final positive statement. He said that there is a growing social force capable of producing major institutional change and that a metamorphosis of society has begun (1992c, pp. 1, 4).

Many theorists supported the notion that society is now beginning the gradual process of the new emerging from the old. They emphasized that such change can only occur by conscious choice and that such choice must be made in consideration of the whole. Sahtouris noted that we have free choice and that it can be exercised in our own self-interests, but that using nature as our best source of guidance, we must acknowledge that there is a natural ethic which suggests that every holon within every holarchy must work to preserve itself (1989, pp. 223, 225). As Norberg-Hodge put it, we must have a "deeper understanding of the interrelated forces that shape society," a wider perspective and an understanding of what we want to gain, in order to move to balance and to learn to heal ourselves and society (1991, p. 60).

Taking Responsibility

Mumford stated that in "effecting this transformation in society, it [change] must first take place in the minds and hearts of individuals who have the recourse to re-educate themselves to the realities and take command" (1951, p. 252). He, along with Sahtouris (1989, p. 223) and Theobald (1987, p. 71) agreed that individuals must examine themselves to determine what their responsibility is for their own and society's survival, to re-appraise their standards, attitudes, and expectations, and to apply the values of honesty, humility, and love to making real-life choices about what is good or bad, wise or unwise, to do--personally and socially. Mumford (1951, p. 17) and Sahtouris (1989, p. 227) agreed: In making responsible choices, we must

look out for ourselves and we can't just reject our present life wholesale, but the resources of our society must be concentrated on building up and regeneration and must be shared to contribute to the welfare of the whole.

Mumford wrote at some length about what he called "the ultimate wisdom of an ethic of development and fulfillment" (1951, p. 156). "We must take upon ourselves the burden of correction, be strong enough to admit error" (p. 172) and must "sacrifice the overdevelopment of particular functions and subordinate them to the dynamic good of the whole" (p. 191). People must continually reassess reality and must develop a conscious daily dedication to making sacrifices for higher values and continuous affirmations of love (pp. 172, 173). People are capable of finding new paths and are able to choose courses for fuller development (p. 85), and he affirmed that "acceptance of man's tragic destiny will lead to man's further development" (p. 156).

As a means to reassess reality and to identify a new path, Foster suggested the use of critical thinking, which he saw as a possible means to achieve a quality of change by transforming opposites into new dimensions and possibilities (1987, n. p.). Many theorists suggested opposites which must be transformed.

Campbell (1972, p. 47), Ferguson (1980, p. 130), and Mumford (1955, p. 172) focused on the need for personal transformation, saying together that human beings must move beyond dead philosophies, old assumptions, patterns from the past, old habits and routines, and past experiences to move toward trusting the possibilities of change and toward cultivating virtue and goodness and fulfilling creative possibilities.

Bell (1980, p. 30), Bellah et al. (1985, pp. 277, 284), de Chardin (1964, pp. 134, 148), Handy (1985, p. 188), Keyes (1982, p. 131), Mumford (1955, p. 302), and Theobald (1987, p. 16) wrote of transforming individuals toward societal concerns. Together they said that humans must change their egoistic focus on autonomy, solitude, selfishness, individual personality, and separatism. They must move toward attaining their supreme center through the spirit and conduct of kindness, love, compassion, giving, service, embracing others, and commitment to community. People must overcome mistrust, anger, hatred, aggression, and the

tendencies to focus on negatives and to use conflict as an excuse for violence. They must move to responsible actions, to belief in liberty and dignity for all, to seeing conflict as an opportunity for creative thinking, and to perceiving others as seeking help to grow and as needing heartfelt sympathy. They must move toward collective convergence.

Harman (1979, p. 10), R.S. Miller (1992, p. 14), Mumford (1955, p. 229), Plummer (1989, p. 13), and Theobald (1987, p. 16) specifically noted the need to move away from addiction to and pursuit of out-dated values of success, status, power, external rewards, materialism, maximum economic growth, and the general repression of life. We must move to a focus on the inner development and inner-directed values of creativity, personal expression, self-actualization, to a more compassionate approach to life, to a more human and person-centered society, to focusing on the perceptions and needs of others, and to living within environmental limits.

In general, these theorists agreed with Mumford's statement that "There is no part of our modern world that we must not be ready to scrap if it is the price of mankind's safety and development" (1955, p. 229). de Chardin said that the earth has many years of habitability ahead if we made the necessary changes today (1964, p. 121). Watts stated that:

Those individuals and institutions willing to adapt and change with the times will lead the way in the next century. Those who insist on entering the 21st century with the tools and techniques of the 20th century will almost certainly suffer. There is really but one choice. (1987, p. 101)

Theobald, in a speech reported by Ferguson, said that "the new world promises to be both personally and professionally more rewarding if we should take the leap of faith to embrace it" (1980, p. 353). Mumford stated that "man must leap upward over peril to overcome the conditions that threaten survival of the human race," and that a "small, reluctant effort will not suffice" (1951, p. 11).

Mumford stated that "when a new movement comes, we may still falter [because] it is easier to acknowledge a new truth than to find a method for fulfilling it" (1951, p. 252). Campbell reflected on the possibility of achieving a new society

and offered Spengler's condition that a society must be "in form," as an athlete is in form. Campbell said that top form must be achieved and maintained for a winning culture and for survival of civilized life (1972, p. 52).

A Society In Form

Many authors offered suggestions for an "in-form" society. Several agreed with Pascarella, for example, that attaining success must begin with restoring people as individuals and as members of the human community. In brief, these theorists suggested personal conditions necessary for change such as: dedication to self-improvement and self-development (de Chardin, 1964, p. 195; Mumford, 1955, p. 249) personal responsibility (Handy, 1989, p. 50); self-motivation, inner-directedness, and intuitive unfolding (Simmons, 1990, p. 266); and introspection to align with greater consciousness (Mumford, 1951, p. 252).

Some writers saw unity as necessary for an in-form society. Briefly, they mentioned such elements as: caring for all persons and all things and addressing the needs of the next generation (O'Toole, 1992, p. 30); using wisdom and power to serve others within the divine principles of the universe (Campbell, 1972, pp. 273); seeking alignment of those who believe in the need for higher consciousness and creating a force field of human awareness (de Chardin, 1964, p. 80; Henderson, 1988, p. 5) joining spirit to spirit in common vision or shared passion to achieve a sympathetic union and a wider degree of freedom (de Chardin, 1964, p. 234; Hubbard, 1982, p. 14) perceiving humanity as one with nature and appreciating the wisdom of the planet to teach us (Sahtouris, 1989, p. 208); and understanding human purpose as extending to all the universe (Sheldrake, 1991, p. 82).

A number of theorists focused on the importance of spirituality in a winning society. In brief, such suggestions were offered as: admission of powerlessness and the belief in a power greater than self (Harman, 1979, p. 6); commitment to common worship and to expressions of gratitude and wonder (Bellah et al., 1985, p. 292); spiritual quest to better our lives and those of our neighbors (Naisbitt and Aburdene, 1990, p. 321); expectation of something greater and the vital urge for personal transcendence (de Chardin (1964, p. 184); continued religious quest for our creator as an inspirational source of guidance and a better life (Sahtouris, 1989, p. 229);

alignment of actions and values with desired ends (Fields et al., 1984, p. 244); "readjustment of our ethics and aesthetics to the new unfolding pattern of reality" (Mitroff, 1987, p. 149); and development of new myths built on religious and spiritual themes (Theobald, 1983, p. 54).

This rather sketchy collection of visions for an in-form society can be perceived, in the context of the necessity and opportunity for making choices, as focusing on the need to create a new future, as suggesting a possible scenario, as hinting at obstacles, as reflecting certain attitudes, and as seeking the balance necessary for a well formed future society.

Summary

The opening remarks quoted at the beginning of the chapter--that no one really knows what transformation means or what the future will bring--remain as true at the end of the chapter. Reflection on other opening remarks--such as those noting that our future society will be different and that change may be constant--suggests that they also remain true, but further examination of the ideas behind those opening statements have helped to develop some insights into theorists' perceptions of what we might do and where we might place our attention at the present time as we envision change and a different future and as we take action to create them.

The authors suggested that we must concern ourselves with human needs for inner development and for other-connectedness and with the integration of the two. They also said that we must pay particular attention to the full development of the human mind and toward a full utilization of the mind, such as its ability to hold and release deeply held, hidden motives and to develop new meanings as well as its powerful ability to cause future realities.

According to these authors, we must also attend to full utilization of the mind's capacity for revealing inner knowing and for developing new thought. In addition, we must particularly focus on the mind's position and function with a universal mind--as it interprets and creates meaning through human symbolism and as it accesses greater, universal knowing.

These theorists stressed that we must be aware of the importance to the future

of individuals becoming in touch with themselves as part of a greater body of divine wisdom, particularly since the authors projected the future to be a time of unity and coherence around common understanding of a universal, higher purpose. Throughout all time humanity has sought, through many means, to achieve spiritual knowing. They noted a persistent universal theme--one suggesting that there is a divine creator of which humanity is a part and that human life is a meaningful journey toward the destiny of a single consciousness--which they saw as likely to continue on as a major theme of the future. The importance of supporting humankind's attunement with that spiritual knowing, and of supporting humanity's experience and expression of universal love will increase the intensity of the need and desire for ultimate unity.

Our lessons for the future include being aware that our present choices create future outcomes. We are reminded that negative outcomes are possible, that there are obstacles to overcome in order to create a positive future, and that there are negative as well as positive attitudes which must be addressed. The authors suggested that moving forward in transition to a positive future must begin with developing individual then social responsibility and must include the vision of a society in winning form.

These recommendations for awareness of our decision making and its impact on the future reflect themes which continuously arise in discussions of transition: the need for transformational growth to proceed from individuals to social and global levels and the need for both a clear understanding of the present and a clear vision of a desired future as necessary for creating the intention to move to a that future.

The next consideration is the impact and application of these understandings in our organizations.

CHAPTER VI

ORGANIZATIONS AND SOCIETY

A vision of society in winning form, as a stimulator of intention for individuals and ultimately for society itself to move forward in its transition, must be created and held around that society's organizations, since, as Bolman and Deal put it, "Almost every human activity [is] a collective one. We are born, raised, and educated in organizations. We work in them and rely on them" (1991, p. 5). Clancy et al. observed that communities of people seek to create societal forms and fashion social lives to meet the needs of individuals and of the larger social order--creating communities in accord with a desire for connectedness and a means to "appreciate the gift of life" (1988, p. 74). Drucker, according to a review of his work by Coates and Jarratt, concluded that we structure our society in terms of organizations (1989, p. 129). Nanus said simply, "organizations provide the warp and woof of modern society" (1989, p. 123).

The Relationship

Organization-Led

A number of theorists expressed strong opinions that organizations, specifically businesses, are the stimulators and creators of societal change and transformation. Harman saw businesses as the "driving force in society" and large corporations as society's "planning agents" (1979, p. 128). Kanter said that "the fate of America lies in its businesses" (1989, p. 13), and Senge added that "in modern society, business has the greatest potential . . . to contribute toward dealing with a broad range of society's problems" (1990, p. 347).

Norberg-Hodge said that "business can steer society to social balance" (1991, p. 60), and Ferkiss noted that "through the sophisticated approaches of planning and organizational theory we can create means of social coordination" (1975, p. 259). Morgan suggested that as organizations are planned and organized, they "play an

active role in constructing their environment" and that as they develop and assert their own identities, they "initiate major transformations in the social ecology to which they belong" (1986, p. 245). As organizations unfold "over time in an open-ended evolving way, social transformation is controlled by self-referential processes that define the total system" (p. 247).

Coates and Jarratt saw corporations as "the largest single factor in our society capable of shaping our political and social agenda positively" (1989, p. 281). Cleveland also saw organizations as a large societal-shaping factor, noting that the larger the organization the larger the impact. "All private enterprise has some degree of public responsibility" and the larger and more complex the enterprise, the more people it affects and the more responsibility it has. The sheer size of the dominant organization will "increasingly require those in [them] to act as though they are responsible to the general public. Because they are" (1972, p. 48). Bellah et al. stated that corporations and the government are the most powerful structures in society and that they affect everything else (1985, p. 275).

Handy noted that changes are taking place in the world of work which have an "impact on government and on the rules of society" (1989, p. 238). Ogilvy suggested that corporations are now taking over some governance functions (in an interview with Coates and Jarratt, 1989, p. 222), and Kiplinger predicted that in future there will be less government regulation of business--with fewer regulatory laws enacted and with gradual removal of some existing regulations--and that government will assume a more background role (1986, p. 8). Cleveland asserted that "nongovernment organizations in our society can do some things better than government can" (1982, p. 173).

Garfield reminded his readers that Adam Smith's perception of capitalism included the notion that businesses, in pursuing their own profit motives, are led by an invisible hand which also promotes, without the businessperson's conscious intention, the interest of society (1992a, p. 315). Brown and Isaacs noted, however, that the "'invisible hand' is faltering. It depended on a consensus of overarching meanings and values which is no longer present." Contrary to the assumption that free enterprise added up to desirable social outcomes, "modern organizations and the promise of the 'good life' have separated us from . . . the connection to our own

spirit" (1991, p. 3).

Pascarella emphasized that organizations must have conscious intention to be meaningful social instruments. Corporations can be viewed as responsible only for profit but that ultimately they impact social programs. He saw organizations as energy, as having potential power approaching the infinite, and as having social responsibility just as individuals do (1984, p. 97).

Several theorists agreed that although organizations are potentially powerful instruments for guiding the best interests of society, they are ill prepared and are failing to do so. Cleveland noted that basic documents of American democracy, such as the Declaration of Independence, guarantee equality of certain unalienable rights to citizens. However, in our ever increasingly complex environment it is "becoming more and more evident that institutions built on this doctrine are not remaining true to the purpose" (1972, p. 123).

Harman stated that business corporations are the dominant institutions on the planet and they hold the "paramount position as guard of the most precious values of society The most serious problems of modern society arise from the successes of the industrial society paradigm" (1988, pp. 108, 111). Although that paradigm created great benefits in the past, it doesn't work any more. It now creates problems faster than it solves them (1988, p. 112; 1992a, n. p.). It doesn't work because such institutions don't have a "tradition of responsibility for the whole" (1992a, n. p.).

Bellah et al. pointed out that Americans still emphasize the pursuit of individual affluence and perpetuate the illusion that we control our fate because we have considerable individual economic opportunity. But the "powerful forces affecting our lives are not operating under the norm of democratic consent. Corporations are private governments making decisions on the basis of their own advantage versus the public good" (1991, p. 79).

Cleveland wrote that "public executives in private organizations" are induced to operate within acceptable social boundaries, which are determined by public outrage and by government intervention, and by a double sanction: the executive's personal conscience and the external expectations placed on executive behavior" (1972, p. 51).

Manne pointed out, however, that in the history of business, social

responsibility has occupied an intellectual role but that it has "never been integrated into the theory of economics or human behavior" (1991, p. 76). The belief that business has a social responsibility has persisted because it gave Americans who can't comprehend the complex market system a sense of power and comfort to hear that business had a personal responsibility to them. The belief has been perpetuated by government officials, who could take political credit for vanquishing irresponsible businesses such as polluters; by intellectuals, who got mileage out of debating the moral issues of business behavior; and by business executives, who were flattered to think of themselves as the divine elect who were obliged to look after lesser beings and who saw social responsibility as economically sound public relations (p. 77).

Social responsibility on the part of business is a fallacy on a number of counts, however. (1) Individual firms can't make a satisfactory impact. "No evidence can be found that voluntary corporate altruism has ever made a significant dent in any but the most insignificant problems addressed" (p. 78). (2) Solutions require collective decision making, and government has muddied the waters when it come to solutions. (3) Costs are passed on to consumers. "For industry to be fully competitive, significant nonprofit behavior is impossible" (p. 79). Some limited surplus might be available for social welfare, but beyond that, nonmarket-oriented activity deprives shareholders of their own money, which inevitably leads to new management, takeovers, and the like.

Manne concluded that "no individual firm could profit from voluntarily advocating the traditional values and ethics of the free enterprise system Businesses are likely to continue to advocate a second-rate economic system and to denigrate a better one" (p. 79). Ferguson reflected similar sentiments when she stated that "corporations have evolved into powerful, semi-regulated little states bearing almost no resemblance to the 'free enterprise' we say we cherish" (1980, p. 196). Cleveland noted that board members and top managers often operate as a self-perpetuating oligarchy--responsible to themselves and to each other. They see themselves as only ultimately responsible to the people-in-general, which means that they simply wait to see "when public acquiescence will give way to public outrage" (1972, p. 50).

Henderson reflected a similar point of view. Corporations are the "dominant

institution of our time [and] corporations, in pursuing profit, regularly make ipso facto social decisions of enormous impact." Large corporation executives see themselves as power brokers, "mediating the interests of virtually all other constituent groups in the entire society" with the right to make social decisions as well as decisions to maximize stockholder's profits (1979, p. 83).

According to a review of Crystal's book In Search of Excess, Wolf said that corporate officials have lined their pockets at the expense of shareholders and that the pay of United States executives, compared to their workers and compared to executives in other society, "raises fundamental questions of equity and even of decency" (1991, p. E-6). Henderson noted that consumers are now becoming aware of narrowly-based economic decisions controlling such things as society's resources, for example. She concluded that examining the beliefs of our industrialized society and "a reconceptualization of the underlying premises of the industrialization process" are two of the most urgent items in our time (1988, p. 345).

Berman stated that "Western culture, its institutions and individuals, are in various degrees of runaway." We have too much profit and too much GNP; as a social system we have been mesmerized by the purpose of profit making. We are now getting self-correcting feedback. He cautioned that runaway systems eventually die and that we must change or hit bottom (1984, pp. 242, 257). Brewer agreed, concluding that we need major transformations and paradigm shifts, beginning with local communities as primary sources of relations of people and of wellsprings of integrity (1986, p. 14).

Harman noted that restructuring of institutions and corporations to make them responsible to those affected by their actions and to give them a legitimate goal-defining role for society could come about in different ways: through people simply accepting organizations' goals as good for themselves as well, through managers accepting and responding to the public as holding vested interests in organizational goals, or through government control. He noted that the courts are already moving to make corporations responsible to the public (1979, p. 128).

Whitman observed that government regulations are increasingly holding corporations responsible for such items as environment, safety, and job security, for example (1987, p. 84). Cleveland said that people tend to exercise control and affect

executive power with the public interest by making government responsible for private business (1972, p. 52).

Wishard pointed out that people charge government with the responsibility for developing public policy to foster individual initiative while mitigating harmful social side effects (1987a, p. 28). Coates and Jarratt (1989, p. 20) and Hunter (1991, p. 12) noted, however, that American political institutions are not prepared for that responsibility--they lack a world view; they have difficulty dealing with long term, global, cross-cutting issues; and their outdated functions lack the necessary flexibility to deal with current changes and demands. As a consequence, according to Ayers, "organizations function according to the rules laid down by the underlying structure of the law which often promotes shortsighted behavior," and the government is held responsible for poor organizational response to public need (in an interview with Coates and Jarratt, 1989, p. 83).

Bellah et al. noted that in response to continual pressures from diverse constituencies the government has become intensely involved in all sectors of the private economy, but, at the same time, Americans have maintained a traditional suspicion of governmental power (1991, pp. 23, 26).

Maccoby, in a speech reported by Wagner, suggested that people are not happy with governmental responses to their charge to control organizations. Due to the failure of government to exercise control, "we are in one of the worst periods imaginable in terms of people's attitude toward government" (1984, p. 33).

Ferguson (1980, p. 191), Halal (1990, p. 28), Norberg-Hodge (1991, p. 60), and Toffler (1980, p. 392) together said that Americans are aware that the big government structures and institutions of the past are no longer appropriate and are about to become obsolete. Centralized controls are too cumbersome to manage the exploding complexity of the Information Age and the rapidly emerging insights into human needs and capacities. People are calling for a transformation of the political system and a decentralization of political and economic structures to ensure local accountability and to permit entrepreneurial freedom.

Wagner reported that a futurist convention had been held to discuss "Governance and Foresight" at which attendees anticipated changes in values and institutions and focused on the government's urgent need to regain the public faith in

its responsiveness to shifts in society (1991, p. 33). Maccoby opined that the poor attitude toward government must be reversed because the major problems we face require public-private cooperation. "Until government takes the lead in changing organizations, it will be seen as part of the problems" (1984, p. 33).

Feinselber, reporting a study by Hansen, stated that "Congress may be as fed up with the public as the public is with Congress." Hansen's study reported statements from members of Congress that the public doesn't accept the truth, that people want gains without pains, that they don't want to be told what they don't want to hear, that they want instant solutions to complex problems, and that they remain inattentive and disengaged (1992a, p. A-3).

Etzioni agreed, pointing out that Americans have delegated someone else, either directly or through taxes, to perform human acts they don't care to undertake (1981, p. 4). Ferguson concurred, saying that government has been a strategy for not facing responsibility, a means of removing decision making from reality (1980, p. 193). Etzioni continued that "there is a danger in blaming all our malaise on government" (p. 4). Bellah et al. pointed out the problem: Government is not only increasing its interventions in institutions, but government itself operates only within the context of institutions [and] we lack a common moral grounding for the new decisions our government is making" within this context (1991 pp. 26, 27). They noted that "the decisions we are making and will make about the future of our institutions will reshape us as moral beings" (p. 42).

Etzioni also noted that there is a danger in "assuming that individuals would step forward to restore an energetic nation if government involvement were reduced" (p. 4). Since the natural community that would support individual action has been displaced by formal structures, "heavy intervention of government in people's lives has wounded both the individual and the natural community" (p. 3). He questioned whether Americans are ready to stand on their own and to operate effectively without the control or guidance of government. He voiced some concern that there could be a "surge of senseless individualism" versus a healthy combination of self-reliance and community action" (p. 4).

King expressed similar concerns. There is currently a general impression of a decaying public morality in society which suggests a weakening of will in people and

in society to "practice what they sense to be true." There is a need for individual egoism to project forward and embrace the survival of the larger society, and he expressed concern that the internal adoption of new attitudes and values will not be accomplished quickly enough to solve urgent global needs (in an interview with Coates and Jarratt, 1989, p. 177).

Bellah et al. echoed those concerns. "We have been blind to the way our institutions enable or cripple our capacity to be the persons we most want to be" (1991, p. 50). We need to understand how much of our lives are lived in and through institutions as well as how better institutions are essential if we are to lead better lives (p. 5). Only greater citizen participation in organizational and governmental institutions will enable us to surmount the deepening problems of contemporary social life (p. 6). "Our problem is how to educate ourselves as citizens so that we really can 'make a difference' in the institutions that have such an impact on our lives" (p. 19).

Bellah et al. added that we cannot solve the problems of corporate life simply by improving individual organizations. Rather, we must reform the institutions themselves--examining how they are conceived and the norms by which they operate (1991, p. 11). Harman agreed. The whole system must change, not just corporations. Large corporations have a dominating influence, and they must change to bring their goals in line with society's goals. The new paradigm needs business policies to be at one with social policies, organizational goals to enhance humankind, and full participation by members to set social policies (1979, pp. 129, 132).

Bellah et al. concluded that for such a transformation to take place, a dedicated social movement would have to develop out of existing groups and organizations. Such a movement would lead to changes in the relationship between government and the economy and in "the climate in which business operates so as to encourage new initiatives in economic democracy and social responsibility" (1985, p. 286).

Society-Led

A number of authors expressed the notion that such a social movement is beginning--individuals and the public are examining organizational behaviors, questioning the basic beliefs of an industrial society, and exercising initial influence. Together Ferguson (1980, p. 196), Harman (1991c, p. 1), and Naisbitt (1982, p. 144)

said that after four decades of trusting in institutional help and of society running its affairs with an agreed-upon form of interaction based on the scientific paradigm, the conflict is getting too intense to be suppressed. The institutions of the old society are working less well and that there are signs of a growing social force capable of producing major institutional change and a great transformation.

Etzioni (1981, p. 4), Naisbitt (1982, pp. 170, 175), Naisbitt and Aburdene (1990, p. 334), and Toffler (1980, p. 427) all perceived a shift from power resting with institutions and from decision making depending on organizational representatives to power and decision making determined by personal influence, individual initiative, self-assertions, and self-representation, that is, from a focus on government and a representative democracy to self-help and a participative democracy.

de Chardin said that in a democracy there is tension between individualism and totalitarianism but that there is no fundamental contradiction because a true democracy must have a balanced combination of the two. He emphasized that the realization of democracy depends on the growth of human consciousness (1964, p. 242).

Ferguson perceived such growth. She said that in the past there was a sense of individual impotence due to constricted awareness but that there is now a wider awareness—an awareness that power comes from the inner center, that individuals make up institutions and therefore have the power to change them, that institutions have social responsibility, and that social harmony ultimately comes from the character of individuals (1980, p. 192).

Other authors agreed that there is wider awareness and observed that: people are coming out in the open to deny the legitimacy of certain aspects of capitalism (Harman, 1992b, p. 29), consumers and civil rights groups are challenging the "divine right of management" (Henderson, 1988, p. 114), and neighborhood and community groups are claiming the right to participate in local decision making (D. M. Fields, 1991, p. 36). Whitman added that society no longer regards profits as the sole organizational goal. "There is a kind of implicit social compact under which corporations exist in which they are expected to do a good deal more than that and are expected to fulfill a great many goals." Some organizational goals may conflict with social goals, but there should be a balance (1987, p. 85).

According to Garfield, the isolationist view of organizations is crumbling. Social problems are making an impact, and "organizations must be fully participating partners in local, national, and global communities (1992a, p. 317). Henderson noted that people are aware of large organizations as predominant forces in our society and are also aware that in order to deal with the system they must work within it. People also understand that they are part of the system--and therefore within it--and that with sufficient creative, vigorous, and uncomfortable public pressures," the predominant forces can be "adapted to the needs of the present as well as the next two decades" (1979, p. 89).

Ferguson (1980, p. 340), Harman (1988, p. 130), and Schwartz (in an interview with Coates and Jarratt, 1989, p. 252), pointed out that businesses are likely to be the most open and sensitive groups in society to respond and adapt to environmental and societal pressures because they face an uncertain environment and their success depends on anticipating shifts and perceiving early trends.

Bennis (1989, p. 28), Harrison (1984, p. 109), King (1986, p. 319), and Lamm (1985, p. 68) agreed that organizations are influenced by the forces of society, external events, and crisis, which provide the opportunity for change, and that responses to such stimulus often result in short-term solutions. Harman noted, on the other hand, that major institutional change is often a response to a challenge to the legitimacy of dominant institutions which stems from changes in the sociopolitical structure (1979, p. 117).

Harman stated that we know how to and we can challenge the legitimacy of organizations and that they may change initially for economic reasons, but that what is needed for the long range is inner work, that is, changing the organizational culture (1992a, n. p.). "It is critical that business people have as much understanding as possible of the forces at work" to help them make change smooth and nondisruptive (1992b, p. 28). Ayers agreed saying that for organizations and institutions to reform they must understand the underlying societal structures which govern their behavior (in an interview with Coates and Jarratt, 1989, p. 83).

Harman said, in early writings, that organizations make microdecisions which add up to macrodecisions affecting the total society and that macrodecisions must be made to preserve and enhance society. The effect of organizational decisions calls for

new kinds of social responsibility and calls for institutional changes to bring organizational goals in line with society's goals. It also calls for the re-education of the whole society to bring about collective and voluntary redirection so that microdecisions will be made in accord with overall social choices (1979, pp. 79, 86, 129). More currently Harman has asked, "If business is the engine that creates the future, how does business learn to conform to a totally different picture of reality?" (1992b, p. 27).

Adams stated that the external environment with which the organization interacts is a suprasystem. The environment operates on a worldview and provides a performance ethos, such as myths about the virtues of hard work, for example, which organizations reflect (1984, p. 195). Trompenaars, in a report published by Johnson and Associates, noted that the national culture influences how organizations and their members are organized and managed (1992c, p. 388).

Several authors agreed that organizations should be responsible to society for its welfare. Clancy et al. (1988, p. 83), Cleveland (1972, p. 48), Coates and Jarratt (1989, p. 303), and Garfield (1992a, p. 317) said together that corporations and businesses are dominant economic institutions in the United States and that any isolationist view of their place in society as merely financial is crumbling and that their roles, responsibilities, and scope of action are increasing. Organizations are recognizing that social contributions are critical to survival, and many organizations are exploring approaches for placing priorities on social and ethical behavior. They are becoming aware that they must be fully participating partners in local, national, and global communities and are increasing their social responsibilities.

Theobald noted that "a corporation that embraced social change would tap into an extraordinary fount of energy in the culture Focusing on needs for change would resonate with many people" (in an interview with Coates and Jarratt, 1989, p. 270). Pascarella suggested that socially oriented organizational innovations would influence people's values through a ripple effect and would become increasingly positive (1984, p. 96).

Foster suggested a means for businesses to arrive at new perceptions and approaches--an answer to Harman's question about how organizations could learn a new picture of reality. Organizations can attempt to link their practices and social

and cultural issues through critically informed theory (1986, p. 10). Ramos stated that, as long as organizational theory "remains uncritical of itself, misplacement of concepts of cognitive politics will . . . constrict any effort at true theory building." The "so-called science of organizations, as we know it, is entrapped within unchallenged assumptions derived from and reflective of the market-centered society" (1981, p. 75).

Bellah et al stated that:

We Americans have tried to make a social world that would serve the self, but . . . we have instead a world that dwarfs the self it was meant to serve The key to this enigma is the appealing but treacherous notion that we can create a good life simply by striving for individual comfort and security, and that by so doing we are indirectly enriching the lives of those around us. (1991, pp. 85-86)

Mumford observed that by sheer habit established institutions are limited by inertia, alien to new impulses, and prevented from change. To restore inner equilibrium, we must "pause and look at foolish habits and routines" (1951, p. 259).

Old Paradigm Organizations

Descriptors

Market-centered. The habits and routines of the market-centered society, according to Vaill, come from a "250-year-old model [which is] ingrained in our consciousness" (in Sanders, 1990, p. 33). Vaill, along with Brown and Bennett (1992, n. p.), Keen (1992, n. p.), McKnight (1984, p. 150), and Ramos (1981, p. 95), described this model as reflecting a system of values in which the organization's only value is a financial asset to be used to achieve the owner's objective, which is acquisition of money or profit.

According to these authors, the core belief of such a system is that scarcity creates economic value by increasing the desirability of resources, and success comes to those most skillful at competing for limited resources and acquiring "more." Such acquisition is considered progress. This value set is reflected in Nobel economist Friedman's statement that "the only business of business is to make a profit," according to Garfield (1992a, p. 303).

Owners attempt to make a profit through the application of highly refined skills of the head such as engineering, programming, and other manipulations of the organization to force change. Communication within such organizations is an instrument of systematically designing and maximizing productive capabilities, and it employs the techniques of persuasion. It is not free from superimposed premises and external imperatives, and it takes place between people regardless of who they are as persons. Such organizations and their owners and managers reflect no skills of the heart such as feelings, personal values, or contributions to human life.

Ramos stated that this is a unidimensional model of social systems which assumes that the market is the cardinal category for ordering personal and social affairs (p. 121). "The market-centered theory of organizations is hindering the actualization of possible new social systems needed to overcome the basic dilemmas of our society." It accepts as a given the unlimited intrusion of the market system on the state of human affairs and has inherent psychological syndromes which prevent social transformation (p. iv).

Ramos described the market-driven model of organizations as relying on a "mechanomorphic view of man's productive activity" (p. iv). It is "predicated on the instrumental rationality inherent in extant Western social science" (p. 3). "For 300 years Reason has prescribed a design for humans to order their personal and social life" (p. 23). "The root of the fallacious character of conventional social science, of which organizational theory is a part, is the concept of rationality which pervades it" (p. 166).

Mechanistic. A number of theorists discussed the mechanistic aspect of the old paradigm organizational model. Together Ackerman (1984, p. 115), Clark (1985, p. 48), Fox (1988, p. 10), Garfield (1992a, pp. 15, 233), Gilliss (1991, p. 19), Morgan (1986, pp. 3, 34), Morgan et al. (1983, p. 4), Mumford (1951, p. 257), and Ramalls (in a report published by Johnson and Associates, 1992c, p. 384) said that the mechanistic view of organizations has held for the past four centuries, stemming from the Newtonian age and based on the assumptions of classical physics that the world is static and predictable.

According to these authors, this traditional model focuses on formal rational aspects of organizations. Emphasis is placed on its form, structure, or methods, on

the component parts which operate within that form--tangible parts such as people and resources and intangible ones such as policies and leadership--and on the organization's beliefs, all as merely tools for getting things done. Organizations are described in terms of how the parts fit together to create the whole and in terms of how they are controlled to operate. Every activity is well organized; work is divided into routine, repetitive, and over-simplified tasks and is supported by intricate technology; and people or employees are factors of production or human machines who are reduced to a fraction of their potential. Language reflects bureaucratic, militaristic, and sexist views and is often delivered in aphorisms. Key descriptive words have no antonyms (efficient, predictable, competent, and so on).

The mechanistic view of organizations, according to these writers, values consistency, predictability, control, and efficient use of time and is based on the assumption of a stable environment and compliant labor. The values and beliefs behind the mechanical view results in policies and practices which support power over. Power is wielded by virtue of superior status where the powerless believe in their own inferiority and doubt their competence. They ultimately develop their own group standards or express anger through personal outlets. Such organization are dehumanizing, limit human capacities for thinking and responding, suppress human ingenuity, shut out creativity, lead to apathy, and, according to Mumford, create "passiveness in which the soul lies open to whatever forces from any direction may touch it" (p. 259).

Mumford saw the obsessive focus on mechanism as "a neurotic attempt to create a refuge in external regularity and an energetic appearance of victory, a retreat from internal disorder and from the unsolved problems of life" (p. 259). Machines have created boredom, a mechanized culture has produced a pervasive sense of frustration, mechanized routine has resulted in loss of self-confidence and self-respect, and general mechanical chaos has finally resulted in an "absence of valuable order and purpose" (p. 16). This "lack of human-heartedness is the typical by-product of our traditional conceptions of science" (p. 17). Block and Harman saw focus on mechanism as a reluctance to live out the democratic values to which society is ostensibly committed (1992, p. 10).

Bureaucratic. Several theorists focused primarily on the bureaucratic aspects

of the old paradigm model of organizations. Block and Harman (1992, pp. 2, 10), Clancy et al. (1988, p. 82), Clark (1985, p. 44), Garfield (1992a, p. 23; 1992b, n. p.), Gilliss (1991, p. 20), Klaus (1987, p. 48), and Morgan (1986, pp. 25, 275) noted that the mechanical view of organizations most frequently describes them in terms of pyramids of hierarchical structures which is a concept originally based on the feudal system with its foundation in charismatic authority--one man in the place of prestige and wealth which he won in battle and which proved he was best. According to the authors, this form has subsequently paralleled the class structure of society. This became evident in the earliest formal organizations and increased in prominence with the Industrial Revolution and the classical management theories of Fayol, Tayler, and Weber. We have continued to create this inherited system of governance today, and it is reflected in power lunching, winning by intimidation, and in perceptions of the winner as the lone pioneer or the rugged individualist. This patriarchal power structure intimidates employees, deprives them of their sense of association, and threatens their need for security.

Bureaucratic structures, according to the writers, are based on the belief that in order to organize effort toward a common goal, people at the top need to maintain control and people at the bottom must be persuaded to comply. Power-through is wielded from top positions where standards and rules are set, the able are coached and rewarded to help further the cause and the less able come to doubt their own competence. They may then turn to other areas of life for legitimacy or exhibit addictive behaviors or violence.

The system values authority, control systems, and management strategies such as budgets and financial controls, information systems, levels of authority and responsibility, and reward systems as means for those who have commanding influence to create states of orderly relations and to achieve desired ends.

Morgan added that job structures and stratifications have further stratified class structures of society. Certain individuals placed themselves in the service of the ruling class as managers. Management became a necessary control link between labor and ownership, thereby dividing occupations and further segmenting society. Discrimination may therefore be an unintended consequence of industrial development. Organizational structures characterized by a strong division between

"them and us," together with exploitation of employees, create a deep sense of resentment and accounts for solidarity movements and bitter conflict. As instruments of domination, bureaucratic organizational structures have ridden roughshod over people's local interests and have had a largely negative impact on the world (1986, pp. 280, 286, 296).

Block and Harman pointed out that such organizational experience relates "far more with societal patriarchy than with democracy. To say that we are deeply democratic in practice is to smooth over the real centralization of power that exists" (1992, p. 10).

Science-based. Theorists in general related bureaucratic and mechanistic views of organizations back to having originated in scientific thought. Kautz stated that science, with its assumptions that there is an objective world out there which obeys mathematical laws and which can be known by a separate observer studying matter in its smallest component, has been the source of authority in our modern world (in a conversation reported by Sullivan, 1992, p. 82).

Keen said that from the 19th century and the beginning of the Industrial Revolution, reason and the rational mind have been the guiding forces, with economics becoming the secular religion and confirming that God was dead (1992, n. p.). Clark noted that following World War I social and behavioral sciences, in a search for order, became characterized by scientific legitimacy and rationality and that Max Weber's systematic theory of bureaucracy was based on rational idealism (1985, p. 44).

Bolman and Deal noted that rational systems theorists focus on the structures of organizations needed to fit organization purposes and environmental demands, and that the structural view of organizations remains a primary framework for viewing organizations (1991, pp. 9, 78). Foster stated that much of organization theory has been built on scientific laws. Functionalism, for example, a mainstream theory, assumes organizations are concrete entities or mechanistic systems with beliefs that systematic study (scientific, positivistic, objectivistic, neutral ways of researching and measuring) will yield reliable and predictable hard data and real facts as the basis of scientific management. This view remains the foundation for much of management theory and practice (1986, pp. 9, 37, 47, 50, 60).

Some of these authors noted that the scientific view of organizations is currently perceived as not fully adequate. Bolman and Deal said that the structuralist view, for example, is too inflexible for rapid change, turbulent, and uncertain environments, that static structures become increasingly out of touch with their environments, and that more flexible views are necessary (1991, p. 78). Foster said that the problem with the organizational theory movement is that it doesn't "come to grips with the realities of human existence The formalistic cages of logical positivism" don't capture such realities (1986, p. 50). Kautz stated that in our modern world, science's causality, opposition of subject and object and rigid distinction between observer and observed, are "shaky assumptions" (in Sullivan, 1992, p. 82).

Keen expressed the beliefs that the majority of people today still hold the position of organizations as rational entities and that there is massive denial of the result: that progress is dead (1992, n. p.). Pascarella and Frohman, however, said that there is some advancement in thinking. Although rational thought processes have been elevated over irrational for over three centuries, management science was never fully scientific. "Scientific" managers have long been challenged by both the analytical nature of organizations and the omission of such powers as intuition and creativity. We are witnessing the end to the old notion of scientific methodology and to outdated concepts about the nature of the world, and we are moving to new views (1989, p. 133).

Vaill agreed that social science has moved beyond the original and inappropriate alignment with the physical and applied sciences with their bases in beliefs that humans and organizations can be objectively studied and results applied to problems of change. Old approaches to organizational development were too focused on teaching isolated and selective facts and methods and that, in reality, facts proved to be marginally useful. We have come to understand that the way people's minds work and how they express themselves were more important than what they know (1984, p. 19).

A number of authors agreed that perceptions of organizations are moving beyond the old science-based view. O'Hara said that the dehumanized, objective view of human activity has been legitimately rejected and that application of methods

appropriate only for doing research in physics and biology has been abandoned. When Maslow and Rogers began to stress the importance of phenomenological analyses of subjective experience, their anti-authoritarian methods were immediately accepted by the alienated American culture (1988, p. 156). Schaefer and Fassel noted that as debureaucratization continued participation became the dominant theme (1988, p. 14).

Participative. Bolman and Deal (1991, p. 9), Gilliss (1991, p. 20), and Harman (1986, p. 105) together described the participatory view of organizations as one which emphasizes the interdependence between people and their organizations and focuses on developing a fit between people's needs, skills, and values and their formal roles and relations. This view fosters maximum feasible involvement of those whose lives are affected by participation. Power-with is wielded through group collaboration. Members are encouraged and helped to contribute, and authentic personal relationships are encouraged and supported.

According to these authors, this view holds the belief that members are motivated to participate by desire for belonging, that opportunity to contribute and to become involved in meaningful activity, and to participate in decision making at appropriate levels raises morale, increases incentive, and improves productivity. This view is based on humanistic values of trust, honesty, cooperation, caring, and social responsibility. Mohrman and Lawler pointed out that this set of values and beliefs reach such a critical mass in collective consciousness and practices that it became known as a movement--the Quality of Work Life Movement (QWL) (1985, p. 150).

Zaleznik noted that the idea of participative approaches to organizations has not been employed with ease. Although it has been advocated for more than half a century, it has not genuinely taken hold, even in Japan, where QWL was examined closely (1987, p. 7). Ramos' perception of the whole movement may explain why this may be true.

Ramos said that the "so-called human relations school" arose in the thirties without a clear sense of its assignment. It was triggered by the imperatives of a business structure demanding consumption, and its widespread approach to management coincided with the "organization society" stage of America. During the preceding scientific management period, workers had other areas for their human

endeavors and existential pursuits. They participated in their communities, did things at home for joy, enjoyed craft competence, and so on.

With the transition in American economy, formal organizations pre-empted the total arena of citizens' life-space. People became "organization men," and their goals were integrated with organizational goals. Organizations began to practice cognitive politics regarding issues such as openness and trust, and they become contrived social environments for personal pursuits (Ramos, 1981, pp. 72, 83). O'Hara suggested that it would be wise to consider the whole humanistic vision or movement with a critical eye, stating that "to prevent becoming bogged down in empty superstition," we must have the intellectual discipline to critique beliefs (1988, p. 147).

A number of theorists discussed problems with the participative view. Bolman and Deal pointed out that interpersonal dynamics in organizations are often counterproductive, with people behaving in ways to protect themselves or control others rather than behaving openly and honestly. The authors gave as an example Argyris and Schon's model of espoused theories and theories-in-use which says that the explanations which people give for their behaviors may or may not correspond to the real determiners of their behavior (1991, p. 151).

Harman pointed out that the concept of participatory behavior is based on two conflicting premises. Personal needs, for learning self-validation and so on, exist concurrently with bureaucratic needs, for efficiency, productivity, and so on. When personal needs threaten organizational goals, organization goals will always take precedence (1986, p. 106). Zaleznik noted that one of the great values of participative views may suggest why it was not more widely adopted, that is, its value in overcoming conflicts of interest between groups and individuals of unequal power (1987, p. 5).

Foster said that human relations concepts have been influential and consistently popular with management, and he suggested some reasons that may reflect Zaleznik's observation about power. Participative theories have shown managers how to engage in social engineering--how to control informal organizations, use peer networks, set group norms, and so on (1986, p. 39). Schaefer and Fassel perceived this application as well. "In practice, participative management is frequently a rhetoric of management that protects the seat of control and power at the top" (1988, p. 17).

Brown said that participative management was not implemented properly. Organizations wanted a quick fix. They only incorporated what fit comfortably, and as a result, leaders projected inconsistencies and implications that they weren't truly serious about empowering members. Leaders did not learn or adopt collaborative participation, and they didn't take time to learn what was needed to transform their organizations (1992, p. 42).

This is Ramos' point. Humanist interventionists didn't question their attempts to enhance organizational effectiveness. They didn't question the "overall dehumanizing and deceptive character" of the job structure of the market-centered society. "Humanist approaches to organizational design are deceptive. They lack a systematic understanding of the contextual requirement of the practice of humanism" (1981, p. 83).

Old Paradigm Leadership

Discussions of both mechanistic and humanistic views of organizations have reflected, either directly or indirectly, coexisting beliefs about leadership in those organizations. Foster stated that traditional views of leadership have reflected either a political-historical model or a bureaucratic-managerial model. The first focuses on power, politics, and the way leaders have changed their social milieus through history. Burns' transactional model of leadership--based on concessions, accommodations, and other manipulation and interplay of social forces between leaders and followers--belongs in this category (1988, pp. 3, 5).

The second model focuses on leadership as an organizational position in which the position holder, driven by organizational goals, serves as a conduit between labor and the organization. Fiedler's contingency model--in which the leadership role is determined by the environment and by task responsibilities--is reflective of this view (p. 9). In general, views of leadership have been co-opted by the needs of bureaucracies and by management thinking and that leadership has been denuded of its original power and relegated to a "how to manual" (pp. 13, 14).

Rost agreed that "leadership has consistently been understood since the 1930s as good management" (1991, p. 99). The industrial paradigm definition of leadership is:

Leadership is good management [It is] great men and women with certain preferred traits influencing followers to do what the leaders wish in

order to achieve group/organizational goals that reflect excellence defined as some kind of higher-level effectiveness. (p. 180)

Rost said that old paradigm theories of leadership exhibit such common characteristics as a structural-functionalist frame of reference, management orientation, goal achievement focus, emphasis on dyadic relationships, male and macho characteristics, and being ethically materialistic and short term. Leadership theories have been "excessively rationalistic, technocratic, quantitative, and scientific in their background assumptions" (p. 27). Old paradigm thinking about leadership is still pervasive. The literature of the 1980s is overwhelmingly industrial in its concept of leadership which demonstrates that the transformation of leadership thought to a postindustrial framework has barely begun (p. 100).

Sergiovanni agreed. "Our understanding of leadership is outdated." We think of leadership in terms of hierarchical bureaucracies--cold and calculating "command leadership"--in terms of psychological authority--style, personality, and manipulation--or in terms of technical rationality--authoritative decision making based on research and effectiveness studies (in an interview reported by Brandt, 1992, p. 46). Old ideas about leadership are based on the male model which emphasizes individualism and competitiveness. Motivational researchers such as Maslow and Herzberg didn't study females and the management literature is traditionally written by men for men. There is a need to change the leadership metaphor, perhaps to perceiving leadership as based on a person utilizing the authority of competence and virtue performing roles of serving the enterprise over a bureaucratic, psychological, or rational/technical rationale (pp. 47, 49).

A number of authors noted the need for moving beyond old paradigm views of leadership. Bolman and Deal said that leadership is distinct from power and authority and that it is different from management (1991, p. 406). Pascarella and Frohman concluded that "the more the command-and-control model erodes, the more organizations will need true leadership" (1989, p. 113). Kiefer said that leaders who approach the task with "solely rational capacities will be overwhelmed." Intuitive skills validated by rational analysis are necessary to formulate vision and to develop empathetic rapport with others (1986, p. 196). And Nanus suggested that "what we currently understand about leadership . . . is simply inadequate to the challenge of a

new age" (1989, p. 53).

Foster observed that real leadership can occur in the context of organizations but that it must shift from an emphasis on organizational goals of profit to visions of human and social improvement (1988 p. 13). Rost stated that "the problem with the industrial leadership paradigm is that it increasingly ill serves the needs of a world rapidly being transformed by a massive paradigm shift in societal values" (1991, p. 181).

Need for Change

The consensus of opinion among the futurists reviewed here seems to be that there is a need to move beyond old paradigm views of organizations. As Theobald put it,

The primary organization form in today's world is bureaucracy If bureaucracies were an appropriate way to manage today's conditions, society would be in fine shape, but, given the . . . rapidly changing realities, we need to organize using profoundly different principles. (1987, p. 90)

Henderson stated that "all these efforts to restructure large, bureaucratized institutions from both within and without are vital adaptive feedback mechanisms to the growing unmanageability of large institutions" (1988, p. 117). Schaefer and Fassel suggested that organizations today are ill, that key people as well as the organizations themselves are exhibiting neurotic behaviors such as distorted thinking, confused and ineffective communication, adherence to strict rules and procedures as an attempt to reduce chaos, loss of values, dishonesty, deterioration of ethics, and so on (1988, p. 137).

Senge suggested that organizations are currently exhibiting signs of learning disabilities--signs such as focusing on events rather than processes, waiting for problems to escalate before taking action, blaming something outside themselves, adapting improperly to threats to survival, and avoiding acknowledging direct results of actions (1990, p. 18).

A number of theorists expressed strong sentiments of a need for change. Block and Harman said that patriarchal beliefs about how organizations work and run simply aren't working. There has been disturbingly little fundamental change in beliefs about purposes, power, how to lead, and how to transform groups of human

beings bound together by common goals. We cannot use the same strategies that created the problem to solve the problem (1992, p. 3).

Lessem suggested that our organizations have gone wrong because they have lost touch with the totality of humanness--individual and institutional thoughts, feelings, and actions (1986, p. 82). Ramos said that there comes a time such as ours in which individuals can no longer cope with the tension caused by self-deception, and they cease to comply with society's norms. At such times old organizational theories are no longer convincing and are impractical and inoperative. "The time is ripe for the practice of an unprecedented kind of organizational science which is sensitive to the diverse issues of human life" (1981, p. 74).

Garfield stated that our managerial models don't suit the context of today's world, that they are clinging to stories developed for a predictable world which no longer exists, and that they have lost much of their meaning and effectiveness (1992a, p. 11). Bellah et al. said that "to make the democratic alternative possible again, we have to think seriously about the nature of our institutions and what they are doing to us (1991, p. 81).

Societal Concerns

In the interest of examining organizations in the context of today's world, many theorists explored the nature of societal changes which are exerting influence on organizations as they move toward establishing new meaning and effectiveness. The three major areas of shift most frequently identified were the economy, ecology, and globalism.

The Economy

Harman wrote that the dominant institution of society is the economy; "its goals are society's goals" (1991c, p. 1). Sahtouris pointed out that the term "economy" was originally coined to mean "rules of housekeeping" (from the Greek *oikos* meaning "house" and *nemein* meaning "manage") (1989, p. 198). Wishard defined economics as "the means by which the human family produces and distributes its wealth (1987a, p. 23). Sahtouris noted that the household is now the whole earth and that the means and rules of accounting cannot be utilized fairly.

Alternate perceptions. Henderson wrote that the free market system, on which

the present world economy is based, was not derived from God or from a human propensity to barter as Adam Smith suggested. The "first attempt to institutionalize a nationwide free market system as a chief means of allocating resources" came from a package of social legislation enacted in England after nearly 100 years of conflict. The laws created land as a commodity to be bought and sold by enclosing it. The "inevitable corollary was to make commodities of human beings who were driven off the land and forced to sell their 'labor'" (1980, pp. 175, 177).

Economics became an even greater tool for managing society when "Marx and Smith agreed it was a good idea to industrialize the earth" and when the resultant Industrial Revolution began to focus on the maximization of materials production through technology. The tool of economics developed into a "set of rules that became the DNA of culture." The Gross National Product came in with World War II as a scorecard of success--a means to maximize production and ensure victory based on the value of machinery. The environment and human beings were discredited--they were not carried on the books as assets nor calculated as part of the GNP (Henderson, 1992a, n. p.).

Harman discussed consumerism, on which the current economic system is judged, as also having arisen in conjunction with World War II. Consumerism is a relatively new idea which began around 1950 when the end of the war brought a fear of peace and of the return to a depression. Service people returned home for jobs and there were no more war contracts. Two decisions were made to keep manufacturing going: the United States began selling arms to other nations--which had been against the American ethic before the war--and consumerism was stimulated. Frugality was no longer considered a virtue (1992c, p. 6).

Harman said that consumerism eventually leads to competition and conflict (1991c, p. 2). Grumwald saw that conflict as systemic. The stimulation of consumerism and the free market system ultimately gave rise to Communism. Socialist movements sprang up in protest to poverty which was stimulated by the Industrial Revolution. The experiment failed due to its being based on the fallacies that people do their best work in a collective rather than in pursuit of their self-interests, and that bureaucrats are able to run an efficient, egalitarian economy. The dreams of a just and stable society have not been eradicated, however, and there is a

growing perception that the "man-made calamities of the capitalist free market [are the] acts of God without God" (1992, p. 74).

Although current society has mitigated somewhat the early harshness of capitalism, its basic contradictions, which are psychological rather than economic, have still not been solved. On the one hand, capitalism requires the engine of self-interest or greed, while on the other hand, society requires attention to the general interest or the taming of greed. We are still pulled between these two poles (p. 74).

Morgan also discussed the notion that capitalism places people in conflict. There are continuous conflicts between buyers and sellers, for example, over the "use value" of goods or services to the purchaser and the costs and profits of those items to the provider. There are conflicts between management and labor over profit and wages. These opposing views reflect underlying conflicts within the capitalist system--between the substructure of the proletariat, producing members of society and the superstructure or the bourgeoisie, nonproducing members. "Many of the conflicts that arise . . . are thus not autonomous conflicts generated by attitudes or actions, but products of relations created by a system geared to the generation of surplus value" (1986, pp. 260, 261).

Firm grounding. In spite of its foundation in conflict, many theorists agreed with Harman's statements that society revolves around economics, that it remains the basis for today's societal decision making, and that "whatever is good for the economy stays" (1991c, p. 5). Bellah et al. (1991, p. 50), Harman (1988, pp. 108, 142), Henderson (1980, p. 96; 1992, n. p.), Lasch (1992, p. 71), Norberg-Hodge (1991, p. 60), Ramos (1981, p. 22), Theobald (1987, p. 66), Tregoe (in Johnson and Associates, 1992a, p. 93), and Wishard (1987, p. 28) all contributed to a picture of the place of economics in today's society. Economics is the most powerful discipline that controls our lives, and it is a manifestation of the collective will--a reflection of the attitudes and values of the culture, which reveals that people view the deeper meaning of life and the possibilities of existence from an economic point of view. There is a belief that the market is the paradigm on which society should be based.

Economic growth and democracy go hand in hand, and progress is measured in terms of abundance, that is, in terms of comforts, choices, and a rich life. Industrialized nations enjoy lavish standards of living compared to the rest of the

world, and these societies, which are an outgrowth of the economic paradigm, are based on the desire for a full life for the masses and on the belief that private accumulation and pleasure are the only public measures of worth.

In an industrialized society consumption is necessary to keep production going. Products must be used up to keep people employed and economic consumption becomes virtuous behavior. Consumption creates jobs necessary to supply the market as well as worker incomes to stimulate the market. Industrialism, then, becomes a self-generating spiral--production generates a rising level of demand and demand generates production--and the workplace becomes defined in terms of money for purchasing power.

Block and Harman (1992, p. 12) and Campbell (1990, p. 224) noted that money becomes something that motivates and compensates people for doing something they don't want to do and that it becomes the language of value--a myth which suggests both the symptoms of real problems as well as a comfortable way to evade the real issues. Current patterns of income are seen as sacred. Earnings should not be taxed, for example, and in a free market system people get paid what they're worth. Meanwhile, the GNP serves as the tool for measuring the health of society, and enhancements in science and technology continue to stimulate economic spirals upward. This latter also leads to greater centralization and specialization.

Huge centralization of power and technology in giant corporations makes them the most dominant characteristic of market-oriented society and the most dominant institutions on the planet. The driving forces of these organizations reflect their economic focus: production, goods and services, availability of resources, technology, markets, and return on profit. Harari observed that when profit is a primary goal of organizations their decision-makers become emotionally detached--they become obsessed with short term financial concerns and they lose touch with vision or passion or quality (1992, p. 54).

Need for change. Ramos stated that "selling a product is the outcome of a disguised political battle against common sense," that people are induced, by linguistic modes contrived to deceive rather than to enlighten, into believing that they want what they do not need. "Organizations typical of a market society are of necessity phony and deceitful" (1981, p. 80).

Harman noted that corporate owners and CEOs become pressured by the economic system to make decisions based on generating income and profit for their organizations or on stimulating growth, on creating new jobs, and so on. Decisions based on promoting superfluous production and consumption and on "how we can get more" versus "how can we get along without it" are "dumb decisions" (1991a, p. 125; 1992c, p. 7). Business causes problems the government must patch up, economics is being used to define and guide political decisions, and "there is no reason to believe that economics is good for society or for future generations." "Economics is crazy" but we don't notice and "we have given our power away by buying into the insanity of the system (1992c, p. 1).

Lasch pointed out that we are paying a price for progress. Change creates wide-spread anxiety and solutions to old problems create new ones, but we still keep faith in progress (1992, p. 71). Ramos pointed out that in a market-centered society, conscious or unconscious language is used with the intent to "induce people to interpret reality in terms that reward the agents of such distortion." It is not incidental that in every society where the market has become a central agency of social influence, community bonds and specific cultural traits are undermined or destroyed (1981, pp. 76, 78).

Schmookler saw the "materialistic appetite of the West" as the engine of destructiveness. The market has shaped our image of human nature, with the economic system sending ceaseless messages persuading us that we are insatiable by nature, that our limitless appetites are good, and that goods are important. "The human soul is turned into a resource for market growth." This is the wrong path. "It is unable to register the value of human bonds or the integrity of nature" (1991, p. 17).

The drive to create abundance has led to belief in scarcity, the pursuit of wealth has become war, and human relations have become permeated with competition. Goods haven't brought happiness. Capitalism creates a gulf between the material and the spiritual, and consumption develops around unfulfilled longing. The fetish of economic growth is a clue to the failure of consumption to truly nourish. People are materialistic because they are so poorly connected. They aren't getting what they need and they don't know how. They are wounded and seeking

compensation in symbols of gratification and in possessions when fulfillment is actually to be found in relationships, in loving contact with others. People are alienated from the primordial and that which creates real pleasure: spirituality (1991, p. 17).

A number of theorists agreed. Ramos said that "the market system works against the constitution of associated life understood as a community of men and women." We need to counteract this effect and to subordinate economics to ethical considerations because:

The sanity of men's desires matters more than the abundance of their means of accomplishing them The market does not tell us in any fruitful sense what are the national, social, or collective wants or means of satisfaction of a community, for it can only give us sums. (1981, p. 36)

Theobald said that "America's overwhelming commitment to economic growth has devalued citizenship Societies are trapped within a whirling dervish economy dependent on compulsive consumption." More and more people are dissatisfied with this way of living (1987, p. 68). Ferguson stated that "material values are an inadequate philosophy for a transformed society" (1980, p. 327), and Simmons said that materialism, which is grounded in rationality and logic, has led to "callousness toward fellow humans and other life forms" and to people being "stranded on the physical plane with no 'communication from home'" (1990, p. 59).

Capra (1982b, p. 20), Harman (1992b, p. 28; 1992c, pp. 1, 7), and Henderson (1992a, n. p.) agreed that economics lacks human spirituality, or, as Mitchell put it, that "economic models are based on scientific models without consciousness (1992, n. p.). These authors noted that economics is only one aspect of the ecological, social, and spiritual fabric. Prior to the Industrial Revolution, the church was responsible for the whole. Business has denied taking that responsibility, however, and society has avoided acknowledging the value system on which economics is based. Economics is a tool, a means toward an end or toward achieving certain goals, but we have gotten confused. We have become fascinated with economic growth without any sense of where it is going, and we have forgotten that the means are not primary. We have lost sight of the real goals, the tools have become the goals, and we're now dedicated to ends that don't make any sense.

Harman concluded that "this is a dumb way to play God."

Harman saw the present practice of economics not only as an "obvious indication of insanity" but also as a "real and powerful threat to survival" (1992c, p. 6). Henderson called it a "300-year-old grab bag of refutable ideas parading as a science" and said that, rather than a science, it is "a form of brain damage" (1992a, n. p.).

Harman (1991a, p. 124) and Henderson (1980, pp. 88, 172; 1992a, n. p.) said that the world is looking at Democracy and the market system for leadership and it is failing. We have failed to note that economic logic will not necessarily lead to good social decisions. Macro-economics won't work. Economic theory is relative, and economic decisions apply only to limited systems and within certain conditions of time and space. The GNP is not a good scorecard for progress because it correlates with consumption of scarce resources. The short circuited logic of economic theory obstructs the development of a new view and thwarts the discussion of alternative theories and policies. There are diverse interpretations of economic phenomena. Multidisciplinary mapping is needed.

New views. Several theorists agreed that new views of economics are imperative. Erickson reviewed the long-wave or Kondratieff cycles of economics which was named for a Russian economist in the 1920s who reported that history shows long, 40- to 60-year cycles of prosperity and growth during which technology and industry become over-expanded. These prosperity cycles are followed by cycles of recession, depression, and finally recovery. Erickson suggested that modern society is currently approaching a downturn, a time of transition with serious disturbances in economic and social life approaching (1985, p. 40).

Ferguson (1980, p. 323), Grumwald (1992, p. 74), Henderson (1980, pp. 96, 147, 324, 331; 1992a, n. p.), and Morgan (1986, pp. 257, 265) agreed that the current economic epoch is drawing to a close. We are at the end of an economic order based on maximizing global trade and efficiency and measured by the single coefficient of growth in the GNP. We must come to grips with economics as the basic force shaping our society and organizations and face the crisis of exhausted resources brought on by consumerism as its basis. We need a new game with new rules and a new scoreboard.

These theorists suggested several facets of a new view. For one, economists have begun to learn from general systems theory that today's mature industrial societies are non-linear, cybernetic systems with thousands of feedback loops. Economists may still be more comfortable with static systems, but they must acknowledge that macro-economics tools based on assumptions of equilibrium don't work. We need a new system which accepts and incorporates feedback.

Second, economists must acknowledge the systemic scale of the social costs that economics is encountering. Society needs a new sense of drive with less emphasis on right and more on responsibility. We need a new psychological climate. We are beginning to see that economics is, at bottom, psychological, that it is based on expressions of peoples' intelligence, will, and spirit, and that people are the wealth of nations--along with feedback from nature. Morgan pointed out that economic and social contradictions with society are dialectic in nature and that they provide a basis for transformation (p. 257).

New postindustrial values are transcending goals of security and survival, and new lifestyles are less materialistic and therefore less translatable into economics than they once were. With personal transformation economic patterns change, new views are arising regarding the values of the marketplace and of work, and such transformation points to the end of the present discipline of economics because it obscures what is valuable. Personal transformation is challenging the vital concerns of organizations. It is calling for corporate responsibility and expressing concern for justice. New corporate strategies must live with new definitions of profit based on internalizing full social and environmental costs of production.

Popcorn suggested that a consumer revolt can be expected in the future--a socioquake--and that, since America is a consumer culture, "changing what and how we buy will change who we are" (1991, p. 4). Among other trends, consumers will protest market immorality and will require companies to be more human and honest (p. 69), and they will demand focus on survival and social responsibility (p. 80).

Many theorists pressed for changes in response to urgent needs for social responsibility and survival. Some focused on immediate, short term strategies: Companies must "reduce debt and leveraging and shore up the balance sheet" (Yankelovich et al., 1992, p. 24). Today's businesses must emphasize higher quality

and adapt to the demands of a rapidly changing environment (Kanter, 1989, p. 10). Companies should focus on service versus profit and results versus numbers. The only justification for an organization's existence is service to its constituency. Profits come from service, good management, and high values (Harari, 1992, p. 53). Organizations must redefine profit. They must discontinue production of items with hidden social/environmental costs, stop giving subsidies at tax-payers expense (reduced utility rates to heavy users, for example), and pass costs on to consumers (Henderson, 1979, p. 87).

Some theorists took a somewhat broader view of needed changes: We must adjust the economy and social structure away from industry and concrete products and toward information as an intangible entity which cannot be used up (Naisbitt, 1982, pp. 31, 56; Ogilvy, in an interview with Coates and Jarratt, 1989, p. 221). We cannot continue to live at a standard of living we aren't earning. We can lower the standard of living by inflation or by tightening belts and putting money in the infrastructure which will increase productivity and production (Etzioni, 1991, p. 39). One means to deindustrialize and to dismantle centrally controlled production is to deregulate or privatize enterprise (Bolman & Deal, 1991, p. 373; Wishard, 1987a, p. 26).

None of the above suggestions would be favored by those more long-term and future-oriented theorists who reflected Block and Harman's statements that the change necessary is "not simply an economic strategy or technique to achieve higher levels of productivity or to succeed in the marketplace" (1992, p. 1), or John Stewart Mill's statement that "no great improvements in the lot of mankind are possible until a great change takes place in their mode of thought" (Ferguson, 1980, p. 330).

The more forward-looking authors offered broader views: There must be a total reassessment of economic concepts and quantification methods, a completely new means for assessing the impact of economics to lead to more open, consultative decision-making in the process. Social and environmental costs must be factored in, and the public must be allowed to participate in economic decisions (Henderson, 1979, p. 84).

The concept of production must be broadened beyond activities undertaken within the confines of the market. It must be seen as constituted by all outputs which

contribute to enhancing the enjoyment of life. A para-economic framework must be established which does not obliterate the market system but which saves the capabilities it has to "serve the goals of a multidimensional model of human existence in a multicentric society" and which serves as a framework for a "political theory of resource allocation and functional transactions between social enclaves necessary to enhance the quality of citizens' lives" (Ramos, 1991, pp. 134, 153, 169).

"Modern civilization has given itself over to quantitative production and has thrown off the natural limits that once existed." We need disciplined control of quantity. Quantitative and qualitative discrimination are both essential. Constant discrimination between good and bad accompanied by "how much" are vital requirements for continued human development (Mumford, 1951, p. 144).

We must move away from material consumption and consumerism to a conserver society and to voluntary simplicity. Voluntary simplicity demands singleness of purpose, avoidance of possessions irrelevant to the chief purpose of life, and partial restraint in some directions to secure greater abundance of life in others. There is growing sympathy for reversing the materialist trends and returning to human values with focus on thrift, bartering, cooperative survival, integrity and morality, greater world awareness, and stewardship of the planet (Capra, 1982b, p. 24; Ferguson, 1980, p. 332; Fields et al., 1984, p. 139; and Pascarella, 1984, p. 55).

We must reverse the mistaken belief that money is the key to fulfillment, that money is the source of power in our society, and that it will bring us freedom, happiness, and security. Traditional wisdom says that the goal of amassing money is greed and that the results will not be what you hoped for (Fields et al. 1984, p. 127). "You may look in vain for historical evidence that the rich have regularly been more peaceful than the poor" (Henderson, 1980, p. 178). The spiritual view is that money is a symbol of energy--not a thing but a transfer or exchange, which is not useful unless you let go of it. This attitude allows us to develop prosperity consciousness--to see life as rich and the universe as abundant, to recognize wealth in ideas, time, energy, skills, and so on and to be grateful for all that we have. It trains us to see life as an opportunity and it can play a significant role in creating financial well-being (Fields et al., pp. 128, 133).

We must move to a more holistic view of economic systems which reflect a

new reality and changed models and assumptions and which focus on a new central project compatible with emergent values. We must move to greater sensitivity to living beings and adopt an economic view which aligns personal and organizational actions with societal needs, one which perceives inputs as energy, resources, and knowledge and outputs as more fully-human beings (Henderson, 1992a, p. 9; Hubbard, 1982, p. 80).

In addition, the new information society could be a learning society in which each individual's occupation would be to learn and develop, to participate in community activities and to contribute to human betterment and fulfillment. Appropriate technology and conserved resources could be used to challenge individuals to fully develop their faculties. Employment could be a privilege based on the primary task of self-development, and work could be seen as "good works" when individuals join others to produce goods and services needed for only existence and which reflect ethical concerns for life on the planet (Harman, 1979, p. 132; 1988, p. 145; Henderson, 1980, p. 177; 1992a, p. 9; Hubbard, 1982, p. 80).

Several of the more future-oriented theorists addressed the need for economics to be concerned with life on the planet, which was the second major area identified toward which organizations will need to shift their views in future.

Ecology

Harman said that there is a strong link between the economy and the environment. Major organizational decisions are defended in terms of economics, industrial processes are justified for profit, and lack of attention to the environment are tolerated due to costs (1991a, p. 124). Naisbitt (1982, p. 85) and Swimme (1984, p. 77) noted that economic necessity directs our lives and that we have become so addicted to consumerism and so blinded by numbers that we have disregarded the damage to our environment and the neglect of long-range planning.

The role of technology. Handy (1989, p. 17), Kiplinger (1986, p. 8), Nanus (1992a, n. p.), Raymond (1986, p. 17), Stewart (1989, p. 9), and Wishard (1987a, p. 23) observed that economic growth in our society and in the world has been driven by as well as dependent upon new scientific knowledge and industrial technology. A new boom in technology can be expected to trigger a period of sustained economic growth, or a fourth long wave for our society, from the mid 1990s to 2045.

Cetron and Davies stated:

"One cannot talk about the future without giving science and technology their due Science and technology are the fastest, most trenchant agents of change that humanity has ever experienced [and] in the next ten years the amount of raw knowledge available to us will double; it will double again in the next decade, and so on into the future." (1989, pp. 4, 5)

Cornish said that "all the changes that are occurring in human life are due to advancing technology." This is the story of the human race, a "cosmic drama of infinite complexity" involving billions of people and capable of going on "for centuries or even millennia into the future." Nobody really knows what all these changes really mean, but the central theme is humankind's increasing power and expansion of its natural capabilities (1987, p. 2).

Corrick stated that "technology now makes it possible to accomplish nearly anything" (1990, p. 60). Ramos defined technology as "a set of procedures and practices by which things get done." Technology is an essential part of the supportive structure of any system (1981, p. 137). Bennis and Nanus (1985, p. 14), Bleeker (1987, p. 21), and Cordell (1988, p. 41) emphasized the importance of technology, particularly computers, as the catalyst in transforming our society into the information age. (Bell (1980, p. 39), Cleveland (1991, p. 21), Coates and Jarratt (1989, p. 20), Hubbard (1982, pp. 10, 70), Nanus (1989, p. 30), Outlook '92 (1991, p. 54), and Rossman (1991, p. 19) pointed out many facets of science and technology in a new age.

These authors emphasized an information society's use of telecommunications--labelled "communications" or "telematics" by some, which includes computers and electronics--to make possible such interactions as global exchange of information, consensus government, group decision-making, and lifelong learning. In addition biotechnology (specifically, applications for health and agriculture), manufacturing (materials and robotics), transportation (fuels and rapid transit), space exploration (rockets, satellites, and space communities), and such multi-use inventions as lasers, superconductors, holography, and so on have created great impact.

A number of writers addressed the question of energy, particularly the impact of the growth of technology and the economy on available sources of energy.

Harman, for example, stated that we "cannot cut back energy use, yet the costs are undermining the strength of the U.S. as a nation" (1991c, p. 2). Cornish (1987, p. 2), Hubbard (1982, p. 70), Kiplinger (1986, p. 41), Simmons (1990, p. 93), and Toffler (1980, p. 135) all perceived, however, that energy use is not a problem. There are enough fossil fuels to support economic growth in the next decade and that with the explosive growth of human powers to constantly develop new ways to obtain energy and to create inexhaustible sources, the growth and availability of new energy sources in future will be staggering. A new era of abundance is beginning, and we must reprogram ourselves away from the belief in scarcity.

The technology-ecology issue. Many writers acknowledged the creative potential of the human mind and the importance of technology to a new age, and many perceived an issue. Wishard asked: "Are we using it [technology] wisely? Is it in control or are we?" (1987b, p. 60). Harman pointed out that technology has brought abundance and solved social problems, but he also noted that it has caused both social and environmental problems (1991c, p. 2).

Cleveland pointed out examples of these problems: with the internal combustion engine and with sewers to remove waste came air and water pollution; an increase in life space engendered population problems; increased capability to produce food brought greater waste but no improvement in the ability to prevent starvation; and using psychology in management skills to organize large numbers of workers was accompanied by frustration with bureaucracy (1972, p. 9).

Campbell said that when we look back at the text of history, "it is a text which speaks of man as superior to nature and as having mastery over nature." He suggested comparing that view with the words of Black Elk who said, "We do not own the land, it owns us" (1989, n. p.) Mumford stated that "by conscious selection, man imposes his will on nature" (1951, p. 122), and Sagan perceived that, having dominated all other species and disrupted or destroyed the environment everywhere on earth, we are now at risk" (1992, p. 10).

Swimme observed that over the last ten million years many species have gone extinct but that an even greater number have been created. With the arrival of technological humanity, the extinction rate has been multiplied many times over, and it is now estimated at a loss to the earth of one species every twenty minutes. Not

only is the earth no longer able to create life but also that, if higher life forms disappear, they can not be recreated (1984, p. 73).

D. M. Fields said that "technology has 'leveraged our ethics' in areas such as the environment" (1991, p. 35). Bell stated that "in the demonology of the time, technology is the 'great whore;' it has profaned Mother Nature and stripped away the mysteries, substituting an artificial environment in which man cannot feel at home" (1980, p. 27). Handy concluded that "it is the combination of technology and economics which causes this discontinuity. Between them they will make the world a different place" (1989, p. 17).

Miller suggested that it would be "lunacy to reject the fruits of technological advancement" which have given us knowledge of human potential and world-wide communication, but that there has been "too great an emphasis on economics, science, and the rule of reason" (1992, p. 14). Henderson stated that "we cannot continue to lump together apples and oranges under the rubric of technological innovation We must remember that some technical innovations have value and add to wealth; others are better described as 'illth' or disservices" (1988, p. 106).

Capra (1982b, p. 24), Corrick (1990, p. 60), Fields et al. (1984, p. 215), Harman (1988, p. 147; 1991c, p. 1), and Ramos (1981, p. 169) suggested that we need to rethink market-centered applications of technology and to invoke voluntary frugality and constraints on inappropriate uses. Appropriateness should be determined based on effects--with data generated to help monitor impact and to raise consciousness of the repercussions of decision-making. Decisions should be made in terms of preserving the ecological soundness of the planet and the psychological health of humankind.

Ecological soundness should focus on showing concern for an ecological ethic--conserving resources, avoiding undue insult to the environment, and in general, identifying with nature and aiming for an ecologically harmonious lifestyle. Preservation of the psychological health of humans should include consideration not only for fellow humans but also for future generations.

Glenn stated that we need "conscious technology" as a worldview. We need to merge human energy with technology so that the technical or mechanical view, which sees tools as answers to problems, is blended with the mystic or consciousness

view, which sees awareness and ideas as the preferred approach. This blended perception can then tell us what attitudes to take about our inventions (1987, p. 60).

Ferguson said that technology must be reevaluated. It has not been connected to matters of the heart. "In the emergent paradigm, technology is not seen as negative, just abused and in need of rehumanization" (1980, p. 356). Simmons agreed, saying that technology deserves praise for enriching our lives as well as condemnation for ravaging the environment. We can't go back but we need a "massive shift in consciousness to prevent self-destruction" (1990, pp. 89, 90).

Need for change. Campbell stated that our sociology is far away from the biological ground, that economics and politics are the governing powers of our sociology today, and that "that's why everything is screwy. We've got to get back in accord with nature" (1990, p. 168).

Garfield (1992a, p. 20), Gore (1990, p. 22), and Harman (1991a, p. 124) agreed, saying that economic growth without limits, like a cancer, has led to ecological decline and that we are constantly hearing new evidence of environmental disasters, ecological disruptions, and so on. The usual attempts to blame business and to penalize, legislate, or repair damage continues have been inadequate. We need a fundamental change. We need to convince people that we are negatively affecting the planet and that there is an urgent need to face the implications of global environmental changes.

To stop the "ruthless and rapacious impact on the earth's biosphere there must be a fundamental shift in focus--from the environment as a target to be controlled to the environment as a "living, sovereign entity, that is, the source of life to be respected, honored, and cooperated with" (Simmons, 1990, p. 241). Ferguson reflected that opinion as well, saying that nature is not a force to triumph over but a medium of transformation (1980, p. 145).

Clancy et al. observed that some businesses are "beginning to reflect the wholeness of the planet and the unity with God" and that they are voluntarily adopting ecological procedures (1988, p. 106). Garfield also suggested that many organizations are becoming aware that cooperating with nature and preserving the environment are basic to survival and that they are examining their relationships to a sustainable society. Eco-thinking is coming in advance of the need to solve complex

environmental problems, which is a step in the right direction.

Garfield also noted that companies which are focusing on values instead of profits are learning that social investments generate goodwill which often ends up enhancing the profit picture as well. These practices set the stage for integrative thinking--for considering the needs of society as well as the needs of the company (1992a, pp. 321, 350)

Sagan wrote that the thinking of scientists and religious leaders is also becoming integrated. He reported that a Joint Appeal by Science and Religion for the Environment has been formed to address the need for fundamental change in human behavior. The group is united around the idea of stewardship and the "clear theme that the natural world is the creation of God, put here for purposes separate from the glory of 'man' and deserving respect and care." The Joint Appeal perceives the assaults on the environment as transnational, transgenerational, and transideological and that it perceives conceivable solutions as having those same qualities (1992, p. 12).

Fields et al. concluded that "ecology has shattered the old politics" and has created a new political theater, that the earth is part of the ultimate political constituency, and that ecological questions are going to be decided in a higher court (1984, p. 226).

Whole-earth views. The killing of mother earth, according to Fox, is the "number one ethical, spiritual, and human issue of our planet Nothing will survive if Mother Earth does not survive" (1988, pp. 144, 149). Henderson stated that "Gaia, the Earth Goddess, is in charge. We must learn to co-exist." Individual ideas are not sustainable; we must share the earth's resources (1992b, n. p.).

The need to share and coexist on the earth was discussed by a number of others. Campbell (1989, n. p.; 1990, p. 204), Cleveland (1991, p. 22); Ferguson (1980, p. 359), Fields et al. (1984, pp. 219, 225), Harman (1988, p. 122; 1991c, p. 3; 1992c, p. 5), and Wishard (1987b, p. 60) said that humankind's alienation from nature is at the heart of environmental problems. The new paradigm view is different from the traditional worldview. It perceives humanity's relation to nature as the American Indians do: everything in the universe is alive, all life is connected, and we're all related. The awakened ecological conscience of the trans-modern world

must regain awareness of humanity's place in harmony with nature and must reintegrate itself as part of Life's Great Process.

The all-one, all-united view includes the belief that human effort is supported by organic life and that humans must have respect for and responsibility to the earth. This view is based on belief that organisms and the environment are co-evolving as well as interrelated, that humans must live in relation to nature rather than conquer it, and that they must show concern for preservation of the environment and its resources.

According to Fields et al., Patrick Moore, founder of Greenpeace, incorporated these ideas into the Three Laws of Ecology: (1) All forms of life are interdependent; (2) stability of ecosystems is dependent on their diversity; and (3) all resources are finite and there are limits to the growth of all living things (1984, p. 225).

Henderson pointed out that the new paradigm view of interrelatedness is a holistic view, with the earth as a system which is the context for such subsystems as humans and the ecology. In this context humans can see themselves as a responsible part of a living body--connecting with the earth's natural rhythms and overcoming unnatural barriers to consciousness such as ideologies and nationalism (1992a, p. 8). Harman also suggested that we need to think in terms of a whole system, with business and economy as parts of the greater global ecological system (1988, p. 123).

Swimme said that taking the viewpoint of the earth as a whole system and perceiving everything required for production as being provided by the earth, with human intelligence to knit it together, is a way to break out of a limited worldview. "The earth is a corporation. Any corporation created by humans must fit itself into the larger corporation of the Earth, because if the Earth goes bankrupt everything else falls to ruin" (1984, pp. 65, 77).

Perceiving the earth as a corporate system establishes the context for examining the third major focus for organizations shifting toward a new paradigm: globalism.

Globalism

"A global civilization is coming into being," according to Anderson. This is a "turning point in human evolution." For thousands of years humans dispersed around

the world developing different cultures, and the process is now reversing. A new social construction of reality is being built based on common webs of ideas about ecology, human rights, communications, and so on, but no one knows what the basic shape of the global culture will be--what values and beliefs will serve as basis for a global civilization (1990, pp. 20, 24, 26).

Coates and Jarratt (1989, p. 294), King (in an interview with Coates and Jarratt, 1989, p. 177), and Halal (1990, p. 27) reflected the idea that a global culture will need to address common problems, which they saw as becoming more difficult at the global level. In addition to ecology and human rights, they mentioned such problems as economic disparity, population growth, industrial development and loss of agrarian nations, scarcity of resources, poor education, ineffective religious movement, and so on. Halal concluded that a world society cannot be managed within existing economics and political structures and that "governments need to plan a transition to some as yet unknown far more sophisticated, disciplined system."

Sahtouris observed that a world society will need a truly impartial and cooperative world government to coordinate its interests as a whole (1989, p. 202), and Hopkins foresaw that an international community will need to be better organized and better able to manage itself in order to use its creative riches to solve human problems (1985, p. 50).

Fox proposed that new communities with new visions of living together will have to emerge and that they will need to be based on a "conscious and deliberate vow to create together, to sustain one another's creative powers, to stand in solidarity with other creators and co-creators in society and the cosmos" (1988, p. 207).

Nationalism. A number of authors noted that a cooperative international world community with new visions suggests the need for revision of nationalistic views. Grumwald pointed out that, historically, nationalism is a fairly recent development and that when it burst forth, beginning with the French Revolution, it became a new religion and proved stronger than anyone expected. Grumwald noted, however, that now something is happening to the traditional nation-state. It is exploding in two directions: downward toward tribalism and smaller religious or ethnic units and upward toward larger units such as the European Community. Grumwald stated that we might now be heading for something approximating world

government as a means to cope with such common problems as the environment, for example. He predicted, however, that "for a long time, nationalism and tribalism will remain intractable forces, especially . . . where they are mixed with deep religious passions" (1992, p. 75). Bell reflected similar notions, stating that in the next few decades single powers will be broken up by unsolvable internal tensions and structural crises. "Every society has experienced internal discord and disintegration" (1980, pp. 249, 255).

Henderson suggested that common problems of industry, technology, communication, pollution, militarism, and so on are driving the United States to a paradigm shift (1992b, n. p.). Bell (1980, p. 249), Cetron and Davies (1989, p. 330), Coates and Jarratt (1989, p. 21), Naisbitt (1982, p. 53), Naisbitt and Aburdene (1990, p. 14), and Nanus (1990, p. 15) all noted that American exceptionalism may be at an end, that the United States is not coping well with prosperity, and that its domination of economic, military, and political influence in the world is declining. Naisbitt noted that as the rest of the world has changed, the United States economy has shifted in two ways: from industrial to informational and from national to global (p. 55).

A few authors resisted the notion of the United States losing world domination. Cetron and Davies suggested that globalism will lead other nations to accept partial responsibility for world affairs, leaving the United States to prosper, to become a "wealthier and more tranquil nation," and to wield influence in the world (1989, p. 326). Bell stated that a nation is more than a voluntary association--it is a history group in which people have kinship attachments to their native land and language. An international society means a loss of "insulating space" which "makes the United States vulnerable to mobilization politics or emotional reactions such as the ideological conflicts in Europe in the 19th and 20th centuries which spread instantly by contagion (1980, pp. 61, 174). Bok suggested that our government must take care in moving toward globalism, that the stakes are high, and that "caution will always serve national self-protection" (1987, p. 14).

Most writers perceived, as Brewer did, that "national communities are the greatest hope and the worst hindrance as midwives" in the emergent global process (1986, p. 16). Toffler stated that "the power that once belonged to the nation-state

when it was the only major force operating on the world scene, is, at least in relative terms, sharply reduced" (1980, p. 321), and Bell said that in the global situation, a national state is too small for the big problems and too big for the small problems of life (1980, p. 227).

Nanus stated that progress is depending more on agreement with other nations, on global connections which are forcing us outside our national boundaries (1989, p. 34). Ferguson observed that self-sufficiency is a real threat. We know that nations are interdependent (1980, p. 196). Whitman saw the overriding issue as one of balance--"between a strong sense of nationalism and dealing with the global village as a community" (1987, p. 82).

Bok (1987, p. 16), Kidder (1988, p. B-4), and Mumford (1955, p. 248) agreed that it will not be possible for countries to stand alone in the world. None is sufficiently strong, disciplined, or moral and that, today, acknowledgement that we are interdependent, unconditional cooperation, and support of international organizations are the price for humankind's survival. The absolute sovereignty of every individual political nation will give way to a much deeper and more universal appreciation of the interdependence of social unity.

Ferguson stated that "movements and networks are gathering people around the world in common cause . . . spreading messages of hope without sanction of any government Transformation has no country" (p. 409).

World community. Rossman stated that people in every country are united on hundreds of levels (1991, p. 20), and Mumford observed that people no longer belong exclusively to a single culture. Rather than pride in an exclusive race or nationality, they are identifying with the larger world and are remaining open to wider influences--they are perceiving a tie with other humans (1955, p. 306).

According to Naisbitt and Aburdene, wider influences are stimulating global lifestyles and cultural nationalism. An international culture is developing due to telecommunications, travel, youth culture, food, music, fashion, and so on (1990, p. 119). Sahtouris credited travel--sharing new ways, food, products, and ideas--as a primary contributor to world culture. "The old separation of distance, language, and culture are bridged as the human technologies of transport and communications bind humanity inevitably into a single worldwide body (1989, p. 196). D'Amore quoted

Louis Brandeis as having once said that there could be no true community "save that built upon the personal acquaintance of each with each," and he credited travel--including student exchanges, cultural exchanges, international sporting events, business meetings, and professional exchanges--as opening the way or global understanding and acceptance (1988, p. 22).

Brewer (1986, p. 16), Cetron and Davies (1991, p. 21), Henderson (1988, p. 347), Naisbitt (1982, p. 78), Nanus (1990, p. 15), Rossman (1991, p. 19), and Salam (1987, p. 111) all focused on a topic raised by Coates and Jarratt who said that with a single global system there is a need to integrate knowledge (1989, p. 21). The exchange of information and knowledge, specifically about science and technology, stimulates global interconnectedness. The information revolution, with improved communication, transportation, and so on, has compelled formerly isolated people to interact and to compare their lives, and the results of globalization will be both raised expectations and a renaissance of linguistic and cultural assertiveness.

In addition, due to the systemic nature of globalism, knowledge is also perceived as a system, with people linking and exchanging information, science, and technology in response to global problems such as need for food, goods, and services. With interconnectedness in the next century, research will begin to focus on large-scale problem-solving. Research transcends boundaries, and academic freedom precludes government control. Universities--with the emphasis on "universe"--will be one of the most important group of institutions for cultural growth.

Naisbitt and Aburdene (1990, p. 23) and Rossman (1991, p. 19) agreed that humanity's problems are now global, that the age of globalization is already upon us, and that we must have cooperative programs. Anderson said that a postmodern worldview and globalism are hand in hand and that "globalizing requires us to renegotiate our relationships with familiar cultural forms" (1990, p. 26).

Asimov observed that one response to renegotiating cultural relationships, with the world becoming more tightly knit, is that there is a tendency toward decentralization, as witnessed by the already dwindling size of cities (1987, p. 30). Bell pointed out, however, that geography no longer provides an effective retreat or escape in any part of the earth. "We have reached our limit in the geopolitical military sphere" (1980, p. 64). The reduction of distance introduces a potential for

instability in world political systems. In response to decentralization efforts such as ethnic minorities breaking away to assert their own identities rulers may try to impose greater degrees of control (p. 61).

Harman suggested that on the global level a world culture must not attempt to control diversity, but must develop a trans-industrial or post-modern paradigm in which diverse traditions, with their own interpretation of human development, social goals, and ultimate meanings, are accepted as compatible (1988, p. 152). Cleveland (1991, p. 24) and Edgar (1992, n. p.) supported that notion, saying that global institutions must value multi-cultural dimensions and develop coalitions of people willing to accept wide consensus on norms and standards (1991, p. 24).

Anderson said that globalism ultimately undermines systems of absolute values and beliefs but that those old systems don't immediately disappear. "For now, global culture is a thin, fragile, ever-shifting web of common ideas, and within that, incredible diversity" (1990, p. 25).

Kidder stated that as the global worldview turns away from science-based preoccupation with fundamental particles and toward complex systems, it will perceive communities of all sorts--ecological, social, religious, and so on--as operating as wholes (1988, p. B-4). Hine suggested that the concept of networking, which preserves sub-culture diversity and encourages inter-penetration of ideas, is consistent with the vision of a global village and is a viable mode of organization for a global society (1984, p. 12).

Ramos perceived a "multi-centered model" of society made up of a "variety of social systems, each with its own design requisites" (1981, p. iv), and Morgan suggested that organizations with their corporate cultures--"mini societies with their own distinctive patterns of culture and subculture"--will serve as the focal points for global interconnections (1986, p. 120).

The role of organizations. Morgan stated that "many of the cultural similarities and differences in the world today are occupational rather than national" (p. 113), and he predicted that multinational organizations, which "typically operate in countries around the world," will have repercussions on power structures throughout the world (pp. 229, 302).

Cetron and Davies (1991, p. 21), Hine (1984, p. 13), Rossman (1991, p. 19),

and Toffler (1980, p. 322) all discussed the dense interlocking relationships of multinational, transnational, or international non-governmental organizations representing millions of members and tens of thousands of branches in many countries as bases of a networking structure for building global management and a new world governance. These authors also addressed the role of the United Nations in this system.

Toffler suggest that the United Nations may continue to be the world organization, with these less visible groups as a second world organization (p. 323). Hine noted that the United Nations cannot serve in a global structure based on decentralization, humanism, egalitarianism, and interrelationships because it is a rational attempt at problems solving and it has failed to break out of a bureaucratic mode of organization (p. 13). Cetron and Davies suggested that as multinational organizations become more powerful and as governments relinquish some aspects of social responsibility to employers the United Nations may be able to carry out its missions regarding world health, literacy, a world court, and so on (pp. 19, 21).

Without suggesting a particular model, Coates and Jarratt also foresaw new, flexible, multinational organizations as managing emerging global issues and as leading actors in the future (1989, pp. 20, 287). A number of theorists held similar perceptions. Garfield (1992a, p. 270), Kanter (1989, p. 17), Nanus (1992a, n. p.), Tannenbaum (in a conversation with Jamieson, 1980, p. 34), and Yankelovich et al. (1992, p. 24) said that with around-the-clock, around-the-globe instant information transmission, physical space is no longer a barrier and that national and international boundaries are breaking down. As boundaries break down and change, individuals and all parts of society are challenged to learn more about each other and about unfamiliar cultures.

For organizations with interactions among clients, suppliers, a multi-ethnic workforce, the marketplace, and so on, barriers to enterprise are being lowered all over the world. Global institutions must develop understanding and appreciation of the needs, backgrounds, and unique contributions of diverse groups in order to avoid misunderstandings and to ensure clear communication. Tannenbaum pointed out that, as boundaries break down, the definition and perceptions of systems also change and that with business leading the way, there is a need for interorganizational relationships

as a new system for world decision-making.

The role of international organizations in world decision-making was discussed at a conference on International Management Practices reported by Johnson and Associates. One segment of the conference, entitled "Let's Go Glocal," focused on the desire of organizations to have a global presence yet meet local needs and tastes (1992a, p. 87). This opens a discussion on the purposes and impact of international organizations, particularly in light of their possible leadership in global agendas.

According to Morgan, advocates of organizational globalization point out that multinational organizations are addressing local needs while they are creating jobs, bringing in capital, and assisting with development of underprivileged countries and people (1986, p. 305). Critics, however, are suggesting that such organizations are exploiting host countries, people, and resources, creating a dependent working class while contributing to the disappearance of needed agriculture, controlling flow of capital and technology, avoiding taxes, driving unduly hard bargains, playing nations against one another, developing rival power blocs, and, in general, creating economic political, and social havoc (pp. 307, 310).

Henderson suggested that overseas organizations will still face social and environmental injunctions--with unions going multinational and with consumer and environmental movements gaining strength in other nations--but that organizations must change their mandate for profit maximizing and "modify their policies and practices to bring them into harmony with emerging social goals and diminishing resources" (1979, p. 86).

Increased need for international organizations to address their policies in light of social goals supports Naisbitt and Aburdene's observation that we are entering a period of increased trade, interaction of finances, and sharing of human resources which suggests that the world is moving from trade among countries to a single marketplace or a global economy (1990, pp. 3. 13).

Naisbitt (1982, p. 70) and Wishard (1987a, p. 23) stated that a shift to a global, integrated systems, away from self-sufficient national economies, is evident in the amount and frequency of funds moving between world markets in international transactions, world trade, and foreign exchanges. The movement of capital and credit, separate from the economy of goods and services, is the most predominant

force in world economy. Other evidences of world economy are: foreign ownership of American property and business, international markets, multinational management, and international laborers.

Yankelovich et al. pointed out that as a global economy becomes a reality, organizations will need to prepare to move toward international involvement (1992, p. 24). Kanter observed that for America to ensure at least maintenance, let alone improvement, of its living standard, the best hope is to take an active role in the international marketplace (1989, p. 13).

Kiplinger (1986, pp. 9, 19), Outlook '92 (1991, p. 54), and Pascarella and Frohman (1989, p. 2) suggested that organizations must prepare for the following: more open foreign trade--with more countries involved, more sales, more suppliers, more foreign competition, increased movement of capital and convertability of all national capital, new national tax policies, fewer national government regulations, more mergers, and more opportunities for small organizations and entrepreneurs. Organizations must be prepared for increased use of technology, massive modernization and automation, and improved productivity.

Bell suggested that organizations must also be prepared for economic dealings between nations to become subject to some international political arena. There are three consequences arising from increased organizational interdependence: (1) the division of labor is widening the gap between poor and rich nations, (2) rich nations with strategic resources are using their strength for political advantage and technological gain, and (3) the shift in technology is stimulating a huge migration of workers (1980, pp. 192, 213). Lasch reflected similar ideas, stating that, so far, global economy has "widened the gap between rich and poor nations," that with a surplus population, medical, educational, and law-enforcement facilities remain inadequate, and that "affluence for all now appears unlikely" (1992, p. 71).

Harman also noted the "vast disparities between rich and poor nations," stating that there is a world distribution dilemma (1979, p. 69). Harman, along with Brewer (1986, p. 16), Grumwald (1992, p. 75), and Ramos (1981, p. 168), described the situation as follows: multinational organizations spread power around the world, but economic, scientific, and technological advances are harnessed to nationalism--profits return to developed countries and results are disparate. A universal desire exists for

the Third World to free itself from a syndrome of deprivation and to achieve a better life. Advanced nations can and must help.

Harman pointed out, however, that even as nonindustrialized nations modernize, experience economic growth, and begin to help the world's poor, they must utilize scarce resources. If they are successful, the world cannot accommodate six to eight billion high consumers (1971, p. 69; 1991a, p. 126). These problems are unresolvable without fundamental change in world culture and in the world economic system--a transformation toward ethical and moral concerns on a global basis.

New world views. Harman (1992c, p. 7) and Wishard (1987, p. 28) both noted that globalism is presently perceived in terms of economics, that business corporations are the dominant institutions on the planet, and that neither economics nor business has a tradition of being responsible for the whole. Capra (1982b, p. 19), Harman (1991a, pp. 124, 127), and Morgan (1986, p. 312) agreed that globalism in its present form is giving evidence that perceiving the world in terms of economics is not working. The present practice of economics is not compatible with an ecologically sustainable global society, not socially plausible, and not humanistically desirable. In order for major societal and global problems to become solvable and in order to achieve greater social responsibility and more equitable relationships there is a need to change the rules and to question the assumptions that allow the game in the first place.

We need fundamental changes in thoughts, perceptions, and values toward whole-systems thinking--perceiving business and economics as part of a greater global ecological system or taking an ecological perspective of a globally inter-connected world. We must move beyond separatist thinking and see the reality of wholeness and that we must focus on innovations for healing with the perception that an organism heals itself.

Korten observed that such a change can take place only through individuals. "It is the global citizen on whom the transformation depends and upon whose commitment to global responsibility the foundations of a peoples' development movement . . . must be built" (1990, p. 108). Progress toward realization of the transformational agenda will depend on the efforts of millions of citizen volunteer working toward the realization of a broadly shared vision (p. 183).

Henderson reflected similar sentiments, suggesting that individuals must join in efforts and must be helped to overcome the decisions of "rational actors [whose] narrow logic and rationalizing [keeps them] trapped in their institutional and conceptual bunkers." The "little people" must align themselves and their energies with the larger force-field of human awareness that, in reality, drives the planet (1988, p. 5).

Bennis also reflected the need for individuals to rise above organizations and their leaders to achieve new heights. In today's material world the captains of industry have been touted as leaders, but with the American emphasis on personal achievement as life's purpose and with the Industrial Revolution's bureaucratic complexity, these individuals became focused on greed and exploitation. Organizations also took on those characteristics and they have been used by society. Organizational members must now be freed to fulfill their genius and visions (1989, pp. 70, 107). Cleveland said that the "macrotask ahead is to manage worldwide transition" (1982, P. 172).

An exploration of the demands of a changing society, then, suggests that organizations may be expected to re-evaluate their emphasis on economics as the primary decision-making factor, to assess their responsibility for resources and ecology, and to examine both as part of an expanded role in the global arena. Without having explored specific societal demands, many theorists discussed, in general terms, organizational responses to the need for change.

Organizational Transformation

The Impetus

Harrison agreed with the need for new organizational strategies for transformation, stating that the "management tools that got us to this point are not appropriate to advance us to another level." Current organizational forms are increasingly unworkable because "we are at an ending of an age" (1984, p. 97).

Several authors discussed organizational responses to the influence of the new age. Raymond said that many organizations still view the world in terms of market control and profit-making (1986, p. 16), and Levitan said that we should not expect radical changes in the 1990's because a decade is too short for such change (1988, p.

85).

Korten suggested that although existing organizations are creations of the past, this is an era of innovation and change and adequate mechanism exists to support evolutionary changes within a broad framework of assumptions. The rewards that organizations offer tie us to the past rather than prepare us for the future, and there is no support for changes that depend on challenging and rejecting current basic assumptions (1990, p. 105). Garfield agreed, noting that in the past, efforts of organizations to deal with change were frequently either refusal to change, with revival and application of old strategies applied with new vigor, or partial attempts to change, with application of new strategies in unchanged environments where no fundamental shift in views of the world or the organization had occurred (1992a, p. 11).

Clark said that there are no illusions that the dominant Weberian paradigm will change in the immediate future, noting its continued influence in research, training, linguistics, political biases, and so on. He believed, however, that

Denial is past the point of no return; slowly but inexorably, our understanding of organizations and organizing will be illuminated by new perspectives.

Cumulatively, these perspectives will define and refine an alternative paradigm that will become the progenitor of numerous competing theories and structures The traditional paradigm will atrophy along with its derivative schema because it differs too markedly from the logic-in-use in organizations. (1985, p. 77)

Brown and Bennett (1992, n. p.), Ferguson (1980, p. 341), Garfield (1992a, p. 49), Kanter (1983, p. 19), Mohrman and Lawler (1985, p. 149), Nanus (1989, p. 55), and Pascarella and Frohman (1989, p. 55) agreed that societal circumstances have changed sufficiently so that the mechanistic worldview as the basis of organizational culture is now being undermined and a major shift in assumptions is warranted. The world has been changing dramatically, there are many movements worldwide which are challenging conventional views of organizations, organizations around the world are awakening and becoming aware that fundamental problems exists, and there is a qualitative change nationally in our attitudes and social awareness. Old visions and metaphors are seeming tired and devoid of relevance in

what people sense is a new age. The moment may now be ripe for a new paradigm of organizations.

Hubbard pointed out that throughout history societies have attempted to achieve the aspirations of a holistic community and have failed. It has been necessary to achieve a sense of interrelatedness and attunement which was not possible until it evolved in the cosmic consciousness (1982, p. 78).

Harrison said that organizations are now ready for transformation and that new age thinking is likely to succeed because people know something is necessary. Although they cling to the past out of fear, people are experiencing personal needs for meaning and commitment. There is a reservoir of positive energy and vitality waiting to be released and a willingness to accept discipline and to forego immediate gratification in favor of a vision of purpose and love (1984, p. 108).

Ferguson (1980, p. 18), Harrison (1984, p. 110), Hubbard (1982, p. 10), Kiefer and Senge (1984, p. 69), Naisbitt (1982, p. 82), Naisbitt and Aburdene (1990, p. 232), Owen (1984, p. 209), Reynolds (1993, p. 41), R. B. Smith (1986, p. 21), Toffler (1990, p. 213), and Vaill (1984, p. 23) confirmed that the time is now ripe for socially responsible organizations to respond to societal pressures in an overt way. Organizations are changed by events and are stimulated to change by crises and that this is a time of unprecedented change and stress. Although the mechanical model of organizations has served the industrial age well, as society has become increasingly disillusioned with its materialistic view and as the tasks of organizations have changed, a basic shift in attitude is taking place and a transition to a postindustrial society is occurring.

This transition has brought about turbulent environmental circumstances which are reflected in fundamental shifts in attitudes and values as well as in extreme economic necessities and that it has created paradoxes, ambiguities, dilemmas, predicaments, and challenges which make the postindustrial society too messy for the old paradigm and innovations imperative. Organizations are being forced either to transform their forms and structures and to modify their approaches or to cease to exist.

Morgan suggested that the force for change may come from within. Societies continue to evolve through the dialectic process, and resolutions of crises invariably

rest in the dominance of one or the other side or in some kind of reframing whereby differences find a new unity in relation to another opposition" (1986, pp. 263, 266). There is a "repressed opposite of rationality," a human side of organizations, consisting of unrecognized or unwanted drives and desires which have been lying beneath the surface of formal rationality and have been struggling to surface and change the nature of rational practice. These repressed needs are like Jung's "shadow" side--the other side of conscious ego. This submerged opposite is a reservoir of forces that has been lost or undervalued. Organizations may now begin to resurrect these resources and to tap new energy and creativity, to "make institutions more human, vibrant, morally responsive, and responsible" (1986, p. 224). This view parallels Harrison's belief that the people of society are ready to accept discipline.

Harman stated that modern society and its organizations are in the midst of a very profound transformation in which there are two big issues: one, a "change in the big picture of reality which underlies whole systems," and two, "how business, as the engines that create the future, can conform to a totally different picture of reality" (1992b, p. 28). Some changes are taking place and they are "perceived as the new paradigm in business, but they're not. They're just the foam at the early part of the wave" (p. 29).

Stewart predicted that great change will have its genesis in the late 1990s, beginning slowly, gaining momentum over the next two decades, and ultimately bringing about "the most remarkable revolution this country has ever seen." Such a revolution will be technological and economic as well as social (1989, pp. vii, 3). Asimov predicted that "the 21st century will be one of the great pioneering periods of human history, as people work under totally new conditions, doing totally new things in totally new ways, taking totally new risks to achieve totally new triumphs" (1987, p. 31).

The Process

Needs. Land and Jarman stated that "the time has come for human beings to take the knowledge which has revolutionized our world and apply these momentous discoveries in their own lives and within their organizations" (1992a, p. 95). Ogilvy observed that historically, the first reformation separated the church and state, with

power passing from the Pope to state officials and with government abstaining from officially imposing values on the people. The second reformation separated corporations from the state, with power passing from government leaders to corporate leaders and with values being pushed one step further from the people (1992, n. p.)

Bellah et al. suggested that what we need today is a "third democratic transformation" which would move us beyond the ancient city state and the 18th century regime of representative government but which would "preserve and advance their gains" (1991, p. 81).

Now is the time to move beyond reformation to transformation, according to Garfield. Reformation is change within the old paradigm. It attempts to preserve the old or to go down the same path more efficiently. Transformation changes underlying assumptions. It is the discovery and development of entirely new paths and fundamental change that cuts to the core of an organization's values, culture, forms, and methods (1992a, pp. 50, 74; 1992b, n. p.).

Adams (1984, p. 194) and Vaill (1984, p. 19) described this type of organizational change as Organizational Transformation (OT) as opposed to organizational development (OD). OD has helped organizations develop toward their potential, but it was founded on the social science paradigm inherited from the physical and biological sciences. OT reflects a transition to new alternatives. OT is aiming at change at a fundamental level--at changes in life and society.

Sheldon said that "when an organization finds itself out of fit with many aspects of its internal and external environment," a paradigm shift is needed--a change of attitude and worldview that brings along a different set of values as well as a radical system shift that involves every level of functioning (1980, p. 62). Garfield (1992a, p. 12) and Harman (1991a, p. 124) agreed that a fundamental change is needed--an entirely new context for operating and a more appropriate guide to lead to the next millennium.

Adams noted that a fundamental shift in organizations requires personal transformations, that critical mass is needed before a system-wide shift can occur. Bellah et al. (1985, p. 289), Bleeker (1987, p. 21), Harman (1991a, p. 128), Korten (1990, p. 185), and Vaill (1984, pp. 18, 26) agreed that people must fully discover themselves and that there must be a shift in the way they perceive their world. There

must be a change in the way people think about their membership in organizations, in their understanding of the meaning of work, in their actions toward one another, and in their language.

Garfield emphasized that "to move to an environment of fully participative partners" requires transformation of the philosophy of the people who must make the leap and also of the entire organizational structure. He saw this as "a massive physical and psychological undertaking" (1992a, p. 111). Schaefer and Fassel noted that addictions (the model they suggested for viewing organizations' current dysfunctions) are progressive and fatal and that recovery must be taken seriously. Recovery is a process--rather than a "quick fix"--in which the goal is progress within the process rather than the achievement of perfection (1988, p. 180).

Change models. Several authors offered insights into and suggestion for carrying out a change-recovery process. There are many models of organizational change, and these few represent only those authors focusing on the future of organizations who attempted to delineate the transformation process.

Bridges defined organizational transformation as different from organizational change. Change is a rationally planned succession of events whereas transformation is a psychological process which cannot be planned or managed in the same way. Bridges offered a three-part model (reflective of Lewin's 1940's cognitive dissonance/re-education model): letting go (disenchantment and disengagement) followed by a neutral period (disorientation) and closing with a new visioning or a new start (discovery) (1986, p. 25).

Rost and Smith suggested a "practical approach" for directing organizational transformation which they offered as suitable for large public and private organizations. They delineated five steps: (1) Building the agenda. Leaders and members debate issues and decide to move toward change. (2) Assessing the issue. They gather and analyze information and determine direction. (3) Planning the change. They outline their proposed change and include their mutual purposes. (4) Gaining support. They influence others and generate internal influence on specifics of the change. (5) Making the change. Policy makers determine whether or not to implement the change. If the response is negative, the process begins again with step one. If it is positive, staff members develop strategies and institutionalize the change

(1992, p. 197).

Rather than specific suggestion for directing organizational transformation, Nicoll offered insights into the process from a more participative point of view. Paradigm reframing, that is, consideration and acceptance of a new definition of reality or a new world view in an organization includes seven steps: fertilization (individuals presuppose new ideas and beliefs), crisis (threatening, disruptive events act as catalysts), incubation (a time lag occurs between crisis and ability of the prevailing paradigm to reorganize to meet it), diffusion (growing numbers of people embrace new ideas), struggle for legitimacy (new ideas explain events and gain currency), politics of acceptance (champions of new ideas influence larger spheres), and legitimization (new ideas are used repeatedly, shape performance, and ultimately become habitual and implicit) (1984, p. 157).

Buckley and Perkins also perceived a seven-stage process which offers insight into the transformational process as well as suggestions for directing it. The first four steps reflect individual change which is followed by an organizational shift: unconsciousness (passive time during which individuals accept possible need for change and build readiness and during which intuitive individuals may be inspired by vision), awakening (perception of problems, exploration of situation, and awareness of need for change, which may be identified and introduced by visionaries), reordering (analysis of situation, disequilibrium, minor modification leading to major change, reorientation to future--likely encouraged and directed by innovators), translation (integration of information into formulation of vision, which may be articulated by leaders who may work to gain support around the vision), commitment (organization takes responsibility for implement vision and key players assist members to move toward attitudes of readiness and acceptance), embodiment (alignment with the vision and initial implementation into day-to-day interactions and operations, assisted and supported by leaders), integration (widespread embodiment of change and community solidification) (1984, p. 59).

Schaefer and Fassel emphasized that the transforming organization and its members must be involved with recovery simultaneously. The first step toward transformation is acknowledging and "naming" the problem--with education as an important part of that process. The step is followed by a shift--with adoption of new

attitudes, values, and changes in behavior. This shift involves both a leap of faith from which there is no turning back as well as a need to grieve as old views die, are experienced as loss, and must be abandoned (1988, pp. 27, 183, 201).

Harrison and Kanter both supported the need for grieving during transition. Harrison said that organizations might go through the sequence of emotions which are experienced with impending death as described by Kubler-Ross (1984, p. 110), and Kanter said that not only must organizations members "mourn the past and grieve there losses, [they must also] get excited about the future and the positive rewards available to compensate for the loss" (1989, p. 84).

Difficulties. Many authors noted that the transformational process is a difficult one. Cordell, for example, stated that transition to a new view of society "will bring about vast disruption and personal and social dislocation" (1988, p. 43). Simmons noted that "massive change is upsetting. People are left with culture lag and future shock Historically, organizations and societies have handled major changes even more badly than individuals" (1990, p. 23).

Kanter suggested that the costs of restructuring organizations are "discontinuity, disorder, and distraction which culminate in a crisis of commitment and a need for people to reaffirm their membership (1989, p. 62). She called for organizations to find synergies to remove barriers to successful restructuring and for societies to extend "safety nets" in the form of education, training, and support for venture creations to help people cover the costs of transition (p. 342).

Alderfer (1982) pointed to the difficulty of group change in his study of intergroup relationships in which he found that people have difficulty identifying their own biases, they have trouble identifying with others' points of view, and they cannot be coerced into change without negative side effects.

Argyris (1982) and Argyris and Schon (1984) pointed out obstacles to achieving fundamental changes when they noted the difficulty people have in attaining congruence between their espoused theories and theories-in-use and in achieving double-loop learning which are necessary for organizations to move to Model II or deep organizational learning. Foster pointed out that in the dialectic view of the change process, change is never accomplished. It is always in process--an underlying property of all systems and a basic feature of all natural and social evolution (1987,

n. p.).

Schaefer and Fassel reflected both Argyris and Schon's findings and Foster's observations when they reiterated that change is a constant and pointed out that organizational rhetoric differs from organizational behavior. Although organizations state the desirability of change, in fact, they are dedicated to stasis (1988, p. 21).

Tannenbaum pointed out that change creates ambiguity and that there is a powerful intolerance of ambiguity which therefore inhibits change and acts as a key limiting variable to transformation. We must learn to eliminate fixities, to live with uncertainty, and to build in adaptability (in a conversation with Jamieson, 1982, p. 37). Garfield noted that the challenge of reconciling opposites is at the heart of the paradigm shift (1992a, p. 35).

Ramos suggested that opposites should be reconciled when he said that there is much in old or extant theory which is useful and which alternative theory should appropriate and develop (1981, p. 172). Garfield agreed, saying that "there is obviously a place in organizations for old story expertise with its focus on precision, analysis, and accuracy, but it can no longer take center stage" (1992a, p. 146).

Tannenbaum noted that systems need to maintain stability and to retain certain elements (p. 36), and Foster brought out that one of the major issues of organizations is to preserve their identity while being an active part of their environment. A shift to a new paradigm will include attempts to transform current patterns and will necessitate management of contradictions (1987, n. p.) Pascarella and Frohman said that new forms of organization will bring forward some of the best organizational techniques and lift them to new states of growth (1989, p. xi).

Tannenbaum stated that joint exploration of old and new elements is useful as projects move forward, change, and unfold with movement toward new goals. We need both to hold on and to let go--to hold on long enough to find new ways and deal with the processes of living and dying and to let go ultimately to focus on rebirth (p. 37).

Nanus noted that some organizations hold onto and are dominated by their past--living in the glory of early successes--but that most are present-oriented--emphasizing stability and control and focusing on short-term results. Those organizations which are future oriented, however, are the ones which take

responsibility for adapting to change and for their own future (1989, p. 124).

Pascarella and Frohman agreed, saying that traditional organizations "see the future as an extension of the past" and that emerging organizations "invent their own future" (1989, p. 319).

New views. Nanus stated that future oriented organizations recognize the need to continuously assess their vision in response to interaction with their internal and external environments (1992b, p. 22). Foster noted that change is a property of interactive systems--that each system is an identity which exists within other identities and that the environment, a system with many subsystems, is made up of mutually causative elements. Changes between systems in the environment cause other changes so that reverberations are unpredictable. Organizations must therefore understand unity and separateness, must see the patterns and logic of change, and must think on new levels about the transformation of opposites (1987, n. p.). Harman agreed, stating that organizations must accurately assess internal and external environments and must understand the significance of indicators in order to make good decisions for the future (1991a, p. 128).

Nanus (1992b, p.20) and Schaefer and Fassel (1988, p. 20) pointed out that seeing the whole related to larger wholes and understanding the significance of the patterns becomes the key to innovation and change. Garfield (1992a, p. 148), Kanter (1989, p. 32), and Pascarella and Frohman (1989, p. 1) emphasized that in this age of sweeping change new story organizations must focus on anticipation, intuition, and creativity and must be responsive, flexible, and open to innovation at every level and in every activity in order to generate opportunities for serendipitous encounters and spontaneous discoveries. R. B. Smith said that in this age of perpetual change, organizations must be in front of change. They must flow with it and they must see change as a way of life (1986, p. 21).

Naisbitt pointed out that, in light of a continuously changing world and the need for constant re-examination and reconceptualization, an organization can keep on top only by recognizing its purpose and maintaining its vision of where it is going (1982, pp. 90, 96). Pascarella and Frohman emphasized that an organization's purpose provides the memory of what has been and a vision of what can be in the future. It assures proper adjustment and centralization of internal activities and

policies and ensures appropriate adaptation and change in response to environmental changes while focusing on the condition of the organization's evolutionary process toward a desired goal (1989, pp. xii, 8).

Nanus stated that "once an organization is capable of shaping its own future, it cannot avoid deciding to do so." The only question remaining is "whether the future will be created carefully and well with attention to the consequences of choice" (1989, p. 59). Schaefer and Fassel also pointed out that organizational transformation is not value free. It is "more than an alternative to OD in that it has an appreciation of spirituality, indeed it has a spiritual base as a specific component" (1988, p. 31). Vaill saw OT as "being in the world with responsibility" (1984, p. 33).

The need for organizational transformation, then, becomes apparent when organizations experience a lack of fit with societal circumstances. Movement toward transformation begins with individuals shifting their ways of perceiving their societal world and their organizations world. Individuals engage in a process of self-exploration and view-shifting which can be perceived in terms of development steps but which, in reality, is a messy, disconcerting, and costly progression which minimally includes, in various states of accomplishment, identification of a need for change, evaluation of the present compared to new possibilities, a tension for change, a shift to a new perception, release of old views, and focus on a new vision. The process occurs for individuals, and ultimately, it occurs interactively with their organizations.

In order for organizational transformation to become fully accomplished, not only must new views and practices become implemented, but also beliefs in continued change and in the need for continuously responsive and responsible behaviors must be adopted as well. The authors' descriptions of organizational transformation reflect the definition of paradigm shift and the discussion of transformation presented earlier in this paper. They also suggest that specific changes will need to occur within organizations in order for transformation to take place.

Statements on the impetus for organizational transformation and the process reflect a reliance on human direction and intervention--on individuals who achieve personal transformation then step forward to direct and assist other individuals and groups to achieve similar change, and on leaders who serve as agents of change.

Leaders as Change Agents

As the need for organizational transformation becomes apparent with societal shifts, the need for those individuals who perceive new needs and develop new visions also becomes apparent. As Korten (1990, p. 106) and Edgar (1992, n. p.) put it, change comes about by public pressure; leadership comes from the bottom up. Cleveland stated, "The tidal movement of social change in the past 20 years boiled up from the people at large." In the last decade the "American people have had quite a lot of practice at getting ahead of their leaders People are underwhelmed by the leaders urging us to face problems [and they are] sensing that they are going to have to lead leaders out of the wilderness" (1982, p. 167).

Nanus noted that

"If we look back over history we see that leaders are most needed and most valued during times of great change Never has the need for leadership been greater. With thousands of our major organizations overmanaged and underled, it is little wonder that anxiety about the future is so widespread in America. (1989, pp. 7, 55)

Cleveland said that people need help, and it will come, not from leaders of great established organizations, but from activist citizens, from those whose concerns exceed their confusion, from those who are privileged to think freely and from a wider perspective because they are not burdened with formal responsibility, from those who can think in terms of an interrelated society in an uncompromisingly interdependent whole (1982, pp. 168, 173). Edgar called such people "intellectual mutants" (1992, n. p.), and Simmons referred to them as "deviants"--people who are aligned with social transformation, who disapprove of prevailing standards, and who may be seen as scourges but may be the heroes of transition times (1990, p. 220). Ritscher described those who separate from others and view life, themselves, and their situation differently as having dedication and courage and as exercising "bold existential acts of courage and will" (1986, p. 66).

Foster noted that there is a need for people who can "see beyond immediate needs and provide a genuine narrative for our lives" (1988, p. 36), for leaders who are critical of current social arrangements and perceptions, who can engage in transformative practices which change them, and who are conscious of civic

responsibility. Such leadership has become both rare and crucial (pp. 20, 36).

Lodge stated that we need "architects of smooth transition from the traditional ideology to the new." We must "educate men and women in considerable numbers to become engines of change" (1987, pp. 43, 45). A number of theorists echoed both Foster's and Lodge's sentiments. Wagner, for example, said that we need leaders who can "create a culture in which people can take responsibility" (1991, p. 33). Bell stated that "the major need is for leaders to recreate a moral credibility" (1980, p. 271), and Harman said that we need leaders who can "communicate the necessity of disruption and the steps toward change" (1979, p. 36). Mumford stated that it takes a dominant personality to help "make a closed society capable of entering into wider social relations" (1951, p. 107). Senge emphasized that we need leaders who show the way by example, rather than by moralizing--who can harness the commitment of people so that the commitment of organizations to building a better world will have some meaning (1990, p. 347). And Hubbard said that we need a new kind of leadership which is aware of evolutionary potential and is attracted to power in order to empower or enable all. Such leadership is emerging (1982, p. 100).

Foster emphasized that for leaders to contribute to a new situation, they must adopt a program of self-critique, ethics, transformation, and education (1988, p. 38). Ritscher suggested that such persons must be able to give up their egos and work for a common good. They must be able to reach deep within themselves to develop the strength and trust to deal with what is and to leap into the unknown. They must have the sensitivity, caring and patience to tap that deep place in other people in order to build and serve cooperation and teamwork and they must be able to develop both the vision and the will to link that vision to intention and to move it to reality (1986, p. 67).

Foster also said that for leaders to create such change they need to perceive how the change process takes place (1987, n. p.). Rost stated that "if a transformation to a postindustrial era is to happen . . . , we need leaders who are imbued with a postindustrial model of leadership that guides the choices, behaviors, and thoughts of leaders and followers (1991, p. 100). Postindustrial leadership must be learned in order to "help people change the dominant paradigm of governing their society, thereby empowering them to transform their society" (p. 182). Knowledge of

new views of leadership is necessary to develop "leaders who will help propel Western societies into the postindustrial era and who will help shape the future of our civilization and the quality of life of future generations" (p. 100).

Authors who addressed leadership specifically as a stimulus to change discussed various tasks and responsibilities of "channeling some of the energies and sowing the spiritual seeds involved in the birthing of the era to follow," as Simmons put it (1990, p. 34). Ferguson (1980, p. 152) and Simmons (p. 34), for example, said that an early step in the leadership of change is to seek kindred spirits and to form a fraternity of paradigm breakers.

From there, Ferguson, along with Cetron and Davies (1987, p. 327), Cleveland (1972, pp. 133, 168), Edgar (1992, n. p.), Foster (1988, p. 5), Mumford (1951, p. 223), and Theobald (1983, p. 54) suggested that those who hold new perspectives should assume the view of globalists. They should identify emergent elements in the new paradigm and major ideas for the future. They could then develop a method for bringing these ideas together into a model such as a scaffolding which connects the ideas and presents them in a wider view.

These leaders could then share their perceptions with a hopeful public to help people understand the phenomena occurring in their lives and to help them comprehend that the old paradigm no longer works. The leaders could educate people to such convergences as science and intuition, for example, and could help people see connections, help them think through contradictions, and help them analyze futures.

Such leaders must use a prophetic voice to express rightness, to provide liberating knowledge, and to communicate the vision of a new social condition. These leaders must inspire people to new levels of concern, help them change their goals and styles to what is new and relevant, and help them ultimately to take action.

Foster noted that it is difficult for leaders to exert influence and to achieve a true democracy, and he suggested that the answer may be through small organizations or organizations within organizations where all members can feel they participate (1988, p. 40). Nanus said that leaders of major organizations and institutions have the authority to respond and to change the system but that only effective leadership at lower levels can address the tasks appropriate to the challenges of the new age (1990, p. 15).

Garfield observed that top leaders often resist making the leap to involve members at lower, smaller group levels in leadership (1992a, p. 111). Tannenbaum said that as change agents, professionals must be willing to exhibit such change (in conversation with Jamieson, 1980, p. 38). Nanus urged that for leadership to be adequate, it must be concerned with member collaboration and empowerment. Although organizations are resilient, leaders must make the adjustments necessary to cope with change (1989, p. 37). Harman stated that organizational leaders must find new, change-oriented ways for humans to express their needs and wants. This is the leader's function (1979, p. 126).

Block and Harman (1992, p. 9) and Theobald (1987, p. 82) noted that top-down, patriarchal leadership belongs to the old paradigm and that social change does not move from the top down. Empowerment is designed, initiated, and invited by top leaders who, as change agents, choose to relinquish their control in service to higher goals. These leaders release their focus on distinctions and privileges and find ways to transfer leadership and responsibility to others.

Other authors emphasized the importance for change of leaders developing individuals at all levels. Foster said that as change agents top organizational leaders must perceive people as creators of energy and as validators of their leaders' actions (1988, p. 39). Leaders as change agents must assume the roles of emancipating leaders--sharing responsibility, recognizing those with experience and wisdom, conjoining ideas, educating people to the responsibilities of leadership, and developing others' freedoms (p. 20).

Ackerman and Whitney (1981, p. 255) and Cleveland (1972, p. 126) said that such leaders must also assume the role of stewards--satisfying people's needs for equity, participation, and achievement and merging diverse elements. Foster stated in conclusion that "leadership, in the final analysis, is the ability of humans to deeply relate to each other in the search for a more perfect union" (p. 41).

Ferguson noted that business leaders who are articulating new perspectives and focusing on human potential are changing their values (1980, p. 340). Cleveland noted that future leaders will have new ethical burdens. They will have to formulate and implement society's purposes (1972, p. 121). Foster stated that democracy depends on values which are ethical and that for such public values as equality and

liberty to continue to exist, private values will have to be taught (1988, p. 40).

Summary

The writings of theorists who have addressed organizational-societal relationships suggest that organizations are seen as stimulators of societal transformation. Although organizations have high impact on society, they are not currently reflecting democratic values or focusing on societal needs. The public, initially through the government and more recently through more personal attention, is beginning to make social demands on organizations.

In order for organizations to respond adequately to societal needs and demands, they must understand the environment of which they are a part. Old organizational views and leadership/management practices have been founded on science-based worldviews and manipulative participative views. Society, however, is moving on toward addressing concerns such as the economy as the major force for decision-making, responsibility for the ecology, and need to address the world as a global whole. Such new age societal shifts in basic beliefs and values are providing impetus for organizational change to more human and spiritual bases. Organizations are facing the need either to respond to this changing environment and adopt new worldviews or to cease to exist.

Through study of models of the transformation process, development of an understanding of possible difficulties, and examination of the societal impetus for change, organizations can prepare to move forward. The remaining need is for leadership.

Leaders-as-change-agents are individuals who respond to the need for change and, through introspection and study, who develop not only a vision for the future but also understandings of the change process and of the meaning of transformational leadership. They are individuals who step forward to help others perceive needs and develop their visions, who inspire others' intentions and support their actions.

The most likely venue for such leadership is in small organizational groups where personal inspiration and participation can be nurtured. Organizations as the arena for stimulating change completes the circle of thinking with which we began-- that organizations are seen as stimulators of societal transformation. This interactive,

cyclic view reflects the holistic relationship of organizations and society.

Having examined that relationship, we move on to explore organizations as social entities within themselves, which Yankelovich and Immerwahr saw as consisting of the interaction of two factors: soft factors such as attitudes, motives, and expectations of the work force and hard factors such as structure and technology (1987, p. 11). Chapter Seven explores the soft factors in the context of organizational culture, and Chapter Eight examines organizations as structures and systems.

CHAPTER VII

ORGANIZATIONS AS SOCIAL ENTITIES

As discussed in the last chapter, the transformation of organizations in response to pressures from interrelationships with society, requires that organizations change their internal belief systems and behaviors. The existence of such beliefs and behaviors suggests that organizations are social wholes and that understanding their internal patterns is necessary for perceiving their transformational processes.

Organizational cultures, human perspectives on organizations, and related topics are discussed here as means to explore organizations as social wholes. These topics are discussed individually, however a certain amount of redundancy suggests that, once again, the content must be absorbed holistically in order to formulate as complete a perception of organizations-as-entities as possible, which is necessary in order to conceptualize the needs and directions for organizational transformation.

Land and Jarman observed that the environment will continue to buffet organizations and to demand radical and more intensified solutions than in the past. Organizations must be willing to explore their total environment and to ask totally new questions about what is possible in order to find out how they can renew the enterprise. "The challenge is to . . . construct a new roadmap for organizational success in a new era (1992a, p. 37). de Chardin said that in the human world social phenomena are not superficial arrangements, and he noted that advancing social phenomena denotes an advance in reflection (1964, p. 214).

A number of theorists described organizations as social phenomena, using various terms to focus on the existence of unifying beliefs and meaning systems. Bennis, for example, said that "organizations are social systems with norms, values, shared beliefs, and paradigms of what is right and wrong, legitimate or not, and how things are done" (1989, p. 30).

Morhman and Lawler noted that the concept of paradigm has been "reserved for beliefs and practices of the broadest communities," it can also refer to beliefs and

practices of more limited social matrices such as organizations (1985, p. 151).

Burrell and Morgan confirmed that paradigms are views of social reality, noting that different paradigms are useful for offering different views of organizational realities (1979, p. 25). Smircich said that, as paradigms, organizations are "patterns of thought, common understandings of adequate knowledge and legitimate activity; ideational systems" (1983a, p. 348).

Foster suggested that such shared meanings are reflected in the paradigms and metaphors we use to conceive of them, that such overall views of organizations profoundly affect how we think about them by providing the language which we use to discuss them as well as the perspectives and frames we use to perceive their way of organizing (1986, pp. 53, 59).

Pondy stated that metaphors are used as effective theory-building strategies to ground theory in a detailed understanding of individual organizations. Metaphors place explanations beyond doubt--by suspending ordinary rules of logic--and bridge the familiar to the strange, which facilitates change (1983, p. 163).

Morgan described organizations as enactments of shared realities. Organizations must be understood as processes that produce systems of shared meanings (1986, p. 132). Bolman and Deal observed that "behind every effort to improve organizations lies a set of assumptions, or theories, about how organizations work and what might make them work better" (1991, p. 9).

It seems then, that organizations can be viewed in terms of their unifying social realities, beliefs, shared realities, and practices and that exploring organizations holistically will not only create a better understanding of them but also facilitate change.

Foster noted that a number of different paradigms are available for viewing the social realities of organizations and that different perceptual frames introduce major differences between various theories of organizations (1986, p. 55). Smircich also noted that there are a variety of metaphors used to refer to "organization" which provide different ways of knowing the phenomena of organizations (1983a, p. 340).

Paradigm Bases and Perceptual Frames

Orthodox Views

Morgan pointed out that different paradigms and metaphors used to view organizations are based on different worldviews and that different functions are identified depending on which metaphor is used to attempt to understand the organization (1980, pp. 605, 608). He saw "orthodox" organizational paradigms--those which form the foundation of modern organizational theory--as based on a functionalist point of view (pp. 608, 613).

Foster described functionalism as mainstream theory which is based on positivistic, objectivistic, "neutral" research. He said that it assumes that organizations are concrete entities and that systematic study will yield reliable and predictable knowledge (1986, p. 60). Morgan saw functionalism as assuming that the reality of organizations rests in a network of real relationships which is relatively ordered and cohesive, which interacts within a context or environment, and which is oriented toward achievement in the future (1980, pp. 608, 616).

The most fundamental organizational metaphor, according to Morgan, is the organization as a machine (p. 613), which he, along with Smircich (1983a, p. 340), described as based on the mechanical imagery of the physical world. It is the basis of Taylor's, Fayol's, and Weber's view of organizations as instruments for performing work and accomplishing tasks in pursuit of prespecified ends or goals. In this view an organization is a combination of elements or multiple parts designed to mesh in formal means-end relationships which are judged on the basis of efficiency. Emphasis is placed on the rational, static, closed structure of the organization and its technology.

Another functionalist view of an organization, according to Morgan, is as an organism (p. 614). He described this view as based on systems theory and as reflecting the views of Katz and Kahn (1966). Here, organizations are systems of differentiated, yet mutually connected, integrated, and dependent parts constituted to share a common life. The system is studied in terms of its life-sustaining activities and its management of interdependencies and exchanges across intersystem boundaries within a constantly changing and interactive environment. Success is dependent upon

achievement of appropriate relationships, both internally and between the organism and its environment, and on conducting the imperative functions necessary for survival.

Morgan described other functionalist views of organizations: organizations as cybernetic patterns--Argyris and Schon's (1974) view of organizations as focusing on sustaining homeostatic balance through learning based on negative feedback and Weick's (1979) view of organizations as loosely-coupled systems which are not tidy, efficient, or well-coordinated. Morgan saw these two views as based on natural sciences and as reflecting more adaptability than organizations-as-machines or organizations-as-organisms.

Morgan's other functionalist views included organizations as political systems, which focus on conflicts of interest and power, and organizations as theaters, which focuses on members engaging in roles and giving official and unofficial performances. These two views introduced the human dimension to organizations and allowed for human shaping of the organization within a contextually defined, real setting (p. 616).

Bolman and Deal also offered different views from which to perceive organizations which they called "frames," which they described as different sets of ideologies, each with its own set of problems, assumptions, approaches, and views of the world. Interchange between the ideologies is "limited and almost combative" (1984, p. 191). Their structural frame, for example, is based on traditions of rational systems with emphases on organizational structure, information processing, and the impact of technology (p. 191). The human resource frame sees organizations and humans as being critically dependent on one another and therefore focuses on synchronization for mutual benefit (p. 202). The political frame is based on beliefs that scarce resources, conflict, bargaining, and compromise are fundamental realities in organizations, and that organizations are basically comprised of coalitions (p. 221).

Bolman and Deal's symbolic frame is based on the premises that within organizations the most important thing about events is their meanings, that symbols serve organizations to resolve ambiguity of meaning, and that apparently dysfunctional phenomena may be logical when viewed symbolically (p. 218). The authors

envisioned that their four frames might be integrated into a flexible approach with which to approach current organizational life and to interpret day-to-day events (p. 240).

Pascarella and Frohman (1989) offered four views of organizations which would be less possible to integrate. They saw organizations as social entities which shift their focus with maturation. In the start-up phase, organizations are led by entrepreneurs, have flat structures with loosely defined roles and responsibilities, and are focused on success in the marketplace. At stage two, the growth phase, organizations are led by administrators, become hierarchical, and have established job definitions, divisions of labor, and formal procedures.

At stage three, maturation, organizations are led by a watchdog and they become focused on capturing resources, negotiating position, and establishing a power position. At this stage, organizations can become rigid and stagnant--more concerned with internal activities than results. At stage four, however, purpose-driven organizations emerge and continue their evolution--becoming increasingly able to adapt to a changing environment. They are led by a visionary, and the leader's sense of purpose becomes institutionalized and becomes the driving force for all organizational activities.

Henderson reported a different view of organizational maturation, one developed by Stanford Research Institute. According to this view, an organization's spring season is an era of high faith, shared values and goals and high growth. Summer is the era of reason, greatest complexity, and moderate growth. Autumn is the era of cynicism. Supersized bureaucracies take over, leaders disavow responsibility and maximize visibility, and constituents become disillusioned. Winter is the era of despair, with rapid turnover of leaders, ideologies, and solutions. The four likely responses to this last condition are: muddling though, descent into chaos, authoritarianism, or transformation (1988, p. 117).

These perceptions and models of organizations suggest that there are any number of ways of viewing organizations and that many of them are based on old-paradigm or orthodox beliefs.

Neo-Orthodox Views

Pascarella and Frohman's purpose-driven stage of organizations and SRI's era of despair suggest a shift toward a new holistic worldview. Clark labelled new worldviews of organizations as "neo-orthodox" and defined them as those views which deny "basic assumptions undergirding conventional organization theory and research." He saw neo-orthodox views as transitional--as denying old views but not necessarily fully reflecting a new paradigm--and as moving from old to new perceptions--from seeing organizations as simple, hierarchical, mechanical, and determinate, for example, to complex, heterarchical, holographic, and indeterminate (1985, pp. 52, 69).

Morgan noted that the bases of functionalist views have been questioned and that they have been challenged by three more recent paradigms (1983, p. 608). The first, the interpretive paradigm, is described by Burrell and Morgan (1979, p. 28), Morgan (p. 608), and Morgan et al. (1983, p. 22) as action oriented, focused on making sense of the organizational context beyond the shared social constructions. Metaphors in this category focus on ways organizational realities are created and sustained and on comprehending the subjectively created social world as it exists in terms of the organization's ongoing processes. Organizations-as-cultures and organizations-as-language games--Wittgenstein's view that reality emerges from rule-governed symbolic structures such as verbal and nonverbal languages--are examples of metaphors based on this view.

Morgan saw the other two challenges to functionalism, radical humanism and radical structuralism, as focusing on social domination and exploitative aspects of organizations, with an emphasis on identifying fundamental contradictions. Organizations as psychic prisons and as instruments of domination are examples of metaphors which illustrate these two views respectively (1980, p. 609).

Naisbitt and Aburdene supported the notion that views of organizations are shifting from physical science bases to being based on newer premises. They cited metaphors such as holistic information systems, morphogenetic transformation, and genetic manipulation as reflecting biological and biotechnological bases, for example (1990, p. 259). A number of authors offered new or neo-orthodox views of organizations which are presented here in brief only to suggest that such new thinking

exists and that it extends over a wide variety of thought.

Organizations are dynamic energy--constantly moving, shifting, changing interrelationships and processes which continually adjust decisions, actions, and goals as they move toward accomplishing core purposes (Ackerman, 1984, p. 116).

"Organizations are inside people and are defined completely by them as they work out their ideas in their heads through their actions in the practical world" (Greenfield, 1983, p. 1). They are social constructs--products of individual human agreements and "subjective understandings people choose to live by" (Greenfield, 1984, p. 3).

Organizations can be viewed as systems of shared cognitions, systems of knowledge or shared meanings, patterns of symbolic discourse, projections of the mind's universal unconscious infrastructure, or manifestations of unconscious processes (Smircich, 1983a, pp. 348, 350).

Kiefer and Senge described a metanoic organization based on a shift in worldview toward awareness that individual belief holds the power to determine destiny, that through responsible participation humanity can create a meaningful and satisfying existence for everyone, and that we can collectively envision and create the society we want. Founded on this underlying set of beliefs, the metanoic organization is built on the assumptions that leaders are responsible for sustaining the tension, people are basically honest, purposeful, and have unique contributions to make, that complex problems require local solutions, and that organizational members can join together in coordinated competition to achieve common purposes (1984, pp. 70, 75).

Ramos offered a nonmarket-oriented, paraeconomic, "substantive" model of organizations as small exclusive settings or communities which members can choose to join as means to produce and actualize and which are based on ideologies found somewhere between total prescription and complete normlessness and between all-encompassing community orientation and exclusive personal orientation (1981, p. 167).

Kinsman offered the community model of organizations as illustrated in Findhorn, Scotland which he described as an alternative organizational style formed around an ambiance of consultation and trust, with leaders as "foculizers" who are responsible for sensitively focusing the energies of members into a consensus formed

through individual awareness and communal purpose (1986, p. 25). Brown and Isaacs described the community model of organizations as focusing on a purpose determined by the whole of the community. Members are free to pursue their personal purposes while serving the common purpose. Leaders are representatives of the people who "have a purpose that is of the whole." The community model is a systemic approach driven by the whole (1991, p. 8).

These and other new metaphors and views of organization and their practices reflect and support Wagner's statement that "a new paradigm of organization is needed that is interactive rather than hierarchical (1991, p. 33). Land and Jarman agreed, saying that "organizations simply cannot use the same worn out patterns and get to the future" (1992a, p. 37). "The opportunity for people to have lives that are rich with meaning, to reinvent the organizations that are the building blocks of society, and for both individuals and organizations to live according to a new worldview lies within our immediate grasp" (p. 135).

Deal and Kennedy said the "we are at a juncture in the theory of organizations where we know that existing metaphors leave too much uncovered and unexplained. We have yet to find metaphors that will help . . . understand and improve modern organizations" (reported by Clarke, 1984, p. 71). Clarke observed that whatever alternative metaphors may emerge, the mechanical metaphor is under daily attack Future research is also under attack . . . because the future is imponderable--worth pondering, but imponderable" (p. 71).

Foster suggested that we might ponder the future through the application of critical theory. Positivism is rejected on the grounds that organizations are human constructs and that humans don't make totally rational decisions. Critical theory is concerned with rational and free discourse without bureaucratic structures and with the contribution of organizational goals and social vision and is committed to the continuous critical analysis of theory and its practice--particularly as it leads to justice (1986, p. 65).

Morgan stated that "our most valuable asset is our capacity for critical thinking." The world is becoming increasingly complex, and "unfortunately, our styles of thinking rarely match this complexity." Through the use of metaphor, which

is basic to our way of thinking generally, we have a means of enhancing our capacity for creative yet disciplined thought (1986, pp. 16, 17). Ackerman concluded that to implement new ways of thinking regarding organizations, we need terminology with which to describe new perceptions of reality and new organizational forms and systems (1984, p. 135).

Having learned that organizational entities can be interpreted in many ways and that new views of organizations are forthcoming and are still needed as a means to engender the future, the study of organizational culture could lead to critical thought, new terminology, or new insight which could be helpful in creating new views and metaphors for organizational transformation.

Organizational Culture

The term culture, according to Owen, comes from *colere* which means "to nourish" and which is the basis of the agricultural term "cultivate" (1986, p. 115). Morgan said that culture is an organizational metaphor derived from "cultivation," the agricultural practice of tilling the soil and developing the land and from the 19th century observation of primitive societies as having different patterns of social development. Perceptions of organizations as cultures arose with an awareness of Japanese management styles and that this view is currently used to guide attention to specific aspects of organizational development (1986, p. 111).

Smircich wrote that the cultural analysis of organizations "forces questioning of taken-for-granted assumptions" and raises issues of context and meaning and of surface values. The present cultural forms in organizations are products of a particular sociohistorical context which embody the values of orderliness, efficiency, and organizations itself. The notion of exploring an organization's culture points out the importance of questioning the ends that organizations serve (1983a, p. 353). It is difficult to both live in one's cultural context and to critique one's own assumptions and values. "It is difficult, but that is what a cultural framework . . . urges us to do" (p. 355).

Morgan saw the strengths of examining organizational cultures as directing attention to the symbolic aspects of organizational life, providing an avenue for

creating organized action, reinterpreting the nature of organizational-environmental relationships, and helping to understand organizational change. He saw the potential weaknesses as creating the possibility of management exercising ideological control, manipulating organizational variables, and seeing only surface organization life and missing fundamental structures (1986, pp. 135, 138).

Smircich (1983a), who also saw the concept of organizational culture as having been borrowed from anthropology, said that it had been developed in organizational studies in two ways--ways which differed in basic worldviews, research approaches, and basic interests. The first view of organizations-as-cultures developed from functionalism or structural-functionalism bases. It focuses on culture as organizational variables and has two themes. The comparative management theme is based on classical management theory and sees culture as a background factor or imprinting force on the organizational environment. The corporate culture theme is based on the concept of contingency theory and sees organizations as culture-producing phenomena which affect organizational behavior through shared values and norms.

The second view of organizations-as-cultures, according to Smircich, sees culture as something the organization is rather than has, as a root metaphor rather than a variable. Smircich emphasized that the major difference between the two views is the issue of causality. This second view developed from the belief that organizations are subjective experiences, expressions of human consciousness. This view has three themes. "Organizational cognition" sees organizations as systems of shared meanings, networks of common understandings, or patterns of thought. "Organizational symbolism" sees organizational culture as patterns of shared symbols and symbolic discourse which are linked to meaning and activities. "Organizations as unconscious processes" sees culture as the projection of the mind's universal unconscious infrastructure and as manifestations of unconscious processes.

Most theorists wrote of organizational culture as patterns of shared meanings without addressing whether or not those meanings are imposed or created. For example, Smircich, herself, when writing in general terms about organizational cultures, described them as systems of shared meanings and "shared understanding of experience" (1983b, p. 55) which emerge "as a consequence of the historical

development of the company, the struggles for leadership within it, and the personal ideology of the current [leader]" (p. 58).

Allen and Kraft (1984, p. 75), Kiefer and Senge (1984, p. 75), Zentner (in a report published by Johnson and Associates, 1992c, p. 385) also described organizational culture in general terms as the organization's identity. Together they said that it determines shared goals, values, and basic assumptions; it defines organizational characteristics, principles, and pursuits such as purpose and mission, member behavior, and treatment of members; and it is translated into and perceived as action.

Louis saw organizational culture as something more than imposed. Organizations are "distinctive social entities possessed of a set of common understandings," in which meanings are the results of interpretation, rather than being given an a priori understanding. Culture provides a set of potential meanings indigenous to the local group, which has evolved through the history of the organization, but that final meanings are determined by individuals who adapt the cultural codes into sets of relevant personal codes (1983, pp. 39, 42).

Morgan agreed that "culture is not something that is imposed on a social setting. Rather, it develops during the course of social interaction" (1986, p. 127). He also expressed the more advanced view. Culture is a "socially constructed reality in the heads and minds of members" (p. 132). Organizations must be understood as processes that produce systems of shared meanings and that reality construction is the process of individuals making their own behavior meaningful. He saw enactment as a voluntary process which empowers people to take greater responsibility for their world (p. 140) and said that culture is the "ongoing, proactive process of reality construction" (p. 131).

Without directly addressing the question of cultural enactment versus imposition, and therefore without clarifying whether they perceived organizations from the old paradigm or from more advanced views, many theorists discussed various aspects of culture. Allen and Kraft, for example, wrote of the power and influence that patterns of social behavior have on organizations. Such patterns become characteristics of an organization's function, and they form narrative

expectations and enduring constellations of forces which determine what people in organizations do—even when they've outlived their usefulness. Although they are enduring, such norms are not permanently fixed. They are malleable and can change quickly and easily. "Any group, regardless of size, can create norms" (1984, p. 37).

Bolman and Deal saw organizational culture as having a central role in determining organizational effectiveness (1991, p. xviii), and Deal and Kennedy said that "a strong culture has almost always been the driving force" behind organizational success, that it is a powerful guide for behavior, and that it has a powerful effect on work lives (1982, pp. 5, 15).

Scully and Byrnbé saw the powerful force of organizational culture as limiting. They saw culture as a closed system which emphasizes tradition and utilizes descriptive language so that it misses evidence of and provides no opportunity for action and change (1987, p. 318). Agor said that the organization's culture is often the opposite of what is needed to enable intuition to flourish and that it often thwarts or drives out the talent most needed for survival (1989b, p. 21). Harman stated that collective beliefs are tricky to change. When a group of people believe the same things, they feel threatened by change (1992c, p. 1).

Bases for Change

A number of theorists stressed that organizational transformation cannot take place without an underlying change in the organization's culture. Theobald said that our ability to move from an industrial era to a communication era is largely controlled by our ability to learn to perceive new images of a culture that works in profoundly different ways (1983, p. 53). Allen and Kraft emphasized that behavioral change comes only when new behaviors become part of the cultural fabric of the organization. Change is only temporary unless the organization's culture is remolded to support it. We must look to the social factors that influence us in order to change, and that the "most promising path to permanent transformation lies in the cultural approach to change" (1984, p. 36). Ackerman and Whitney stated organizational transformation focuses on culture and that strategies for transforming organizational structure and relationships involve altering elements of culture (1984, p. 254).

Kiefer and Senge (1984, p. 75) and Yankelovich et al. (1992, p. 24) agreed

that in order to change organizational culture and to move toward the future, the organization's basic assumptions, which lie at the deepest level of the culture, must be examined. It is important to understand both how the assumptions affect members and what views those assumptions support about the future. Owen also agreed, stating that the transformation of organizations involves organizational culture which focuses on both the internal and external relationship of the total organization (1984, p. 210). Priesing noted that the transformation of an organizational culture requires a critical mass of changes--a focus on unified thinking and a worldwide mentality (in Johnson & Associates, 1992b, p. 73).

Schien added that in order to change underlying assumptions, higher order assumptions must be used to override and redefine old patterns (in Johnson and Associates, 1992b, p. 75). The primary thesis, according to Allen and Kraft, is that "if organizations think of themselves as having cultures and focus on changing their cultural norms, the negative forces can be dissipated and meaningful change can be achieved" (1984, p. 36). Block and Harman added that change in the culture of our organizations will draw us out of ourselves and answer our need for the organizations we believe in (1992, p. 2).

Garfield observed that innovation blossoms in a favorable climate (1992a, p. 131), and both he and Deal and Kennedy (1982, p. 157) suggested that organization members must experience trust, free access to information, peer consensus, training, and so on. Allen and Kraft added that "members working together can make profound changes in their organizations and in other aspects of their lives and world" (p. 37).

Schien also suggested that a key to changing underlying assumptions is a "charismatic leader with the qualities to persuade others that it is the right thing to do" (p. 75). Owen agreed, saying that there is a link between leadership style and organizational culture which gives insight into why organizations work as they do. In superstar organizations--those which adapt well to the vastly changing world--the significant variables are a charismatic leader and an organization with a rhythm conducive to change (1984, p. 209).

Deal and Kennedy (1982, p. 18), Morgan (1986, p. 126), and Smircich

(1983b, p. 60) together said that it is the leader's task to read the existing culture, to hone and shape it--developing new values and codes of behavior--, then to blend it with individual orientations to develop harmony and integration.

A number of theorists focused on the means by which leaders can read, develop, and harmonize an organization's culture. Pascarella and Frohman defined culture in terms of such means, which they called "behavior-shaping elements," and identified them as rituals, myths, heroes, and so on (1989, p. 117). Pondy said that these elements illustrate the cultural/social organization (1983, p. 158).

Many behavior-shaping or illustrative elements have been identified by theorists. Bolman and Deal (1991, p. xviii), Deal and Kennedy (1982, pp. 59, 129), Kiefer (1986, p. 216), Morgan (1986, pp. 113, 123, 133), Morgan et al. (1983, pp. 4, 18), Owen (1984, p. 219), Pascarella and Frohman (1989, p. 117), and Smircich (1983b, P. 61) contributed to the following list: heroes and heroines, images, symbols, objects, myths, stories, anecdotes, folklore, fantasies, metaphors, language, statements, vocabulary, rituals, routines, activities, events, ceremonies, festivities, celebrations, behaviors, norms, customs, humor, play, and spirit. Morgan et al. stated that cultural symbolism "pervades every aspect of organization life, for it is through the medium of symbolic processes that humans engage and give form and meaning to their world" (1983, p. 30).

In general, other theorists reflected similar notions about the purposes of cultural elements. Deal and Kennedy (1981, p. 60), Kiefer (1986, p. 216), Lessem (1986, p. 93), Morgan et al. (1983, p. 19), Owen (1984, pp. 211, 219), and Smircich (1983b, p. 64) said together that the various manifestations of organizational culture serve to raise awareness and give organizational culture a tangible, cohesive form by providing a sense of meaning for understanding the patterns of organizational social life--providing social contact, defining social groups, establishing group access, reinforcing social position, bonding and reducing conflict between members, and establishing the basis for initiating new members, for rites of passage, and for rewards--and developing a sense of commonality necessary for organizational activity--establishing a common identity, expanding cultural consensus, creating new vision, communicating central values, creating supportive atmosphere and a sense of security,

demonstrating group spirit, stimulating motivation and inspiration, and providing justification for a sense of self worth.

Lessem (1986, p. 93), Morgan (1986, p. 123), and Owen (1984, p. 210) described these manifestations of culture basically as binding elements, social processes, and critical mechanisms, respectively. Pondy emphasized that in the past, due to the rational bias, analytical distinctions between the social and formal phenomena in organizations tended to reify the differences and to preclude perceiving the importance of the social aspects (1983, p. 158).

Morgan agreed. He said that, because of commitment to mechanical and organismic metaphors of organization, traditional organization and management have failed to grasp the full importance of the symbolic side of organizational life (1983, p. 13). According to Harman, the industrial system exhibited immense drive but no guiding images and goals (1979, p. 114). As Bennis put it, "in the very material world, the prevailing view is at best pragmatic and at worst downright cannibalistic" (1989, p. 65). Harman continued that "we currently live without the benefit of powerful positive myths, symbols, and images of the future [and] this lack of a beacon to steer toward could be fatal" (1979, p. 114).

Theorists are now focusing on these elements of organizational culture as important for leaders as they attempt to establish a beacon and to direct organizational change. Owen noted that although these elements evolve--growing from the happenings of history and through assemblages of narrative material--they ultimately die and new ones can be created "at certain times by certain people" (1984, pp. 210, 218). He noted that they are powerful mechanisms for communication and manipulation (pp. 216, 218).

Together, Deal and Kennedy (1982, pp. 86, 98, 166), Owen (1984, p. 221), and Stephens and Eisen (1984, p. 189) suggested that, in order to change the culture, leaders must identify those social elements such as communication patterns, personalities, and ritual events which have the most positive and negative intensity in order to recognize patterns and identify the structure of influence to be tapped. Change agents then manipulate those elements which most closely match group needs and support change rather than attack the negative influences directly. They

suggested using transitional rituals and building tangible symbols of new directions.

Stephens and Eisen, in keeping with Schien's notion of moving to higher assumptions, suggested that leaders become storytellers--weaving mythical stories out of emotionally charged issues and disengaging the transition from personal identification and moving it to epic proportions and transcendent perspectives. Garfield noted that a new mission begins with a new myth (1992b, n. p.). Bolman and Deal stated that images, poetry, and reflections--rather than memos, policies, and commands--will help move us in new directions (1991, p. xv).

Transcendent Views

Ethics and morals. A number of theorists focused on the leader's responsibility to develop new cultural myths and images based on higher assumptions. Foster pointed out that leadership has a moral responsibility to wield power for the purpose of criticizing social conditions, searching for vision, offering new possibilities, and elevating people to new levels of morality. There must be an ethical focus toward democratic values (1988, pp. 30, 33). Nanus said that high moral standards are the key to creating an enduring sense of purpose and that leaders must "take the high road and aim for the highest standards." He added that today's moral standards are inadequate for the future and that there are new imperatives such as caring about organizational members and dedication to improvement (1989, pp. 97, 191). Block and Harman noted that social revolution is demanding that organizations focus inward--on concerns such as integrity of action and internal accountability (1992, p. 10).

Garfield stated that American organizations "have been separated from the value base that would humanize" them and that ignoring the moral dimension of organizational culture means "encouraging or condoning ethical abuses and having a demoralized workforce" (1992a, p. 320). Lowry suggested that companies will have to re-examine the value of policies of maximum return to shareholders at the expense of worker or public interests. He opined that no economic system can prosper without a solid moral base (1982, p. 28).

Mumford stated that there is widespread disintegration of our civilization because we have "artificially destroyed the higher centers . . . and have reduced the

symbolic functions to an almost reflex level" (1951, p. 144). He added that in the new age, ethics will dominate political orientations (p. 223).

Cetron and Davies concurred and added that "the long-standing neglect of ethics must soon come to an end if the United States is to remain a viable society" (1989, p. 295). Whitman stated that there is a need to re-establish some center of moral authority, and he suggested that it begin in both families and organizational ethics (1987, p. 85). Maisonrouge said that the new ethics of business must accept a prime role in solving social and environmental problems (Johnson & Associates, 1992b, p. 67). de Chardin said that "whatever we seek to build will crumble and turn to dust if workmen are without conscience and professional integrity." Ethical principles are a condition of survival, he stated, and external principles cannot be superimposed (1964, pp. 202, 203).

Autry emphasized that morality exists only among people, that it is not institutional, and that it must exist within every member of the organization. He saw ethics as a subset of morality and said that ethics must be reflected in the attitudes of organization leaders and managers as a means of communicating the kind of moral judgment expected of members (1991, p. 91).

Spooner agreed, noting that the organization's social values are a concern of its members, that people want to be associated with moral and ethical leaders, and that a sacred regard for the general rules of morality must be a mainstream of daily management practices (1992, p. 401). Bennis and Nanus said that a demonstration of leader integrity and of the harmony of tension is a demonstration of an organizational identity which reflects trust (1985, p. 43). Ritscher defined leader integrity as the "tendency to do what is praiseworthy, effective, and right and to avoid that which is reprehensible, ineffective, and wrong" (1986, p. 76). Bennis and Nanus observed that there is no trust unless leaders' actions are consistent with high moral standards (1989, p. 101).

Some writers reflected that it is difficult to specify exactly that which is ethical or moral behavior. Mumford said that morals are common to all human society, they distinguish civilization from noncivilization. They are ideas or compass points, rather than absolutes, which direct people toward proper conduct and social regulations; they

are observed in customs and are the bases of orderly behavior. Ethics, according to Mumford, are observed in habits and reflect constant discrimination between good and bad (1951, pp. 123, 139, 164, 166).

Garfield saw ethics as the foundation for socially responsible behavior and the principles by which an organization operates at the core level. He defined ethics as "doing what is right and what brings the greatest benefit or least harm to all involved" and as the "spiritual glue that holds organizations together" (1992a, p. 319). Berman differentiated between the ethics of maxima--trying to master the environment--and the ethics of optima--attempting to achieve wholeness or grace. He saw the latter as the goal of the human race and said that ethics is based on the recognition of relationships and of complex networks of pathways (1984, pp. 255, 258).

Rost stated that "in many situations and for many issues there is no consensus of what higher moral ground is" (1991, p. 125), which is why he declined to put a moral requirement on leadership. There are several systems of ethics for making judgments: utilitarian ethics (based on the balance of good over harm) (p. 168), rule ethics (based on standards given by religious or ideological belief systems, for example) (p. 169), social contract ethics (based on rules of behavior agreed upon among rational humans) (p. 171), and ethical relativism (reflected in several forms such as hedonism, egoism, emotivism, and so on) (p. 171). Rost concluded that "our moral system of thought, our moral language, does not encompass a concept of a social vision, a common good, a public interest" (p. 175).

The comments of a number of authors suggest that organizations are currently being judged on the basis of the utilitarian ethic with focuses on how well people are addressing their social responsibility and the public good. Stanley stated that "ethical behavior is a major consideration leading to customer support" (in Johnson and Associates, 1992a, p. 90). L. B. Jones reported on a study which revealed that Americans believe that "low business ethics is the biggest reason for the decline in the American marketplace" (1992, p. 9). Popcorn stated that she has learned that people will buy products and services depending on the quality and depending on how they feel about the company and its stand on environmental concerns, employee childcare, charitable interests, and similar issue. (Yankelovich et al., 1992, p. 24). Popcorn

said that people are examining the corporate "soul"--who the organization is, how it perceives world needs, what it sees as its responsibility, and what it pledges to do to help (1991 pp. 159, 161).

Block and Harman noted that people want to feel pride in the quality and services of American organizations and that they yearn to contribute to society (1992, p. 2). In a review of his work by Coates and Jarratt, Drucker suggested that organizations can respond best to the demand for attention to public concerns by transforming social problems into business opportunities (1989, p. 127).

Lowry reported that "socially responsive corporations are having more success than companies that begrudge the issues." People are looking for "good" companies that produce quality products, don't pollute, treat their employees fairly, and so on and that "people are putting their money where their morals are" (1982, p. 23). Meyer said that there is a new transcendental social and business ethic characterized by concern for the quality of life, decentralization, an ecological ethic, and spirituality (in Ferguson, 1980, p. 342). Lowry continued that people with capital resources are assessing these issues and that there is an organized movement toward social investing--investing in organizations that focus on social as well as economic returns and that are future oriented toward future benefits (p. 24).

Organizational practices which focus on social concerns were discussed at a 1990 Conference on Corporate Conscience, according to Simpkinson. He reported that Ben and Jerry's Homemade Ice Cream gives a percentage of pretax profits to charitable organizations and that Anita Roddick's Body Shop pays first world wages to third world suppliers, for example. Simpkinson noted that many organizations are becoming aware that socially responsible programs are good for the bottom line as well as for the corporate image. He reported that the most enthusiastic applause of the conference went to Ben Cohen of Ben and Jerry's who said, "Because business is the most powerful vehicle in America, it must be guided by spiritual principles" (1990, p. 31).

Reynolds reported that there is a new business lobby in Washington called Business for Social Responsibility whose agenda has been called a "combination of New Age corporate and social and environmental activism and practical cutting-edge

management thinking." Its charter is to "change the basic ways business is done in America by making social, environment, and worker-friendly practices an integral part of both corporate and government policy-making." The group's underlying belief, according to Reynolds, is that "if something is bad for customers, employees, or the environment, then it is probably not going to be good for business" (1993, p. 39).

According to Reynolds, members of the group are "social entrepreneurs" who believe in creating organizations that "reflect their vision of the world as they'd like to see it," who factor in the social and environmental costs of doing business, and who "care as much about their company's corporate soul as they do about financial cost controls" (pp. 40, 41). Michael Levitt, the group's director, stated that "socially responsible business is not a new idea, but it is an idea whose time has come This way of doing business is inevitable." Levitt said that business is the most powerful force in America and that that power should be used as a positive agent for change (p. 40).

Spooner noted that in response to political, economic, environment, and consumer developments, organizational ethics, social accountability, and moral responsibility are reappearing after having been lost (1992, p. 400), and Lowry said that the return reflects a withering of the old Protestant ethic--the assumption that maximum individual gain would bring the greatest benefit for all (1982, p. 28). McKnight observed that the old paradigm must change, that we must acknowledge that the primary business product is its impact on the community and its internal culture (1984, p. 150).

Bellah et al. (1985, p. 290), Lowry (1982, p. 26), and Spooner (1992, p. 400) all agreed, saying that the major issue is whether or not ethical considerations are an integral part of organizational culture. A search for new moral principles will require a deep change in the ethos of businesses and professions--changes in traditional ideologies and political beliefs and new forms of social organizations. Lowry concluded that "no economic system can continue to prosper without a solid moral base" (1982, p. 28). Block and Harman stated that "genuine reform is a long-term qualitative change" and added that when democracy is rediscovered inside our

organizations, human values will have been brought in (1992, p. 11).

Values. Deal and Kennedy said that values are the bedrock of organizational culture--they "define the fundamental character of the organization" and they provide the "essence of success, the sense of direction, and the guidelines for behavior" (1982, p. 21). Garfield stated that "if an organization hopes to thrive . . . , it must be committed to an explicit set of values" (1992a, p. 52).

Zaleznik noted that there is an absence of values in society and the workplace (1987, p. 9). Deal and Kennedy agreed. "Society today suffers from a pervasive uncertainty about values" (p. 22), and Ogilvy observed that we have been "reluctant to grapple with issues of values" (1992, n. p.) Ramos stated that a value-free society works "only as long as the circular causation linking the market and behavior conformity of individuals is undisturbed." He noted that such conformity is now open to question (1981, p. 36).

Garfield said that there exists at the present time an urgent need to implant ethics and spiritual bases in organizational minds (1992b, n. p.). Brown and Bennett (1992, n. p.), Clancy et al. (1988, p. 83), and Pascarella (1984, p. 101) all agreed that we must have values, that they are essential for providing a community context, for establishing trust and cooperation, and most importantly, for determining common, worthwhile purposes.

Kiefer and Stroh noted that people are seeking work that is intrinsically valuable--beyond financial security--and that they are shifting from an instrumental to a sacred worldview. A deep sense of purpose which expresses the organization's values and vision of a desired future helps people clarify what they really want and inspires them to reach beyond their fears and preoccupations to what could be (1984, p. 173).

Garfield noted simply that members are far more likely to embrace an organization's mission and to act on it if they consider it a worthy one, and he argued that a shared core values are a critical prerequisite for organizational transformation (1992a, pp. 52, 107). Land and Jarman stated that living according to shared values makes the world a better place and that when organizational behaviors become separated from core values, inevitably people know it (1992b, p. 27). Harrison

pointed out that when goals are not in line with higher purposes, they are "increasingly difficult to achieve, there is no joy in the struggle, and people are no longer energized." At that point, he said, it is "time to move to a path with heart." He stressed the "goals and activities must be examined against criteria of the heart" (1984, p. 106). Theobald agreed, noting that the realities we confront today cannot be resolved within industrial era styles and values. "We live in a totally new context" (1983, p. 54).

There are many paths with heart, or, as Pascarella and Frohman pointed out, there is a "staggering diversity" in new values and life-styles (1989, p. 2). Autry disagreed, saying that "there are no new values--just new names" (1991, p. 150), but he agreed with Deutsch who said that "the workplace of the future will be shaped by values and consciousness of a new work force"--primarily baby boomers, the post World War II generation who are now occupying the middle rings of the work force (1985, p. 8).

Autry and Deutsch agreed that this generation is bringing new needs and different ways of addressing organizational values. Autry noted that its members are seeking the right path through spiritual as well as material goals. Kanter observed that these new values are forming a new basis for ethics and for loyalty (1989, p. 333).

Many theorists named specific new values and needs which organizations are being called on to address. Together Autry (1991, p. 103), Brown and Bennett (1992, n. p.), Clancy et al. (1988, p. 106), Connelly (1992, n. p.), Garfield (1992b, n. p.), and Harman (1979, p. 130; 1992b, p. 29) identified the following concerns: business goals focused on excellence (exceptional quality and service); work spirit focused on member fulfillment (orientation to democracy with fully participating patterns, support for personal growth, accomplishments and satisfaction, and an atmosphere of openness, energy, and moral purpose); and concern for social welfare with focus on a viable future (goals of sustainable growth and development, involvement in community regeneration, and support for ecological procedures, ecosystems and wholeness of the planet).

Although these advancing value concerns are broad-ranged, they generally

address concerns for a common good, and they roughly reflect the notion of a common good as described by Rost. Rost, who noted that there is no consensus about what the higher moral ground is (1991, p. 125), suggested that mutual purposes can be perceived as focusing on a common good which he saw as aiming toward communities where members can discourse about end values, commitment to social ecology, and a mission to transform the culture (p. 121).

Nelson and Burns also supported the notion of organizations focusing on mutual purposes based on advancing values for the common good. "Developing a pre-active organization requires a pro-active frame of reference" and the critical factors are a shared vision attuned with members' values, a high value on people, and a commitment to human values (1984, p. 232).

Deal and Kennedy emphasized that organizational leaders must "pay a great deal of attention to fine tuning, shaping, and enhance the values which reflect what the organization stands for and must also focus on communicating those values so they are known and shared by members (1982, p. 22). Fujiwara (1992, n. p.) and Ogilvy (1992, n. p.) urged organizational leaders to teach values by narrating value scenarios and by demonstrating them.

Block and Harman suggested that teaching and communicating values in the organization is more than just the leaders' responsibility. Persons must take responsibility for their own actions in service to something larger than themselves and claiming ownership and teaching those above is an act of stewardship. They saw the organizational community as a partnership and which in practice is a combination of service, ownership, and responsibility. Teaching those above who have the wider view the values of community can help them perceive democracy in the pursuit of purpose (1992, p. 11). Harrison urged individuals to take responsibility: "Get your values right, know what you want, go for it with all your heart, and trust in the Lord" (1984, p. 107).

Spirituality. Spirituality, according to Ritscher, is the heart of an organization-its vision, purpose, energy, and vitality (1986, p. 62). According to Owen, spirit, which literally means "breath," is the "vital force or energy that underlies all physical reality The spirit of man assumes its shape and gets its job done" in the

dynamic field which is culture and that "in powerful cultures, the spirit is strong" (1986, pp. 113, 115).

Owen explained that to focus on spirit in meaningful ways, the key is the cult at the center of culture. He pointed out that "culture" comes from *colere* which means "to cherish" as well as "to cultivate" and that "cult" comes from *cultus* which is interpreted as "a system of religious worship." Cult, then, is the heart of the system of worship which establishes values and behaviors. He described the culture as the medium and the cult as the means by which people in all their dimensions grow (p. 116).

Owen pointed out that conversations about spirit have been reserved to the shadow world of religion and have been strictly avoided in the harsh realities of everyday business except for a few slips regarding "esprit de corp" or the spirit of the place. For the most part, due to Western scientific traditions, we have "forgotten how to talk about spirit" (1986, p. 113).

Pascarella discussed the traditional relationship between spirit and work, saying that in the era of the Protestant ethic America's need to work for economic survival was coupled with a dominant moral obligation to work. Work was a matter of self-denial and was done for a greater spiritual glory, which was based on progress on earth (1984, pp. 29, 30). But work for the sake of work no longer has a transcendental connection for most Americans, as spirituality has become internalized and private. People no longer find meaning in work and self-denial, and they now favor more cautious economic growth and preservation of resources (pp. 27, 30).

Morgan offered a different relationship between spirituality and the workplace. Although spirituality of any kind was excluded from the rational workplace of the industrial society, decision making in formal organizations paralleled the magic and divination of tribal societies. In primitive societies, magic provided clear-cut decisions on hunting, war, marriage, and so on. In formal organizations quantitative analysis forecasts the future and determines courses of action. In both, uncertainties exist. There is a need to increase credibility of action over guesswork, there is a need to preserve credibility when decisions fail, and there is faith in the preferred techniques.

Spiritual belief systems exist in modern organizations; they are based on what anthropologists call "the myth of modern society:" rationalism (Morgan, 1986, p. 134). Kautz noted that changes are occurring in the cultural belief system. Americans are "showing more interest in understanding more about the spiritual realm," and organizations are honoring decision making based on more internally-focused techniques such as intuition (in Sullivan, 1992, p. 82). Kiefer and Senge reported that instrumentalism is being supplanted by a "sacred" outlook that seeks the intrinsic value of human experience in the workplace (1984, p. 69).

A number of theorists addressed a question put by Kruschke: "What is the role of spirituality in the workplace?" He saw it as "one of the most important cornerstones for society" and as therefore holding a very important place in organizations (1992, n. p.). Pascarella pointed out that corporations are not places for worship and will not become religious institutions. Rather they will "increasingly deal with people's ethical, moral, and spiritual dimension." They may already be more "religious" than they realize since their actions are influenced, both directly and indirectly, by religious forces (1984, pp. 101, 102).

Block and Harman said that in this revolution we will discover that the workplace, where we spend our waking hours, is a primary, perhaps the best, place to pursue spiritual values. Organizations will become the place where spirituality and economics intersect, that the social revolution is reforming our organizations so that when democracy thrives, spirit is answered (1992, p. 4). DeForest stated that the new age is calling for a festival of spirit in the organizational world and that we will experience profound shifts in our perception by evoking spiritual dimensions (1986, p. 231).

McKnight saw organizations as having religions in sets of beliefs, creeds, rites, and so on (1984, p. 146), and he said that careerism qualifies as a religion, as a "frame of orientation and an object of devotion" (p. 144). He saw spirituality, however, as the climate which determines a clear sense of purpose, enthusiasm, optimism, and so on (p. 146). Ritscher reflected the same perception of spirituality when he said, "only an organization that is well grounded in its spiritual nature has the will and the strength to survive" (1986, p. 62).

McKnight and Owen both expressed the importance of an organization's spirituality to its members. Owen saw organizations as purely manifestations of spirit and stressed the importance of focusing on the spirit and keeping the energy flow coherent and directed as events occur (1986, p. 113). McKnight said that a spiritual orientation makes organizations more habitable for members and helps them find transcendent meaning in their work (1984, p. 146). When organizations tap into their members' spiritual centers and liberate their spirits, the people become more contented and more enthusiastic--which, McKnight point out, literally means "filled with God" (pp. 142, 148). Vaill said that "this business of helping others explore more spiritual interpretations of organizational events" is actually kind of a ministry (in Sanders, 1990, p. 33). Without the willingness to lead a more spiritual life, "one cannot understand what is going on in a human organizations, one will not be able to see very clearly how to be personally effective there, and one won't get much personal pleasure out of being there" (p. 34).

Block and Harman said that "spirituality is the process of living out a set of deeply held personal values, honoring forces or a presence greater than ourselves; it is the desire to find meaning in all that we do" (1992, p. 4).

Enabling members to live out their personally held values and find meaning in what they do was considered a primary concern and responsibility of our organizational culture by many authors. Naisbitt stated that we need balance between our physical and spiritual realities (1982, p. 52), and Autry said that our workplaces can provide opportunities for spiritual and personal growth and that, if they don't, "we're wasting far too much of our lives" in them (1991, p. 13). Vaill observed that the old paradigm failed to address many issues that mattered such as ethics, spirituality, community, and human feelings (1984, p. 22).

Human Perspectives

Autry (1991, p. 13), Elmandjra (1987, p. 60), Kiefer and Stroh (1984, p. 171), and Pascarella (1984, pp. 10, 100) stated together that with the transformation of society from a production to a knowledge-based paradigm, organizations must recognize and accept humanness. They must understand that organizational processes

are human processes and that the organization's resources are human resources. As Autry put it, "There are no businesses, only people; business exists only among people and for people." Organizations must develop new views of what it means to be human, of the role that work plays in humanity, and of an organization's ability to achieve success in human satisfaction as well as performance.

McKnight stated that at present organizational members perceive work as a never-ending struggle. Most still believe it is morally important to work, although they admit to working less hard than they did ten years ago, and that they don't see any social or personal benefit in it (1984, p. 140). Isenberg (1984, p. 24), Ramos (1981, p. 87), and Vaill (1989, p. 34) noted that most people now feel that work is commonplace, insignificant, and beneath their dignity, that it is depersonalized and externally imposed, and that it is incidental to their abilities as well as their personal development or actualization.

Pascarella stated that "poor work behavior today stems from an extreme mismatch between what people want from work and what they can get from it" (1984, p. 39). Harman said that from our work life we "get a belief system of being inadequate and unworthy, then experience that message as true." Work is "an individual's primary way of relating to society," and people need satisfying social roles but that, at present, "meaningful work is scarce" (1991c, pp. 1, 2).

Ramos stated that "the 'job' now has limited utility for assessing an individual's social worth" (1981, p. 169), and Tannenbaum said that organizational membership is "no longer an activity of personal fulfillment which enriches a person's life" (in Jamieson, 1982, p. 41).

Choate (1987, p. 57), Fields et al. (1984, p. 108), and Mumford (1951, p. 105) agreed with Autry's statement that "lack of personal fulfillment is the result of imposing bureaucratic systems on people's spiritually necessary function: work" (1991, p. 152). With the pursuit of scientific knowledge and the growth of gigantic bureaucracies, organizations have become depersonalized. They said that workers have been driven by attitudes traceable back to the Protestant work ethic in which worldly success was believed to be a sign of having been chosen by God as well as having been driven by the forces of economics.

Mumford stated that "there is nothing in [bureaucratic] behavior that suggests a transference of love on a collective scale" (1951, p. 118). Fields et al. suggested that we need to revise the concept and practice of work in such a way that it becomes meaningful and fulfilling for the individual worker and useful for society in order to recapture its spiritual essence (1984, p. 114).

Autry said that "we must be patient. Spirituality is moving into the mainstream" (1991, p. 34), and Maccoby stated that "the work ethic is not dead, but it has not been articulated for this age" (1984, p. 53). Pascarella noted that organizations are "now making the first significant moves toward helping individuals realize their potential and enabling them to grow to their full measure" (1984, p. 10).

Ackerman (1984, p. 125), Ackerman and Whitney (1984, p. 256), Brown and Isaacs (1991, p. 9), Fields et al. (1984, p. 118), Garfield (1992a, p. 262), Pascarella (1984, p. 10), and R. B. Smith (1986, p. 21) together suggested that organizations can establish a climate of showing members they are truly valued by nurturing positive human values, by caring for physical, mental, emotional, and spiritual needs, and by encouraging personal growth and empowerment. Organizations can become the stage for the pursuit of excellence by creating opportunities for members to fulfill their highest capabilities, to contribute freely, and to utilize their unique gifts. Organizations must become positive reinforcing systems in which members can unblock their energy, explore their full potential, and develop skills for more fulfilling lives.

Pascarella noted that "in general, people have had to turn outside the workplace to find esteem and fulfilling experiences and relationships." They have not learned that work can be "sublime" or self-actualizing (1984, p. 13). Harman stated, however, that individuals are awakening to the possibility of personal growth in organizations and are finding opportunities to attain it (1988, p. 130).

Fields et al. observed that in the past people developed marketable skills to earn money to do things they really wanted to do in their free time, but they were "renting themselves out" to cover the essentials of life. There is now a rising awareness that work is an integral part of life and that the quality of life and the quality of work time are one and the same (1984, p. 109).

Pascarella suggested that the "work ethic is very much alive" (1984, p. 10) but that people are focusing away from organizations and toward themselves to get their needs met (p. 82). Sekimoto stated that "the most rapid change in organizations today is in employee attitudes" (1992a, p. 87). Yankelovich and Immerwahr foresaw those changes as two major trends: the amount of control or discretion that jobholders have over their work and the emergence of a new set of workplace values which they labeled "expressivism" (1987, p. 12).

Ferguson saw these changes in attitude about work as a vehicle for transformation. The individual's struggle to find meaning in work is a struggle to find higher purpose. A shift to a new consciousness causes people to look at the world differently, and it affects the way they function in organizations. The transformation to a meaningful direction creates the need to bring work into alignment with belief; there is a sense of conflict and a need to reconcile and integrate the world of work with the new sense of self. Some transformed workers are trying to rehabilitate their organizations. Ferguson stated that a vocation is a calling, not a job, and that it is an ongoing transformative relationship (1980, p. 343).

Attitudes

Discussions by theorists on changes in member attitudes which call for organizational transformation were focused on three main areas: identity, fulfillment, and independence. Regarding identity, Butler (1984, p. 2) and Deal and Kennedy (1982, p. 67) wrote that work provides a sense of identity and that workers are demanding more satisfying work as a justification for greater self-respect and self-worth. Nanus stated that "work is a more important role in life than making a living; it is living, a way to find meaning in life" (1989, p. 19). Sinetar saw work as the way for people to express their innermost selves. It is done best in the context of contributing to others so that work is incorporated into meaningful and fulfilling life contexts and so that inner truths and values are merged with outer realities (1987, p. 25).

L. B. Jones agreed, saying that "work is love made visible. [It is] how we show love to the world" (1992, p. 9). Fields et al. expressed a similar notion which they explained in terms of the Buddhist perception of "Right Livelihood" which has

four requirements: (1) that work be chosen on the basis of it being the person's passion, (2) that it create constant curiosity and challenge, (3) that it be appropriate for the person, and (4) that it serve the community. Right Livelihood reflects an attitude of caring about work, of perceiving it as a discipline that shapes the personality and makes the mind whole, and that responsible work is the embodiment of love. When work is seen as a way to deepen personal experience, as a means to learn and grow, and as a means to awaken the caring in others then it is not strange to love it (1984, pp. 105, 109).

Harman focused primarily on the self-development aspect of work-as-identity, suggesting that, following the Greek notion of *Paideia*, life becomes an art form and the person a work of art, with employment as a major portion of life and therefore a primary stimulator of development (1988, p. 146).

The second area of changing attitudes about work focused on fulfillment. Fields et al. (1984, p. 109) and Jones (1992, p. 9) wrote that people are determining that work, where they spend most of their time, should be fulfilling and rewarding. Harman (1988, p. 124) and Sinetar (1987, p. 21) agreed that workers are expressing needs for self-actualization--focusing on their own psychological, physical, and emotional well-being and putting their own personal goals and inner rewards above organizational objectives. Sinetar stated that people are perceiving job satisfaction as contributing to personal happiness and they want to pursue meaningful jobs (p. 25). Ritscher saw work as a natural outgrowth of the desire for challenge and success (1986, p. 77), and Ferguson said that transformed work is a means to achieving full human potential (1980, p. 340).

Bellah et al. noted that people are making vocational choices in terms of intrinsic satisfaction and that the satisfaction of work well done is a positive human motive. To be fulfilling, work should be perceived as a vocation or a calling and should therefore focus on contributing to the good of all (1985, p. 287).

The third focus of changing attitudes toward organizational membership is toward independence. Cetron and Davies noted that new age organization members are placing emphasis on independence and are more interested in personal performance, achievement, and advantage than earlier workers (1989, p. 135).

Kanter also noted that workers are showing greater loyalty and commitment to themselves and are developing portable skills. As organizations restructure in future, workers will continue to develop careers based on their own skills, knowledge, and reputation and that they will become entrepreneurs, creating and offering products and services of value (1989, p. 299).

Cetron and Davies (1989, p. 275), Lundin and Lancaster (1990, p. 21), and Nanus (1992a, n. p.) agreed that knowledge workers will view themselves as professionals--developing careers or becoming "self-employed," that is, having the ability to "find another job that compensates you at a level equal to what you are actually spending within a relatively short period of time" (Lundin and Lancaster, 1990, p. 20). Such "careerists" will have no fear of losing a job. They will work with freedom, will require psychic rewards of challenge and esteem, and will have no tolerance for make-work or old-boy networks. Such workers will feel secure enough to face confrontation and conflict, will have the assurance that their skills have worth in the open marketplace, and they will participate by free choice (p. 21). Garfield said that independent members will be increasingly viewed as volunteers and that "only organizations that can gain trust, respect, and commitment" of their members will be successful (1992a, p. 46).

Gaining trust and commitment of organization members, then, will require that organizations look more closely at ways to help members achieve identity, fulfillment, and independence. It will also require that they look more deeply at what members need and want in order to develop and support positive attitudes.

Needs and Wants

Many theorists saw the following areas as ripe for change as organizations develop cultures to more closely align with member needs and wants.

Purpose. Bellah et al. wrote that organizations that function well give their members a purpose and an identity "through challenging them to become active, innovative, responsible, and thus happy persons because they understand what they are doing and why it is important" (1990, p. 50). Autry suggested that organizations should learn from volunteering that people work toward consensus and problems solving without any authority over them because they are driven by a cause (1991, p.

206). McKnight said that people perform most energetically and creatively "when they believe they are contributing to a cause larger than themselves . . . [the] role of purpose in life is central to the discussion of spirituality in the workplace" (1984, p. 142).

Ackerman (1984, p. 127), Bleeker (1987, p. 16), Harman (1979, p. 55; 1988, pp. 10, 144), Gaster (1992, p. 114), and Pascarella and Frohman (1989, p. 104) focused on the importance of purpose as providing meaning for work, for helping members perceive why they are participating and what value is to be gained from events. People need to establish a set of values and to understand the context in which they operate. They need to determine a sense of direction in order to think, inquire, and evaluate and in order to integrate their efforts and ultimately to be able to fully contribute to the central project.

Ackerman and Whitney (1984, p. 256), Garfield (1992a, pp. 98, 108), Harman (1988, pp. 165, 167), and Kiefer and Senge (1984, pp. 25, 75) together said that the organization's vision becomes compelling when it moves from concrete to cosmic purposes so that it aligns with members' most deeply held values, beliefs, dreams, and goals and meshes with their visions. When the organization helps people discover and act on their own deep sense of purpose, it actualizes their commitment. In the context of a common purpose and the pursuit of excellence, people become energized by the risks and rewards of the challenge. They see the opportunity to make unique contributions, to fulfill their potential, and to achieve personal satisfaction.

Creative opportunity. Ferguson stated that "the new paradigm focuses on the creative potential in all of us" (1980, p. 352). The challenge for organizations, according to Garfield, is "to liberate the creativity and willful commitment" of all members (1992a, p. 46). Kanter stated that the "workplace will become absorbing when work encourages imagination and commitment" (1989, p. 280).

Bleeker (1987, p. 17) and Naisbitt and Aburdene (1990, p. 25) noted that information and ideas are the strategic economic resources of the future, that knowledge workers will constantly need new information to work with, and that the quality and innovativeness of human minds will determine organizational success.

Ackerman and Whitney (1984, p. 256), Agor (1989b, p. 231), Kautz (in a

conversation with Sullivan, 1992, p. 42), and R. B. Smith (1986, p. 22) emphasized that organizations must develop a setting supportive of innovation and creative processes. Rational, analytical, linear thinking will have to be replaced by more intuitive methods of learning and that organizations must create environments for developing intuitive talent and integrating intuition into the mainstream.

Cetron and Davies (1989, p. 276), Garfield (1992a, p. 102), and Kanter (1989, p. 183) stressed that organizations must reward member creativity and avoid punishing risk taking. Not only should pay bases shift from bureaucratic to more entrepreneurial forms but innovative employees should receive personal recognition, performance awards, bonuses, and so on. Autry suggested giving excellence awards to recognize the organization's "heroes"--the brave who go beyond normal procedures and the crazy who innovate, for example (1991, p. 164).

Relationships. Vaill reported that when people reflect on their peak experiences in organizations they recall situations in which they felt their work was valuable and in which they had a "strong sense of teamwork that bordered on love of other group members." They reported feeling that the group remained committed to its purpose and that it was noticed by outsiders. They claimed to have "felt transformed in the situation--lifted to another plane of experience" (1989, p. 33).

Autry stated that "the workplace is rapidly becoming the new neighborhood" due to the compulsive search for connection and the need for community (1991, p. 13), and Naisbitt said that "the more technology we introduce into society, the more people will aggregate, will want to be with other people" (1982, p. 42).

Senge noted that individuals are among the key variables which interrelate as an organization--they are not outside it--and that as members of the organizational culture or structure they have the power to alter it (1990, p. 44). Vaill stated that we must begin to see people and organizations as flowing and relational (1984, p. 26), and Whitman stressed that organizations must move from adversarial to cooperative models (1987, p. 87).

Ackerman stated that organizations must move beyond their ego and power attachments to priorities and conflicts and must move toward perceiving the larger picture, toward being open to differences and polarities and toward seeing synthesis

(1984, p. 130). Nanus said that organizations must develop cultures supportive of mutuality, cohesiveness, and supportive relationships (1989, p. 131).

Raymond (1986, p. 16) and Zaleznik (1987, p. 4) agreed that the movement toward organizational democracy demands cooperative networks, collaborative problem solving, and consensus management. Ackerman and Whitney (1984, p. 256) and Fields et al. (1984, p. 117) noted that an environment which brings talented people together in a dynamic, sharing, creative situation where work is perceived as fun creates synergistic outcomes. They stressed that a happy and synergistic workplace comes from challenging work and satisfying relationships.

Trust. Bok stated that the overarching challenge for the twenty-first century is trust. "There are a great many problems in our society that we absolutely have to work together at, and it is not possible to work together at them so long as there is so very much distrust" (1987, p. 13). Kiefer and Senge stated that people are basically honest and trustworthy and that they have unique contributions which they want to make (1984, pp. 75, 76). Ackerman stated that we must have patience with and trust in people's intentions to work for common goals (1984, p. 127), and Vaill suggested that love and trust were the two most important phenomena for organizations in the new paradigm (1984, p. 28).

Bennis noted that "change occurs in two primary ways: through trust and truth or through conflict and dissent," and he added that positive change requires trust (1989, p. 27). Kanter stated that there is a need to respect individuals and for "people to trust one another in areas of uncertainty where outcomes are not yet known" (1983, p. 34). Nanus pointed out that for mastering change the organization must develop a reputation built on "confidence and trust among constituencies" (1989, p. 129).

Mason and others saw trust as essential not only for successful change but also as necessary for member commitment. Mason said that to "move to full empowerment" organizational members must be entrusted and believed to have "high dedication and work commitment" (1993, p. 16). Autry said that "there are no secrets anyway, so you might as well be open," and that if an organization is "asking its members to commit, to embrace the vision, and to develop a sense of ownership,

they cannot have too much information" (1991, p. 94). Post noted that when members' needs are taken into account and when they are perceived as allies there is a bias for trust (1992, p. 103). Harman stressed that members learn to overcome fear of ridicule and failure and learn to fully participate as they experience trust (1988, p. 164).

Garfield also noted that, within a more pluralistic society, organizational cultures are more open and people are aware of similarities and dissimilarities between themselves and others. Organizations must develop sensitive cultures which value diversity and which foster dignity and equality so that members experience trust and safety in differences (1992a, pp. 283, 287).

Empowerment and responsibility. Kiefer and Stroh stated that organizations need people to make meaningful contributions and that people want to fully express themselves and be responsible for collective productivity (1984, p. 176). According to Bleeker (1987, p. 19) and Pascarella (1984, p. 141), organization members want the ability, power, and resources to control and be responsible for their own actions in meeting common needs. Senge suggested that organizations must redefine the scope of members' influence in order to improve performance (1990, p. 46). Yankelovich and Immerwahr stated that if organizations don't allow member discretion, "workers can drop out and find other outlets for expressivism, or they can withhold effort and commitment" (1987, p. 19).

Fields (1991, p. 35) and Yankelovich and Immerwahr (p. 13) observed that opportunities are expanding, that organizations are already increasing worker discretion and responsibility, and that high discretion jobs and individual latitude over performance will continue to increase. Whitman said that organizations are becoming aware that "the guy who does the job may be indeed the greatest living expert on what the problems are and how it could be done better" (1987, p. 87). Ackerman and Whitney (1984, p. 256) and Post (1992, p. 110) pointed out that enhancing personal responsibility and providing members with opportunities to contribute enables members to take care of their own needs while supporting the needs of the whole group, all of which influences the general quality of member participation.

Gaster (1992, p. 114), Kiefer and Senge (1984, p. 70), Ramalls (in statements

published by Johnson and Associates, 1992c, p. 384), and Raymond (1986, p. 16) together said that empowering members--motivating them to exercise personal initiative and giving them authority and power for on-site decision making--shows a keen appreciation of member competence. Empowerment puts individuals at the center as experts of their own space and utilizes their input which then aligns their needs, goals, and best interests with the organization's mission.

Partnership. Garfield stated that organizational focus on integrated and cooperative individual effort can result in a feeling of partnership, which he said will be "necessary to deal with the myriad challenges of the changing world" (1992a, pp. 12, 13). Naisbitt said that people want to feel that they have ownership in life-changing decisions (1982, p. 209), and Pascarella stated that "people will embrace innovation . . . if they are part of an open-ended, creative, learning environment which they feel they have a hand in shaping" (1984, p. 132). He said that "a worker who feels he or she is alive and growing on the job is more likely to feel like an owner of the company than the underutilized worker with a share of stock" (p. 131).

Garfield stressed that the new era demands partnership, that "continuous innovation requires the brainpower of every individual in the organization," and that members must be fully participating partners (1992a, p. 33). Naisbitt pointed out that democracy is based on the premise that "power ought to flow from the bottom up," that organization members can make the most pervasive changes, and that organizations are in the process of redefining member roles, rights, and participation (1982, pp. 195, 201). Deutsch said that today's management tools are participation, teamwork, horizontal organization, and relationships (1985, p. 2).

Pascarella noted that organizations which are responding to member desires for more direct influence favor dispersal of power through decentralization (1984, p. 82). Nicoll (1984b, p. 7), Post (1992, p. 105), Raymond (1986, p. 16), and Sekimoto (1992, p. 87) together described decentralization as heterarchical, with multiple, smaller, flatter, overlapping, and fairly independent units rather than the previous hierarchical pyramid. They noted that decentralization is an organizational pattern based on the belief that there are multiple levels of reality, each with its own principles and patterns. The patterns connect at all points, investing in member

decision and responsibility and creating a sharing, interconnected, and symbolic society of healthier, happier members.

Garfield (1992a, p. 107), Henderson (1979, p. 88), and Kiefer and Senge (1984, p. 70) together suggested that some organizations are encouraging member initiative, responsibility, and full participation by creating incentives such as profit sharing and corporate ownership programs.

Integrated lifestyles. Senge observed that "we cannot have shared vision without fostering personal vision." We must think in terms of the total system--that life has many connections and that personal mastery must be supported in all areas of life (1990, p. 307). Kanter noted that as personal involvement and relationships in organizations grow there will be effects on family relationships and leisure time (1989, p. 293). Fields et al. cautioned organization members that they must keep the rest of their lives alive by remembering that there are other priorities such as family, play, and spirituality (1984, p. 118).

Fox stated that at present people feel isolated with their own unique struggles because "none of our lifestyles is allowed to touch the others with its unique wisdom" (1988, p. 206). Simmons observed, for example, that the workplace has taken over many of the traditional functions of the family (1990, p. 139), and Autry noted that friends and co-workers have become the new extended family (1991, p. 143). Simmons suggested that this phenomenon has created some anxiety. There must be more emphasis on family relationships for psychic fulfillment and spiritual growth (p. 139). Mumford emphasized that family life is vital to a balanced life and that there must be a recovery of family values. The "denial of love here arrests the development of love in every other part of life" (1951, p. 283).

Garfield said that any boundary between work and family life is arbitrary, a product of the old pattern of reducing wholes to isolated parts, and he suggested that organizations focus on reconciling competing life goals and supporting members' needs to integrate work with family life (1992a, p. 107, 108). Morrison (1990, p. 9), Outlook '92 (1991, p. 58), and Ramos (1981, p. 141) all suggested that organizations must support time and space for family as well as community involvement.

A number of writers discussed the integration of work and nonwork life in

terms of leisure time. Gordon, for example, noted that the boundaries between work goals and other life goals are arbitrary, stating that it is becoming "increasingly difficult to distinguish between leisure and non-leisure time" (Yankelovich et al., 1992, p. 27). Theobald agreed, observing that there was no split between the concepts of work and leisure in primitive societies and that "in the emerging era we need to return to the sense that work is an integral part of one's life--though not the whole of it" (1987, p. 63). Cetron and Davies stated that there must be more concern with balancing work and leisure (1989, p. 307).

Asimov said that leisure will have an important impact on the development of creativity (1987, p. 29). Naisbitt and Aburdene predicted that with a shift in focus to leisure time there will be a renaissance in the arts. After the dark ages of the industrialized twentieth century, the new information society will experience a need to re-examine the meaning of life through the arts and that this spiritual quest will be funded by business. Organizational involvement in the arts will deepen as a means to define a more uplifting image of life (1990, pp 50, 83).

Bird commented on another area of life-work integration. As work becomes a more integral part of human activity, no one will want to retire from it. "It would be like retiring from life," he stated. Organizations may develop flexible work patterns to accommodate the needs of older members (1987, pp. 133, 136).

According to Naisbitt and Aburdene, there is one particular segment of organizations which is currently highly concerned with balancing work with other priorities, and that segment is women (1990, p. 235). This introduces an area of human perspectives which was frequently discussed by theorists.

Gender Issues

Tarnas stated that from start to finish "the Western intellectual tradition has been produced and canonized almost entirely by men and informed mainly by male perspectives." The masculinity of the Western mind has been pervasive and fundamental in both men and women, affecting every aspect of thought (1991, p. 441). Tarnas and Sahtouris (1989, p. 160) both noted that Western culture was shaped from 4000 years ago when ancient matriarchal cultures were conquered by patriarchal nomadic groups who were father-god worshipers and who were

experienced with weapons.

Sahtouris continued that this changed the social structure of society and society's worldview in two ways. The first was toward perceiving a value in dominance--a shift from life-giving and partnership to life-taking and domination from which "women's equal valuation was never regained." From that time forward the civilized world went on to become organized in "kingdoms and empires with patriarchal religious worldviews and strict laws for keeping order" (Sahtouris, 1989, p. 161). Simmons noted that the major world religions--Christianity, Islam, and Judaism--support the male dominance principle (1990, p. 207). Tarnas pointed out that war has been prominent in every historical spiral from that time forward (p. 207).

The second consequence of patriarchal conquests, according to Sahtouris (p. 160), Simmons (p. 53), and Tarnas (p. 441), is the belief in the superiority of weapons holders over nature--a separation from the primordial union with nature or a separation from participating with the mystique of nature and the beginning of the progressive denial of belief in a community of being and a world with soul. Campbell reflected on the separation of humankind from nature in terms of mythology and religion, saying, "The goddess represents nature, god represents society. When you have a mythology that accents a god over a goddess you have a religion that accents society over nature" (1990, p. 95).

Capra pointed out that these shifts in views have had many consequences for modern society and daily life (1982b, p. 24). Some of them were discussed by Fox (1988, p. 24), Harman (1988, p. 123), Helgeson (1990, p. 223, 252), Henderson (1992a, p. 9), Morgan (1986, p. 211), Simmons (1990, pp. 53, 143, 207), and Tarnas (1991, p. 441).

Together these authors said that the patriarchal culture has placed societal value on the mature, autonomous, rational human being, on the intellect with the strong sense of self and the self-determining will, and on the lone male hero who dominates and wins and thereby strengthens himself. The ideals, values, and language of the dominating warrior have been seen in history, government, law, reductionist science, manipulative technology, competitive enterprise, and aggressive

nation states.

Organizations, according to these theorists, reflect characteristics associated with the male sex in Western society: hierarchical relationships, dominant authority figures, and rational, analytical approaches to problem solving.

This male experience is amplified and universalized as if it were the total human experience. As a result of this view, women have been perceived as different. They have been devalued and exploited, their qualities have been deemed too soft, they have been confined to societal roles considered subordinate, and they have been relatively silent about their experience.

Campbell pointed out that in mythologies, which he said always deal with traditional social situations, male roles are roles of "doing"--they create action and bring forth society--whereas female roles are roles of "being"--they bring forth the species. These are significant polarities, particularly in organizations, where women are forced to compete on the basis of achievement and where they lose their sense of what it is to be (1990, p. 101).

The differences between male and female energies were discussed by a number of theorists. Composite descriptions of these characteristics were as follows: Males were perceived primarily in terms of action--active, acting on (versus with), and single actors. They were seen as self-assertive, competitive, adventurous, expansive, impetuous, brutish, and taking comfort in mastery (versus mystery). They were also seen as analytical, rational, and working toward definable ends.

Women were perceived primarily in terms of integration, cooperation, and support. They were described in terms of wholeness, synthesis, community, connection, inclusion, always in relationship, acting with (versus on), and having integrated work and life. They were also described in terms of mothering, loving, nurturing, protecting, caring, empathizing, trusting, accepting, receiving, and strengthening themselves through strengthening others. In addition, they were perceived as creative, intuitive, and learning by experience as well as fluid, flexible, and working through processes. They were also seen as spiritual and as being comfortable with mystery (versus mastery).

Theorists who contributed to the descriptions are Agor (1986, p. 18),

Sergiovanni (in an interview with Brandt, 1992, p. 47), Campbell (1990, p. 92), Capra (1992b, p. 21), Ferguson (1980, p. 226), Harman (1988, p. 123), Helgeson (1990, p. 223), Morgan (1986, p. 211), Remen (1992, n. p.), and Simmons (1990, p. 129).

Many writers emphasized the need for rebalancing or integration these energies. Capra (p. 21) and Simmons (p. 53) perceived the two sets of characteristics in terms of the yin or female energies, which have been devalued, and the yang or male energies, which have been favored and are pre-eminent in our culture today. Both authors emphasized that the imbalance of current beliefs does not reflect the balance intended in the yin-yang philosophy. As Fields et al. put it, in Taoism the universe is made up of the union of both male and female or yin and yang energies--active cannot exist without passive, hard without soft, light without dark, and so on (1984, p. 65).

Simmons agreed, stressing that there must be a restoration of the yin/yang balance and an integration, that past imbalances have impeded collective evolvment, and that the integration of polarity will be "vibrantly transcendent" (1990, p. 130). Helgeson observed that, "assigned to different sexes and different realms, these dualistic divisions deprived each sex and realm of the full range of human possibility" (1990, p. 254).

A United Nations report on human equality stated that "if we really aspire to any development of the human lot involving both economic growth and social equity, the best way to achieve this will be by having men and women sharing in decision-making" (1993, p. A-9). Ferguson stated that there must be a "change in the balance of power between the sexes," and she emphasized that men must have permission to be intuitive, sensitive, flexible, nurturant, and so on (1980, p. 226).

Simmons pointed out the benefits to men of greater freedom to choose lifestyles. Humans are not instinctively aggressive, men have been socialized to a need for combat, and those with emotional or spiritual attributes have been perceived as weak and have been denied the free choice due all human beings. An "endless intertwining covalence of yin/yang characteristics for both men and women would be ideal" (1990, pp. 133, 207). Remen agreed, suggesting that a reintegration of the

feminine perspective is needed and that, rather than focus on strengths, it would be best to focus on balance (1992, n. p.)

The current imbalance was discussed by a number of authors in terms of organizational involvement and membership. For example, the United Nations report on equality predicted that if current trends continue, "it will take nearly 1,000 years for women to gain the same economic and political clout as men [It will take] five centuries for women to gain the same access as men to management positions and a further 475 years to get equal representation in the higher echelons of political power" (1993, p. A-9). In another example, Sergiovanni stated that "women are underrepresented in school principalships, but overrepresented in successful principalships (in a conversation with Brandt, 1992, p. 48).

A further example: Kennedy reported that according to a United States Department of Labor study of nine Fortune 500 companies, "white males are still running things in the corporate world." Kennedy added, however, that women are making small cracks in nonprofit agencies, which were not studied. Women are "more prevalent in such agencies" because salaries are lower and there is less competition from men. "Basically, any field that is very dedicated to serving people doesn't pay," and that nonprofits have a stigma. "Women interested in moving up in corporate life should not work in [them]" (1991, p. E-1). Ferguson made a similar observation, saying that "women are represented in far greater numbers in 'network' organizations than in the establishment" (1980, p. 228).

A number of theorists suggested that women's lot may be improving, and they suggested more swift advances than those projected in the United Nations report--at least in the United States. Pearce said that the number of women aged 25 to 44 in professional positions is increasing--up from 33.1% in 1960 to 58.4% in 1980 (1982, p. 392). Kiplinger's prediction was that by the year 2000, 3 out of 5 women will work and that the disparity between male and female earnings will lessen (1986, p. 227). Holt stated that by the end of the 1990s, 20% of CEOs will be women (in a conversation with F. Lear, 1992, p. 17). Naisbitt and Aburdene predicted that the 1990s will be the decade of women in leadership, with women dominating the information society and with "men and women on an even playing field" where it will

no longer be "an advantage to have been socialized as a male" (1990, p. 228).

Tarnas wrote that in order to achieve reintegration "the masculine must undergo a sacrifice: an ego death This is the great challenge of our time, the evolutionary imperative is for the masculine to see through and overcome its hubris and one-sidedness--to own its unconscious shadow, to choose to enter a fundamentally new relationship" (1991, p. 444).

Autry agreed. Male dominance is always about power and that men's inability or unwillingness to accept full equality of women in the workplace shows in men's expressions of power through social dominance. "We must accept appropriate expression of caring, of support, and of affection in the workplace" (1991, p. 54).

Harman noted that our culture is developing some sensitivity to the destructive aspects of a patriarchal society and masculine dominance (1988, p. 120). Simmons suggested that we are becoming aware that the "imbalance is life-threatening" (1990, p. 54). He and Helgeson (1990, p. 255) both noted that an integration and rebalance of female principles offers hope for healing. Fox stated that a paradigm shift will require a "renaissance of sexual mysticism" and a celebration of diversity (1988, p. 163). Capra said that the "feminist perspective is essential in a new vision of reality" (1982b, p. 21), and Berman said that one of the characteristics necessary for a future planetary culture is "less sexual repression" (1984, p. 277).

Lamm gave four positive points for the future, the first of which was: "women entering the workforce" (in an interview with Coates & Jarratt, 1989, p. 184). Bell said that there are two conditions necessary for women to emerge as a major segment of the workforce: a shift in cultural attitudes and the "institutionalization of a market for women's employment" (as reviewed by Coates & Jarratt, 1989, p. 95). Morgan suggested that "organizations are likely to change along with contemporary changes in family structure and parenting relationships" and that women and gender-related values can play a major role in transforming the corporate world (1986, p. 212).

Henderson stated that there is currently a search for new values which includes reviving the yin qualities of nurturing, cooperation, and cohesive patterns (1988, p. 172). Tarnas said that the Western mind is opening itself to reality and is shattering its most established beliefs about itself and the world. "Today we are experiencing

the death of Western man--as something that must be overcome, and fulfilled, in the embrace of the feminine" (1991, p. 445).

Tarnas suggested that current emergence of the feminine in our culture is the resolution of an ancient and deeply held urge to reconnect. Humankind's entire trajectory, from the separation of humanity from nature through the "long intellectual and spiritual struggles" from Greek poets and Hebrew prophets to Freud, has been driven by "the deepest passion of the Western mind to reunite with the ground of its being" (1991, p. 441). Tarnas suggested that the "driving impulse of Western masculine consciousness" has been to reconnect with the cosmos and that the masculine predisposition has been essential to evolution--a necessary part of a great dialectic in which each perspective is a part of the whole and each polarity requires another fulfillment. Tarnas also reminded readers of Hegel's statement that a civilization cannot become conscious of itself until it is so mature that it is approaching its own death, and he suggested that humankind now faces the existential crisis of being a solitary, rational, conscious ego or of reconnecting with the Goddess traditions and the intuitive, unconscious unity with nature found in feminine values (447).

Henderson noted that when value systems and class stratification are questioned, then "groups remote from old value systems clamor for higher status" just as the proletariat once did and as disadvantaged groups are doing today. She reminded us that Freud called it "the return of the repressed" (1988, p. 172).

Fields et al. observed, for example, that the feminist and gay liberation movements have "led to a much-needed re-examination of alternatives to patriarchal male-dominated spirituality" and that the women's movement in particular has renewed interest in earth religions and the divinity of the Great Earth Goddess (1984, p. 231). Henderson echoed that notion, stating that women's spirituality is restoring prehistory so that we now have awareness of humanity's first universal religion--the Mother Goddess--and that human embeddedness in nature is being reaffirmed (1992a, p. 9).

Schaeff and Fassel wrote that the women's movement has been a major influence in the social changes of this century and that the women's literature reveals

the main themes of these changes. The results of their survey showed that science fiction reveals an imaginative new world in which female values are reflected. Fiction tends to mirror today's world with critiques of the patriarchal system, showing an awareness of the exploitation of women and racial ethnic groups.

Organization and management literature pictures a corporate system different from the real world, with women as significant entities who learn to play by the present rules and win or alternatively who choose to return to the home or to move to entrepreneurial endeavors. This genre shows an awareness of stereotyping and of oppressive organizational climates, but it does not suggest any changes in organizational styles or structures as remedies. The books on alternative systems which openly declare the existence of white male dominated systems call for change to more inclusive models but do not describe these alternate realities. The authors conclude that there is a rising awareness of the need to change organization, but little actual change (1988, p. 40).

Simmons suggested that there are signs of some fundamental changes, that shifts in cultural attitudes are creating growing influences on the mass thought forms of the emerging world society, and that these influences have resulted in qualitative changes in job opportunities (1990, p. 129). Naisbitt stated that options are expanding for women--and that choices for men will increase as well--as gender-bound occupations yield to multiple options (1982, p. 264).

Kinsman suggested that in the new information age computer technology will come to represent the left-brain rational side of organizations, leaving the right-brain intuitive, creative, supportive roles to people of both genders (1986, p. 24). Holt pointed out, in a conversation with F. Lear, that women are winning elections all across the country because people are becoming skeptical about the political system and beginning to trust the way women govern more than men (1992, p. 17). Helgeson stated strongly that "feminine principles are entering the public realm because we can no longer afford to restrict them to the private domestic sphere, nor allow a public culture obsessed with Warrior values to control human destiny if we are to survive" (1990, p. 255).

Some understanding of women's issues along with other insights into human

attitudes, needs, and wants suggest the need for alignment of organizational cultures with these human perspectives. Harrison called it merging individual strength and will with the collectivity. Such alignment, according to Harrison, requires a charismatic leader (1984, p. 100).

Leader-Member Relations

Theorists' discussions of charismatic leaders and of leader-member relations in transformed organizations directly reflect those of new organization views and of changing human perspectives. For example, L. B. Jones wrote that leaders who can inspire and motivate people to new visions must combine alpha (masculine, authoritative) with beta (feminine, cooperative) styles and must always operate from a higher value (1992 p. 129). Senge said that learning organizations require a new view of leadership and that the Western view of leaders--as heroes who set direction and make key decisions--must give way to a new view of leaders--as having subtler, more important tasks such as serving as a steward and helping members continually expand their capabilities (1990, p. 339).

Descriptions of new leaders reflect the integration of more cooperative, supportive types of behaviors. Allen and Kraft (1984, p. 36), Cleveland (1972, p. 13), Naisbitt (1982, pp. 108, 209), Naisbitt and Aburdene (1990, p. 240), Nanus (1989, p. 77; 1990, p. 5), and Pascarella (1989, pp. 13, 103) contributed to the following picture.

Increased organization complexity and member needs make collective leadership imperative. Leaders must hold humanistic values--they must believe that people want to do a good job; they must be open and communicate an organizational culture based on ethics and trust; and they must serve as role models and examples of excellence, embodying and demonstrating the characteristics in which they believe.

Leaders also need to use holistic approaches. They must believe that people want to have meaning in their work, and they must challenge, inspire, and empower members to do their best to develop themselves and to achieve fulfillment by facilitating their involvement and by diffusing power. Lastly, leaders must exhibit a participative or consultative style. They must be concerned with relationships, with

giving people a sense of partnership, and with keeping them involved; they must work in close proximity with members, demonstrating collegial, consensual, and collaborative interaction; and they must serve as mentors, coaches, teachers, and facilitators.

Block and Harman focused primarily on the importance of leadership as stewardship which is threatening to many old-style leaders because it embodies questions of the redistribution of power and privilege and it evokes images of service (1992, pp. 6, 10). The authors noted, however, that a revolution is underway, that its essence is the new concept of stewardship, and that organizational survival is dependent on service-based governance and the redistribution of power (pp. 1, 8).

Leaders "must be alert to the temptation to justify patriarchy in the name of stewardship." As a means for "controlling, defining purpose, and holding others accountable" it becomes just a noble word for patriarchy. Leaders must "hold to the spiritual meaning of the concept: "to honor what has been given to us; to use power with a sense of grace; and to pursue purposes that transcend short-term self-interest" (p. 7). Block and Harman described stewardship as giving people at the bottom more choice, personal responsibility, and control over what they do and as integrating the managing of the work with the work itself. Many theorists saw this redistribution of power and member empowerment as the heart of leader-member relationships in new views of organizations.

Bolman and Deal noted that leadership is always situational and relational and that "leaders may not be the most potent force for change" (1991, p. 408).

Henderson suggested that it is the people who must ultimately create alternative futures because they know more than leaders (1992b, n. p.), and Edgar stated that "leadership comes from the bottom up" (1992, n. p.) Block and Harman agreed, saying that the "opportunity for a position of power is created by the community. Power is bestowed upon us by the people we 'lead'" (1992, p. 6).

Berman said that the shift toward member empowerment was begun by individuals drawing inward--by workers finding meaning elsewhere and withdrawing their allegiance (1984, p. 281). Kinsman said that it was a response to a "crisis in followership" rather than in leadership and that "today's employees want to be at the

forefront of their own, albeit smaller, parades" (1986, p. 20). McKnight stated that leaders need to respond to members' desires for collaboration and their need to be active participants (1984, p. 150), and Pascarella said that people can be helped in the workplace to "be ushered into an appreciation of a new paradigm" and to acquire skills for full participation. This kind of inclusion can be achieved through leaders nurturing the organization members and developing collective action (1989, p. 103). Block and Harman agreed. They said:

There is only one direction to go if the problems before us are to be solved and people's yearning for spiritual fulfillment in the workplace is to be satisfied. Dramatic change is needed in the degree of ownership and responsibility each person feels. (p. 12)

Many authors addressed leaders' roles and responsibilities for empowering organization members. Bennis wrote that leadership can be felt throughout the organization, that it gives pace and energy to the work and empowers the workforce. He saw empowerment as the collective effects of leadership and said that when leadership is effective empowerment is evident (1989, p. 22). Gardner saw the responsibility of leadership as ensuring "individual fulfillment within a moral framework," helping followers take a positive view of the future, and seeking to correct any objective circumstances that produce negative attitudes (1990, p. 11).

Kinsman stated that a leader's major attribute will be the ability to empower colleagues to be their own leaders (1986, p. 20). Pascarella said that participative management and a corporate mission might suggest that there will be less need for leadership, but he stressed that this is not so. There will be a greater need for leadership to ensure direction and to stimulate inner power than there was "when the task was to manage the status quo" (1984, p. 169).

Adams and Spencer (1986, p. 10), Block and Harman (1992, pp. 1, 6), Gilliss (1991, p. 18), Lowry (1982, p. 28), Lundin and Lancaster (1990, p. 19), and Naisbitt and Aburdene (1990, pp. 231, 236) described leader behaviors leading to the stimulation of members' inner power. Leaders must have a commitment to ensuring democracy--redistributing power and resources in the service of placing ownership and responsibility close to the core work and inspiring performance and self-

management by removing constraints and by establishing supporting conditions. Leaders must value followership as enriching the organizations and must have respect for people. Leaders must see individuals as both followers and leaders, and they must perceive individuals as responsible for themselves. Leaders must be able to share authority and decision making, to support relationships, and to engender synergistic group-centered power based on strong feelings of trust, interdependence, and a moral and righteous cause in which they believe.

Several authors emphasized the importance of leader morality on leader-member relationships. Gardner stated that leaders cannot have an impact unless they themselves have a high level of morality (1990, p. 12). Naisbitt and Aburdene said that "management skills count toward being a good manager, but who you are counts toward being a leader" (1990, p. 240). Block and Harman said that "the obligation of accepting this position of power is to be, above all else, a good human being" (1992, p. 6).

Autry concluded that a leader's role and responsibility consists primarily of accepting the power bestowed by the group to be used for them rather than against them. "Power and control are illusions that we create for ourselves out of the sense of authority." At some point we realize the truth: "people control their own lives; all we can hope to do is influence them" (1991, p. 87). Helgeson agreed, stating that leaders of well-run nonprofit organizations are good models. They must rely on volunteers who will simply devote their time elsewhere if their needs are not met. These leaders believe that the "ability to motivate is absolutely paramount" (1990, p. 71).

Theorists concerned with future leadership, then, concluded that motivation and influence along with mutually held purposes are the keys to transforming organizational cultures and ultimately to creating social impact. Rost's perception of leadership reflects these elements. Recall that he defined leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (1991, p. 102).

Ritscher reflected similar perceptions. "A transformational leader is a person who catalyzes a dedicated, spirited, close-knit organization that singlemindedly

pursues a common vision and produces effective results in the real world" (1986, p. 76). Spiritual leadership is transcended. It rises above everyday reality, taps human potential energy, shapes and catalyzes the spirit of the organization, and creates an organization with great vitality and high performance (p. 78).

Summary

This look at organizations as social entities with beliefs and behaviors which must be understood and ultimately changed as organizations move toward transformation has led first to a review of orthodox and new-orthodox metaphorical perceptions of organization. The review suggests that old views of organizations as machines, for example, must be abandoned in favor of yet-to-be-clearly defined perceptions of organizations as interactive wholes.

Further explorations of organizations as cultural entities, which forces a look at organizational contexts and assumptions that lie beneath surface beliefs and behaviors, have provided insights into the necessity and the means to change the cultural fabric of organizations in order to bring about their transformation. An examination of theorists' views of the ethical and moral, value, and spiritual bases suggests that new cultures must be based on higher order assumptions and must move toward supporting socially responsible behavior, focusing on the common good, and developing means for intrinsic personal contributions and transcendent meanings.

A closer look at the need for organizations as social institutions moving to a more human-oriented paradigm to develop cultures supportive of their human members reveals that organization members are changing their attitudes about organizational participation. Contrary to the old paradigm acceptance of menial, nonrewarding tasks and the pursuit of personal satisfaction outside bureaucratic and patriarchal organization, members are now moving toward holistic life-work perceptions and are seeking identity, fulfillment, and independence in their work-life experience.

Shifts in member attitudes reveal some areas of organizational culture and behavior which must be examined and ultimately adjusted in order for organizations to meet members' needs and move toward transformation. Future organizations must:

ensure member understanding and acceptance of common purposes, provide creative opportunities, build supportive relationships, develop member trust, offer empowerment and responsibility, develop partnerships, and support integrated lifestyles.

For organizations to develop cultures which support members' attitudes, needs, and wants, the people in them must abandon male patriarchal, dominant belief systems and move toward female, collegial, cooperative views. In addition, these views must be reflected by organizational leaders as they interact with members in order to support member needs and wants and in order to move the organization toward a desired future and toward transformation.

Recall that Yankelovich and Immerwahr saw organizational entities as consisting of the interaction of two factors (1987, p. 11): soft factors such as attitudes and motives, which have been discussed here, and hard factors such as structures, which we examine next. The exploration of theorists' perceptions of organizations as systems and as structures produces further direction and confirmation for organizational transformation and ultimately leads to a new model of organizations for the future.

CHAPTER VIII

ORGANIZATIONS AS SYSTEMS AND STRUCTURES

Ritscher stated that the human side of organizations must be institutionalized, that is, there must be some system or structure or symbol which gives organizational evidence of the concern for the human side. He noted that the organization of work must be supportive and responsive and must create a "human feel"--the two sides are interrelated (1986, p. 74). Adams and Spencer said that for organizations to achieve their vision it is essential that they attend to the systems which support the desired outcomes (1986, p. 11).

Systems

Schaeff and Fassel described organizational systems as reflecting both human and structural aspects of organizations. Such a system is "an entity that comprises both content (ideas, roles, and definitions) and processes (ways of doing things) (1988, p. 60). Morgan et al. noted that viewing organizations as systems is closely linked with the cultural view since it focuses on studying the nature of the organization's symbolic discourse and on understanding organizational behavior (1983, p. 21).

Cleveland saw adopting a view of organizations as systems as moving beyond old-paradigm thinking. Organizations that get things done "will no longer be hierarchical pyramids, they will be systems" (1972, p. 13).

Although systems views are more forward and more encompassing than old paradigm views of organizations, some interpretations remain somewhat narrow. Schaeff and Fassel, for example, defined an organizational system as complete within itself. Such a system, according to the authors, contains an entire worldview. It is closed in so that it won't take in any information that can't be processed within its existing paradigm, and it is open only in that it will take in new information as a means to ensure its internal flexibility (1988, p. 60).

Tregoe reflected this view when he described an organizational system as a "mechanism for collecting and passing information to top management as needed for reviewing strategy" (in statements reported by Johnson and Associates, 1992a, p. 92).

Theorists who wrote of organizations as systems described varying degrees of openness. Morgan saw open systems as being open to the environment and aware of the necessity of achieving an appropriate relationship with it for health and survival but maintaining internal control over the relationship. The most common perception of organizations as systems--organizations perceived as organisms--reflect this relatively open type of relationship.

Organizations as Organisms

Fields et al. (1984, p. 117), Harman (1992b, p. 29), and Lessem (1986, p. 91) together described this view of organizations as having the same type of systems control found in nature. They saw organismic organizations as complex living systems in which autonomous units form the nuclei of the system. These "cells" have internal identities and decision-making processes, so the organism is not totally controlled in one place. Together these units form the organization's psyche, values, image, vision, and common purpose. Describing this kind of system, Cleveland said that organizational systems are "interlaced webs of tension in which control is loose, power diffused, and centers of decision plural" (1972, p. 13).

Senge emphasized that such systems acknowledge processes of control from countless local points as opposed to maintaining the illusion of someone "up there" being in control as in a hierarchy. Much of the openness of this system is internal openness--a characteristic of internal relationships which include the freedom from constraint to learn and to create something new with value and meaning to people (1990, pp. 284, 290).

The above authors described an organism as a living, dynamic, ever-changing and evolving process which links its past with its future and has a direction for its progress. In order to maintain healthy conditions for stability and growth, it maintains continued and spontaneous awareness of a larger environment; it connects with outside forces such as the economy, technology, and social trends and continually responds to change.

Morgan saw the strengths of perceiving organizations as organisms as: perceiving a relationship between organizations and the environment; seeing the need for balance in interactive processes; becoming aware of the availability of a greater variety of options; and perceiving the virtue and contribution of organic forms for flexibility, innovation, adaptation, and organizational advancement. He analyzed the limitations as: seeing organizations as achieving self-referential closure in the environment and as interacting with the environment only as a projection of their own identity; perceiving organizations as too concrete (rather than as less fragile socially constructed phenomena); and failing to perceive that organizations don't function as harmoniously as organisms which function in unity to preserve homeostasis (1986, p. 72). Morgan also stated that there is a danger that this view of organizations could become an ideology, which would suggest that organizations should be functionally integrated and which could possibly lead to the use of people as resources rather than encouraging them to exercise their personal influence and choice (1986, p. 72).

Adams and Spencer said that a systems perspective aids in understanding an organization's core issues and causal factors and helps avoid emphasis on merely alleviating symptoms (1986, p. 11), and Senge cautioned that systems control must include individual and collective learning in order to avoid having local decision making become myopic and short-term (1990, p. 294).

Organizations as organisms, then, are described by these authors as open systems in that they are aware of and respond to changes in their environment, but the focus is primarily internal--on local, interactive decision making primarily to preserve homeostasis.

Morgan described two other somewhat open systems view of organizational-environmental interrelationships. In his contingency theory, the organization depends on the environment to a greater degree and its success is determined by external conditions. In his population-ecology view, the environment "selects" the organization depending on its characteristics and its ability to modify itself or evolve (1986, p. 66). These views are based on separateness and on perpetual states of tension between organizations and their environments. In more advanced systems theory, organizations are not discrete entities; they are elements within complex

ecosystems (p. 71).

Modern Systems Theory

Garfield stated that a perception of organizations as interactive wholes existing in the context of a larger whole, versus independent wholes existing in isolation or semi-isolation, began to gradually emerge in the 1980s (1992a, p. 19). Morgan said that in this view, along with interactive patterns of relationships, organizations are perceived as co-creators with the larger, more complex system as the whole ecosystem evolves and emerges in natural response to increasing complexity and turbulence in the environment (p. 71). Adams (1984), Coke and Mierau (1984), and K. K. Smith (1982) all reflected this more advanced view.

Smith described organizations as "systems of relationships among parts and among other sets of relationships." Organizations are entities made up of parts and relationships which add up to more than the sum of the parts just as individuals make up the organizational culture. The organizational entity can be viewed from three layers: it is part of an ecosystem for those parts below it; it is a collection of parts on its own level; and it is a part of the ecosystem above it. The organization is held accountable for its actions by the other interests in the ecosystem. Its parts are not considered accountable because they are separate and replaceable. Smith emphasized that organizational relationships cannot be seen--they can only be inferred from behaviors--and that the organization does not exist in any verifiable form--it can only be understood as a metaphor (1982, p. 325).

Adams described a similar three-level framework of interactions. The "suprasystem" is the environment which provides a worldview which is moving away from a scientific and toward a more holistic approach. The "system" is the organization which experiences pressures from the suprasystem and which is composed of procedures and rituals which seek equilibrium as well as norms and myths which resist change. The "subsystem" is the individual who, in conditions of sustained excellence, performs at peak levels of commitment, challenge, purpose, judgment, transcendence, and balance (1984, p. 195).

Coke and Mierau described their "corporate fitness" model as "movement through a system in multi-dimensional places to reach a desired goal" (1984, p. 266).

Their model included perceiving organizations as: (1) flow states--constantly manipulated flows of motion moving away from a "now state" of ineffectiveness and pain toward a strategic goal; (2) systems--living systems in which organizations are both interacting groups and parts of larger wholes; (3) holograms--all-encompassing images in which every sector contains the information needed to create an entire image; (4) processes and content--the presence and interactions of both in constant change; and (5) basic and advanced skills--use of both in total organizational transformation (p. 267).

Garfield (1992a, pp. 17, 36, 78), Harman (1992a, n. p.), and Kiefer and Senge (1984, p. 79) all saw organizations as members of all-encompassing ecosystems which interrelate with their environment. Together they described "new story organizations" (Garfield, p. 36) as living, dynamic local environments which interact with other systems and which perceive the world as a complex, interconnected, ecological-social-psychological-economic system. Each organizational system is aware of its interdependence with the larger system of which it is a part and of its responsibility for supporting the whole, for addressing the well-being of the environment, and for working with the forces of the larger system rather than against them, that is, of focusing on cooperation, partnership, and collaborations with the ecosystem versus engaging in competition, rugged individualism, and power struggles.

Kidder said that it is important to maintain a view of "all these different levels of organizations in relation to one another" and not to "reduce them all to a single so-called fundamental level." He said that fundamental "always means totally fragmented" (1988, B-4). Harman added that each segment of the system must operate on trust--trusting in its place and the importance of its role, like a heart knowing it will get its blood supply (1992a, n. p.).

Modern systems theory has been considered a very important approach to perceiving organizations by many theorists. Bolman and Deal called it "a candidate to become a more general theory of organization," although they noted that many theorists are not eager to use it, probably "because it isn't specific to human systems" (1991, p. 319). Senge saw it as the "fifth discipline" because it integrates and fuses the other learning disciplines of personal mastery, mental models, shared vision, and

team learning into one "coherent body of theory and practice" (1990, p. 12).

Tannenbaum stated that systems thinking is particularly important in a paradigm shift because it increases awareness of contracts between itself and old, mechanical models, it stimulates awareness of environmental factors, and it facilitates individual and organizational development (in an interview reported by Jamieson, 1982, p. 35).

The two major aspects of modern systems theory most frequently discussed by theorists are the perception of organization-as-systems as wholes and the interaction of those whole-systems in response to their membership in the greater whole-system.

Concerning the concept of wholeness, Hubbard emphasized the importance of a holistic view when she said that there is a continuing, evolving pattern in the process of nature which leads to greater whole systems, higher consciousness and freedom--and that "its going on NOW!" (1982, p. 10).

Garfield described organizations as holons embedded in a holarchy and noted that that idea changes organizations behaviors, decision making, and structures (1992a, p. 19). Senge said that whole systems thinking leads organizational members to develop personal mastery by helping them continually to see more of the connectedness of the world--discovering connectedness between external forces and personal actions--and to become committed to the whole--developing broader vision and experiencing spiritual power (1990, pp. 167, 170).

Hubbard said that a holistic synthesis of views is essential because we don't have any authoritative guidelines for transformation and "no existing institution is capable of making such choices on its own" (1982, p. 110).

Concerning organizational interaction with the whole, "many problems lie at the boundaries between systems and key variables in the environment," according to Tannenbaum in an interview with Jamieson (1980, p. 35). Senge said that systems must be able to work in continuous cycles with the environment, "developing hypotheses, acting, and reflecting on results" (1990, p. 303).

Ackerman (1984, p. 123), Argyris (1982, p. 48), Harman (1988, p. 168), and Henderson (1988, p. 119) agreed, noting together that the total system must be oriented to the process of managing in a flow state, of incorporating both positive and

negative feedback as essential information on the appropriateness of its actions in order to identify a match or mismatch between outcomes and intentions. Ackerman stated that continuous assessment is essential to implement new behavior and to ensure that the system remains viable as it aligns members toward greater focus on organizational purposes (1984, p. 135), and de Bivort emphasized that open interaction and slough-off strategies are key elements for organizations in transformation to be able to continually redirect their resources toward attainment of their vision (1984, p. 251).

Political Systems

As they addressed the necessity of holistic organizations aligning members and directing resources, theorists called attention to one particular view of organizations: as political systems. de Chardin said that political systems are "defined social systems"--purposeful means of organizing or "ordering the masses" (1964, p. 37). Morgan stated that the original meaning of politics is a means of allowing individuals with divergent interests to reconcile their differences through consultation and negotiation. He pointed out that the root, *polis*, means "city-state" or "aggregate of many members" and that Aristotle saw politics as a means of reconciling the need for unity and for creating order out of diversity while avoiding totalitarian rule (1986, p. 141).

Bolman and Deal said that politics in organizations is unavoidable and that it need not be sordid or destructive. The skills of constructive politicians, for example, include diagnosing political realities, setting agendas, building networks, negotiating, and making effective choices (1991, p. xvcii). Viewing organizations as political systems, Bolman and Deal saw them as "goals, structures and policies which emerge from ongoing processes of bargaining and negotiating among major interest groups" (p. 203). Morgan defined organizational systems of politics as relations between interests (sets of predispositions which lead persons to act in certain ways), conflict (which happens when interests collide), and power (the medium through which conflicts of interest are ultimately resolved) (1986, pp. 149, 155, 158). Power comes from the control of such things as resources, rules, boundaries, technology, alliances, symbolism, and so on (pp. 161, 169, 171, 173, 176).

Morgan pointed out that some organizations wield power through authoritarian, super-subordinate relationships while others model democracy. Both are intrinsically political systems, and politics, which is not necessarily dysfunctional, may be an essential aspect of organizations (p. 141). Bolman and Deal agreed, saying that the question is not if organizations have politics but what kind they have. The authors reiterated McClelland's thesis that power has two faces: negative--used for exploitation and personal dominance--and positive--used for creating visions and collective goals (1991, p. 206).

Bolman and Deal (1991, pp. 9, 206) and Morgan (1986, p. 186) both said that political systems can be used negatively as settings for conflict, competition, and coercion among different interest groups for power and scarce resources and as powerful tools or implements for organizational members who can master them to further and achieve their own interests and purposes. Foster suggested that politics, as designed by decision makers, becomes a science which precludes individual expression and input into the character of decisions and utilizes aggregate votes only to affirm or disaffirm policy decisions (1986, p. 79). Gilliss noted that in the old paradigm view of politics, power is used as power against: persons in authoritative positions dominate through fear and the powerless feel deprived of their rights and their ability to improve their own lives (1991, p. 18).

Foster also noted that political conflict occurs not only as organizational systems address internal interests but also as they interact with the larger environments. When the larger social system became driven by economics, for example, purposive, rational decisions to accommodate technological progress and capital accumulation "ultimately clashed with norms and values of tradition, meanings, and culture" (1986, p. 77).

Bolman and Deal agreed: "All the factors that generate politics within organizations also exist in the relationships of organizations to one another and to the larger environment," but politics need not be totally negative in its interactions. Organizations as political systems can be viewed simply as political arenas or settings for the interplay of interests and agendas as well as for use of political tools (1991, p. 206).

Morgan pointed out that with the multiple nature of interests, power sources, and so on which shape organizational life, democracies, which are designed for the free interplay of stakeholders, are appropriate (1986, p. 186). Bolman and Deal emphasized that there is a constructive kind of politics and that political players know how to build networks of support and to adopt open, collaborative strategies (1991, p. 206).

Fox suggested that politics need not be defined in a pessimistic or negative manner as the "art of compromise" but that it can be perceived as the "art of expression of the people's will and needs," contributing to the justice, balance, and harmony needed for living on and managing the planet (1988, p. 201). Block and Harman stated that "if our organizations are to survive, political reform will have to take place" and that it must be a revolution through participation (1992, p. 9).

Morgan suggested that viewing organizations as political systems helps to understand the sociopolitical implications of the roles they play in society as well as to recognize the reality of policies in organizations and their constructive role in the social order. Such a view also helps to overcome the perception of organizations as rational, functionally integrated or closed systems. There is a danger, however, that a political view can lead to increased political behavior in pursuit of personal interests, although he acknowledged that its use to assume a plurality of interests among participants at all levels may be superficial rather than realistic (1986, pp. 195, 197).

Structures

Senge concluded that a systemic perspective of organizations shows that there are multiple levels of interests which involve events, patterns of behavior, and structures. The latter may be the most powerful means to explain what causes patterns of behavior and to develop the deepest insight into how members think (1990, p. 53).

Shandler said that systems have two types of underlying variables: the collective human attitudes, expectations, talents, relationships, and so on, and the prescribed organizational goals, policies, procedures, and structures. He said that structures organize systems in unique and particular ways (1986, p. 124). Morgan

agreed that organizational structures, rules, policies, procedures, and so on serve an interpretive function as points of reference for behaviors (1986, p. 132).

Ramos defined organizational structures as "sets of roles and relations among individual members" (1981, p. 104). Morgan emphasized the importance of focusing on the structural properties of organizations when he said that "the structures through which we produce and sustain our material conditions of existence" may well turn out to be the basic forces which shape organizations and society (1986, p. 265). Giddens supported this notion, stating that organizations are on-going productions of the perceptions of the organizational actors as they carry out their day-to-day activities, and the actors are both the creation and foundation of social structures (1984, p. 26).

Nanus also perceived organizational structure as a creative force. Organizations are instruments for creating the future, and members must develop the skills to design and implement appropriate structures and settings to reflect the human context of values and priorities (1989, p. 87). Argyris and Schon noted that organizations create the conditions that influence individual behaviors (1974, p. 45), and Ferkiss suggested that they can create the means of social coordination which makes individual participation and free creativity possible within an overall pattern of balance (1975, p. 259).

Bellah et al. observed that organizational structures both "grow out of and also influence changes in consciousness, climates of opinion, and culture" and that they are frequently altered by social movement (1985, p. 275). Bolman and Deal (1991, p. 277), Cordell (1988, p. 43), Deutsch (1985, p. 210), Halal (1990, p. 28), Tannenbaum (in Jamieson, 1982, p. 36), and Wishard (1987b, p. 60) all agreed that we are currently dealing with a social movement--the transition to the information age. When such historic transitions bring environmental changes and new knowledge, organizations must be aware of the environment, make judgments about the relevance of their current factors, and adapt the context of their operations to mirror the shift or lose their effectiveness.

Such environmental change requires changes in organizational policies, procedures, and structures in order for the organization to mesh with emerging values. Changes toward decentralization, for example, help organizations become

flexible and innovative in order to support movement toward the future. Korten concluded that we need "creative experimentation toward the recreation of our institutions to serve the needs of life on a living spaceship" (1990, p. 106).

A number of authors noted that in response to societal needs and changes, organizations need to determine their desired directions and to design their operations accordingly. Kiefer and Stroh (1984, p. 177), Pascarella and Frohman (1989, p. 14), and Shandler (1986, p. 124) agreed that structures interact with purposes to drive organizations toward their desired ends. Organizations must design and use appropriate processes and structures which are consistent with their values and purposes in order to align individual energies and personal power with collective results. Pascarella and Frohman noted that when a new organization defines its purposes, those purposes are then central to all policies and activities. The purpose statement describes the organization's reason for being, its arena of action, and how it will act (1989, pp. xii, 9).

Nanus stated that the future status of organizations is determined in large part by internal elements and their interactions. Organizations must redesign their structures to make achieving desired outcomes more likely (1989, p. 62). Harrison stated that when forms and processes are flowing from the organization's essential qualities, the organization will become energized and integrated and will be effective in dealing with its environment (1984, p. 106).

Harrison (p. 98) and Garfield (1992a, p. 145) agreed that adopting appropriate organizational structures for today's world requires the ability to think systematically in order to understand the impact of decisions on the organization as a whole and in order to allow healing forces to emerge.

Sergiovanni stated that "the door is now open for revolution." He suggested schools as an alternate way of thinking about organizations, noting that they are examples of small communities where people care about what is happening. Perceiving organizations in this way "requires a change in your mindscape about how human enterprises work" since they are the opposite of traditional management theory (in an interview reported by Brandt, 1992, pp. 48, 49).

Need to Restructure

Many authors supported the need for both mind change and organization structural change, reflecting Naisbitt's statement that "belief in the ideal of the pyramid structure has come tumbling down" (1982, p. 213). Autry, for example, stated that "organization charts are not real pictures of organizations. They are pictures of egos." Such structural representations are always inaccurate, don't define real life, are morale killers, and are totally unneeded. "If the organization doesn't exist in the minds and hearts of the people, it doesn't exist at all" (1991, p. 82).

In another example, Bleeker observed that the factory model of steep, pyramidal hierarchies will not solve today's problems and that mechanical-age principles do not apply in today's society. People, not machines, are the source of power, and we must restructure the workplace to "shift authority to a larger portion of the workforce" (1987, pp. 15, 18).

Brown and Bennet stated that not only must we move beyond the hierarchical pyramid of the machine age, we must "release the conception of human nature and related human endeavors from the structures implied by the behavioral syndrome." We must develop operational approaches to nurture varieties of pursuits which support particular goals (1992, n. p.)

Garfield pointed out that "attempts to reshape the pyramid are only interim steps on the path to structural transformation Until the structure of the organization is significantly altered, no dramatic improvements can be achieved" (1992a, p. 26). Pascarella stated that people must do away with reductionist thinking and segmentation of roles. They need a fundamental change in philosophy--a redefinition of work and of working relationships (1984, pp. 105, 110). Handy opined: "It is these changes in the way our work is organized which will make the biggest differences to the way we all live" (1989, p. 9).

Ramos stated that "formal organizations are not the appropriate settings for people's de-alienation and self-actualization The time is ripe for the practice of an unprecedented kind of organizational science which is sensitive to the diverse issues of human life and which is able to deal with them in settings where they appropriately belong" (1981, p. 74).

Pascarella and Frohman noted that "more and more companies are

seeking ways to nurture and change organizational environment." Such change is focused on "changing what traditionally goes on" in organizations, rather than merely changing people, and on creating an environment where people can use creativity and innovation to initiate and implement new ideas (1989, p. 102). Brown wrote that we are now in the middle of a paradigm shift and that we must keep pushing to overcome failure and to ensure that new structures for member involvement become habit (1992, p. 44).

Bolman and Deal (1991, p. xv) and Kiefer (1986, p. 193) agreed. With the current societal shift, leaders will be able to discover, shape, and maintain new organizational structures that will release untapped individual potential, channel creative energy, improve collective performance, and produce results. Kiefer noted that when people operate within such structures with clear vision and purpose they become inspired.

Pascarella and Frohman pointed out that new processes and procedures are needed to direct organizations to the future and to help them achieve results. "Visionary leadership alone is not enough" (1989, p. xii). Kanter said that "organizations need to find synergies to remove barriers to successful restructuring" (1989, p. 67). Peters suggested that "the most bold change is the result of a hundred thousand tiny changes that culminate in a bold new procedure or structure" (1987, p. 468). Ferguson pointed out that new age organizations are characterized by their fluidity and their reluctance to create hierarchical structures or to operate on those principles. She suggested that future restructuring can not be decreed but can only be facilitated (1980, p. 18).

Leviton noted that structural changes are forecast for the next decade but that organizations are very slow to change (1988, p. 83). Ettorre observed that "it is easy to discuss theories, but it is far more difficult to turn them into reality" and that not much happens when organizations actually attempt to implement change. She reported research findings that 83% of a group of surveyed organizations reported undergoing reorganization and that "only a very small minority believed the process was successful." The barriers to change are organizational divisions between functions and units, conservative corporate cultures, and risk-aversion managers.

Nevertheless, organizational leaders stated that "new ways of thinking are a requirement to achieve corporate objectives" (1993, p. 6).

Corrick wrote that in order to stimulate positive skills and attitudes people need to "overcome the myopia and lassitude of outdated structures" and implement networks and flows of information (1990, p. 60). Autry (1991, p. 145), Pascarella (1984, p. 110), and Ramos (1981, p. 87) said together that organizations need to adopt person-centered perspectives--humanizing and personalizing the organization for participation, shared ownership, and self-management in a bond of common enterprise and friendship in which individuals can realize their potential and take pride in their work.

Factors in Restructuring

The factors most frequently discussed by theorists as they addressed the importance of organizations overcoming outdated structures in light of both societal influences and societal needs for greater humanization are discussed below.

Demographics. Harman pointed out that one of the fundamental dilemmas the industrial world must face in the future is population growth (1979, p. 39). Simmons wrote that the world population explosion is due to higher numbers of live births and a lower death rate than ever before in history (1990, p. 149), and Edgar noted that more than half the people who ever lived on earth are alive today (1992, n. p.)

Cetron and Davies (1989, p. 5), Kiplinger (1986, pp. 9, 149), and Simmons (1990, p. 149) together noted that not only is there an increase in numbers but also that an enormous shift in the size of age groups is occurring. From 1900 to 1990 the human life span doubled, and the age pyramid is now stretching. By the year 2000 the baby boomers--the largest cohort group our society has ever known--will reach middle age, and those with decision-making power are moving toward retirement age. Harman saw major growth concerns as forcing us to focus on redefining productivity as well as human and social needs.

Theorists pointed out a number of specific effects that population growth and shifts are likely to have on transforming organizational structures in the future. Major impacts discussed included:

1. Increased unemployment due to technology and robotics as well as

downsizing will be accompanied by more contracted "outworkers" and part-time, flexible, or temporary workers (Bureau of Labor Statistics, 1991, p. 47; Foegen, 1988, p. 80; Handy, 1985, p. 24; Kinsman, 1986, p. 21; and Outlook '92, 1991, p. 55);

2. Job requirements for higher educated and high-tech workers will increase, but there will also be reduced numbers of middle level jobs, fewer college graduates, scarcity of entry level workers, and more older workers (Bureau of Labor Statistics (1991, p. 47; Handy, 1989, p. 26; Morrison, 1990, p. 9; Pearce, 1982, p. 392; and Yankelovich & Immerwahr, 1987, p. 14);

3. Shifts in age group dominance of the work force will occur along with reduction in the middle ranks. Low-tech jobs will be filled by immigrants, students, and older workers. Baby-boomers with unexpected behavior and commitment to change will be in decision-making positions (Cetron & Davies, 1989, pp. 63, 309; Kiplinger, 1986, p. 12; Levitan, 1988, p. 83; and Ogilvy, in an interview with Coates & Jarratt, 1989, p. 220);

4. Need for tolerance and acceptance of diversity will increase with different generations, more women, and more ethnic diversity. Immigration to the United States will be stepped up, and urban, industrial centers will be mostly inhabited by minorities (Cetron & Davies, 1989, p. 5; Coates and Jarratt, 1989, p. 282; Isenberg, 1984, p. 22; Deutsch, 1985, p. 8; Kiplinger, 1986, p. 24; Morrison, 1990, p. 9; and Outlook '92, 1991, p. 55).

Size. Ramos wrote that the size of the organizational setting affects its ability to make optimum use of resources and to accomplish its goals and that an increase in size does not necessarily imply an increase in effectiveness. An organizational system's ability to respond to members' needs imposes size limitations and that when face-to-face relationships are deemed fundamental for accomplishing goals, small organizations are more appropriate (1981, p. 137).

Foster noted that one of the major issues that makes achieving a true democracy difficult is size. In large organizations it is difficult for leaders to exert influence on organizational processes. The answer may be smaller organizations, organizations within organizations, or organizations with different representation

patterns so that all members could feel they participate (1988, p. 39).

Pascarella stated that there is general dissatisfaction at this time with the ability of giant organizations to carry out agreed-upon actions (1984, p. 82), and Harman noted that we are currently "moving toward smaller institutions or small, more autonomous parts of big ones--less hierarchical with internalized authority and autonomy" (1991b, p. 29).

Toffler said that there is a current realization that organizations may have exceeded the limits of economies of scale and many organizations are searching for ways to reduce the size of their work units. People are "beginning to realize that neither big nor small is most beautiful, but that appropriate scale, and the intelligent meshing of both big and small, is the most beautiful of all." Managers are beginning to experiment with new forms of organizations which combine the advantages of both (1980, pp. 261, 262).

Deal and Kennedy (1982, p. 12), Kanter (1989, p. 115), and Larreche (1992, p. 143) noted that executives are getting rid of bureaucracies and decentralizing organizations and that organizations are culling staffs by half--transforming middle management and turning workers into entrepreneurs. With fewer layers the organization is more focused and work is done in small, autonomous units which have more responsibility and more opportunity to participate by communicating directly with top management.

Work. Handy noted that "the world of work is changing because the organizations of work are changing their ways. At the same time, however, the organizations are having to adapt to a changing world of work. It's a chicken and egg situation" (1989, p. 87). Harman pointed out that present conceptions of work were formed when "there was no foreseeable end to the desirability of increasing productivity." Now the constraints of resources and the environment, automation, and overpopulation are creating "superfluous people" and that we must change the role of work (1988, p. 143).

Butler noted that predictions about future work can be quite accurate based on today's observations (1984, p. 8), and Bolles advised that in the world of work, people and organizations need to prepare for change by planning and to make use of

change by taking stock (1983, p. 9). Post suggested that with fewer positions available, managers need to assess members as valuable contributors to organizational plans, align personnel activities to business development, and adjust organizational strategies and structures accordingly (1992, p. 110).

The opinions of those who have taken stock and made some assessment of the future role of work seem to suggest four general conclusions. The first is that jobs will move from fabrication to service. This view was shared by Bolles (1983, p. 9), Cordell (1988, p. 41), Naisbitt and Aburdene (1990, p. 232), and Zaleznik (1987, p. 4), among others.

The second conclusion is that "dull and repetitious work will disappear" (Asimov, 1987, p. 25) and will be replaced by "knowledge work." Bleeker defined knowledge workers as those who must think, inquire, gather and evaluate information, communicate, and take informed action. Such work will require comprehending and processing, at succeeding levels of difficulty, data, facts, knowledge, experience, principles, and insights (1987, pp. 16, 20).

Other authors defined knowledge work as exercising judgment (Zaleznik, 1987, p. 4), thinking and intuiting (Isenberg, 1984, p. 19), and, specifically, computer work (Bolles, 1983, p. 9 and Butler, 1984, p. 8). Kiplinger predicted that the best careers will be in the scientific and technological fields such as computers, communications, and biotechnology (1986, p. 243), and Naisbitt and Aburdene said that skilled information workers will earn the highest wages in history (1990, p. 25).

The third conclusion is that large numbers of people will be working at home. Toffler stated that with new views of production, literally millions of jobs could shift out of organizations and be swept "right back to where they came from originally: the home" (1980, p. 194). Handy (1989, p. 141), Mason (1993, p. 14), Naisbitt (1982, p. 33), and Yankelovich et al. (1992, p. 24) all agreed.

Together these theorists noted that in the information age people will be dealing with conceptual space. With the sophistication and portability of technology, organization members can choose to work anywhere, and more and more jobs will be performed outside the organization. Work and lives will be intertwined and work will be shaped to suit our future lives. Organizations must be prepared to develop policies

and procedures and to train and support members to work effectively in alternative settings.

The fourth conclusion is that "more people will be in business for themselves" (Pascarella, 1984, p. 103). Naisbitt observed that transitional times are the times when entrepreneurship booms--the times when people seek self-reliance--and the start of the shift to an information era is reflecting such a boom (1989, pp. 7, 160, 218). Plummer noted that there has been a 50% increase in entrepreneurships in the last half century, partly due to a shift in the meaning of work. People think work should be fun (1989, p. 8).

Ferguson (1980, p. 353), Sinetar (1987, p. 24), and Yankelovich and Immerwahr (1987, p. 21) agreed that entrepreneurship is a natural response to the transformative process and that people are seeking psychological wholeness and self-actualization. Employees are willing to shift from one workplace to another or to create their own workplace, and they are more concerned with autonomy, creativity, personal fulfillment, contributions to society, and a confluence of work and enjoyment than with economic security.

Kanter (1989, p. 175), Kiplinger (1986, p. 39), Sinetar (1987, p. 24), and Young (1987, p. 168) pointed out that entrepreneurship works well for business and it is one of the two major trends in organization restructuring today (the second being mergers). This structural arrangement creates opportunities for new, small business development while at the same time it meets the needs of larger organizations for flexibility in an ever-changing environment. Larger organizations want to deal with resourceful, actualizing people from whom they can get quick responses and with whom they can avoid organizational constraints which can interfere with successful completion of projects. Entrepreneurial organizations meld resources with ideas and contribute to organizational vitality on many levels.

Mason (1993, p. 16) and Simpkinson (1990, p. 32) noted one drawback to entrepreneurial work patterns. Lone workers often feel disconnected from one another and experience a lack of social interaction. Both authors suggested that communication through networking is the answer.

Loss. "Transition may be painful," according to Asimov (1987, p. 27) and to

Kanter, who observed that "restructuring has costs" (1989, p. 62). Kanter, along with Bolman and Deal (1991, p. 397) named such costs as confusion, loss of meaning, uncertainty, discontinuity, distraction, disorder, and conflict among both those who benefit by organizational restructuring and those who don't.

The major negative impact of restructuring addressed by theorists was job loss. Harman stated that the long-term future of our society is "chronic un- and underemployment." Economic growth cannot generate enough jobs and cannot continue to use resources and spoil the environment (1988, p. 143). Porter predicted a shortfall of at least 18 million jobs by 2010 (1986, p. 9) which Handy saw as "the necessary and inevitable price for bringing down inflation [and] preferable to having international poverty" (1985, p. 180).

Kiplinger predicted a less drastic shift, saying that unemployment will gradually be reduced. Except for a surplus of un- and underskilled labor, job displacement will be low enough for retraining or relocation. There will be no shortage of computer-oriented workers and that knowledge workers will have to compete for jobs (1986, p. 224). Asimov summarized that some people will be unemployable and need support, some will need to be re-educated, and many will have more time for leisure and for ways to unleash their creativity (1987, p. 28).

Having determined that full employment is not possible in the future due to limited resources, Handy suggested that either productive industry or the state must accept responsibility for incorporating and supporting members unable to produce in the new system. The state will be unable to absorb, retrain, and replace unemployable workers because it will have reduced resources due to lessened productivity and smaller numbers of tax dollars. This leaves productive industry to be responsible for solving the social problems of large numbers of unemployed workers (1985, p. 179).

Harman emphasized that the full participation of society's members is essential, and he suggested re-evaluating work in an attempt to minimize transfer payments to the unemployed--taking into consideration pay for family and social work, for retraining and re-education, and for socially constructed tasks, and leaving unconditional transfer payments for only those who cannot contribute, such as the

disabled and the elderly (1979, p. 61).

Whatever transitional approaches are taken to address the loss of work and its resulting impact, Kanter emphasized that people must be allowed to mourn the past and must be stimulated to become "excited about the future and the positive rewards available to compensate for the loss" (1989, p. 84). Organizations must be sensitive to the process as well as to the needs and concerns of people and work toward building commitment to shared goals (p. 88).

Feldman, reporting on various studies and interviews on downsizing, quoted Greenberg as saying that for organizations faced with restructuring, "the real questions is 'How are we doing business?'" Greenberg said that historically, cutting payroll is the first approach to restructuring but that "people, ultimately, are the only thing that add value to a product or service" (Feldman, 1993, pp. 7, 18). Feldman concluded that keys to reducing complexity include constantly questioning why work is done, eliminating work that doesn't focus people and resources on organizational goals, ensuring that members understand the organization's vision and objectives, and giving them the power to generate ideas to make decisions. The people who should have the greatest effect on the structure of the organization are those who deal with its day-to-day activities (pp. 20, 21).

Education. "Education deficits are at the root of many social problems that affect companies," according to Garfield (1992a, p. 377), and many theorists agreed. The editors of *Management Review* recently asked fourteen of the country's most forward-thinking leaders how they would use unlimited resources to prepare the United States for the coming millennium. The editors summed up the findings: "The answers send a clear message to [decision-makers]: Strengthen the workplace by fortifying all levels of education, including vocational and on-the-job training" ("Leadership Poll", 1993, p. 24).

Bradshaw (1992, p. 50), Bureau of Labor Statistics (1991, p. 47), Kiplinger (1986, pp. 12, 237), Mason (1993, p. 17), Naisbitt and Aburdene (1990, pp. 34, 185), Simmons (1990, p. 173), and Tannenbaum (in Jamieson, 1980, p. 34), gave a number of reasons for putting a priority on education. Together they said that with the new economic order and standards of competitiveness of today's complex global

society, the only way for countries to differentiate themselves competitively is through continuous creation of new knowledge or learning. Countries which invest the most in education will be the most competitive, there is a national priority for excellence which can only be achieved through education, and members of society must be educated to join the world community.

Education has many implications for organizations and the workplace. Education breaks down barriers, not only internationally and nationally, but also in organizational interactions. The level of education influences expectations of work and it correlates with standards of living, the rise of which are both important for our future society.

The movement to an information society requires that workers be well-educated and technically trained. Educated workers will be the most in demand in the future, education is a high priority for preparing people for a high-tech future, and today's workforce must continue to upgrade their skills. The issue, then, according to Naisbitt and Aburdene, is how to educate people for future jobs.

The issue hangs on Naisbitt's statement that "we are drowning in information but starved for knowledge" (1982, p. 17). Bradshaw (1992, p. 50), Hooker (1987, p. 34), Kiplinger (1986, pp. 61, 143), Larreche (1992, p. 143), Miller (1992, p. 12), Naisbitt (1982, p. 51), and Tannenbaum (in Jamieson, 1980, p. 38) all agreed on the need for knowledge. In order to participate in the human race, we need to discover our potential as humans--to develop inner knowledge and wisdom as well as the ability to think and to analyze in order to build new knowledge. These abilities are what make us human. Having knowledge and the ability to create it adds meaningfulness to our lives, makes us capable of acting responsibly, and reduces fear of change.

This philosophy of education includes a belief in involving everyone--that all citizens need to develop knowledge--and in developing the whole person--that the potential of people's brains must be awakened. Training can make machines out of people, the ability to manipulate data and technical equipment is not enough, and basic skills and minimal literacy are no longer sufficient. Knowledge is needed to guide the exploration of technology and the capacities once demanded for the elite and

college bound are now general requirements.

Higher standards of literacy should aim at a literacy of thoughtfulness and the development of competent generalists--at developing a solid grounding in the humanities and the social sciences so that people have a sense of history and philosophy, a familiarity with literature, poetry, and economics, and the ability to communicate, all of which will continue to serve and grow throughout each individual's lifetime.

Ferguson noted that education in the past has been conducted from a left-brain, reductionist, separatist, science-discipline point of view "outside the ken of humanity" (1980, p. 147). Berman agreed saying that education, as it has taken place in the "institutions of official culture in contemporary Western society," has been nonemotive as well as "steeped in scientism and purely discursive ways of knowing." Sensual modes of knowing and of ingesting the unfamiliar must be added (1984, p. 270).

Bradshaw (1992, p. 50). D. M. Fields (1991, p. 36), Ferguson (1980, p. 147), Garfield (1992a, pp. 24, 131, 236), Mason (1993, p. 17), and Raymond (1986, p. 17) agreed that an education geared to maintenance and pattern reproduction doesn't work in a dynamic world. Knowledge-based work focuses on creativity and innovation. Knowledge and creativity are interrelated and interactive: thinking innovatively and creatively are necessary to stimulate a continuous creation of new knowledge. Innovation is the product of new knowledge. Raymond noted, for example, that with artificial intelligence and the linking of human thought to electronic technology, new information in the future will be generated continuously and instant creativity and spontaneous innovation will be necessary.

Innovation flourishes where organization members are encouraged to accumulate knowledge continuously. Innovative thinking and learning stimulate participation, problem solving, the exercising of good judgment, group learning, and social contribution. Organizations need to educate members toward creative thinking and both organizations and their members need to understand the connection between work and learning.

Mason pointed out that the transition to a society in which the continuous

creation of new knowledge provides the competitive edge "is going to fundamentally reshape our entire idea of what the workplace is" (1993, p. 17). Cetron and Davies (1989, p. 60), Ferguson (1980, p. 317), Garfield (1992a, p. 377), McKnight (1984, p. 150), Naisbitt (1982, pp. 27, 157), and Outlook '92 (1991, p. 59) suggested that one aspect of such reshaping is that organizations will discover that education is an area through which they will develop connections with the larger society. Education is becoming despecialized and demystified, learning is moving beyond the boundaries of schools and out into the community, and there will continue to be more nonschool-based education, particularly in businesses, which are the prime consumers of the education industry's product.

Today's educational system cannot begin to prepare students for the world they will encounter when they graduate from high school. As a result, organizations are losing confidence in the quality of education. As need increases for higher levels of literacy, educational institutions no longer articulate and transmit the culture. With increased need for advanced computer skills, for example, they said that business schools produce increasingly inferior results.

Cetron and Davies noted that American businesses, with their ample supply of funds and their desperate need for well-educated new employees, are natural allies meet the needs of our schools (p. 63). Organizations in the future can ally with educational institutions in a number of ways: by developing more private companies in the business of education, by developing publicly accessible data bases (perhaps even replacing libraries), by contributing to the education of the community at large and of members' families in particular, and, of course, by conducting their own training programs.

Asimov (1987, p. 28), Cetron and Davies (1989, p. 61), Nichols (1992, p. 387), Pascarella (1984, p. 105), and Yankelovich et al. (1992, p. 24) said together that as technology advances ever more rapidly the need for people to fill higher knowledge-based positions will grow ever more pressing, will impact on mass education, and will force changes in the workplace. In order to prepare for the next century and the continuous demand for education, training, retraining, and development, organizations will need to take the lead in education and will need to

change their corporate culture to do so.

Taking the lead in education, according to Ackerman (1984, p. 128), Axtrey (1991, p. 157), Edgar (1992, n. p.), Porter (1986, p. 13), Senge (1990, p. 313), and Wishard (1987a, p. 27) involves such activities as: incorporating teaching staffs and programs into the total organizational system; conducting on-site formal classes utilizing programs and computer modules; giving ample time and support to continuous learning cycles in terms of both hands-on experience with reflection on observable results as well as continuous advancement through educational levels; understanding the necessity of individual and collective learning through such means as dialoguing; and providing a supportive and enriching learning environment which stimulates thinking, exploration, creativity as well as freedom to err and self-correct. It also means, according to Foster, having leaders who educate by exhibiting the ability to both analyze personally and enable others to self-reflect on organizational life in order to transform it as necessary to move forward toward a new paradigm (1988, p. 28).

Taking the lead in education, then, according to Garfield (1992a, p. 144; 1992b, n. p.) Joiner (1986, pp. 39, 48, 50), Mason (1993, p. 17), Ramal (in Johnson & Assoc., 1992c, p. 384), and Senge (1990, pp. 3, 14) means developing the culture of a learning organization. These theorists together described a learning organization as one which understands that learning is an individual phenomena, that it only occurs in people's heads. A learning organization is a giant lab which is based on a shared purpose among its members, which maintains concern for open integrity, i. e., full integration, and which supports active experimentation.

In learning organizations, gathering information and acquiring knowledge are considered on-going, integral parts of every members' participation. In such organizations, new and expansive patterns of thinking are nurtured, collective aspirations are set free, and people are continually learning how to learn together. Individual differences are considered valuable, and members interact and work in teams to learn from each other, to multiply the knowledge of individuals, and to enable and release the latent energy of the groups. Learning organizations are characterized by people continually expanding their capacity to create the results they

desire and the organization continually expanding its capability to create the future.

Flexibility. Butler stated that "conformity and standardization are no longer the norm and will be less so in the future." The workplace of the future will be restructured to be more human and humane in response to workers' desires for more control over their lives and their jobs (1984, pp. 5, 7). Nanus said that organizational structures, besides being flatter and more decentralizing, will be looser and more flexible (1989, p. 135). Kiefer and Senge suggested that this new structure reflects a faith and trust in individuals to "function efficiently and effectively without elaborate rules and procedures" (1984, p. 77).

Ackerman pointed out that order, clarity, and role identity are needed but they need not be rigid. New organizational forms can be self-organizing, self-connecting, and adaptable (1984, pp. 125, 135). Pascarella and Frohman echoed that notion and said that in this age of sweeping change, organizations need the flexibility which will allow them to change continually. Organizations "must be open to innovation in every activity and at every level" (1989, p. 1).

Garfield suggested that "the same organization may adopt many different forms over time, and different structures may emerge within a single organization: (1992a, p. 64). Toffler predicted a "flexfirm"--a fluid organization that can metamorphose into a variety of different forms to suit its context (1990, p. 191).

One particular area of flexibility which was suggested by Cetron and Davies (1989, p. 308), Kanter (1989, p. 269), and Kiplinger (1986, p. 226) was greater flexibility and ownership of pay bases, compensation packages, and benefit systems, with a wider range of choices to be selected "cafeteria style" and carried from job to job. Another area, discussed by Cetron and Davies (p. 307), Kanter (p. 270), Mason (1993, p. 15), and Popcorn (in Yankelovich et al., 1992, p. 24) was flexible work hours, which they described in terms of staggered hours, flextime or letting workers choose their own hours, compressed workweeks, job-sharing, work-sharing, permanent part-time, and home assignments. Mason noted that with knowledge workers and with information as the product, as long as the work is completed by a designated time, the worker can decide when to do it.

Flexplace was another aspect of structural flexibility. Here members are not

restricted by location or fixed work sites. Bleeker (1987, p. 16), Cetron and Davies (1989, p. 307), Garfield (1992a, pp. 63, 99), and Mason (1993, p. 17) together noted that ideas can't be orchestrated, they can only be encouraged and that loose, adaptive arrangements capable of reconfiguration to meet the requirements of the moment allow for spontaneity. Knowledge workers can work alone or in teams and can work from home, branch offices, or wherever it is convenient, which encourages maximum participation by emphasizing autonomy.

New Structures

Many authors addressed the means to encourage participation and autonomy and incorporate the various factors which must be considered in organizational restructuring by developing or discussing new organizational structures.

Wishard noted that major corporations have been restructuring since 1984 in order to achieve greater flexibility (1987a, p. 26). Weick reviewed various "newer proposals of what organizations are like" (1985, p. 109) and reported six commonalities about new organizational structures and operations. First, theorists are now proposing that organizations have less rationality than meets the eye. There are "growing doubts about the importance of formal rationality in organizations" and organizational talk of goals, planning, analysis, and so on is a facade. Such rationale portrays sound management and dramatizes efficiency even though it may actually restrict efficiency. At best, it may actually be used as a post hoc justification for decision making (p. 109).

Second, according to Weick, organizations are segmented rather than monolithic. The preoccupation with central tendencies reflects "a generic bias to exaggerate orderliness" and to adopt a philosophy of managing segmented complexity (p. 112). Weick's third theme of new organizational structures is that the stable segments in organizations are quite small. Small entities such as small groups and short time spans reflect the highest performance (p. 116).

The fourth theme is that connections among segments have variable strength, with rules and feedback affecting the strength of the connections. Few commonalities occur with a weak connection. Fifth, connections of variable strength, that is, loosely-coupled connections, produce ambiguity. Situations are ambiguous when

information is problematical, when there are multiple interpretations and different value orientations, and so on. When ambiguity is increased, actions are more likely to be guided by values and ideology and the person with the greatest power in such situations is the one with the clearest vision of the organization and of the world (p. 122).

Weick's sixth theme of new organizations is that connections with constant strength reduce ambiguity. When organization members work among disorder, a presumption of logic, although incorrect, can lead to the anticipation of order and may tend to make events more tightly coupled. Order, therefore, exists as much in the mind as in the field of action (p. 126). From the above observations, Weick arrived at some implications for organizational structure and management: develop small pockets of order, use rationality only when it works and don't treat it as a universal prescription, practice enlightened delegation, design around the stable subsystem, and expect sense to exist only in small bursts. Also, understand that a map is not the territory and a plan is not the organization, that people act in response to salient concerns, and that anticipations matter (p. 132).

Armed with similar observations, a number of theorists offered specific new organizational structures. Helgeson described an organizational web with the leader as the gatherer and disseminator of information in the center and an interrelated structure of radials and orbs emanating from that point and "bound together as if by invisible strands." The entire web spins as management staff jobs rotate every two or three years (1990, p. 44)

Handy perceived of an organizational shamrock consisting of three equal-level groups made up of core workers (managers, technicians, and professionals), contract workers (performing flexible and uncritical jobs), and the labor force (temporary or part-time workers) (1989, p. 11). Lessem described the "metaprise" as a transformed organization which consists of (1) a formal structure made up of a skeletal framework of policies and strategies, levels of authority, functions, and so on, (2) semi-autonomous centers in which intrapreneurs or achieving individuals capable of asserting themselves make decisions and coordinate efforts regarding activities, risks, profits, and so on, and (3) an interactive nerve center for coordinating

communications and activities (1986, p. 92).

Morgan described a holistic organizational structure which he said consists of "patterns of rich connectivity between similar parts which create systems that are both specialized and general." He saw an organization as a complex system composed of relatively independent subsystems plus patterns of interconnectivity. He described four principles of a holographic organization: (1) redundancy of functions--multiple skills and extra functions which provide excess capacity and which allow room for maneuvering and for intelligence; (2) requisite variety--internal diversity which matches and embodies the variety, complexity, and critical dimensions of the environment which allows the organization to cope with external demands; (3) minimum critical specification--no more definition or specification of roles or functions than is absolutely necessary which enables organizations to adapt change roles, evolve, and create new opportunities; and (4) learning to learn--valuing learning activities and capabilities and encouraging double-loop learning in the context of shared identity and continuously questioned values and norms, which encourages growth but presents flexibility from becoming chaotic (1986, p. 95). Morgan noted that this is a future-oriented structure.

Most authors, rather than developing specific or unique models or proposals for new organizational structures, discussed more commonly held notions. The two most generally supported approaches were teams and networks.

Teams. Cetron and Davies suggested that with everyone knowing the big picture, teamwork will replace the lone worker (1989, p. 275). Deutsch did not agree. He stated that the central issue is personal freedom and self-expressions and that individuals will want more personal freedom, autonomy, and discretion in the workplace which suggests fewer interpersonal processes and more focus on providing end products with minimal direction. "Team participation violates inner freedom and self-expression" (1985, p. 11). Harman reflected a similar view, cautioning that "team building [must be] secondary to development of the individual" (1988, p. 130).

Garfield perceived people participating in teams while maintaining their autonomy. He saw them as the "basic holon of organizations," as bases for the fundamental processes of organizations in which 5 to 30 people come together to

develop their full potential and collaborate in order to pursue the team's objectives (1992a, p. 164). Garfield saw such "smart teams" as having three characteristics, which he based on Capra's descriptions of self-organizing systems.

The first team characteristic is self-management. Teams are autonomous rather than commanded from above. They interact with and receive help from the organization, but they make their own decisions based on using the best information available on how to do the job. Garfield said that some teams are more or less fixed over time and others form spontaneously across functions, levels, and even organizational boundaries to make innovations and to solve problems. Capra described self-organizing systems as tending to "establish their size according to internal principles of organization, independent of environmental influences." Such systems interact with the environment continuously but that "this interaction does not determine their organization (1982a, p. 268).

Garfield's second characteristic of smart teams is self-renewal. Such teams have an inherent integrity, they are processes rather than fixed entities, and they continue to function as needed with changes in structure, membership, leaders and so on. They function as fluid, flexible, continually renewing patterns of movement of people and resources over time (pp. 165, 176). Capra stated that "self-renewal is an essential aspect of self-organizing systems." He noted that the overall pattern of organisms is preserved as they carry out their activities and that their self-maintenance persists under varieties of circumstances including changing environmental conditions (Capra, 1982, p. 271).

The third smart team characteristic, according to Garfield, is self-transcendence. Teams line up with individuals, other teams, the organization, and the environment to exchange ideas and resources and to achieve shared goals. They communicate constantly to share information and coordinate, and they learn (pp. 164, 177). Capra said that self-transcendence in living systems is the "phenomenon that expresses itself in the process of learning, development, and evolution. Living organisms have the inherent potential for reaching out beyond themselves to create new structures and patterns of behavior" (Capra, 1982, p. 285).

Autry saw teamwork as a basic requirement of success. No one has ever

achieved success without other people's hard work and commitment. He suggested redefining "ambition" in terms of co-production and co-creation and as "taking other people along with you" (1991, p. 63).

Senge also focused on team learning which he saw as the "process of aligning and developing the capacity of a team to create the results desired by members" and that it builds on personal mastery and shared vision (1990, p. 234). There are three critical dimensions to team learning: thinking insightfully (tapping the potential of many minds to address complex issues), taking innovative, coordinated action (members trusting other members and counting on actions to complement the whole), and continually fostering other learning teams.

Team learning is a "team skill" which must be learned and which includes two fields of practice: dialoguing and establishing environments for confronting the dynamics of complex realities (pp. 236, 260). "There has never been a greater need for mastering team learning in organizations that there is today" (p. 236), and Garfield stated that the "presence of empowered teams is a clear sign of an organization on the path to transformation" (p. 165).

Networks. Network is the term most commonly used by corporate executives and management theorists to describe the shape of the "new story organization," according to Garfield (1992a, p. 64). Hine, who saw networks as perhaps our oldest social invention, said that since the early 1960s attempts by the powerless to organize themselves for social change have resulted in the same structural form and mode of functioning: the network. "Historically, many pre-industrial societies were organized by the segmentary principle." Networks were efficient means whereby groups of thousands of people remained stable over thousands of years "in contrast with hierarchies which are noted for their instability with the rise and fall of civilizations." Networks are alien to the bureaucratic mind and are a qualitatively different mode of organization (1984, pp. 11, 13).

Naisbitt said that the failure of hierarchies to solve society's problems forced people to talk to one another--the beginning of networking (1982, p. 213). Ferguson recalled that in 1928 H. G. Wells predicted that the "new society" would have no centralized organization, no pawns, and no "ordinary adherents." Instead of the

traditional top-down politics and influence by power brokers, there would be coalitions of small groups (1980, p. 213).

Lipnack and Stamps noted that systems of networks are challenging bureaucracies and hierarchies as being appropriate forms of large-scale organization. "Intertwining, densely populated networks can now be found supplementing, weaving through, and sometimes eclipsing bureaucracies" (1987, p. 23). Korten stated that "the organization forms most conducive to social learning processes are based on networks which are built on shared interests and application of integrative power versus hierarchies which are sustained by threat, control, bureaucratization, and economic power" (1990, p. 106). McInnis also suggested networks as "alternative structures to bureaucracies" (1984, p. 9)

Cleveland (1972, p. 13), Ferguson (1980, pp. 215, 219, 410), Garfield (1992a, p. 64), Huff (1985, p. 165), Kotter (1985, p. 22), Naisbitt (1982, p. 218), Sahtouris (1989, p. 192), and Theobald (1987, p. 105) all saw networking as the shape of organizations to come. When people are trying to change society or when they are encouraging themselves to change some aspects of it, they look for ways to aid themselves in making the necessary transformational shift. In the context of this movement fueled by grassroots power and changing authority structures, networks emerge.

With the collapse of the industrial era, we are currently in the middle of a very bumpy and stressful transition period. We are moving from control by top-down power structures to working through countless self-organizing and interlinking groups and centers which are supporting new consciousness. These self-created networks and linkages are very little like old paradigm structures, they are non-bureaucratic and very effective, and they are the way informed systems have always operated.

Networks are becoming images for recognizing society as a more human, harmonious venture and these changes have first-order implications for managing organizations in transition. At the heart of these changes is the awareness that reality is in constant flux and that no predictable structure can deal with continuous change. Today's organizational leaders will need to maintain informal information sources to help understand the mutually causative aspects of the world and they will be dealing

with thousands of interdependent relationships. The leaders will also need to accept that power is changing hands, moving from dying hierarchies to living networks. The organizations that get things done will no longer be hierarchical pyramids, they will be interlaced webs of interaction.

Theobald stated that there is one block to networks-- "where authority has no single locus"--becoming the organizational structure of the future: there is "no acceptable definition of a networking system" (1987, p. 105).

Quite a number of theorists have at least attempted to define networks. Cleveland (1972, p. 13), Ferguson (1980, pp. 24, 213, 215), Hine (1984, p. 11), Lipnack and Stamps (1987, p. 23), McInnes (1984, p. 9), and Naisbitt (1982, pp. 215, 221) all contributed to the following discussion of a definition of networks. Networks are polycentric structures or matrices of communications made up of intertwining connections and interactions suitable for energy-scarce and information-rich environments. They consist of overlapping cells or circles which form chains of horizontal, spiraling, and interconnecting links between all levels. These interconnections encourage multidirectional communication which contributes to collective responsibility and to consensual decision making by enabling personal autonomy and exploration to occur through interactions of individuals with one another as well as allowing group relationships to develop through groups interacting with other groups.

Hine described networks as "badly-knotted fishnets with multitudes of nodes of various sizes, each linked to all others directly or indirectly" (1984, p. 11).

Networks have three main characteristics: One, they are autonomous segments or holons. The nodes or hubs are local wholes which are self-sufficient. They are organized either conventionally or ad hoc, and they determine their own course for furthering their collective goals. They overlap at points where individual members participate as nodes in more than one segment and, as links among segments create links and interactions in hundreds of loose and indirect ways, and they become participants of larger systems of wholes. In this way their independent nodes are integrated into the larger network. Boundaries are blurred as activities and patterns ebb and flow according to needs of participants and consequences of events.

Two, networks are decentralized. They are open systems, organic modes of organization, or dissipative structures which are flexibly connected by horizontal linkages such as overlapping memberships and mobile leadership. Power is diffused and distributed throughout their social fabric; they value equality and loose and informal control; and they are constantly in flux and consciously flexible. The forces of distribution and centration work together to maintain the health and growth of networks, and they can respond rapidly to changing needs and environments.

Three, networks are linked by unifying ideas, mutual interests, shared values, and collective goals. They cohere ideologically or due to preferred tactics and are formed around deep commitments to clusters of values and to basic tenets which are shared by all and can survive the loss of particular participants or of a particular leader. In addition to the three above characteristic, according to Hine, a network's growth and speed of interaction or movement is escalated by factionalism--segments grow and form temporary coalitions with other segments in response to the effectiveness of changes by the establishment or to attempts at takeovers by any one segment.

Besides defining networks, the theorists also discussed their attributes. Deal and Kennedy (1982, p. 85), de Bivort (1984, p. 250), Ferguson (1980, pp. 112, 213), Garfield (1992a, p. 63), Hine (1984, p. 13), Kotter (1985, p. 23), Lipnack and Stamps (1987, p. 23), McInnis (1984, p. 9), Naisbitt (1982, p. 166), Pascarella (1984, p. 142), Rossman (1991, p. 19), and Schwartz (1987, p. 98) all contributed to this discussion.

Networks provide bases for individual growth and development. Networks support individual desires to assume responsibility for their own mind and behavior and to help others do the same. As members experience being the center of linkages and nodes, they become more responsible, self-respecting, creative, innovative, and self-fulfilled. They experience group support and feedback which leads to their personal empowerment and to the full use of their unique skills.

Networks also meet people's needs to relate to others. People experience a longing for communion, and through networks they are able to relate to others as equals. Through mutual discovery and reinforcement, they are able to develop

friendships with like-minded person to form kinship bonds with those who share deeply-held values. Through human alignment with shared assumptions and the reinforcement of concepts, temporary collaborations grow into commitment to combined objectives and mutual aid.

In addition informal cooperation can develop out of interaction and interplay of diverse opinions and beliefs among self-reliant individuals. Members can discuss ideas without external direction or censorship and can develop diverse viewpoints into cooperation based on common values and vision. Vitality and excellence are developed through constituencies and through internal support begun by contacts among peers. The flow of knowledge and exchange and sharing of resources develop into unified and synergistic power. In this way groups become able to help themselves, by-pass institutional assistance, and become a binding force.

Self-sustained segments affect network resiliency. The segments provide maximum flexibility and minimum vulnerability for the system. They can quickly adapt to the whole, and squashing one segment does little to impair the whole system, making it difficult to suppress. Adaptability and flexibility are facilitated by fluid boundaries and by communication. By working through informal, invisible chains of mutuality (versus chains of command) as their primary means of communication, members are free to move outward in any direction--across boundaries, functions, titles, positions, or levels--eliminating barriers and promoting cross-fertilization of ideas. This direct communication can take many forms such as single link-by-link chains or pools of multiple participants, for example. This is a people-oriented system which allows maximum penetration of ideas, keeps members informed, provides the means to scan for trends, and ensures that action ideas are directly connected with decision making.

Several writers discussed the importance of fluid boundaries. Post, for example, emphasized that for organizations to be proactive, they must continuously operate networks externally as well as internally (1992, p. 111). And Nanus stressed that the need for leaders to alter their visions comes from external as well as internal environments (1992b, p. 22). Garfield (1992a, p. 63), Kanter (1989, p. 119), and Nanus (1992a, n. p.) pointed out that organizations can't do everything they need

internally and that they must align with other organizations for support--developing allies for sharing information, raw materials, resources, and technology. Garfield pointed out that the bulk of an organization's assets move freely across corporate and national borders (p. 46).

Hine (1984, p. 13) and Schwartz (1987, p. 8) both emphasized the importance of developing networks as a viable mode for a global society, noting that sharing will lower the barriers between the world's peoples and will bring about needed social and political change. Ferguson (1980, p. 213) and Garfield (1992a, p. 64) agreed and concluded that networking is a primary force for social change. They both stressed that networking should be viewed as a process rather than a frozen structure. As Garfield put it, "It is more accurate to say that networking will be the glue that holds the organization together than to suggest that a network structure will be the primary form of organization."

Managing the Structure

Management, according to Rost, is "an authority relationship between at least one manager and one subordinate who coordinate their activities to produce and sell particular goods and/or services" (1991, p. 145). He emphasized that management is "necessary to the operation of our complex organizations and societies" and that it should be highly valued (pp. 140, 143). Adams and Spencer agreed that management is necessary but argued that management based on old-paradigm, "reactive" premises is limiting (1986, p. 8).

Heller said that old-paradigm perceptions of management began in the late 19th century when management was paternalistic and father was a metaphor for boss. She noted that this changed with the advance of industrialism--as bosses became less caring and more professional (1984, p. 90).

Schon reported that the idea of professional management came into currency in the early 20th century as industrialism rose and as organizations became characterized as machines and work as a man-machine process. Management became a "science" with the post World War II rise in the prestige of science and technology, the birth of operations research, and the use of applied math to solve problems. At that time

managers became technicians who applied methods derived from management science (1984, p. 36).

Land and Jarman noted that "people still spend an extraordinary amount of time and resources to 'manage' situations in orthodox and time-honored ways" even though those ways are plagued with failure (1992a, p. 11). Bolman and Deal pointed out that most managers have invested a great deal of time and effort learning mental maps and patterns with which to make sense of organizational complexities and when those theories don't work, they experience a dilemma. They blame other people, power, or bureaucracies. However, to find out what is really going on and to act decisively, the authors stated that managers must go to a deeper level (1991, pp. 29, 33, 37).

Argyris and Schon wrote that managers have self-protective models of behavior (espoused theories) based on their views of organizational politics, competition, scarce resources, and so on, on which they base private diagnoses of solutions to problems. They perceive themselves to be rational, open, concerned organization members (their theories in use), but when they encounter discrepancies between their two sets of theories, they become defensive, blame others, and attempt to get others to change. Argyris and Schon suggested that a more successful model would be to communicate openly and to publicly test assumptions and beliefs (1974, p. 151). Larreche noted that the need to resolve discrepancies and the need for change are being seen everywhere, and he suggested that the necessary change is "not a matter of intellectual sophistication, but of openness" (1992, p. 14).

Ackerman (1984, p. 114), Bolman and Deal (1991, p. 6), Harrison (1984, p. 97), Pascarella and Frohman (1989, p. 6), and Tannenbaum (in Jamieson, 1982, p. 38) together agreed that management methods and techniques learned in the past may not be relevant. With continued use of the old, familiar practices, organizations will become so bound up in internal structures that they will lose vitality. The old tools that got us to this point are no longer useful in today's and tomorrow's changes and they are not appropriate to advance us to another level.

Today's problems are more durable than today's solutions. "How to" information and solutions to immediate management problems are too short sighted;

we need new methods and new management models to solve problems. We must challenge our fundamental assumptions and break through to new ground in order to improve management and reshape organizations.

New Views of Management

Wagner suggested that many people in organizations are beginning to challenge their old practices. The Director of Training for the Government Accounting Office stated that "we are at the turning point; we're beyond accepting the mess we've got, and we're now thinking about how we'll deal with it" (1991, p. 35).

Harman wrote that "management is headed toward a new state of mind, new perceptions of its own role and that of organizations." As managers make fundamental shifts in values, organizations will undergo a "radical reorientation" to new views. Managers are currently making a fundamental shift--from seeking power and controlling people to empowering and enabling creativity (1988, p. 132).

Heller noted that the most apparent transformation in organizations today is in authority patterns (1984, p. 88). Organization members are experiencing a loss of confidence in formal authority, and they are no longer giving unquestioning conformity and respect. There is a change in the degree to which individuals are willing to submit to the organization. They are searching for alignment with their personal goals and for meaning from work. Turbulent times undermine organizations as fixed symbols for interpreting situations and individuals are no longer defining themselves in terms of organizational affiliation. They are finding greater stability through personal identification than through organizational identification, and identity now transcends organizations (p. 89).

Heller continued that, as a result of this more independent stance, the new definition of organizational authority is: "shared values about the power or influence of an organization or an individual representing that organization" and that power is vested by the members of the organization with whom the organization shares meaning (p. 88). Organizations are not only experiencing a loss of member willingness to submit to authority, they are experiencing a loss of interest in management positions. In response to these cultural shifts, organizations must move toward operating from a more holistic base (p. 89).

Deal and Kennedy (1982, p. 177), Naisbitt and Aburdene (1990, p. 231), Post (1992, p. 111), and Sinetar (1987, p. 25) all agreed with Heller's assessment. Together they said that organizations are beginning to recognize that they can only compete by enlisting the support and energy of their members. Beginning in the 1980s organizations began experimenting with alternative corporate structures and management practices. The dominant principle has now shifted from controlling the enterprise to establishing new cultures--to building continuously operating networks in which members are supported and socially influenced to achieve their best and to be able to respond to change.

Autry (1991, p. 13), Garfield (1992 pp. 80, 317), Pascarella (1984, pp. 141, 174), Sekimoto (1992, p. 87), Senge (1990, p. 300), and Wagner (1991, p. 35) agreed that the primary purpose of management is to create winners--to motivate people, to encourage them to develop and use their capabilities, and to empower them (versus control them). Management is stewardship--managers must be responsible for the welfare of members. They must nurture self-esteem, promote self-actualization, encourage risk, and practice forgiveness. It is essential for organizations to be responsive to both the spiritual and nonspiritual needs of its members and the crucial test for management is whether it can successfully inspire human hearts. As Autry put it, "good management is largely a matter of love. Or if you're uncomfortable with that word, call it caring" (p. 13).

A number of theorists focused on management support and motivation as reflected in cooperative relationships. Bleeker (1987, p. 19), Block and Harman (1992, pp. 3, 10), Cetron and Davies (1989, p. 270), Deutsch (1985, p. 2), Ferguson (1980, p. 348), Kinsman (1986, p. 22), Kiplinger (1986, p. 13), Levitan (1988, p. 85), McInnis (1984, p. 10), Pascarella (1984, pp. 10, 117), Post (1992, pp. 109, 110), and Tannenbaum (in Jamieson, 1982, p. 36) agreed that separating those who manage the work from those who work is no longer functional. It has created a class system and it creates obstacles to improving the quality of the organization and its ability to respond to a volatile environment. Management must be lateral, managerial power must be distributed, and management needs to be done at every level of the workplace. One of the most important roles for managers in the near future will be

to assist with the reintegration of managing the work with doing the work.

There will be fewer management positions in the future. Decisions will be made by those closest to the work, knowledge and power are needed by those making decisions, and managers will need to learn to share power versus accumulate it. Encouraging member autonomy and empowering members with authority and responsibility stimulate personal growth and helping people realize their potential spells success for the organization. Managers will need to develop harmonious, cooperative relationships. They will need to work alongside organization members and to demonstrate respect for members' values and talents as they align personal and organizational goals and as they provide members with the tools, skills, and information needed both to participate in decision making and to improve personally.

Systems Management

Pascarella and Frohman emphasized that managers will need to see the potential for people developing and using their talents in terms of total organizational effectiveness, style, structure, and so on and that these concepts must be defined to ensure that the organization is in tune with the outside world. Executives must have a new view of both people and the world (1989, p. 3).

Wagner agreed, saying that organizations of the future will be managed interactively--from the outside in as well as from the inside out (1991, p. 33). Tannenbaum stated that the major management functions will be at the organization's boundaries rather than within the system itself. Decisions and judgments will be made about the relevance of organizational factors based on awareness of the environment (in Jamieson, 1982, p. 36)

Tannenbaum, along with Ackerman (1984, pp. 123, 125, 131) and Pascarella and Frohman (1989, pp. 86, 88) stated that in order to manage organizational growth and change, it is essential to pay attention to the whole system's needs. Planned change, that is, attempting to predict and control future elements, is a fallacy. It is inconsistent with systems thinking, and that continuous exploration of the environment is important to determine what system elements to hold on to for stability of processes and functions and which to let go of for change and revival. de Bivort suggested that it is particularly important in transitional times for strategic planning to include

"slough-off strategies," that is, the means to slough off activities which have lost their vitality and to redirect resources toward goal attainment (1984, p. 251).

Organizations need to manage in a flow state versus the traditional model of operating in a fear state which focuses on decision points within structures and which ultimately blocks the system's flow. Organizations must focus instead on the larger purpose and service to that purpose and on moving toward goals which will unfold and change as the project progresses.

The authors' suggestions for managing in such ambiguity and for coping with uncertainty reflect the need for outer and inner systems interaction. Organizations must interact with the environment to track results, to stay on top of technical developments, to be aware of work force demographics, to determine customer satisfaction, and so on. The managers must know how well plans are working, determine how well actions are serving the intended purposes, and generally review directions and accomplishments. Organizational managers need to build readiness--to cultivate "ready" people by caring for their minds and spirits, by developing work support and cooperative relationships, and by nurturing their inner flow state--to develop momentum necessary for action, and to generally maintain a strategically proactive stance.

Management Skills

A number of theorists noted that managing ambiguity and uncertainty call for new kinds of management skills and behaviors. Isenberg said that managers have traditionally been viewed as rational, purposive, and decisive and that they have been perceived as needing to go through a series of stages of data analysis of data before making a decision (1984, p. 81). Agor observed, however, that complex situations and incomplete data in a rapidly changing world will make traditional decision-making techniques obsolete (1983, p. 49).

Isenberg (p. 81) and Schon (1984, pp. 38, 41) both pointed out that studies (principally Mintzberg's 1973 study of five male managers) show that most successful senior managers do not follow the traditionally expected classical, rational model of decision making anyway. Mintzberg, according to Schon, concluded that managers learn effective problem solving behaviors from long practice and that they build up a

generic capacity for decision making which can't be analyzed.

Schon continued that long before management was considered to be a body of techniques, managers were perceived as acting out of skill and wisdom and that, even with the perception of management as a science, managers have been seen as being sensitive to phenomena of uncertainty and change. "Decision under uncertainty"--with need to address such concerns as economics, competition, consumer interests, legal regulations, labor concerns, and so on--has been an acknowledged behavior for over twenty years (p. 38).

Agor (1983, p. 49), Isenberg (1984, p. 81), Lodge (1987, p. 42), Ramal (in Johnson & Associates, 1992c, p. 384), and Schon (1984, p. 38) together noted that our currently changing world is increasing the demand for real participation and that managers in the 21st century will need to be increasingly sensitive to the changing environment. Management practices can no longer be reduced to explicit techniques, rules, or theories. Rather managers must focus on overriding concerns such as purposes and goals, and they need nonrational approaches to decision making. They will need to find the best way versus the right way.

Schon suggested that management has become an art rather than a science and that managers have become craftspeople rather than technicians. The art of managing is crucially important in uncertainty, instability, and uniqueness. Schon described the art of management as having a two-fold meaning: knowing-in-action, which is exercising intuitive skills and judgment, and reflection-in-action, which is on-the-spot understanding of the phenomena being experienced--in relation to a cumulatively built up stock of organizational knowledge--and immediately perceiving incongruence between the two. The art of management includes acting as an agent of organizational learning--the ability to extend or restructure the immediate learning to make it available for future inquiry. The manager's ability to reflect-in-action is strongly influenced by the organization's learning systems, that is, whether or not the organization is more or less adaptable or resistant to new findings (p. 42).

Schon also noted that one of the problems of adaptability to new learning is the continued split between the art and science of management which prevents managers from becoming more reflective. The concern for rigor and acceptance of

the spontaneous exercise of intuition might not be so painful if the art of management could be seen as rigorous in its own way. A dialogue between the science and the art of management might heal the rift and that the art of management might then be seen as science-in-action (pp. 41, 43, 61).

Agor (1983, p. 49); 1990, p. 12), Isenberg (1984, p. 81), and Simon (1989, p. 38) agreed that new skills such as intuitive decision making are becoming more important with societal shifts and it is important to merge traditional management skills, styles, and literature with emerging practices. It is a fallacy to contrast analytic and intuitive styles since studies show that top managers, for example, rely heavily on both in such situations as public inquiries or need for immediate recommendations.

Managers develop both the disciplined ability to analyze systematically and intuitive skills through training and experience, and they incorporate both into the capacity to recognize, diagnose, judge, and respond rapidly, especially in situations requiring quick action. Simon stated that "the effective manager does not have the luxury of choosing between 'analytic' and 'intuitive' approaches to problems." Management means having command of a whole range of skills and applying them as they become appropriate (p. 38). A new model of management should blend analysis with insight, the pragmatic with the spiritual.

Along with insight and the ability to analyze, a number of theorists highlighted other particular skills needed by managers of transitional organizations. Together Bolman and Deal (1982, p. 68), Evans (in Johnson & Associates, 1992c, p. 384), Ferguson (1980, p. 350), Mason (1993, p. 16), Nichols (1992, p. 387), Pascarella (1984, p. 182), and Wishard (1987a, p. 27) said that in order to "create viable organizations and contribute to human development" (Pascarella), managers at all levels will need a new worldview, a sense of urgency about transformation, a perception of change as an organic process, and a focus on processes. They will need to be able to achieve a dynamic balance between change and continuity, be comfortable with creative tension, be action oriented, and be risk-takers.

In addition, according to these writers, managers will need to be team builders. They will need to let go of their egos, be willing to serve as resources and

to provide information for others' decisions, and be able to coordinate, collaborate, and integrate ideas. They will need to improve their influence and interpersonal communication skills and be as capable of listening as well as expressing themselves.

Management Strategy

Several theorists pointed out the importance of managers' abilities to link transformational worldviews and team building in order to develop action-oriented strategies for helping organizations evolve. Agor (1989b, p. 20), Drucker (1990, pp. 59, 99), Fields et al. (1984, p. 117), Larreche (1992, p. 147), Nanus (1989, p. 112), Pascarella and Frohman (1989, pp. 19, 27), Porter (1986, p. 14), Post (1992, p. 102), R. B. Smith (1986, p. 21), Tregoe (in Johnson & Associates, 1992a, p. 92), and Williams (in Johnson & Associates, 1992c, p. 385) all contributed to this description of management strategies.

A strategy is the link between the organization's intentions and its daily activities, the translation of the language of the board room into the language of the workrooms. Strategy was defined as a game plan to try to ensure the organization's best chance for success in achieving its purposes or as frameworks or guides for converting the mission into performance.

One of the primary purposes of a strategy is to provide direction. It is a course of action which is based on concern for the long term and which is designed to move the organization in an intended direction, to maintain and strengthen the organization's position as it moves forward, and to yield some satisfactory payoff. A strategy is an attempt to arrive at early answers about what may be necessary during the organization's progress toward long range assumptions, a selected course of action to achieve the organization's place in the future, or a means to create new opportunities on the way to achieving the organization's future. Harrison pointed out that the result of the strategizing process is a mission statement--a statement of intention, of projecting the organization into the future--which becomes the basic operating document of the organization (1984, p. 107).

Harrison suggested that a strategy should be considered not so much as a plan to achieve a predicted future, since the unforeseen cannot be planned for which immediately invalidates the plan in any case, but as a plan to discover the

organization's "given" place in the larger system and to continuously deal with known or suspected conditions or variables. This view requires an organizational orientation to learning (p. 106).

The theorists saw the need for continuous adjustment as a major aspect of strategies. Effective strategies initially are merely frameworks within which unplanned events can be dealt with. They provide for continuous adjustment on the basis of constant questions and answers about the organization's future, its resources, its progress, and so on. Good strategies, then, develop gradually on the bases of experience and on-going evaluation. Based on understanding of a range of possibilities or possible scenarios, strategies are designed to include strength, diversity, flexibility, and choices of responses in decision making.

In addition to providing direction, strategies also stimulate drive and encourage commitment. Strategies affect the way organizations perform and conduct business, they "will" the organization toward the future, they focus members' intentions, they engender adherence with the organization's objectives, and they prevent complacency by providing a continuous stimulus to innovate and improve, and to drive movement beyond success.

Harrison noted that strategies, as they assist transformational organizations to move toward their place in the future, are determined partly through transactions with the environment and partly through an inner search for values and meaning. This type of strategic thinking requires a change in orientation regarding plans and goals--from focusing blindly on goal achievement to including questions of the worthiness of the goals (p. 106).

Determining strategies based on values, meaning, and worthiness of goals suggests the necessity of the people in the the organization determining a value base or establishing an organizational culture with known and accepted moral bases and belief systems. Nelson and Burns (1984, p. 235) and Sergiovanni (in Brandt, 1992, p. 47) both suggested that the establishment of this value- or morally-based belief system is the responsibility of the organization's leaders and that, in fact, it is one of the leaders' major roles. The management of the organization's tranformational strategies, then, ultimately relies on leadership.

Management and Leadership

The authors noted that new views of leadership are focusing on moral authority, commitment to ethics, and so on and that values-based leadership is really transformational. In addition, de Bivort (1984, p. 249) and Kiefer (1986, p. 187) stated that the key to a transformational organization is the vision of what that organization is seeking to become and that transformational leaders are the stewards of that organizational vision. Organizations which develop and manage value-based strategies are those in which transformational leaders are helping to move them toward visions based on higher level views.

The differences between management and leadership in transformational organizations is not well-defined. Rost noted that "confusing leadership and management and treating the words as if they were synonymous have a long and illustrious history." Some scholars, including himself, have had "serious conceptual problems" with using the terms synonymously, and he pointed out that those who have attempted to differentiate between the two have "had little impact" (1991, p. 129). That situation generally continues with theorists who focused on organizations in transition, although some attempted to separate the two roles.

Bolman and Deal stated that "leading and managing are distinct," adding that "both are important." They stated that organizations that are overmanaged but underled eventually lose any sense of spirit or purpose and that poorly managed organization with strong charismatic leaders may soar temporarily only to crash shortly thereafter (1991, p. xiii). "The challenges of modern organizations require the objective perspective of the manager as well as the brilliant flashes of vision and commitment that wise leadership provides" (p. xiv).

Schon also perceived that "leadership and management are not synonymous." He described management as monitoring and controlling activities, making decision, and allocating resources. He described leadership as conducting symbolic, inspirational, educational, and normative functions (1984, p. 36). Autry suggested that the difference between leaders and managers is that leadership is the ability to articulate the vision with inspiration and clarity. Putting pressure on managers to become leaders is intimidating to managers and that transformational organizations

would be better off to "liberate" managers from paperwork, monitoring, and structural concerns to focus on member relationships (1991, p. 49)

Bolman and Deal emphasized that "modern organizations need quality, commitment, and creativity" and that those characteristics can be developed and encouraged by either leaders or managers who "embrace the expressive side of their work" (p. xv).

It seems, then, that theorists are urging both leaders and managers in transformational organizations to move toward greater focus on individual expression and interpersonal relationships but that leaders can be differentiated by their ability and responsibility for developing, communicating, or inspiring the adoption of visions around which the organizations develop managerial strategies for achieving common purposes. Helgeson stated that "nothing is more common when discussing leadership today than mention of the leader's need for vision. Vision has become one of the buzzwords of the decade" (1990, p. 221).

Leadership and Vision

Kruschke stated that one of the major challenges for the 21st century is to answer the question: "What is vision?" (1992, n. p.). Fox wrote that the new paradigm needs new vision--new wisdom, a new civilization--and that the alternative is faithlessness, artlessness, an earth stripped of beauty and hope, and surrender to death (1988, p. 160). Maisonrouge said that vision is essential to prolonging an organization's existence (in Johnson and Associates, 1992b, p. 67), and Nanus said that vision is the indispensable key to guiding 21st century organizations. Without it the multidimensions of organizations would fly apart and the organization would self-destruct (1992a, n. p.) Nanus' statements point to the two major purposes of vision suggested by theorists: direction and focus.

de Bivort (1984, p. 249), Naisbitt (1982, p. 98), Nanus (1989, p. 68; 1992b, p. 25), Olsson (in Johnson & Associates, 1992b, p. 68), and Pascarella and Frohman (1989, p. 23) together wrote of vision as a master template of something of significance that the organization can accomplish which helps the organization look into the future and determine its greatest potential. They described vision as

providing an organizing force for keeping the organization aligned, for coordinating and synchronizing efforts and decisions, and for channeling events toward the desirable.

Developing the Vision. Nanus pointed out that in order for leaders to develop visions which provide direction and focus, the leaders must attend to the future and develop farsightedness. Leaders must not be preoccupied with the present but must devote time to the future--constantly scanning the horizon, developing long-range thinking, and in general, operating their minds in the future tense (1989, p. 82; 1990, pp. 13, 17). There are many alternative futures and futures-creative leadership consists not only of identifying them but also of "translating insight into reality." Leaders must develop insight by generating images of possible, probable, and preferable futures and then continuously examining, sorting, and ordering occurrences in an effort to "constantly anticipate how forces will play out" (1990, p. 17).

Nanus suggested that leaders must participate in "anticipatory learning" (1989, p. 88) which he described as gathering raw materials of signposts of the future--from such sources as forecasts, trends, opinion polls, think-tank reports, party platforms, social critics' and activists' statements, editorials, speeches, and so on--and developing mental frameworks of the future. The models would then serve as background or views against which alternative images of the future can be play and evaluated (1989, p. 65; 1990, p. 16).

Inner knowing. Nanus also suggested that contemplating alternative images of the future requires creativity and intuition. "There are distinct limits to rational processes in contemplating the future, especially in complexity and uncertainty" (1989, p. 62). Peters stated that "developing a vision and values is a messy, artistic process" (1987, p. 401). Gaster said that leaders need a qualitatively different kind of thinking to arrive at a visionary level; they need to step outside day-to-day issues and take time to reflect (1992, p. 113). Harman saw transforming leadership as intuitive and creative (1986, p. 109).

Pascarella and Frohman said that committing an organization to a direction without specific knowledge or guarantees is not a rational decision. "Vision is arrived at intuitively" and when others accept it they do so intuitively (1989, p. 132).

Buckley and Steffey said that leaders guiding transformational organizations must work equally well with invisible and subtle energies in organizational life as well as visible, quantifiable elements. Such leaders must shift their consciousness to work in subconscious realms in order to foresee and anticipate directions for the future and that they must act on subjective experiences. This is not "soft thinking." It is crucial for organizational success (1986, p. 233).

Harman pointed out that transforming problems and making decisions from a deeper context are new and visionary. Such an approach means shifting underlying assumptions about the human mind and spirit and about the nature of power (1986, pp. 105, 109).

A number of theorists supported Harman's belief that following a sense of purpose is an inner decision (1988, pp. 164, 168). He, together with Agor (1983, p. 52), Brandt (1992, p. 47), Gaster (1992, pp. 114, 115), Nanus (1989, p. 116), Pascarella and Frohman (1989, p. 115), Schaefer and Fassel (1988, p. 27), and Senge (1990, pp. 139, 141) said that leaders need to be in touch with their own feelings and needs in order to create powerful, adaptive organizations. Transformational leaders work deeply within themselves to renew, challenge, and clarify who they really are, and to develop their personal characteristics. They maintain self-awareness of how their whole mind and body loops are functioning, and they pay attention to their own behavior because it shows them how they interpret their own works and it reflects the quality of their vision.

Personal mastery goes beyond competence and skills and beyond spiritual unfolding. It requires constant learning to see reality clearly, continuous clarification of what is important, remaining open to changing self-perceptions, and living life from a creative viewpoint. Leaders who experience life with deep, quiet, inner knowing and joy develop and listen to an inner voice or connection they really believe in--a source of authority and set of conceptions which they feel passionately about, which they perceive with a level of certainty as meeting basic needs and as being appropriate for inferring decisions, and which ultimately becomes the ideal structure for the organization. This inner commitment to subconscious knowing allows leaders to proceed without full understanding, to be unaffected by adversity and opposition, to

choose trust over fear of failure, and to consider whatever happens as feedback on the appropriateness of actions and as additional information to help build inner knowing.

Wider views. Nanus pointed out that leaders' inner knowing and commitment are directly related to their values. The leaders' values impact their perceptions of needs and issues, their choice of information and alternatives to evaluate, and their images of possible and preferable futures. Both societal and organizational values--cultural frames of reference, social priorities, prevailing ideologies, and so on, also affect the leaders' images and choices (1989, p. 64; 1990, p. 16). Leaders need balanced attention--not only focusing on their internal awareness and development but also on external environment and on past, present, and future orientations (1989, p. 68).

Nelson and Burns said that holistic leadership includes an appreciation of the larger roles of the organization which is needed to achieve and sustain high organizational performance. Leaders must appreciate the cultural and human community aspects of organizations, they must perceive the organization as contributing to the general drama of human development, and they must see the organization as a flow across time--including appreciation for the rich traditions and legacies of the past as well as projected images of the future (1984, p. 238). Naisbitt and Aburdene agreed that leaders affirm values, grasp the relationship of larger realities, and think in longer terms of renewal (1990, p. 231).

Gaster (1992, p. 115) and Nanus (1989, p. 62; 1992b, pp. 20, 25) emphasized that thinking in longer terms of renewal includes perceiving the development of vision as part of a continuing process of orienting the organizational direction. Visionary leadership includes being aware of how the vision is operating in the dynamic organizational environment, by standing outside the action, reviewing interactions, observing feedback, examining organizational content and context, and monitoring change, then making midcourse corrections to change processes and structures. Leadership includes knowing that visions don't last forever and knowing when to initiate new vision-forming processes.

Nanus (1989, pp. 73, 83) and Nelson and Burns (1984, p. 239) stressed that the development of a vision includes viewing change as a natural process, perceiving

that new opportunities and challenges never cease, and being aware that dynamic situations are subject to streams of decisions necessary to transform them.

Communicating the Vision

Pascarella and Frohman stated that a purpose-driven organization begins with an individual who "passionately embraces certain values and defines a vision of where the organization should go and the general means of getting there" (1989, p. 114). Most of a leader's efforts are focused on conveying that vision to others (p. 17). Senge said that the leader's first act in taking a stand for a transforming organization is inspiring--literally breathing life into--the vision (1990, p. 340).

A number of theorists perceived leadership primarily in terms of articulating the vision. Leadership is the ability to communicate the vision and empower people to pursue it (Gaster, 1992, p. 113). Leadership is having extraordinary vision and the ability to articulate that vision with inspiration and clarity (Autry, 1991, p. 72). "Institutional leadership, as suggested by Selznick, is the kind where leaders communicate the vision of the organization's mission or role in society" (Wilkins, 1983, p. 85). A new kind of business leader is capable of articulating a vision and putting it into action (Tregoe, in Johnson & Associates, 1992a, p. 92). Leadership in the new paradigm means creating and communicating a personal and organizational vision (Kiefer and Stroh, 1984, p. 182).

The importance of communicating the vision was perceived in a number of different ways. Morgan (1986, pp. 126, 136) and Nelson and Burns (1984, p. 240), for example, saw its importance as constructing the social reality or maintaining cultural perspectives--developing values, codes of behavior, processes, and so on.

Buckley and Steffey (1986, p. 238), Kiefer and Stroh (1984, p. 175), Naisbitt (1982, p. 99), and Wilkins (1983, p. 85) all pointed to alignment of organizational energies as the primary purpose for communication and developing a common vision. Organizations must have a shared vision or socially integrating myth which appeals to a broad base of believers, links differentiated parts of the organization together, stimulates commitment, provides energy and inspires people to operate fully and freely as part of a larger whole, and enables transcendence.

Gaster (1992, p. 115), Morgan (1986, p. 136), Nanus (1989, p. 61),

Pascarella and Frohman (1987, p. 33), and Senge (1990, p. 354) focused on the importance of communicating the vision as a means to create meaning. Knowledge and understanding of vision provides a larger explanation for the existence of the organization and for its purposes. They enhance member respect for work, and satisfy personal desires to achieve. By fostering patterns of meaning, vision influences organizational activities and it also illuminates and resolves paradoxical issues by shifting perception to higher logical levels. Gardner suggested that knowledge and acceptance of organization vision serves to keep hope alive; believing in the future, without denying the difficulties of the present, stimulates confidence and unrelenting effort (1990, p. 10). Senge stressed that communicating the vision, along with the current reality, is essential for establishing the creative tension necessary for moving forward (p. 343).

A number of writers focused on the means of communicating the organization's vision in order to develop and sustain organizational culture, alignment, meaning, and drive. Bennis (1989, p. 23), Buckley and Steffey (1986, p. 239), Garfield (1992a, p. 377), Nanus (1989, p. 73), Nelson and Burns (1984, p. 240), Owen (1986, p. 119), Pascarella and Frohman (1989, p. 113), and Stephens and Eissen (1984, p. 189) said together that the ideal toward which the organizations strives must be given a tangible, cohesive form. Leaders must appeal to members' spirits, that people must be helped to disengage from the personal to make a transition to perceiving events in epic proportions and to form a transcendent perspective.

In order for leaders to reflect the vision and to reconcile diverse views they must convey their personal passions, they must exclaim aloud--saying "I care," "I believe," "I'm concerned"--and expressing their visions in terms of dreams, agendas, missions, or challenges, for the organization. Leaders put their voices to the vision by becoming storytellers. An essential tool for leading at the level of spirit and managing the energy patterns released by human spirit is the myth. Leaders must weave mythic stories out of emotionally charged issues and create heroes who personify values and epitomize the strengths of the organization who then serve as role models for behaviors and decisions befitting the organization's vision.

Leaders then need to orchestrate the mythic structure, playing the tales in as

many ways as will be useful and allowing the spirit to gain expression in powerful ways. In addition to story telling, these authors also suggested communicating the vision through ceremonies, rituals, visualizations, affirmations, and so on in order to help develop understanding and alignment.

Shared Vision

Block and Harman cautioned that the application and manipulation of such methods to communicate the vision can focus power and purpose at one point in the organization and that over time this has the impact of "destroying the very culture and outcomes that it is [the leader's] sincere intention to create and protect" (1992, p. 6). Members are attracted to the idea of leadership because it includes a vision of the future, some transforming quality that they yearn for. They believe that those with vision and power can help them rediscover hope. However, the members can pay too high a price for attributing the ability to transform the whole organization to the people in charge (p. 5).

"People in charge typically think that the way to achieve and institutionalize change is to define the behaviors required, view themselves as essential to the change, and use education as indoctrination . . . to ensure compliance." The idea of leadership which embraces these actions encourages the recreation of one belief system, tends to be very narrow, and too easily retains ownership at one point (p. 5). "The act of leading cultural or organizational change by determining the desired future, defining the path to get there, and knowing what is best for others, is basically incompatible with distributing ownership and responsibility in an empowered . . . organization (p. 6).

Naisbitt stated succinctly that "people in the institution must have 'ownership' in the vision" (1981, p. 100). Nanus (1990, p. 17), Pascarella and Frohman (1989, p. 134), and Smircich (1983b, p. 60) all suggested that the leader's task is to balance internal, intuitive, visionary aspects with personal, human relations skills and to harmonize organizational traditions with individual orientations and human emotions.

Nanus described the leader's task as both to select a direction and to promote a shared sense of purpose (1990, p. 14), but Brown and Isaacs saw direction as coming from below as much as from above. They said that the leader's primary role is to

understand what members and constituents want as their purposes and then to act as a connector--connecting the organization through shared purpose (1991, p. 8).

Brown and Isaacs as well as Nanus, in an earlier work (1989, p. 93), plus a number of other authors (Bennis and Nanus, 1985, p. 32; Kiefer, 1986, p. 187; and Kiefer and Senge, 1984, pp. 70, 71) discussed the importance of creating shared purposes. Organizations in which individuals are aligned around an appropriate vision can have an extraordinary influence in the world, and leaders, as custodians or stewards of the organization's vision, are responsible for seeing that the organization has a collective vision and that members share it and are committed to it.

The authors defined alignment as the condition around which people operate as an integrated whole. Through alignment members become shareholders in the organization, they see the task as part of themselves, they perceive the importance of their contributions, and they become committed to accomplishment of the vision. The writers said that alignment is achieved through leader-member interactions and that exchanging energy back and forth creates unity, develops interdependence, and stimulates willingness to participate in joint efforts to create something new and better. It inspires people to share ideas, to participate in decision making, to see collaborative solutions, and to take ownership for results. Gaster (1992, p. 14), Kiefer (1986, p. 189), Nanus (1992b, pp. 22, 25), and Nelson and Burns (1984, p. 240) all saw this act of forming shared vision as spreading the leadership role and as engaging in the process of empowerment.

Implementing the Vision

Empowerment and ownership of the vision, according to Land and Jarman, are the "driving force of the organization" (1992a, p. 175), and a large number of theorists agreed. Along with Land and Jarman, Bennis and Nanus (1985, p. 32), Garfield (1992b, n. p.), Gaster (1992, p. 15), Kiefer and Stroh (1984, p. 182), McKnight (1984, p. 151), Nanus (1992a, n. p.), Nelson and Burns (1984, p. 239), and Pascarella and Frohman (1989, pp. 24, 33, 114) discussed the energizing qualities of vision.

Having concern for an outcome, commitment to common goals, and desire to complete a mission are powerful motives. A well-articulated and adopted vision

creates the acknowledgement of a gap between what is presently experienced with discomfort and the hope of what could be. In-depth knowledge of the present state and a high-resolution picture of a future state links positive aspects of the organization's cultural heritage and its current qualities to potential future excellence and creates the power of future pull.

A compelling picture of the world as a better place, as if it were already achieved, energizes life. It creates a synergistic effect, it focuses awareness on renewal and transformation, and it stimulates an intention which catalyzes and revitalized people's commitment to move toward the vision. Such a vision stimulates passion, enthusiasm, and pride, and it also provides challenge. By defining the character of success, it generates reasons for committing our best effort.

In this respect common vision takes on spiritual qualities--it spurs us on to find fulfillment in larger purposes and it attunes individuals with one another in a sense of mutual respect, caring, and love. It enables us to experience the true joy of life, which, according to G. B. Shaw, was found in the experience of being a force of nature or being used for a mighty purpose as opposed to being a "selfish clod of grievances" (Land & Jarman, 1992a, p. 177).

A unitary purpose also acts as a primary force for guiding its own achievement. Vision develops awareness of present behaviors and actions, it directs energies toward more appropriate agendas, it guides organizational decision making, and it prescribes appropriate structures and strategies. Shandler noted that leader-member interaction develops direct ends but that leaders need a dual vision. They need not only to envision organizational purposes they also need to see organizational structure clearly (1986, p. 124).

Several theorists commented on this leader responsibility. Brown and Isaacs (1991, p. 8), Gaster (1992, p. 114), Kiefer (1986, p. 193), Kiefer and Senge (1984, pp. 72, 171), McKnight (1984, p. 152), Nanus (1989, p. 53; 1990, p. 14), Nelson and Burns (1984, pp. 234, 240), Pascarella and Frohman (1989, pp. 33, 138), and Senge (1990, p. 353) stated together that the visionary leader must perceive the organization as an instrument for creating the future. Having brought disparate things together to create the organizational vision, the leaders must develop subordinate

goals and an organizational framework which aligns with purposes and vision and which produces results.

An organization's systemic structure lacks a sense of purpose within itself but in practice it reflects the organization's values and what the vision means. It is the leader's responsibility, then, to ensure that the organizational context and operational mechanisms are directly connected with the ideas and ideals identified by its purposes and vision. It is the leader's role both to create and to maintain an organizational design which is directly connected with the organization's purpose as well as one which maintains structural integrity. Such a design must include attention to the following elements: structure--internal elements such as the physical setting, roles and relations, and communication flows; policies--parameters for decision making, regulations, and determinations of how goals will be attained; and procedures--activities and dynamics of actions and interactions.

It is essential to keep the organization well-tuned by redesigning the system as the organization moves forward--to adjust and to navigate strategically to continue moving the organization toward its vision and toward operation in the future.

In implementing organizational vision, then, the leader is responsible both for creating motivation and intention among the organization's members in order to attain the vision and also for designing an organizational structure which enables and supports movement of the organization toward that attainment. These responsibilities directly reflect the two major aspects of organizations discussed earlier: the human side and the institutional side. The obvious responsibility of leadership, then, is to direct all aspects of holistic organizations.

Summary

The perception of organizations as systems promotes a view of organizations as interactions between both their human and their structural aspects. Although organizational systems can be viewed as operating with varying degrees of openness, modern systems theories consider organizations primarily as holons within a holarchy, that is as units which contain internal subunits and which interact with units similar themselves within an all-encompassing ecosystem. This new-paradigm view increases

awareness of the importance of both internal interaction and external environmental factors.

The importance of focusing both internally and externally is noted throughout the examination of organizations as systems and structures. Organizational structures are a means to interpret organizational behaviors, and new structures are developing both in response to current societal shifts and the need for reflecting new organizational visions and person-centered perspectives. Newly emerging organization forms such as teams and networks were described as self-organizing systems which provide an integrating communication structure that promotes interrelationships among members and groups with mutual interests.

In conjunction with revised structural systems, the emergence of new views of management also reveal a focus on both the internal and external aspects of organizations--focusing on total organizational effectiveness for accomplishing shared purposes by shifting power and authority to cooperative interrelationships. Managers, as they develop strategies--utilizing knowledge of both the external environment and the internal organizational needs and capabilities--to direct the internal activities of the organization toward its overall purposes, must utilize both pragmatic analysis of external data and intuitive approaches to inner knowing.

A review of leader roles and responsibilities, as transforming organizations adjust structures and management practices, suggest that leaders are primarily responsible for developing the organizational vision on which structures and practices are based. Although the initial development of the vision is an inner process, the vision itself must be holistic and it must be communicated externally with emphasis on interaction with organization members in order to develop a shared view of a future beyond the present which energizes and impels members to achieve it. This internally held vision and the structures and practices supporting its attainment must be adjusted continuously, however, in light of external contingencies. This on-going directing and redirecting of both the internal and external aspects of the organization on all levels are the organizational leader's responsibility.

The need for continuous attention to both inward and outward aspects of organizations on multilevels strongly supports the view of organizations as holons

operating within a holarchy, with the need to focus on the internal systems or subholons, as well as the supra-system of which the organization is a part. Further, the leadership responsibility for directing organizational holons suggests not only a focus on the needs of the organizational unit but also on the need for ensuring the empowerment of all organizational sub-units as well.

The responsibility of leaders for holons also suggests the ultimate responsibility of organizational leaders for directing the supra-system--the society of which their organizations are a part. With the adoption of this new-paradigm worldview, organizational leaders, then, have the responsibility, not only for guiding their organizations to higher levels, but also for both envisioning and creating a better world and for developing and enabling their members to assist in bringing that world into reality.

CHAPTER IX

TRANSFORMATIONAL ORGANIZATIONS: A MODEL

Research Methodology: Developing the Model

Background of the Study

This study is based on the belief that the world is presently experiencing complexity, stress, and turbulence, that its inhabitants lack understanding of the social stress and its causes, and that people are seeking betterment and a more certain and enlightened future. Further, it is based on the belief that people, through their membership in organizations, can be helped to achieve a more comprehensive view of social problems, but that at present organizations, their leaders, and members need a better understanding of the present indicators and dynamics of change.

The study is based on the assumptions that the current social turmoil is the reflection of a transitional change or paradigm shift away from a science-based belief system which is no longer adequate for our time. The study assumes that this shift is impacting organizations, that organizations need to perceive this shift in the context of their relationships and operations, that they need to confront the unworkability of forms and practices based on old-paradigm thought, and that they need to move toward a new view.

The study holds that organizations and their leaders need help to perceive such a shift and that a new view of organizations in transition toward an enlightened future may help equip leaders to survive and adapt to turbulent times, to engage in real leadership, and to aid their organizations and members to move forward. The major issue of the study, then, is to address social turmoil and to develop insight and guidance for organizational leaders and their members as a means for adjusting and for moving ahead.

The purposes and objectives of the study reflect this major issue. They are: to examine recent literature regarding societal and organizational stress in order to develop an understanding of the current situation and its possible directions and to

develop a model of organizations which may help their leaders and members adjust and move toward the future.

The study's purposes are directly reflected in the research questions.

1. Does the current literature on social problems provide a base for comprehending today's turmoil?
2. How does the current social upheaval affect present-time organizational stresses?
3. Does the accumulated knowledge of current social and organizational problems suggest a theoretical framework for organizations in transition toward the future?
4. On the basis of such a theory, can a model for organizations in transition be constructed?

Study Design

Literature analysis. The basic design of this study is a literature analysis culminating in the development of a model. According to Borg and Gall, the most difficult tasks in research is to pull together research findings that are relevant to a topic, to extract useful knowledge, and to draw conclusions (1983, p. 195). An increasing number of dissertations are based on just such a literature analysis rather than primary research, and that "the conduct of a rigorous literature analysis makes a significant contribution to our understanding of research on a particular problem." Such integrated research reviews are "very useful in helping researchers keep up with the current state of knowledge in their interest areas" (p. 198). Borg and Gall cited meta-analysis, an approach developed by Glass et al. (1981) for mathematically converting the elements of many studies into common bases for a general analysis, as a popular approach to literature analysis.

Cooper (1982) supported an extensive analysis of research literature as a relevant form of inquiry and described a five-stage format for conducting such an inquiry: problem formation, data collection, data evaluation, analysis and interpretation, and public presentation.

Cooper also provided a means to ensure the validity of such a study. He suggested that there are four major areas of concern for the researcher which must be

examined at each of the five stages in the research process. The major areas of concern, along with examples of possible questions to be addressed, are: (1) The research questions: What procedure should be used to identify data relevant to the question? Which data should be selected as relevant to the question? (2) The function of the literature selections: How can relevant material be distinguished from irrelevant? How should relevant material be synthesized? (3) Procedural differences: How can differences in procedures for data gathering or for data analysis be accounted for among various relevant data? (4) Potential invalidity: What operational details, target populations, study omissions, and so on contribute to the invalidity of the relevant data?

Cooper's model, particularly the last two areas of concern, addresses a literature analysis of quantitative studies. This study, therefore, departed somewhat from Cooper's model for conducting a literature analysis (and eschewed the meta-analysis approach of Glass et al. totally) in favor of conducting this integrative research review as a humanistic study.

Cooper's five stages have been followed, with each stage examined thoroughly as Cooper suggested, in order to ensure the development of a well-founded literature analysis; however the examination of the stages was based on the recommendations by Borg and Gall (1983), Burrell and Morgan (1979), Guba and Lincoln (1981), Lincoln (1985b), Lofland and Lofland (1984), Long, Convey, and Chlawek (1985), Strauss (1987), and Strauss and Corbin (1990) who described similar stages for conducting and reporting a sound qualitative study. The examination and development of each stage is described in the discussion of processes and procedures below.

Qualitative stance. The study is conceptualized and designed as qualitative or naturalistic. Qualitative research, according to Strauss and Corbin, is a nonmath analytic procedure in which data are gathered in a variety of means such as observation, interviews, and review of documents and which results in "findings not arrived at by means of statistical procedures or other means of quantification" (1990, p. 17).

Guba and Lincoln described naturalistic inquiry as being aimed at the understanding of actualities and social realities utilizing processes geared to

uncovering idiosyncratic information about real events in natural ways. Such inquiry attempts to arrive at generalizations or to establish structures of reality through application of everyday reasoning, aims at nontechnical audiences, and utilizes ordinary language (1981, p. 78).

A number of theorists saw humanistic, qualitative methods as true to the nature of social research. Strauss described social phenomena as complex and as requiring a method capable of capturing a great deal of variation and of developing many concepts and their linkages (1987, p. 6). Lincoln described qualitative methods as the best approach for just such contingencies--for "accommodating and explicating multiple, conflicting, and unaggregatable realities" (1985b, p. 142).

Strauss and Corbin concurred, stating that qualitative types of research are particularly suitable for uncovering the nature of experience and for understanding what lies behind complex phenomena, particularly those about which little is known, or for gaining fresh insights into such phenomena about which something may be known. Qualitative approaches are the method of choice for use in social and behavioral sciences because they concern issues related to human behavior and functioning. The authors gave organizations as an example of human behavior appropriate for such methods.

Morgan also focused on organizational inquiry as an appropriate application for qualitative approaches. Methods of studying organizations should be true to the nature of the phenomena being studied. "Non-scientific disciplines may have relevant insights, approaches, and methods of inquiry which can contribute to organizational analysis" (1980, p. 613).

Burrell and Morgan noted that qualitative or humanistic approaches are particularly appropriate for the social sciences because the social world is relativistic and subjective (1979, pp. 3, 5). They echoed Harman's statement that "in some sense all knowledge is ultimately subjective, since the root of all experience is consciousness" (1979, p. 78). Burrell and Morgan stated that "the ultimate reality of the universe lies in 'spirit' or 'idea' rather than in the data of sense perceptions" (p. 7) and that the social world can only be understood by focusing on the ways individuals create and interpret their world. Perceiving social reality from this

interpretive or subjective view, the researcher seeks to understand the world as it is, to investigate the fundamental nature of the world on the level of subjective experience. Such understanding cannot be gained by generating objective data. It requires a search for what is unique versus what is general, an emphasis on the relativistic nature of the world, and a personal and direct involvement in the study.

Foster supported this conclusion. "Empirical work must be balanced by interpretive and critical understandings, for it is these that distinguish the human sciences from the natural sciences Objective knowledge of natural phenomena is often gained through subjective explorations and shifts in ways of seeing the universe" (1986, pp. 28, 55).

Several authors stated specifically that empirical scientific approaches are inappropriate for new social inquiry. Burrell and Morgan, for example, said that scientists treat the natural world as hard, real, and external--an objective reality--and that this view focuses on the identification and definition of regularities rather than on uniqueness (1979, p. 2). Morgan noted that scientists view the world through concepts which structure their perceptions and which implicitly or explicitly guide their analysis. They draw on these constructs to make the relationship between the subjective and objective worlds concrete (1980, pp. 610, 613). Lincoln suggested that methodological assumptions underlying rationalistic inquiry are more consistent with older modes of thought than the newer modes (1985b, p. 137).

Foster explained that "logical positivism aimed at eliminating mystic and metaphysical thought that concealed the structure of human relationships Empirical work should be valued, but within the context established by an understanding of the social system" (1986, p. 36). Understanding is related to both the search for meaning and the methods of research used to gain that understanding (p. 74).

To illustrate, Foster referred to Habermas' three cognitive interests (1971, p. 313) and commented on the relevancy of each for social inquiry. First, Habermas identified technical interests which focus on human beings establishing control over nature. Foster stated that scientific approaches to learn about the laws of nature that predict human behavior are trivial in the context of human action as "ever being

formed anew" (p. 75). Second, Habermas said that historical-hermeneutic interests focus on communication and on developing common understandings of ourselves and our histories as well as on establishing relevance. Foster noted that human action, with its characteristic of being ever-new, occurs in a historical context, and therefore interpretative analysis in the context of history and tradition is appropriate for identifying meaning (pp. 12, 75).

Borg and Gall supported historical research as appropriate, noting that it aims at obtaining information on which to build an understanding of events preceding the present and that it involves an historian who discovers data versus a researcher who creates data. Also "historical research can assist in predicting future trends" (1983, p. 802).

About Habermas' third area of interest, emancipatory, which focuses on realizing the conditions of freedom and on channeling power, Foster noted that critical theory is an appropriate approach for examining the relationship of technical and historical-hermeneutic interests in the context of developing equitable power structures (p. 75).

Guba and Lincoln (1981, p. 64) and Lincoln (1985b, p. 137) noted not only that naturalistic inquiry and qualitative methods are superior to rationalistic inquiry for social and behavioral research and but that they are also strongly related to the emerging paradigm. Lincoln stated that naturalistic methodological assumptions undergird and mutually reinforce the emergent paradigm and are more consonant and synergistic with the emergent context of new paradigm thought (p. 140). Morgan stated that the paradigm at which organization theories are located defines the nature of the issues and the lines of organizational inquiry (1980, p. 396).

On the grounds, then, that this is a study focusing on development of organizational theory in a new paradigm, and on the grounds that it addresses human behavior through the social sciences, this study is conceived of and mounted from a humanistic or naturalistic point of view. Further, as an attempt to identify meaning through interpretive analysis of written observations of social and behavioral phenomena in the context of history and tradition, and as a means to uncover the nature of experience and to understand what lies behind complex behavioral

phenomena, an integrative research review or literature analysis culminating in a model is perceived as a qualitative approach within that view.

Characteristics. Three primary characteristics of a naturalistic study have been most frequently described by theorists. A literature analysis culminating in a model complies with these characteristics, they support the choice of methodology for the study, and they provide support for the study design. The three characteristics are: the emergent design, the researcher as a participant in the study, and the rigor determined primarily by the authenticity of the information derived and presented.

Regarding the first characteristic, Guba and Lincoln (1981, pp. 70, 71) and Lincoln (1985b, p. 147) stated that the purpose of naturalistic inquiry is to get new ideas, to relate and formulate them, and to allow rudimentary theory to emerge. They said that when concepts or characteristics are yet to be discovered, it is not possible to state them precisely beforehand and that measurement is impossible. Such an approach prevents the laying out of a detailed schema in advance. Rather a research design can only be specified incompletely, a fuller design emerges with the study and remains continuously in flux, and great detail would place unreasonable constraint on the inquiry.

Naturalistic researchers must be committed to the concepts of constructed and multiple realities, they must hold expansionist perspectives that will lead to descriptions and understanding of phenomena as wholes, and they must be willing to sift through naturally occurring events until they find where nature has arranged the experiment. The design results from the patience and willingness of researchers to give time and energy to building outward from the point of entry, exploring and gleaning insights from each step. The design emerges with interactions between the the researcher's and the respondents' realities. Logical factors establish limits and margins, and the inquiry bounds itself as the problem emerges. "What is interesting and important will reveal itself as the multiple realities . . . are exerted on one another and the researcher" (Lincoln, 1985b, p. 142).

Concerning the researcher as a participant in the study, Guba and Lincoln (1981, pp. 70, 72, 129), Lincoln (1985b, pp. 14, 142), Strauss (1987, p. 7), and Strauss and Corbin (1990, pp. 9, 18, 41) together said that with naturalistic methods

human inquirers are primary data collection instruments as well as the instrument administrators. Persons acting alone, in pairs, or in teams must immerse themselves totally in the learning process as data collectors, analysts, and interpreters, constantly searching, digesting as they go, and seeking to understand versus manipulate the information.

The authors noted a number of personal characteristics that researchers need in order to carry out their role, and these provide additional insight into the researcher's responsibilities. Researchers must have a contextual sense of the whole and must perceive no limits to a wide variety of constructs. As a result of those perceptions, they must be flexible and infinitely adaptable. For example, they must be open to all avenues of data collection, be able to focus their methods and processes according to what they perceive, and be able to collect data on several levels at one time.

Researchers must also be personally, environmentally, and socially sensitive--being alive to constraints and challenges, sensing the dimensions of a context and able to make them explicit, and learning from their own and others' expressed and unexpressed values. In addition, they must be able to step back and critically analyze situation; be capable of recognizing, honoring, and sorting multiple realities; and be able to distinguish and assess subtleties of meaning.

Researchers must use both propositional and tacit knowledge. In order to obtain valid and reliable information, they must use insight or connotative knowing, that is they must be able to utilize hunches, gut reactions, or feelings that can't be stated in words while maintaining the ability to think abstractly and to draw on their experiential and theoretical knowledge. In addition, in order to make sense of the whole, researchers must be immersed totally in the process or be "in the work"--emotionally as well as intellectually" (Strauss, 1987, p. 10). At the same time, however, they must be able to recognize the phenomena shaped by their presence, avoid bias, suspend their own value judgment, adopt an analytical distance and frame of reference, and retain a stance as reliable and objective observers to the degree possible.

Guba and Lincoln most fully developed the third characteristic of naturalistic inquiry, that of rigor, which they saw as "establishing trust in the outcomes of the

inquiry" and which could be done by attending to four "naturalistic analogues" to the criteria used for determining the precision of a scientific study (1981, p. 103).

Although some of Guba and Lincoln's recommendations refer to more hands-on research methods with direct interaction between the researcher and the study's respondents, much of their approach is applicable to ensuring the quality of a literature analysis, wherein authors are the respondents. Their recommendations which were applicable to such a study design were followed in this study and are discussed here.

The first determiner of a rigorous naturalistic study, according to Guba and Lincoln, is the "truth factor" or credibility (versus the internal validity needed for a scientific study). Strategies for increasing the likelihood of credible findings are: prolonged engagement of the researcher in the study, self-checking by the researcher to avoid personal biases and to maintain objectivity, continuous scrutiny of data to ensure respondent credibility, use of multiple sources of triangulation to cross-check sources and to establish links that create a whole, and persistent attempts to locate pervasive and/or atypical qualities. "Credibility is to some extent a function of the amount of time and effort the inquirer invests" (p. 109).

The second test is applicability or fittingness (versus external validity or generalizability). This concern is "meaningless and irrelevant" for naturalistic studies and "it is up to each audience to determine if [the] information is applicable" (pp. 115, 116). Nevertheless applicability remains an issue, and Guba and Lincoln made the following recommendation: The study should include careful, thick descriptions of the study's context so that audiences can assess the fit between the context in which the research was generated and the context of application on the basis of thorough knowledge (p. 116).

The third test for trustworthiness is consistency or reliability (versus adaptability or replicability). Naturalistic studies are more interested in differences than in similarities. They are singular and not likely to be replicated. Nevertheless reliability can be demonstrated by overlapping data or triangulation and by the researcher having maintained an adequate decision trail showing reasoning, nature of decisions, and so on so that the emergent hypothesis is found reasonable given the

data (p. 122).

The final recommendation for sound naturalistic studies is for neutrality or confirmability (versus objectivity). Objectivity is not an appropriate concern for naturalistic studies on two counts: (1) With an inquiry emerging out of multiple realities, there can be no objectivity; (2) subjective connotes the concerns of a single individual and objective connotes the experiences of a number of people. Thus, the difference is in number, with objective or "quantity" accepted as more reliable. But the "experience of a single person is no less reliable than the experiences of several" and that a single person can be more factual and confirmable than several, depending on the individual's training and experience (p. 124). Humans are not without unconscious biases and incompetencies, but there is no reason why a trained inquirer should be a doubtful source of data. The burden of proof regarding rigor is on the data or information produced by the study, which should be factual and confirmable, not on the investigator (p. 125).

Although the determination of rigor in a naturalistic study is ultimately determined by its audience, as the above authors noted, this researcher has attempted to ensure the quality of this research by attending to the primary characteristics described for naturalistic approach. The study reflects an emergent process, beginning with a general design, building from a point of inquiry by assessing literature for the purpose of understanding current phenomena and culminating in a theory illustrated by a model. As the sole researcher I have attempted to maintain the personal characteristics described as necessary for a successful study of this type and have, I believe, successfully addressed the concerns for rigor. The reader as final judge can determine whether or not sufficient time and effort, continuous scrutiny, thick description, reasoned decisions, and so on have produced factual data by assessing the descriptions of the process and the results of this study which follow.

Underlying approach. As noted, one characteristic of a naturalistic study is that the design emerges as the inquiry progresses, which is necessary to accommodate the discovery of concepts and to allow theory to emerge. While an emergent theory is the general purpose for all naturalistic studies according the Strauss and Corbin and is reflected in various types of qualitative approaches such as ethnography and

phenomenology, for example, the authors called attention to one particular qualitative approach in which emergent theory receives the main focus: grounded theory (1990, p. 21). This approach is the undergirding design of this study.

Guba and Lincoln (1981, p. 67) and Strauss (1987, p. 1) both noted the need for effective theory based on the qualitative analysis of data. Social phenomena are complex, and the most useful approach for generating new theories about complex social behavior is by grounding them in real world data from the start. Without grounding, social behavior would be speculative and ineffective. The discovery and development of new theories about social phenomena have been slighted or neglected and "grounded theory is a major task confronting sociology today" (Guba & Lincoln, 1981, p. 68).

Lincoln (1985b, p. 145), Strauss (1987, pp. 5, 22, 34), and Strauss and Corbin (1990, pp. 23, 25) together contributed to the following understanding of grounded theory. They defined grounded theory as an approach to qualitative research in which a systematic set of procedures is used to collect and analyze data pertaining to a particular phenomena and out of which a theory is derived or constructed. This approach differs from quantitative research in that the theory is not given initially and used as a guide for the collection of data or as the basis for a priori reasoning. It differs from other qualitative research in the amount of interpretation applied to the data.

The purpose of grounded theory is: accounting for patterns of behavior which are relevant or problematical to those involved in the area of study in order to illuminate that area and to arrive at a theoretical formulation of the reality. Grounded theory is founded on the beliefs that by its very nature experience continuously evolves; that life and change are complex processes; that conditions, meaning, and actions are interrelated; that there is a need to understand these complexities and interrelationships in the area under study; that the collection and analysis of data and the resultant theory stand in a reciprocal relationship to one another; and that grounded theory is important in the development of a discipline in the area studied.

The process of arriving at a theoretical formulation of reality is by systematically and constantly interpreting and comparing the data to discover groups

of related concepts, then synthesizing and integrating these to develop or generate provisional conceptual labels. These groups of concepts are continually verified and tested against one another and adjusted to insure sound internal and external relational fit and are ultimately formed into a theoretical rendition of the reality being examined.

Strauss and Corbin noted that this is a creative process which takes openness and flexibility in order to respond to the situation and to adapt to the phenomena. The most gratifying moments in the research are those in which intuition brings major breakthroughs in assumptions to achieve understanding of meaning or patterns and to "create a new order of the world" (1990, pp. 27, 28).

Grounded theory has distinct features to ensure sound conceptual development. It begins with an area of study and allows what is relevant to emerge. It emphasizes the importance of the data in which the theory is grounded and the context out of which it grows. It is faithful to and represents the reality of a given area. It is carefully induced from diverse data and multiple constructions of reality and makes sense and is comprehensible to other studies or persons practicing in that area. It concludes with a theory sufficiently abstract or general or imbued with enough variables to be applicable to a variety of contexts related to the phenomena yet is specific enough to guide application or provide control for action.

This study is built on the basic premises of grounded theory. It is based on the beliefs that there is a need for new theory about organizations of the future, that such a theory must be grounded in the reality of our times, that it must emerge from the thorough examination and analysis of perceptions and information provided by able observers who together can provide a broad view of the times, and that it must culminate in a form which will be generally applicable while providing useful guidance. The following discussion of the research process and its outcomes reflect the generation of a guided theory.

Processes and Procedures

Strauss stated that there are no hard and fast rules for converting data into effective theory and that "having precise, exact techniques is not an accurate characterization of how the work is carried out." Certain operations must be carried out but general guidelines and rules of thumb are sufficient and "are useful to

researchers across a broad spectrum of disciplines." He emphasized that "research is basically work" (1987, pp. 1, 7). Burrell and Morgan described the basic work of qualitative research as obtaining knowledge of the subject under investigation by getting close to it, exploring it in detail, and letting it "unfold its nature and characteristics during the process of investigation" (1979, p. 6).

The work of this study is described here, following the general guidelines mentioned earlier: the five stages suggested by Cooper (1982) for conducting an integrated research review of literature while adhering to the recommendations for conducting and reporting a sound qualitative study made by such authors as Borg and Gall (1983), Burrell and Morgan (1979), Guba and Lincoln (1981), Lincoln (1985b), Lofland and Lofland (1984), Long et al. (1985), Strauss (1987), and Strauss and Corbin (1990).

Stage one: Problem formation. Lofland and Lofland stated that "personal interests or concerns [are] the starting point for meaningful naturalistic research" and that the naturalistic approach to social research "fosters a commitment on the part of the investigator to bring personal interests to the research situation." Such personal interests provide meaningful links between the emotional and intellectual operations and they may come from jobs, relationships, or other experiences (1984, p. 7).

Strauss and Corbin suggested that the sources of a research problem can come from professional experience or practice in a field, from personal experience or background, or from familiarity with a phenomenon through literature or previous research (1990, p. 42). Guba and Lincoln stated that in response to initial and limited inquiry a conceptual problem emerges--"a situation resulting from the interaction of two or more factors that yields a perplexing or enigmatic state" (1981, p. 89).

Such was the case for this researcher. From personal experience as a management consultant and business owner, I became aware of the need for a better understanding in organizations of how to cope with members' malaise and with changing demands for services and for attention to community and social needs. I observed organizational leaders, myself included, searching both for a better understanding of events and for the means to deal with them. The ideas and approaches I had learned, practiced, and taught seemed much less helpful or

applicable than they once did.

In my desire to know how to be a better leader and to obtain knowledge and insight to help me help others, I enrolled in the leadership program leading to this degree. Through the course work I gained a wider understanding of both organizations and leaders, and, during that time, I also observed that the world was growing increasingly tense.

It seemed clear that some understanding of the nature of the times would be necessary for successful leadership. The very concept of leadership connotes forward movement which suggests the need for developing some sense of the future. That suggests the need to develop some sense of the present and how it came to occur in order to perceive how it might move forward. Also, leadership, in order to occur, must be exercised, that is, it must move beyond theory to application. Therefore, in order for the knowledge I was gaining about leadership and organizations to be useful, it would have to be applied. In today's times that meant exercising it in the real context of a confused and rapidly changing world.

I decided, therefore, that I needed both a bigger picture of what was happening in the world and a means for interfacing that situation with knowledge about leadership and organizations. Hence the study: an examination of current literature regarding societal and organizational stress in order to develop an understanding of the current situation and its possible directions and to develop a theoretical framework as the basis for a model of organizations in transition to the future which may help their leaders and members adjust and move toward the future.

Stage two: Identifying resources. Guba and Lincoln noted that the identification of a problem suggests the boundary designations for the study and that such boundaries are holistic. The identification of a problem establishes parameters which suggest an initial stipulation of the study's limits. Such limits are without constraints in that the researcher begins with a discovery posture which leads to insights and to further discovery so that boundaries emerge through a recycling process of inquiry which ultimately leads to the identification of the final boundaries (1981, p. 89).

Strauss wrote that data collection is controlled by the theoretical purpose of the

inquiry and is conducted by "theoretical sampling" which he saw as driven by the researcher's analyses and determination of the usefulness of the data for the study. He defined theoretical sampling as "a means whereby the analyst decides on analytical grounds what data to collect next and where to find them" (1987, p. 38).

Borg and Gall concurred, stating that a search plan, or a plan to identify data systematically, can be revised as the interpretive framework develops. It begins with preliminary identification of sources of materials (institutional repositories, bibliographies, reference works, and so on) and moves to the identification of primary and secondary sources of information (1983, p. 804). Information is identified as useful when it reflects the concerns or issues of the study--concerns being matters of interest or importance that pose a threat, suggest undesirable consequences, or need to be substantiated, and issues being points of contention or differences in points of view (1981, p. 92).

Strauss emphasized that a new theory must be conceptually dense, involving many concepts and many linkages among them, and that "capturing the complexity of reality [and] avoiding simplistic rendering of the phenomena" means extensive data collection (1987, pp. 1, 42). Lofland and Lofland stated that the overall goal is "to collect the richest possible data" (1984, p. 11).

Strauss and Corbin noted that some early acquaintance with technical literature is also useful to stimulate theoretical sensibility, to provide a background on ways to approach the data, and to guide the research project. They cautioned that such information should not be controlling--as it would be for researchers trained in other approaches--but that it can serve to shed light on the theoretical framework that evolves during the research process (1990, pp. 48, 50).

This researcher began stage two, identifying resources, approximately nine months before the onset of stage five--writing this document. At the entry point of the study, the tentative boundaries were to investigate social stress, its impact on organizations, and the prognoses for organizations in the future. I aimed at identifying both futurists and organizational theorists who had addressed these areas. I was also interested in what futurists and leadership scholars had said about leadership in the future and in what had been written about the present social turmoil

in relation to the future.

I spent about two weeks in this get-acquainted stage. I began with a bibliography from a course entitled "Leadership and the Future" (one in which I had not enrolled during my course work) and with other sources recommended by members of my committee. From there I explored the usual library resources in search of data related to the research topics. I also reviewed bibliographies and materials from my earlier course work to identify authors who had written in the area of this research. In addition, I explored enough technical material to develop a tentative set of sources for conducting a literature analysis and a naturalistic inquiry.

Examining the samples of data derived from these sources, I drew tentative conclusions about what would be applicable to my research and what would not. For example, I determined to exclude those works which discussed the future of organizations in finite, manipulative, business-oriented terms in favor of those which approached organizations from more holistic and sociological points of view. I also decided to exclude most of those works which described the future of organizations without a recognition of the existence of stress, changing times, or new paradigm views (except for some few which provided historical or comparative information) .

On the grounds that a study focusing on present time and on its implication for the future should be based on as much currently available information as possible, I decided to exclude any material over ten years old, again excepting that which provided particular historical context or that which was considered particularly authoritative or was frequently referenced. In keeping with that decision, I determined to examine as many journal and professional articles as possible on the grounds that, due to shorter preparation and publication time, they might provide more up-to-the-minute information than would be available in book form.

I emerged from this process with an initial identification of likely sources of data and a somewhat clearer set of boundaries. Although the initial identification of possible resources took place in this early stage of the research, I continued to search for new sources of data throughout the selection stage and also identified some new sources during the analysis and reporting stages.

For example, with the help of electronic communication devices and the

United States mail, I utilized the member reference services of the American Management Association to obtain newly published materials. I also attended three futures-oriented conferences, one conducted by the World Future Society and two by the Institute of Noetic Sciences. At these meetings I was able to gather first-hand information on topics of interest to my study from some of the most prominent thinkers of our time. On two occasions, following private conversations with prominent authors, I was given access to or was provided a copy of previously unpublished material.

Attendance at these conferences also afforded me the opportunity to purchase new books, tapes, and other materials. In addition, membership in these organizations gave me access to continuously updated annotated bibliographies as well as bibliographies of past publications of interest to my study and the opportunity to purchase these materials. Throughout the study, then, I had access to many avenues for identifying and obtaining resources.

Stage three: Selecting relevant data. Strauss stated that a major assumption behind qualitative studies is that a wide variety of diverse materials provides indispensable data (1987, p. 1). Borg and Gall pointed out that the key to obtaining such indispensable data is a critical attitude. It is necessary to evaluate the genuineness, credibility, accuracy, and bias of data, and they suggested subjecting it to both internal and external criticisms. External criticisms might question, for example, how genuine the material is, whether it is original, or who wrote it, when, and under what conditions. Internal criticisms might examine the competency of the writers as observers, their expertise, the accuracy of their statements, their biases or prejudices, any exaggeration of their roles, and so on (1983, pp. 814, 815, 817).

Guba and Lincoln emphasized the importance of both determining the relevance of data and of processing it immediately upon acquisition. The process of data collection generates insight, it reorders and changes the direction of the inquiry, and it expands the inquiry as necessary to account for new information and understanding (1981, p. 137). It is necessary to identify what is relevant and what is not without defining those categories before the inquiry begins. This is a highly intuitive process with no infallible procedures (pp. 89, 93).

Guba and Lincoln suggested beginning the process of selecting relevant data by taking everything seriously until further evidence suggests not doing so. Frequent concerns and issues will begin to emerge with recurring regularity which will suggest that these are highly salient topics for further inquiry. Other concerns and issues may also be considered valid on the basis of their uniqueness, their addition of interesting detail, or as points of leverage on problems. At the same time some areas will be determined invalid due to their lack of general interest or lack of time, resources, or methods to inquire further about them (p. 94).

The relevance of materials can be further determined by focusing on convergence and divergence. Convergence is deriving sets of categories within which to classify and interpret data. The evolution of major concerns and issues establish criteria for relevance and in order to be included, data must be relevant to the category and must contribute to conveying the whole picture of that area of concern. Divergence is the need to flesh out categories. Data which would provide sufficient detail or evidence to permit an adequate view or judgment of the area of concern or which would provide a bridge between disconnected items of information should be considered relevant (pp. 95, 96).

The identification and selection of what is relevant can be considered complete by determining that the outer boundaries of the study have been reached--that new situations are rare or cease to be identified, that further examination yields redundancy, and that the researcher senses integration and regularity in the information (p. 96).

This researcher worked in the selecting data stage of the study for about eight months, initially determining relevance on the basis of the broad contexts provided by the four categories previously mentioned--paradigm shift, organizations in future, leadership, and methodology, with the primary emphasis on the first two. I read extensively, taking copious notes, cross-referencing, noting primary and secondary sources, and gradually becoming aware of recurring areas of interest within the main topics. There turned out to be a great many of them. I observed that attempting to discover what is wrong with the world today includes a great many relevant topics. So does the nature of organizational stress, and ideas about the future of organizations

and leadership in years to come are quite numerous. The continuing process of identifying relevant materials, then, expanded my inquiry greatly although my general focus remained much the same.

Because I had taken fairly extensive notes from the beginning, I did not find it necessary to recycle too often, as I continued to discern important areas of interest and to recapture data previously passed over. I did begin to develop a sense of what could be omitted as irrelevant and discovered a basis for auditing the selections. For example, among the many issues discussed by authors as reflecting societal turmoil and/or as being in need of attention for the future, I totally omitted those which seemed not to relate directly to organizations--for instance, medical and health needs and related technology. And I selected as relevant only those portions of other issues which related to organizations. Demographics, education, and ecology are good examples.

At the same time I exercised researcher privilege to audit out materials on the basis of author competency as an observer, genuineness of material, and so on. For example, one author presented very cogent remarks about organization members' needs for acceptance, appreciation, and interaction. However the author's area of interest and expertise lay in a field unrelated to organizations. Therefore the work was considered irrelevant on the basis of the author's apparent lack of professional background.

Data which were ultimately determined to be relevant and were included in the study were those that were considered well founded and which contributed to an understanding, either through direct examination or through providing historical or philosophical background information, of its major themes. There were only a few instances of need to identify additional relevant data in order to flesh out categories (the need for additional historical background is the most notable example) since the volume of data provided adequate coverage in each topic area and since many theorists' ideas overlapped and merged in a number of areas.

The greater difficulty lay in determining where and when to declare closure. New and relevant materials seemed to continue to emerge to add unique and vital information to the data already gathered. Ultimately, I simply had to call a halt to

data gathering in order to move on to the next stage of the study, although, even then, a number of new materials were added even through the final stage of the study. At the conclusion of formal data selection, I had accumulated over 1000 pages of tightly typed notes and had referenced most of the nearly 400 works which appear in the bibliography.

As these data were selected, and as categories were massaged and adjusted in order to identify meaningful relationships and comprehensible groupings, I had arrived at six categories in place of the original four. Paradigm shift seemed to include two areas of relevancy: discussions of the concepts of paradigm and paradigm shift per se plus discussions of the elements societal paradigms. Likewise, the original category of organizations seemed to hold two areas of relevancy which paralleled those of paradigm: perceptions of organizations as paradigmatic entities plus discussions of the elements which comprise those entities, particularly those pertaining to organizations in the future. The other two original categories, leadership and methodology, remained intact.

Stage four: Making inferences. Strauss and Corbin stated that the purpose of analyzing the data and making inferences from it is to present an accurate picture of what is being studied (1990, p. 22). They, along with Lincoln (1985b, pp. 146, 148) and Strauss (1987, pp. 1, 11), described the process as making sense of complex data. Together they stated that inductive analysis is the best means for taking into account and reflecting the multiple realities and values in a context and that the particulars of the context shape the interpretations of the data.

Making sense of the data is guided by successively evolving interpretations. One of the assumptions about qualitative analysis is that the methods are rudimentary. The focus is on keeping a balance and on creating a connection between the previously known and the hitherto unknown. It is a process of discovery which Strauss described as doing "detailed, intensive, microscopic examination of the data in order to bring out the amazing complexity that lies in the data" (p. 11).

Borg and Gall (1983, pp. 819, 824), Guba and Lincoln (1981, p. 76), and Strauss and Corbin (1990, pp. 22, 44) together described that intensive examination or analytic process as thinking, asking questions, and conjecturing in an effort to

interpret common attributes and consistencies among the concepts, to reduce and order materials into representative selections and ideas, to form meaningful patterns, and to develop generalizations. The emphasis during the process is on attending to complex interrelationships. Interference in patterning can help make sense of relationships. Unanticipated factors stretch the mind and require expansion of theory. The findings are strengthened by increasing the data.

Long et al. stated that the focus of the study "determines what the researcher will be able to learn from the data but at the same time the structure depends on the insights of the researcher concerning the data and on the choice of appropriate categories" (1985, p. 143). Guba and Lincoln pointed out that it is important, during the process, for the researcher to remain flexible and to accept continuous change as the essence of reality (1981, p. 76). Strauss and Corbin stressed that the researcher, in order to present a detached conceptualization of reality, must maintain an attitude of skepticism, must periodically step back to take a broad view, and must use interaction and creativity in the discovery process.

This researcher attempted to follow all these admonitions. I found the analytic process to be a fascinating one. For four weeks I focused almost exclusively on this stage (still identifying a few additional relevant materials during this period), poring over the data and attempting to hear how the authors perceived reality from their points of view and their areas of interest and identifying how their perceptions related to one another. I began to discern relationships and to arrive at categories, some more readily apparent than others, some of which remained fairly stable throughout the process, and some which changed substantially or become more finitely defined as I delved deeper into the material. Some categories continued to be reordered during the reporting stage as ideas were examined even more closely.

I began with the six categories previously described: concepts about paradigm and paradigm shift, elements of our societal paradigm, organizations as paradigmatic entities, elements of organizational paradigms, leadership and leadership roles, and methodology. Within these categories, notes were grouped by the works of authors who had written on some topic related to that area. Several authors appeared in more than one category.

My first reordering consisted of grouping authors' comments by more specific topics, problems, issues, or the like. Topics within the technical/methodological material were fairly easy to reclassify into three groups: justification for the use of naturalistic inquiry, directions for conducting such a study, and limitations of the approach. Other than referring to this material from time to time throughout the study to ensure that I was on track, I left further analysis until I began the final reporting stage. At that time I reordered the material into two types: that which seemed to provide introductory information about a naturalistic study and that which provided more in-depth or fully descriptive information. One more cut separated out what seemed to be inside information to help me accomplish my task from that which seemed aimed at helping others to understand the task and to judge its outcome. The latter appears in this report in Chapter One, introducing the methodology, and in Chapter Nine, describing it.

A second group of materials, on leadership, was also fairly easy to interpret. Early on I discovered that the authors' discussions of leadership focused on definitions or descriptions, responsibilities of leaders to society, vision, and leader-member relationships. While reordering the data accordingly, I identified two additional categories: definitions or descriptions of leadership from old paradigm views and practices plus focus on leaders as change agents. I recycled back and broke out these categories of comments, then continued with six classifications of information about leadership: definitions/descriptions, old paradigm views, societal responsibility, change agents, vision, and leader-member relationships.

Further examination revealed that some authors in each category had addressed leadership in fairly general terms while others referred to leadership more specifically in the contexts of organizations and organizations in the future. The categories of responsibility, change, vision, and relationships were divided accordingly. The references to leadership in general were grouped with leader definitions to form a more holistic view of leadership.

A review of these general views of leadership suggested two perceptions. Some authors referred to leaders as individuals (a leader's personal development of vision, for example) while others referred to leadership as a leader-member

relationship (the leader's responsibility for developing shared vision). I separated these two views, and the final arrangement of the data appears as the definition of leaders and leadership in Chapter Two.

Regarding the data about leadership in more specific, organizational terms, initially it seemed to comprise a holistic picture of leadership for future-oriented organizations. As the data on organizations emerged and were reordered, however, I discovered a better fit between certain aspects of organizational leadership and certain aspects of organizations. Chapters Six, Seven, and Eight reflect the way in which this data ultimately cohered.

The category into which I had originally grouped old-paradigm views of leadership was totally dissolved. Closer examination revealed that, rather than separate thinking, authors had provided material which related directly to other aspects of leadership and was better used with that data to provide background or contrast.

Identifying authors' interests and concerns in the remaining four areas was more challenging, partly due to the volume of material, partly due to the number of relevant subtopics, and mostly due to the close interrelationships among all the topics. It became clear early on that attempting to sense order out of the multiple perceptions of an ever-in-the-process-of-emerging reality to discern a theory was to be no easy task. The data were examined, compared, organized, synthesized, and otherwise manipulated many times as relationships continued to become visible and as structures useful for describing the phenomena came and went. Any attempt to relate the details of this process would result in a description too thick to be understandable. The following provides the reader with enough detail about the complexity of the material and the process to develop insight through which to judge the outcome but to avoid going beyond that which is comprehensible.

The third major area, issues and concerns about the concept of paradigms, included the following separate topics: definitions and descriptions of paradigm, paradigm shift, the history of paradigms, the relationship of paradigm thought to science, new paradigms, transition, the future, social systems as paradigms, and demographic projections for the future. Some subcategories become evident fairly

early.

For example, history immediately became two categories: history and modern history--separating the focus on the industrial era from earlier times. From there, the interests in history were fairly easy to break into major time periods and then to note the major issues authors discussed within each period. Occasionally data from other areas later surfaced which pertained to a particular historical perspective and were added to the appropriate material. Occasionally I integrated some additional material to ensure a smooth progression of historic information. Otherwise, this category and the writing of it emerged fairly early.

The whole notion of history and its relationship to today's turmoil emerged as such an important group of concerns that it became a full chapter, Chapter Three. Many authors addressed historical issues from many points of view in order to develop some background of knowledge about paradigms and about our current situation.

Authors' concerns about the future also developed into two closely related subcategories: general descriptions of future possibilities plus the choices for the future facing us today and their possible outcomes. Some of the authors' comments in these two groups also related to those which had been grouped under a new paradigm. These three categories of comments concerning the future were therefore reordered. Focus on descriptions of future possibilities and on the outcomes of today's choices ultimately related well and formed the basis for Chapter Four, which ultimately reported authors' views on many aspects of the future.

Remarks about definitions or descriptions of a future paradigm projected two views of a new paradigm: a holistic or maxi view and a mini view more oriented toward particular social settings. The latter related best to organizations as paradigmatic entities, specifically to modern systems theories of organizations as reported in Chapter Eight, and the former fleshed out the definition of paradigm which is reported in Chapter Two.

Authors' comments on paradigm shifts reflect concerns about paradigms per se as well as data on stress and stressors. The former focuses primarily on definitions and descriptions of a paradigm shift and remained the focus of this category. It is

reported in Chapter Two along with the concept of paradigm, which also developed into a definition of a paradigm. Authors' discussions of the terms basic to this study were so voluminous and so thorough that a discussion of these definitions developed into the full and separate chapter, Chapter Two.

The material on stress relates to transitions. These issues were reworked as two topics became evident: definitions and descriptions of transition along with stresses or stressors which impact on or result from transitions. Definitions of transition were combined and added to Chapter Two. The material on stress and stressors (later determined to consist of two points of view: descriptions of turmoil plus reactions to it) relates to other concerns about, and contributes to a more complete picture of, our transitional times and is reported in Chapter Four.

Authors' concerns about old paradigm relationships to science that relate both to history and to transition are reported in Chapters Three and Four, providing the basis for comprehending a paradigm shift to new views. Interests in social systems relate directly to authors' interests in systems theory (which I initially saw as an element of social paradigms). Systems were seen by authors as fairly widely accepted and somewhat future-oriented views emerging at the present time. These data, then, contribute to a more complete picture of our transitional times and are reported in Chapter Four.

The data on demographics were held in abeyance as somewhat unique. Much of the material relates with other concerns about organizational structures and is reported in Chapter Eight. Some of the materials was determined to be irrelevant and was ultimately disregarded.

A fourth major area consisted of authors' perceptions of a wide variety of elements comprising a social paradigm. These elements proved to be both more disparate and more closely interwoven than I had originally perceived. I began by identifying the following elements: knowledge, humankind (out of which grew two additional categories: mind and causal reality), spirituality, symbolism (with the subcategory of mythology emerging later), values (out of which also grew, ethics, morality, freedom, and cooperation), consciousness (out of which came love), creativity (which engendered additional categories on right-brain/left-brain use,

childishness and play, and intuition and which were later reformed as two groups, with creativity including play and intuition including brain approaches), wholeness (with separate categories of unity and complexity later identified), technology (ultimately separating out ecology), new science (from which systems theory emerged), holons and holograms, and women.

The reader can see that this was a mixed-bag of societal concerns. With a great deal of reordering in an attempt to arrive at a cohesive picture, the data were reorganized as follows: Holons, holism, and unity basically describe perceptions of society which are emerging in our transitional society, and they are reported in Chapter Four. Systems theory, along with concerns about values, were found to complete the authors' perceptions of currently emerging new views.

Some values issues were addressed less to societal levels than to individual levels and those appear with the more local concerns of organizational cultures in Chapter Seven. The subcategory of ethics and morality is more concerned with organizational levels (although some remarks apply to leadership) and is reported in that connection. The subcategory of freedom and cooperation reflects the needs and wants of humans in organizations for autonomy and trust and is reported along with other such needs in Chapter Seven.

Discussions of new science and spirituality reflect shifts in views which are occurring in our transitional time and are reported in Chapter Four. Some of the authors' remarks on spirituality suggest even more advanced views or expectations for human emergence in the future. They were separated out from the mere evidence of a transition and are reported along with other aspects of the future in Chapter Five. The subcategory of love relates to new expectations for spirituality and is reported in that connection in Chapter Five.

Other topics originally seen as elements of the social paradigm were later perceived as aspects of human emergence in the future and are reported as such in Chapter Five. These are the mind (including consciousness), knowledge (which was later qualified as deep learning), causal reality, intuition, creativity, and symbolism (including mythology). Some aspects of these last two topics focus more directly on leadership and are reported accordingly.

The remaining topics in this major area are technology and ecology, and they are so closely intertwined as to be inseparable. They reflect societal considerations for organizations as reported in Chapter Seven. Authors' concerns about women focus primarily on issues concerning organizations as social entities, and these concerns are also reported in Chapter Seven. The category of women does not combine with any other; it maintains a major focus in its own right.

The last two major areas of focus, organizations as paradigms and organizational elements, were the most difficult to synthesize. After a good deal of manipulation of the data during this inference stage, I re-evaluated and revamped the material again during the writing stage.

Organizations-as-paradigms initially comprised the following groups of concerns: definitions of organizations (out of which grew models and metaphors), science-based organization models, humanist or participative models, old organizational practices, new organizational practices, organizations in transition, perceptions of organizations in the future, organizations as networks, organizations as systems (out of which came new systems theories, organizations as organisms, and political systems), organizational cultures, organizational relationships to society, and organizational relationships to the family.

These concerns were ultimately ordered and reported as follows: Definitions of organizations completed Chapter Two, the definitions of terms basic to the study. Material concerning the relationship of organizations to society is not simply a facet of organizations as paradigms but the key to relating issues about organizations to societal concerns, and it introduces the chapter focusing on that relationship, Chapter Six.

This chapter reports authors' views of the development of organizations in parallel with previous chapters on the development of societal paradigm, beginning with the authors' perceptions of old paradigm practices (which, according to the writers' represented, included humanistic or participative practices). Material which focused on issues of organizations in transition continues the parallel, and that category, along with the role of leaders as change agents in the organizational process, completes Chapter Six.

The authors' ideas about organizational transition focus on two topics: the impetus toward transition and the transition itself. The impetus deals with societal pressures, along with the already-mentioned discussions of ecology and technology reflecting these pressures. In addition, issues concerning the economy and globalism (initially classified with the final major area of interest, elements of organizations) also reflect such pressures, and they were added to this discussion.

The remainder of the authors' interests in organizations focus more on internal aspects rather on interrelationships with society. Discussions of organizational models, however, do reflect a parallel between organizational development and societal paradigm development. Metaphors and models (which had been previously separated from definitions of organizations) relate both to the discussions of science-based organizational models and to the descriptions of organizations of the future. These discussions of organizational models reflect paradigm shifting and are reported as orthodox and neo-orthodox views in Chapter Seven.

The authors' discussions of organizational culture continue the examination of internal aspects of organizations and are also reported in Chapter Seven. This category provides an umbrella for discussing many of the aspects of organizations which were initially perceived as falling in the fifth major area of concern: organizational elements. An analysis of this area is discussed momentarily.

The remaining views about the internal aspects of organizations as paradigmatic entities address either operational-structural concerns or systems points of view, the latter appearing to perceive organizations from a level somewhere between culture and structure. The authors' remarks on organizations both as systems and as structures are reported in Chapter Eight.

The categories and subcategories concerning organizations as systems (organizations as organisms, modern systems theory, and political systems) are reported much as originally discerned. The category of new organizational practices focuses primarily on organizational structures, and it provides an introduction to that discussion. Many of the elements of organizations relate directly to that group of concerns. The final topic in this area, organizational relations to families, reflects only one aspect of organizational members' needs and is reported along with other

needs in Chapter Seven.

The last major area of interest concerns these organizational elements: globalism, communications, demographics, economics (with a subcategory of consumerism), education and training, jobs (with entrepreneurs), the labor force, personal needs, leisure, motivation and rewards, productivity, structure, technology, values (including ethics and morality as well as spirituality), and women in organizations.

The framework for the final disposition of these elements is already well established and is justified by the above explanation of inferences. Economics (along with productivity as one aspect), globalism, and technology (in conjunction with ecology) are societal considerations for organizations and are reported in Chapter Six. Discussions of values, ethics and morality, and spirituality were reported as major aspects of organizational culture in Chapter Seven.

Also, as the primary focus in a discussion of human perspectives, the authors' views about personal needs and motivations are reported in Chapter Seven. These categories hold some specific concerns about attitudes, and they also reveal some needs and wants in addition to those of leisure and family relationships which had previously been identified as separate concerns. The authors' ideas about women's roles and positions in organizations are also reported as an aspect of human perspectives.

The remaining elements identified in this area relate to organizational structures and are reported in Chapter Eight. The authors' remarks on organizational structures to contribute to introductory ideas as well as provide more specific interests in that area. Individually identified interests such as demographics, labor force, jobs, and work (which were restructured and are reported as work), and a relatively long segment on education, reflecting a large amount of concern about that topic, complete that discussion.

The category of communications reflects ideas about new organizational structures such as networks, which contributes to the total picture of organizations as structures. The data on management relate directly to managing the structures of organizations and are reported in Chapter Eight. Some authors specifically address

the process of management as separate from leadership, which contributes to perceiving the role of leaders as visionaries in organizations, and these views are also reported in Chapter Eight.

The final outcome of the process conducted at stage four is ultimately found in stage five: the report of the research or the dissertation. During the analysis process I came to understand and fully appreciate the technical writers' description of it as a creative and intuitive process. Other investigators would likely have proceeded through the process somewhat differently. Given the amount of data, however, which tended to corroborate the categories by sheer frequency of attention, and the necessity of letting the authors lead the way in order to complete the process, it is also likely that, in general, similar perceptions of the phenomena would have emerged. After all, the authors said what they said.

The major difficulty I encountered, as mentioned, was in finding ways to separate out the authors' tightly-woven discussions in order to provide a structure which would help build an understanding of the phenomena but which would avoid redundancy and which would still give the reader a perception of the close interrelationship of the issues and a sense of the holism.

I experienced a number of surprises. One was the width, depth, and breadth of concerns expressed. I had no expectation that this study would take on the length and depth that it has. Another surprise was that there was so much coherence. Early in the process I began to perceive that "everyone is saying the same thing" albeit from their own point of view or area of interest. A third surprise was the general awareness of and wide support of the need for increased spirituality in the future.

The final surprise was how well the ideas seemed to flow in the reporting process. Considering the above insights, this should probably not have been unexpected. However, even though it was a long and painstaking process to identify relationships and to determine a linear means to present them, I continued to be amazed at how one idea seemed to flow directly into the next.

Stage five: Reporting. Lincoln noted that just as the particulars of any given context shape the interpretation of the data, so too do they shape the conclusions (1985b, p. 148). Lincoln saw the importance of the conclusions of naturalistic

research as expressing the experience or the reality of the area under study. It is the "task for inquirers to teach as well as to learn."

Borg and Gall gave two suggestions for good reporting. The first refers to causal inference. The authors cautioned against generalizing conclusions that one set of events brought about, directly or indirectly, a subsequent set of events. They suggested that knowing more about antecedents make it more likely to discover possible causes and that an increase in the amount of data strengthens generalizations (1983, p. 824).

Borg and Gall's second suggestion is to be careful about language, particularly the use of adjectives, which can have particular interpretive significance (p. 824). Strauss and Corbin agreed. They suggested letting "informants speak for themselves," reporting spontaneous and meaningful expression with little interference from the inquirer's words or observations.

This researcher has attempted to fulfill these requirements for good reporting. During the nine months I spent in the writing stage of this research, the context continued to drive the shape of the conclusion. As noted in stage four, analyses and manipulation of the data continued throughout the reporting phase. And, not only did the authors' ideas direct the shape of the outcome, for the most part their words delivered the message. I deliberately avoided interjecting descriptive or editorial comments except for calling the reader's attention to certain statements, such as an opportunity to compare authors' views, for example, or to summarize. It was my intention to ensure that personal perspectives or biases be kept to a minimum--realizing that determining which materials would be included and how the data would be arranged and reported certainly constitutes a bias of sorts.

In addition, I deliberately avoided the use of cause-effect inferences or statements. For the most part, the authors did not attempt to create cause-effect relationships, and such relationships are neither provable nor relevant to a naturalistic study. Besides, there is sufficient material for readers to make whatever inferences regarding causes and effects that they choose. I did, of course, endeavor to reflect the relationships of ideas, just as the authors did, with the sole purpose of attempting to create a solid foundation for the study's conclusions.

The study concludes, then, with one final analysis of the data. I reviewed the entire study to identify major themes and determine if they related sufficiently to reveal a culminating set of inferences which could be presented as a theoretical base on which to develop a model of organizations in transition. Having determined that such a base did emerge, it is presented as the last stage of the study along with the model which was developed from it.

Results: A Model

The purpose of this study has been to generate data with which to answer a set of research questions which were based on a set of assumptions. The answers to those questions, data permitting, were aimed at developing a theoretical basis for a useful model. For the study to be successful, then, the data must serve to reflect and uphold the assumptions, answer the questions, provide a theoretical base, and furnish the components of a model. More specifically, the data for this study must provide a background of understanding about our turbulent times, about the effect of these times on organizations, about what might help organizational leaders and members move successfully to the future, and about what organizations in transition to that future might look like.

Having accomplished the first two purposes of the study--examining the current literature to build a basis of understanding of our time and exploring the effects of these times on organizations--this researcher is satisfied that the data have successfully provided all of the above. I respectfully suggest that a review of the analysis to identify major themes in the process of accomplishing the final two purposes--development of a theoretical base and presentation of a model--will justify that conclusion.

Theoretical Base

The purpose of this step, as noted in Chapter One, is to determine if knowledge of current social and organizational stress can contribute to a theoretical frame for conjecturing about organizations as they progress in a transition toward the future. The following discussion is a review of the literature studied, focusing on the points most frequently and strongly expressed by the authors surveyed. This review

reveals a number of recurring themes which the researcher offers as theoretical bases for developing a model. The material, as it is presented in this section, does not refer specifically to authors as direct sources. Rather it is primarily a composite of the thinking previously presented and the analyses of that thinking. Some few statements reflect insights which occurred to the researcher as the authors' ideas were pulled together in the review process. The total is formulated and offered as theory.

Turbulent times. Three related points of view suggest the present as a time of turbulence and transition: first, an outdated science-based belief system has dominated and impacted on society; second, stress and turmoil are currently in evidence; and third, new beliefs and practices are rejecting the old paradigm and focusing on a new one.

First, concerning the dominance of science, the turmoil being experienced within today's societal system is, at heart, a direct result of the development of a science-based paradigm which began in the early 1600s with Galileo's confirmation of Copernicus' theory of a social-centered universe. Galileo's discoveries stimulated an epochal shift and formed the basis of the entire modern world view. The earth was no longer the fixed center of the universe and humanity was no longer favored. Religious-based beliefs were questioned and a thirst for objective knowledge grew.

At the time of Galileo's discoveries, Descartes proposed reason as the foundation of meaning and the valid means of analysis. Logical philosophy became the basis for scientific modes of thought, the universe was seen as a rational system of logical laws--which were accepted as the bases for norms and standards--and the subjective was separated from the objective. Dualistic alienation began at this time. The outer world replaced religion as a compelling belief system, and the inner world was repressed and denied.

Scientific objectivity dominated the outer world. This domination has been based on the following beliefs: logical empiricism (the belief that all knowledge is acquired by direct experience of the external world through the physical senses), positivism (an emphasis on observable, measurable physical matter), objectivism (the belief that the world consists of fixed, external objects), and reductionism (the belief that understanding comes from studying elemental parts in isolation).

Scientific methods based on these beliefs controlled a utilitarian search for knowledge. Modes of inquiry focused on understanding, predicting and controlling events, and soon turned the focus toward developing power, efficiency, and progress. This focus stimulated mechanization and technology, which ultimately resulted in the maximized production of goods and services and the replacement of human labor by machines.

Submission to the scientific-objective view and its basic beliefs had a direct impact on humankind's personal and social behaviors and the application of these beliefs through the social sciences became tools for controlling nature and for managing society. Separatist thinking, for example, led to loss of meaning and to humanity's estrangement from its own experience. It led to a destroyed perception of equality, citizenship, and democratic participation and to self-preservation and self-actualization as the main concerns of people in our society.

These self-interests led to our adoption of pragmatic values with an emphasis on winning and success, with immediate interests seen as justification for actions, and with personal needs and desires as more important than the means for accomplishing them. In addition, this ethic of achievement, coupled with the belief that order is granted extraneously, led to acquisitive materialism--a focus on property as the main concern, on affluence and material standards of living as the means to personal gratification, and on values as secondary properties of things.

Further, the emphasis on matter and the lack of concern for intrinsic ends illustrated a neglect of inner, human experiences and an erosion of transcendental and moral bases which have been replaced by an emphasis on the marketplace and the dominance of capitalism and economics. Such dominance has created stress in many ways. For example, the capitalist system created exchange by contract and eroded noncontractual bonds between people, consumerism led inevitably to competition and conflict, and technology and maximal productivity disrupted and destroyed the environment.

Regarding today's turmoil, inconsistencies are now evident between the theories of science and today's world, awareness is rising that past knowledge is not a valid guide for new realities, and the old paradigm is increasingly unworkable in

today's rapidly changing society. As serious disturbances and disruptions in our social and economic life become more evident, a fundamental shift in attitude is taking place.

This disturbance reflects the impact of a science-based belief system. People have become aware that the mechanical worldview is not working well in critical areas of their personal and social lives, that the social world is no longer serving as it was intended, and that humanity no longer feels at home with old social ideas. A new world view is latently present. There is a superficial overlay of the new over the old, but the old guard of society is still clinging to outdated illusions. These competing realities are creating dissonance and discomfort. Old guiding themes are exhausted, new ideas are challenged and resisted, and, as a result, the overall pattern is disintegrating. Many people feel uncomfortable and are threatened by dark visions of an unknown future and possible extinction. They are experiencing a major upheaval and an end of human capacity to interpret what is happening. It is a time of emptiness and spiritual exploitation. Life seems hollow and meaningless.

People feel separated from inner knowing and from the meaning derived from relationships. They are unsure of their roles. Some are ambivalent about the future, and some are enthusiastic, but many are reluctant to move forward. They exhibit a high degree of resistance in response to threats to their belief system, and they desire to regain the past. Their psychological needs are not being met, and they don't know how to achieve autonomy within the larger world so they are erecting psychological barriers in an effort to create conformity and to reject the novel.

As people experience confusion, disorientation, depression, anxiety, and fear, they may attempt to avoid recognizing problems or they may exhibit frustration through breakdown. Typical examples of such behaviors are crime and poor mental health at the personal level, uncontrolled special interests and the failure of social services at the social level, and overpopulation and destruction of resources at the global level.

People are feeling a need for shared responses. They are looking for meaning and yearn for absolute values. They are seeking for a way to tell what life means--whether it is mechanical and accidental or meaningful and purposeful. They are

searching for guiding premises, yet they lack tradition or philosophy to provide moral meaning or guide an ethical vision of the common good. There are no definitions or descriptions of values on which to base civic virtue. Our current society lacks symbols and myths with which to identify meanings, and there is no transcendental purpose to stimulate energy. In short, there is a crisis of vision.

No society in the past has ever been in this situation. We are in the dilemma of being caught between eras--the collapse of the industrial era and the demise of its social structures, and an unknown future. We are buffeted by social change, and it is not possible to live with and ignore these contradictions. Progress is a force, and we are approaching a critical point--the highest stage of human development ever to have occurred. Conditions are making a choice imperative, and the change must reflect a massive, fundamental shift in beliefs about the way the world works--a challenge to science and the old paradigm and a transformation in thinking toward more spiritual and mystical views.

Such a shift can be difficult and dangerous. Capitalism is resilient and the accumulation of wealth is a well-entrenched goal, for example, but the change will be cathartic and uplifting. A deep change in beliefs must be adopted from the view of the beginner's mind, and it occurs through collective thought forms. It will provide the wellspring of reverence for all beings which is necessary to achieve balance.

Resolution of the many evidences of transitional turmoil is ultimately achieved through balance. Imbalance is destructive. Polarities must be transformed and fused, creating an integrated power. Convergence between the nature and meaning of empirical science and philosophy and the essence of transcendental and spiritual knowledge is the greatest issue to be resolved in our time. Fundamental distinctions exist between viewing the world as a living organism (life) and a machine (the antithesis to life). There are certain elements in old paradigm which are useful and which could be retained as a means to maintain stability. Newly emerging science, which perceives the world as a whole living system and which becomes engaged in transcendental questions, begins to bridge the gap. A meta-physical framework could be developed for encompassing both ways of contacting reality and for bringing scientific reasoning into better balance with nonscientific reasoning. Most

importantly, there is an urgent need to reconcile opposites, to eliminate fixities, and to pursue adaptability in order to deal successfully with the present turmoil and to move forward to the future.

Equilibrium is dynamic, and there are no absolute answers. There is never a final state. There must be a place for negativity and competition as well as for change and cooperation. Maladjustments can and will occur, and they must be endured and a middle ground maintained because equilibrium is necessary for humans to exercise higher functions and to grow.

Balance ultimately comes from recognizing both the realities of the present and what we wish to accomplish in the future. We are most alert and dynamic when we are maintaining a tentative balance and are poised and ready for action. Balance, then, is a state of tension. And balance with a poise toward transcendental purposes, that is with the intention of maintaining a balanced move toward those purposes, suggests that spirituality may indeed provide both the guiding premises and the energy to move humanity to higher levels.

The existence of unrest during the present time is accompanied by the stimulus of new views. Transition can be seen in changes in underlying assumptions and new views which are currently emerging. Many people are beginning to re-examine and re-appraise long held beliefs. They are altering the way they have thought about the world, and they are developing new patterns of belief. These are the beginnings of profound changes or a transformation, and, as individuals make new decisions about their deepest levels of beliefs, changes will ultimately occur in the basic predispositions and choices of the world.

Many actions of individual citizens and groups who are acquiring deeper knowledge and taking responsibility is evidence that greater human awareness is developing and that many people are shifting to new levels of consciousness. There are evidences of changes in fundamental belief structures and of changes in the quality of human experience. New metaphysical ideological bases are developing with an image of humanity as transcendent.

Humanity is beginning to draw more fully on inner resources, is awakening to its true nature, and is developing a new image of itself as spiritually free and as

having choice. The human mind is developing a holistic perception of reality and is coming to understand the laws and processes of nature which then engenders higher ideals and concern for higher purposes. These deeper stirring are stimulating a new wave of thought about basic cultural premises and dominant values of civilization under a higher order--thoughts about justice and freedom with responsibility and about changes in social roles and organizations.

The emergence of a new focus on spirituality is the basis of a change in our perceptions of values and of a fundamental transformation of mind. This focus arises from the need to fill the void that society's belief in separateness and the resultant meaninglessness of existence have left in people's lives. A consciousness movement or a new age spirituality is beginning to coalesce, and it is the basis of a global religious revival and of societal transformation.

Spirituality is a quest for meaning and direction, an attempt to perceive the universe and humanity's nature and fate within it. Through spirituality, people are seeking a means for connectedness, a means for identifying the inner depths of being and life by experiencing them through unity with the whole of nature, through perception of the larger reality which lies beyond known boundaries, or through connection with their origin or the divine creator.

The focus on spirituality is a response to the need to know that humans are connected with a living force, that their brain is attuned with a larger domain, that they have a transcendental connection, and that they are one with the creation of the universe as co-creator. People need to perceive the existence of an inspirational guide and see life as sacred in order to perceive it as purposeful. They must achieve a sense of psychological well-being. A spiritual path is found in a pattern that quenches this thirst for unification or that stimulates both awareness of a universal presence and connection to that presence. This perception of connection is considered wisdom.

The most universal path is that which has remained constant through the centuries: the perennial wisdom--a cosmic story of the unifying principle of the universe. The perennial wisdom suggests the presence of a creative and evolving divinity which discloses itself to the human heart and which directs evolutionary development as a steadily progressing ascension which gradually unifies the multiple

elements of existence into increasing stages of planetary compression, integration, and complexity back toward the source and ultimately into convergence with creation. This sense of convergence releases an upward spiritual force which pulls the tide of consciousness in the spirit of tension infallibly and irreversibly forward toward completion.

This spiritual path reflects human and world unity through the creation of a matrix of linked beliefs in which all lines and boundaries, between mind and body or spiritual and physical for example, are erased so that the self becomes dissolved into at-oneness with the divine. Transcendence is achieved at the ultimate pole or convergence point where the climax of the long evolution culminates in total cosmic involution. At this point humankind is detached from all material arrangements, converges with all consciousness, achieves the ability to completely reflect upon itself, and awakens to the ultimate forces of nature and the mystic dimensions of self. This process takes place both instantly--in atoms and molecules--and over centuries. In this view the world has a history of ever-progressive, divine unfolding, and a single lifetime reflects one, small version of the total cosmic evolutionary process.

Individual transformation takes years of inner work and contemplation, and it cannot take place without love. Love is the energy of harmony and wholeness. The process of unification and convergence requires a human ambiance of caring for self and others--perceiving love as an interrelated element of transformation.

Adherence to this type of spiritual path provides coherent answers to core essential questions. It supports the presence of a divine creator and aligns humanity with the mystery and patterns of creation. It emphasized interconnectedness and creates holism, relating individuals to the universal consciousness and perceiving personal energy as the energy of the universe. It presents human life as a meaningful, intelligent part of the cosmos and human existence as having goals and ends.

Meanings and awareness which result from this spirituality affect human attitudes and behaviors. People perceive a need and desire to fully become and exceed themselves, to pay attention to their souls, to develop self-knowledge and inner growth, and to transcend personal concerns. Awareness of a divine direction

stimulates an intention to participate consciously in a supreme purpose and to move to higher levels of ethics and morality. Awareness of the laws of human development as an ultimate reality and of the nature of humanness suggests humanity as ultimately responsible for cosmic evolution. It changes the way people see themselves in relation to each other, and it prompts them to perceive all people as members of a universal community. The human ego becomes disengaged from personal needs in favor of a more mature stance to act responsibly. The new view prompts people toward a greater sense of responsibility to others, a need to achieve a better society, and a desire to move beyond self-centeredness.

In addition, the experience of being a co-creator with the divine spirit stimulates a rediscovery of the human side of ourselves and of our full capacities. The gifts of a liberating vision, of relief and release from the physical world, and of faith as a source of guidance inspire people to live life fully awake as a celebration and expression of wonder as well as to exercise their limitless potential to shape new personalities and new cultures. They become less materialistic, more alert to the supreme goodness in the world, and more hospitable to creative and mystical experience.

Such a spiritual path is not a panacea for today's turbulence. Conscience must accompany consciousness, and the critique of injustice must accompany bliss. The importance of the spiritual path, however, is emphasized by other new views which are emerging during this time which reflect a new spiritual base.

One new view of the world and society focuses on holism, globalism, unity, community, or some similar framework for an all-encompassing oneness in emerging civilization. Since people are perceiving a fit between individual purposes and larger cosmic purposes, they are adopting a hologrammic, whole-systems view of nature and its interdependencies. With the perception of all people forming a single consciousness with the common destiny of converging on totalization in response to the unifying energy of the cosmos, people are reflecting a holistic view of the planet as an entire human family.

People are increasingly aware that with its increased population the globe is becoming more restrictive, that isolation is untenable, that humanity is being forced

together in a process of ultra-socialization, that people are uniting in greater organization, and that interrelationships are becoming the basic structures and processes of the universe.

People are beginning to perceive a global civilization made up of communities operating as wholes and as coalitions of multicultural dimensions which are networking and exchanging ideas, information, technology, values, beliefs, languages, and cultures in responses to global problems and the need to influence solutions to those problems.

This interactivity has brought attention to the impact of global interrelationships. People are beginning to see a need for becoming better integrated and for identifying mutual needs and a common cause--a search for community, the development of common vision, and an alignment of the collective conscious. They are perceiving both the value of diversity and the need for cooperation so that social action in a universal society can be aimed at the betterment of society and can be judged on the basis of its impact on the universal community.

In keeping with the holistic concern about global cooperation, voices are being raised in concern about the United States as a global participant and a partner in the unity of humankind. There is concern about the industrialized nations enjoying a lavish standard of living compared with the rest of the world and that the insatiable civilizations need to be healed. People are aware that economic growth and democracy go hand-in-hand, but they are also becoming aware that the United States, in general, is not coping well with prosperity, that democracy based on a market system is failing, and that the military-industrial approach to world involvement is resulting in a decline of influence.

The problems engendered by technology and industry are driving society to a paradigm shift. The materialistic appetite and the drive to create abundance has engendered a belief in scarcity, heated competition, and separation from integrity.

The decline in democracy and the separation of people from faith in government is evidence of the negative impact of old-paradigm beliefs and practices. People are suspicious of government. They see government decision making as removed from reality, and they are aware that big government is too cumbersome and

is no longer appropriate nor prepared for the responsibility of changing society.

A related view which is also more widely expressed is the need for a total assessment of the existing discipline of economics as the most powerful discipline that controls our times, and of the entire economic-political structure and its impact. People are aware that they are caught in a system mesmerized by profit making and that such a system is both a threat to survival and an inadequate philosophy for a transformed society.

People are calling for a reverse in the emphasis on economic growth, on societal decisions made according to economic and market factors, on attention given to special economic interests, on focus on material values, and on the belief that amassing money is the key to life. They are suggesting that a new system needs to be developed based on a more holistic view, one which has greater sensitivity to human values and societal needs, which is more compatible with emerging values, and which emphasizes fairness and equity. They seek, for example, some redistribution of incomes, voluntary simplicity, a focus on emotional security and survival, an emphasis on a conserver society, and the development of prosperity consciousness.

A specific concern for the universal community, which is an outgrowth of holistic views, is the killing of mother earth. People perceive the earth as a part of the political constituency, humanity as interrelated with nature, all organisms as co-evolving, humans as part of a living body, and so on. As a result, they are calling for the development of an ecological ethic focusing on need to care for the environment and maintain the planet. But they see the focus on economic growth, addiction to consumerism, questionable practices of business and industry as the dominant mores on the planet, all of which are incompatible with a world ecological concern for scarce resources. People reflect a desire for a reunification with nature. They are calling for a view of humanity as the steward of resources and are seeking greater interest in the development of a conscious technology. They are asking for greater responsibility in the efforts to achieve a balance between the technical/mechanical view of the earth and the consciousness/spiritual view.

Continuing in the spirit of holism, another rising new view is that people are more aware that separatism has engendered psychological contradictions between self-

interests and general interests. Capitalism, for example, which emphasizes singular achievement through wealth and success and which enables people to develop personal empowerment, also places people in conflict and produces a callousness toward life. People are more aware that defining success and attempting to achieve personal satisfaction through wealth has led to a preoccupation with material gain, the neglect of a sense of community, the withdrawal of personal concern from involvement in social interaction, and the negating of inner resources.

People see that an overemphasis on society can create a neglect of the inner self and that inner transcendence and self-transformation among large numbers of members must be achieved before societal transformation can take place. They understand therefore, that individuation and collectivization are related rather than opposing ideas.

People also see that personal achievement comes through harmony with groups and that society and culture are the appropriate place for self-transformation to occur. As they perceive higher purposes, people become aware that transformation first takes place in the individual mind and heart. They begin to see that by moving to greater consciousness people are capable of examining dead philosophies, of perceiving the values of status and power as egoistic, of determining their personal responsibility for their own and society's survival, and of overcoming mistrust and automatic reactions. They are capable of choosing a course for fuller development and for restoring the soul.

People are achieving the ability to focus on inner-directed values such as honesty, humility, compassion, and love, to trust in change, and to move to responsible action. They can take up the burden of correction, change their present perceptions, find new paths, and work to modify the impact of their past experience. They are now achieving the dedication needed to make sacrifices and to subordinate themselves to the dynamic good of the whole.

There is growing awareness of the need for individuals to achieve both personal success and public success, and people are aware that what is needed is balance: a society which promotes the achievement of true inner autonomy by supporting individuals who interrelate autonomously and who experience a sense of

commitment to the wholeness of life.

Settling the I-versus-we separateness issue is one of the greatest tasks of the present. There is a need for compatible values aimed at achieving the common good such as the following: freedom or liberty (to engage in interactions and dialogue from a position of equality) and justice (freedom of diversity accompanied by personal and social responsibility). These values are the basic tenets or ethical values on which democracy rests, and they are based on spirituality.

The right and need for personal development is another related view which is reflecting a period of transition. The focus on inner harmony, inner directedness, self-improvement and self-actualization is a form of compensation for the former impersonal nature of science-based belief. Such a focus comes in response to perceiving an inner connection to a spiritual center, to knowing that change comes from within, and to a collective psychic commitment for betterment.

One particular aspect of personal development widely supported by new views is development of the mind. With greater acceptance of humans as the highest developed organism in the organic holarchy and with the human mind as an organ of diversity and creativity, there is also wider belief that active engagement of the total mind reflects active participation in world knowledge and universal truth. There is increasing acceptance of the notion that civilization rises to greatness with full release of the potential of the human mind.

People now recognize creativity as a higher order form of thought which taps into highly developed, supraconscious capacities of the human mind. They are coming to agree that the urge to create is an impetus to move to higher spirals of energy and that the exhilarating burst of energy experienced at the brilliant moment of creative thought is a euphoric spiritual experience. People are also coming to understand that the inner knowing experienced as intuition is a result of trusting in and utilizing the full capacity of the larger mind to transform patterns and connections from deep influences and deep contexts to inner recognition. The powerful sense of correctness about these inner knowings are now being accepted as inspiration or as coming from a spiritual base. A third utilization of the full mind is also more widely adopted with new views. The dialectic, based on the power of critical inquiry, is

being viewed as stimulating known findings into a new perspective by unfolding and transforming contradictions and dualisms in pursuit of a sense of unity.

The power of the mind, not only to tap into the universal consciousness but also to affect it, is also more widely accepted. There is growing belief that all minds are linked together in a systems-as-a-whole network which forms the universal mind source and which operates for the conscious purpose of creation promotes the related belief that millions of people thinking together create a wholesale quickening of minds or a heightening of consciousness which has the power, through the collective vision, to create a desired society.

The ideas that the collective mind is the creator of the world and that the individual mind is the creator of events are gaining in currency. The mind or consciousness has both the primary intention to create reality and the ability to transmit energy pulses of information. We are becoming aware of the extent to which we create our own destiny, that the true nature of humanity is as co-creator of reality, and that we can consciously choose to access our potential and to enter this state so that creation becomes a conscious act.

By recognizing that the world is not "out there" but that we create the reality of each moment based on our operating premises about how the world works, we can utilize the unlimited capability to reshape our beliefs and bring in a new world by altering our premises. We need only to believe in the power of individuals to create their own destiny by affirming an image of solutions for the future or envisioning the unity necessary for survival, for example. By programming our unconscious belief system, our view of the future will determine what we get. It is important to participate responsibly and to project positive views of the future.

During this period of transition more people are doing both. This is the dawn of a conscious evolution, and a metamorphosis of society has begun. We are tuning in to the mystery of creation, experiencing the certainty of a purposeful universe, and perceiving a large, all-encompassing reality that transcends a single life. We are coming to better understand that our behavior is determined by our beliefs, that we hold the wisdom to foster a healthy change, that we have a moral obligation to fully develop and use our inner knowing, and that the key to a better future is to seek new

perspectives and to restructure our fundamental vision.

People are beginning to understand that life is a constant search for higher and higher levels and that the key to achieving higher levels is to strive continuously to understand the present reality while at the same time to hold firmly a vision of a desired future. These two views will create the balanced tension and provide the intention to continue in the transition.

Impact on organizations. The next area for review in which to identify major themes as theoretical bases for a model concerns the impact of our turbulent times--awareness of an outdated science-based belief system, turbulent behaviors, and rising new views--on society's organizations.

Not surprisingly, the impact of society's current transitional turbulence reflects parallel views between the societal turmoil and organizations reflection of it. Today's organizations were seen as reflecting old, science-based modes of thought and practices, as exhibiting signs of stress, and as indicating awareness of a need for change.

Perceiving organizations from science-based points of view stems from the earliest perception of organizations as social entities and from early development of organization theory. Such theory reflects the early relationship of social science to the physical or applied sciences--a belief that humans can be studied objectively and the assumption that social settings are stable environments. Organizational theory and its resultant perceptions of organizations, then, reflect not only that organizations can be studied objectively but also that they can be helped to develop through the application of selective, isolated facts.

Organizations long have been seen, then, from rationalist, positivist, objectivist, functionalist points of view as ordered, cohesive, concrete entities oriented toward achievement. For the most part, organizational theory has remained uncritical of itself, and the scientific view of organizations has largely remained unchallenged.

Based on that scientific view, and on mechanical imagery which stems from emphasis on the physical world, organizations have primarily been viewed as machines, that is, as simple tools for pursuing prespecified, desired ends. This view includes placing value on efficiency, order, control, and authority. Work in

organizations based on these old-paradigm views has primarily been perceived as performed in hierarchial, bureaucratic structures--based on the feudal system--which aim at preserving control and prestige for top members by generating adherence to rules and procedures.

More recent applications of organization theory continue to reflect science-based beliefs. Participative views, for example, aim at overcoming conflict in bureaucratic structures and at protecting power. Closed systems views focus on mechanisms for passing information to the top, and political systems point toward use of particular skills as tools for obtaining power and resources.

An organization's desired ends in today's society are market oriented, and those ends also reflect a mechanical mindset, focusing for the most part on financial operations, acquisition of resources, production, technology, and so on.

The culture of organizations which adhere closely to these mechanized views reflect the presence of relatively closed and limiting elements and processes which emphasize formal organizational phenomena, traditional values of orderliness, and work as both a moral obligation and a necessity for survival. There is an absence of guiding myths, images, or symbols which might stimulate innovation or change. Such a culture lacks the higher centers on which civilization is based such as humanity and spirit, ignores moral and ethical dimensions, and contributes to uncertainty about human values.

Learning in this culture is considered to take place through left-brained, reductionist, discursive ways of knowing. Management is considered to be rational, purposive, and decisive, with decisions based on progressive stages of data analysis. Old-paradigm views of organizations are patriarchal, which is reflected not only in rational, analytical approaches to problem solving but also in the leader as the dominant male authority figure at the top of the hierarchy--the lone male warrior or hero--with value placed on competition, domination, action, and mastery.

Just as societal focus on science-based belief systems is reflected in organizational thought and practice, so, too, does society's turbulence during this transition time relate to organizational stresses. We are in the middle of a very messy, bumpy transition period as we attempt to move away from top-down

organizational control. There is rising awareness that old forms of organizations are working less well and that conflicts will soon be getting too intense to suppress, and there are signs of a growing social force capable of producing major organizational change.

Although change is a constant underlying feature of organizations and a necessity for achieving ever-stretching objectives, organizations have many obstacles to change such as inertia, intolerance for the ambiguity caused by change (and therefore refusal to approach it), and inability to achieve the deep learning necessary for change.

The bumpy ride of transitional times and the likelihood of accelerated conflict is reflected in public opinion about organizational responsibilities for responding to shifting societal needs. The first opinion is that organizations have some responsibility to respond to societal concerns but that this responsibility is unclear. A different opinion is that the social responsibility of organizations is quite clear and that they can be induced to cooperate (within acceptable boundaries) in response to public outrage and to government intervention.

Some hold the opinion, however, that organizations may be able to resist successfully much of the government prodding on the grounds that large corporations are themselves taking over some governance function so that in the end there will be fewer government regulations. In this view organizations are evolving into powerful semistates which are not operating under the rules of democratic consent. Organizations are making unhampered decisions regularly based on their own advantages versus the public good.

Those who hold the opinion that government will prevail in persuading organizations to change suggest that the people are putting increased pressure on the governments to take the lead in changing organizations, that governmental regulations requiring more corporate responsibility are increasing, and that the courts are making organizations more responsible to the public.

Some people discount the impact of public demands by suggesting that social responsibility, at the bottom line, is a fallacy. They feel that organizations are prevented from voluntarily advocating any nonmarket-oriented position because it

impacts the (public) shareholders. Organizations are pressured by the economic system to generate not only profit but also jobs, income, and an increase in goods. Any unattractive alternative to the status quo will be found unacceptable.

Organizational transition is clearly an unsettled issue. A close look at the arguments against organizational change reveal that they are based on retaining old-paradigm views of economics. A shift will not occur unless these old views are relinquished and new perspectives developed, and a shift in views will ultimately stem from the stress experienced within organizations.

There are no illusions of immediate change, as most organizations continue to view the world in terms of market control and profit making. There has been disturbingly little change in beliefs about purposes, power, and how to lead, and predictability and control continue to be valued. Denial is past the point of no return, however, and new perspectives will create illumination, alternative paradigms will be defined, and the old paradigm will ultimately atrophy.

Organizations are showing signs of disabilities, and old science-based practices will ultimately be seen as neurotic and deceitful. Practices based on separatist views have led to: segmented work and isolation, lessened personal significance, boredom, meaningless communications, loss of self-confidence and self-respect, disconnection from spirit, and a loss of values--with deterioration of ethics and with no concept of civic virtue or social vision.

Management practices will be seen as meaningless, ineffective approaches which create a class system and which were developed for a predictable world that no longer exists. Old paradigm approaches will ultimately be perceived as creating obstacles to the quality of organizations and as hampering their ability to respond to a volatile environment. Many corporate "leaders" will be seen as dishonest and selfish opportunists who are lining their pockets at the expense of shareholders.

Sensitivity will arise to the destructive aspects of male dominance. Awareness of men's inability to accept the equality of women, of stereotyping and oppressive organizational climates, and of the devaluation and exploitation of women will lead to a re-examination of alternatives to the patriarchal belief system. Women will be seen as significant entities in the real world and as an equal part of the total human

experience.

Submergence of the masculine ego and emergence of feminine characteristics are great challenges of our time. Continued imbalance is life threatening. The feminine perspective is essential to the total vision of reality. There is a need to accept appropriate expressions of caring and support in human interaction, and the passive is essential to the active, the yin to the yang.

The impact of societal turmoil on organizations is reflected not only in old-paradigm practices and current stressors in organizations but also in the emergence of awareness of the need for organizational change. This is a time of unprecedented stress. Impetus for change is beginning and is gaining momentum.

People know that something is necessary. They are experiencing a personal need for meaning and commitment and are sensing that the time may now be ripe for new organizational belief systems. There is a building reservoir of positive energy and of willingness to forego immediate gratification for a vision of purpose, and this emerging energy is forming into an influential mass thoughtform. It is stimulating organizations toward experiencing a readiness for transformation which will result in qualitative changes.

Organizations are becoming aware that social circumstances are changing, that public pressures are mounting, that people are challenging the legitimacy of old-paradigm behaviors, and that a mechanical worldview is being undermined. They are experiencing a lack of fit with many aspects of their internal and external environments due to changes in member needs, in consumer attitudes toward social responsiveness, in national and cultural opinions about government and industry, and so on. As a result, many organizations perceive a need to be more socially responsive. They see that the time has come to explore the total environment, to ask new questions, to explore assumptions, and to take responsibility for accepting a shift as warranted, for adapting to change, and for bringing organizational goals in line with social goals.

Organizations are increasing their awareness and acceptance of societal forces as stimulating change. They are also increasing their awareness that the isolationist view of their role in society as primarily financial is crumbling and that their role and

responsibility in society are increasing.

There is recognition that social forms such as organizations are created by communities of people and that social practices emerge out of existing groups and organizations. Many people see organizations, then, as predominant forces in society and as the largest single factor capable of initiating social transformation and shaping the social agenda--as powerful instruments for guarding their best interests.

At the same time, many organizations perceive themselves as playing active roles in challenging society, in coordinating social action, in stimulating changes in the sociopolitical structure, and in constructing the social environment. With greater organizational realization of the ideas both that their primary product is their impact on the community and that they hold a vital role as guardians of societal values, organizations must also come to realize that they must accept a degree of public responsibility, that their social contribution is critical, that they must make decisions which preserve and enhance society, and they must become fully participating partners in achieving both societal advance and social balance.

The realization is rising that if organizations are to reflect both social pressure to change and organizational responsibility to contribute to a better society then they must develop more appropriate guides for operating in a new era. Old organizational theories and practices are no longer convincing. They are impractical and inoperative. They are out of touch with the environment, too inflexible for rapid change, not reflective of reality, and based on shaky assumptions. People are looking for realities which satisfy their experiences of truth.

There is an awareness that organizations must move beyond the belief systems on which they were created--beyond mechanical and hierarchical models based on a materialistic view and away from market-centered applications of technology, for example--because they no longer apply. Organizations must release old-paradigm perceptions of human nature, re-examine the basic beliefs and assumptions on which they were formed, re-evaluate conventional organization theory and research, critique existing metaphors, reconsider structural behaviors, and scrutinize work and work relationships.

People are becoming aware that today's organizational practices apply less and

less to today's society and that they create problems against the integration of new social beliefs. Organizations are being forced to transform their structures and modify their approaches or face extinction, and reconceptualization of the underlying premises is one of the most urgent items of our time. In order for organizations to reflect democratic alternatives and make them possible, organizations must think seriously about the nature of organization itself. A transformation of the philosophy of people requires a fundamental change in the belief systems and structures of organizations--a massive physical and psychological undertaking. It requires both a change in the big picture of reality which underlies the organizational systems--new transformational views--and in the methods and practices by which organizations operate and conform to that new picture--a new and unprecedented kind of organizational science.

There is growing awareness that new organizational practices and policies must be designed to support transformation. Such changes must reflect people's needs for shifts in power (from authoritarian to interactive), increased flow of information (from top down to interlaced webs of interaction), opportunities to grow and achieve (from focus on position advancement to inner development), new ways to work, new working conditions, and so on.

Transformed organizational cultures must reflect understanding of emerging social structures. People are demanding that organizations focus inward, and they are examining the corporate soul. People are not only expecting organizations to show greater concern for the effects of their actions on society, and they are also seeking an inward focus on human and spiritual values. The new society is emerging with a greater value on the individual and is being guided by a reviving spirituality.

Progress toward the realization of transformation depends on individuals experiencing change and uniting in a larger force field. The central theme of human advancement is increasing power and expansion of natural capacities. The guiding principles for the new age are that individuals are responsible and that individual energy matters. There is an increased awareness that organizations have lost touch with the totality of humanness, and there is a concern that they must not be allowed to suppress the human imperative.

There is a crisis among the members. Organizational members are no longer finding meaning in work and self-denial. People are withdrawing allegiance and drawing inward to find meaning elsewhere. Organizations must recognize that there are no organizations, only people. They must focus on achieving success through human satisfaction. They must develop a new psychological climate and new person-centered perspectives which recognize human drives and desires and which support discovery of creative potential, development of inner knowing and wisdom, and involvement in continuous learning. Organizations must enter into a partnership with their members, supporting and tapping human energy and vitality in order to move both the organizations themselves and their members to higher levels of responsibility and morality.

Moral responsibility is reappearing in society as spirituality moves into the mainstream. On a world scale there is an increased yearning for something spiritual--a search for the inner and deeper meanings of existence--and that as society shows more interest in understanding the spiritual realm, people are pressing for more focus on spirituality in organizations.

Organizations, as places where we spend many waking hours, are appropriate places to pursue spiritual values. Instrumentalism is being supplanted by a more spiritual outlook as organizations begin to perceive the intrinsic value of human experience and to support the full realization of human potential. Organizations which are adopting a spiritual orientation are learning that such a view makes the experience more hospitable for members; it helps them find transcendent meaning in their participation. In addition, such organizations are determining that a spiritual base helps them to address their value concerns, to seek appropriate paths toward the future, and to address the consequences of their goals.

As organizations move toward human and spiritual values and away from old practices and views and as society progresses even more rapidly toward change, there is a great need for true leadership. Awareness is arising that old-paradigm command-and-control, white male, patriarchal models of leadership aren't working, that they are inadequate to the change of a new age, and that a new human and spiritually-based leadership is imperative.

Support for change. The third set of themes sought in the data to ensure the presence of a theoretical base focuses on information or support which might help organizations and their leaders move successfully to the future. Writers provided clues and suggestions which reflect their views on the presence in society and organizations of old paradigm beliefs, of transitional turmoil and stress, and of awareness of the need for change.

Qualitative change is needed for most organizations to reflect and live in harmony with emerging social beliefs. Organizations must move beyond ego attachments to their priorities and conflicts and must modify their practices and policies in order to move toward synthesis. In response to internal needs of their members, who are searching for meaning and connection, organizations must adopt human and spiritual values and must perceive people as relationship oriented. In response to external concerns about global membership and continued habitation of the planet, organizations must adopt more impartial and cooperative views of living together and must move toward balance and coordination between self-sufficiency and environmental connections.

Awareness of the importance of both internal interaction and external environmental factors is achieved by organizations moving beyond old-paradigm thinking and adopting a view of organizations as open systems. This perception of organizations provides a framework or basis for thinking holistically, for seeing the world in terms of relationships, or for perceiving both the internal mind and the external world in the context of total interconnection.

The holistic-systems view of organizations suggests that there are multiple, overlapping hierarchies--three in its simplest form--which interconnect in mutual support but which are not controlled by any single principle. Organizations are perceived as holons or system units within the holarchy which interact with other holons on different levels in constantly moving, adjusting interrelationships of dynamic energy.

Subunits, also holons--which may be thought of as individual members or member groups--are separate and replaceable from the larger unity, but when constituted, they share a common life and move to achieve core purposes. In

addition, each unit participating in the system at any level can reference the common vision of the whole. Units interacting with others on the same level form a supra-system or all-encompassing ecosystem, which can be perceived as the organization's environment. This complex outer world creates external forces which hold the organization units accountable.

The autonomous, organizational units, then, are living, dynamic, interactive whole systems of relationships among parts within a local environment. Each unit is an interlaced web of tension with plural and diffused centers of power and decision making and loose control which emanates from individuals who have laws unto themselves and from numerous local points which are not essentially functional constituents of the whole. Each organizational unit has an internal identity (values, vision, purposes) and exhibits its own structure (behaviors, events) and each perceives its own reality of the universe. Each unit has external openness, with freedom from constraints to receive feedback from the environment and to learn, change, and evolve continuously.

Success of the organizational unit depends on achieving appropriate relationships both internally and externally. Internally, whole-system thinking allows members the freedom to develop mastery, to locate themselves within the larger context, and to relate to one another and to their common habitat. It helps them see the connectedness between their personal actions and the external forces, to develop a broader vision of the environment, and to become committed to the whole.

Whole systems views of the external larger system or the environment are the key to effective application of systems theory. This is an age of perpetual change, and change is the inherent property of interactive systems. In this time of social movement, problems are most likely to occur at the boundaries between systems. The value of a systems view is in perceiving the link between each element of the system and key variables in the larger environment so that organizations can be managed interactively.

Organizations must be aware of their interdependence with the larger whole and of the need for appropriate relationships. They must understand unity and separateness. They must perceive systems of information as flowing in large circuitry

through fluid boundaries and must see patterns of logic and change--understanding that change unfolds and systems evolve (or disappear) through the circular patterns of interaction.

With this knowledge organizations will understand their responsibility, as co-creators of the larger complex, for addressing the well being of the environment and for supporting the whole system as it evolves. They will perceive that focusing solely on their own survival, for example, will destroy the environment.

For the health and survival of organizations, organizational systems must be aware of the need to interact with the environment and to respond to its changes in order to engage in self-regulating behaviors. Organizations must see the environment as part of themselves and must continually assess both the environment and themselves to ensure that the organizational system remains viable.

Organizations need to explore the environment continuously--reading available and related information, identifying known or suspected variables, detecting variations, and evaluating multiple causes--and to view positive or negative feedback as essential information. In light of this new information, organizations must also assess their own inner workings--re-examining their values and the worthiness and meaning of their goals, evaluating how well plans or actions are serving intended purposes, and generally judging how relevant all current factors are to the larger purposes and to the service of those purposes.

The purpose of this interactive process is to discover continuously the organizational system's place in the larger system, and it results in the organization making decisions about which of its elements to hold on to in order to maintain autonomy and stability and which to slough off for change and progress.

The process of organizational growth and change determines organizational structure. Restructuring can't be decreed, only facilitated, and it often takes place through hundreds of tiny changes. Organizations are instruments for creating the future, and structure is a highly creative force. Organizations' structures may be the most powerful determiner of organizational behavior. Since organizational futures are determined largely by their internal elements and interactions, then it is very important for them to adopt appropriate structures for transformation. There is

currently a need for creative experimentation on organizational structures. The door is now open for a revolution.

There are a number of ideas about revolutionizing organizational structures. Since reality is in constant flux, and since predictable structures can't deal with continuous change, new age organizations should exhibit high degrees of fluidity and flexibility. Policies, procedures, and structures should reflect emerging social values and environmental change. Organizational structures should be consistent with organizational values and purposes, should integrate an organization's essential qualities and should align individual energies with those purposes and qualities.

Organizations should be designed on an appropriate scale for interaction and meshing of ideas so that people can communicate face to face. They should be flat, decentralized, open to innovation, self-organizing, self-renewing, and open to deep learning. A new design must reflect a human context. It must focus on people and reflect the ability to respond to members' needs. For example, along with participation through interaction, conditions should make personal freedom, autonomy, and control possible.

Networks are possible new organizational structures. These intertwining, multidimensional matrixes of communication fulfill many of the design conditions desired for organizations in the future. Networks are flexible: they are processes rather than structures, they are composed of hundreds of loose and indirect links, and they reflect decentralized and diffused power versus centralized control.

Networks also reflect emergent social values and environmental changes. They are people oriented, for example. They emerged from society as a means for engaging in human and harmonious interaction. They lower the barriers between people, and they facilitate the formation of kinship bonds and informal cooperation. Networks also reflect an appropriate scale for interaction. They rely on face-to-face communication and on the coalition of small groups such as ad hoc or flexible teams. They provide the human context for participation, autonomy, and creative expression. They promote interaction of ideas around unified beliefs and contributions to consensual decision making, they encourage the interplay of diverse opinions and beliefs, and they stimulate innovative thought as well as personal growth. They are

conducive, therefore, to organizational learning.

Just as organizational structures must grow out of an organizational system's interaction with its environment and the need for adapting successfully with that environment for survival, so must the strategies and processes which are carried on as part of that structure. Organizations are continuously engaged in processes of interaction, adjustment, change, and growth; and the whole system must therefore be geared to the process of operating in a flow state. Planned change is a fallacy. The unforeseen cannot be planned for. Processes and contents of organizations must reflect constant change and the intention to pursue worthy goals.

Good strategies develop gradually on the basis of on-going evaluations and experiences, and they merely provide a framework for dealing with unexpected events and for making continuous adjustments. They suggest answers about what directions or courses of action to take to make progress; they offer tentative guides or game plans for converting intentions into performance.

Appropriate strategies align members to organizational vision--focusing members' intentions and encouraging commitment. Appropriate strategies also build member readiness for change to develop the momentum necessary for action. By supporting cooperative relationships, nurturing the inner flow, and caring for mind and spirit, organizational policies and procedures help cultivate the positive perceptions people need in order to respond positively to change.

Supportive procedures and strategies are important, then, in order for organizational systems to maintain flexibility and to restructure as necessary in response to current social shifts. As jobs shift to knowledge and service work, for example, or from structured to independent and entrepreneurial, members may experience loss and confusion, and organizations must incorporate strategies for maintaining responsibility to support members through these times.

In conjunction with organizations perceiving holistic systems as appropriate means to perceive both internal and external stressors and in addition to attending to their structures and strategies in response to these stressors, organizations must also perceive themselves as social or culture-producing phenomena. In light of systemic changes in both internal and external environments, organizations need to re-examine

the shared values, belief systems, basic assumptions and meanings which actively influence the socialization of members and determine what they do.

Here again, organizational systems of shared understandings of experience emerge and grow rather than being decreed. Organizations are expressions of human consciousness or subjective experiences socially constructed from the minds of the people within them. Organizational cultures develop out of on-going social actions and processes which produce systems of shared meanings as well as patterns of thought, discourse, and symbols and which become characteristics of organizations' functions.

These characteristics then become an imprinting force for establishing tangible, cohesive forms and a sense of commonality. They become the organizational context in which people join as members and become empowered to take responsibility for organizational behaviors as well as the driving force for determining organization goals and for evaluating effectiveness.

These forces are the consequences of historical development, and they reflect the personal ideologies of former and current leaders. And just as cultures have been socially developed, they can be changed. Although belief systems may have been conditioned into humans over a lifetime, they may also be formulated consciously. They are not permanently fixed, and any group can change its norms.

Organizational transformation focuses first on changing culture and then on changing strategies and structures. Transformation cannot take place without underlying changes in organizational cultures. In order for permanent transformation to take place, organizational cultures must be remolded. To change, organizations must overcome the conditions which threaten survival. Organizations willing to adapt and change will lead the way to the next century.

Such adaptation and change cannot take place without examining the organization's deepest basic assumptions. Organizations must begin change by thinking of themselves as cultures and as needing to change the cultural norms. Changes in norms must be approached based on an understanding of how the assumptions both affect members and relate to the future. Changes cannot take place unless attention is focused on both the internal and external relations of the whole

organization. In addition, in order for the culture to be changed, higher-order assumptions must override and redefine old patterns. Organizational transformation requires the ability to perceive new images, and behavioral change occurs only when new behaviors become part of the cultural fabric.

New images and behavioral changes must reflect our changing times and promote successful advancement to the future. As a basic consideration, future-oriented organizations must be committed to an explicit set of values. Values are the bedrock of culture, they define the fundamental character of the organization, and shared core values are a prerequisite for organizational transformation. Further, a qualitative change in values is necessary. There is an urgent need for organizations to adopt moral and ethical principles. Organizations must have a solid moral base, and ethical principles must be an integral part of the organizational culture. They are a condition of survival. The organization's vision must be perceived as worthy and the purposes as worthwhile in order for members to adopt and share those goals and to develop the trust, cooperation, and enthusiasm, and energy necessary to participate in their attainment. People want to be associated with moral and ethical leadership, they want to see morality reflected in management, they want to align with goals aimed at higher purposes, and they want to participate in an organization which functions from a harmony of tension.

It is difficult to specify what ethical and moral behavior is. In general terms it is civilized behavior, proper conduct, and acting for the greatest benefit and the least harm. In more spiritual terms, it is acting from the heart and achieving wholeness or grace. Although there is no commonly held concept of the greater good, it is essential for organizational cultures to at least begin to reflect democratic values, such as freedom with responsibility and equal justice.

Organizations moving toward the future must recognize the importance of spirituality, both as a reflection of its place as a cornerstone for society and as a ground for organizational culture and values. Spirituality has an important place in organizations, not to make them places of worship, but to recognize the presence of the spiritual dimension as the heart of the organization--the animating life or vital force or energy which furnishes the will and strength to adjust to survive and

establishes a climate of meaning and direction. Organizational spirituality is the basis of wisdom, of achieving knowledge by being in tune with a higher self. By honoring forces greater than themselves organizations develop a basis for a set of deeply-held values and for meaning in their actions.

In addition to generally operating from value driven or spiritual bases, organizations moving to the future need to exhibit more specific characteristics, each of which suggests an underlying moral or ethical view and which together might be considered to reflect the spiritual base or to comprise the value system from which they operate.

Organizations must respond to external, social stressors by embracing social change--by being sensitive to society's needs and by being socially responsible. They must reflect democratic values in pursuit of their purposes, and they must focus on the quality of life. For example, organizations need to exhibit concern for social welfare by accepting the limitations for sustainable growth and by showing concern for the ecology and for preservation of resources.

Organizations must redefine profit, discontinue profit-making activities with hidden social costs, focus on the quality of their products and services, and consider the effect of their activities on all their constituents, customers and members included, as well as stockholders. In addition, organizations must develop reputations as positive agents for change by conducting responsible programs guided by spiritual principles--becoming involved in community regeneration, engaging in social reinvestment, and so on.

The guidance of spiritual principles is needed in organizational responses to internal needs for change as well as external. Organizational cultures and values must reflect concern for humans internally while remaining in tune with their membership in the larger whole. Their cultures need to reflect support for humans as active participants in many levels of the holistic system. For future success, organizations need to adopt a worldview of people as both individuals and as members of the larger human community.

For example, organizations moving toward the future need to attempt to cure the isolation which has formerly been perceived with work roles and to reconcile

formerly competing life goals by breaking down arbitrary barriers between work, family, and leisure. Organizations must begin to perceive membership as only one element in human life and to move toward integrating members' needs for wholeness and to move toward supporting a balance of priorities between family relationships, psychic welfare, and spiritual growth, for example.

Organizations must be committed to nurturing human values as a step toward building social unity. They need to support human physical, mental, emotional, and spiritual qualities and to perceive them as necessary for both successful organizational members and for citizenship in a democracy. Organizational cultures must reflect a belief that humans have the ability to create a meaningful and satisfying existence and to determine destiny--an understanding of the ability of the human mind to create and recreate its own map of reality. In order to support social creation of a viable future, then, organizations must support the development of persons to be in tune with and capable of serving the community and serving in satisfying social roles. They must focus on developing members' personal mastery.

First, organizations need to focus on member fulfillment. They need to tune in to peoples' wants and needs and their perceived self-interests in order to provide an intrinsic sense of satisfaction, help create attunement among prevailing beliefs and values, and to develop a shared vision with the organization. Organizational membership must be perceived as meaningful, integrated with a sense of self, and as attuned to a higher purpose.

Second, organizations need to create opportunities for people to fulfill their highest capacities and to support personal growth, accomplishment, and satisfaction in order to promote the sense of identity, self-worth and self-reliance necessary to awaken caring and commitment for a better future.

Third, organizations need to support individual learning in two ways. One, organizations need to provide education, vocational training, and retraining programs for members as they move forward and change, (and to accept some responsibility for extending education beyond the immediate organizational system to the greater social environment). Two, organizations need to maintain open communication and flows of information to encourage members to think independently, to make critical

judgments, and to express desires and concerns without constraints. Members must be encouraged to become engaged in dialectic interaction or dialogue as a means of deepening their personal experiences. They must be supported in inquiring into the larger picture and searching for meaning within by opening themselves to those who disagree and by challenging their own views through self-criticism. People need to be encouraged to achieve their full potential by developing self-clarity, different perspectives, and new skills and thereby arriving at qualitative change.

In addition, organizations need to encourage their members to evolve toward using the full spectrum of their abilities. Organizations must free people to contribute fully by helping them to unblock their energies and to contribute their unique gifts. Organizations need to develop supportive settings which stimulate members' native capacities for creativity and innovative thought and to encourage them to move beyond rational, mechanical views of reality and conformity. Organizations must encourage and support new approaches to accessing, stimulating, and training these imaginative powers which stem from the wellspring of the inner, spiritual mind. They need to encourage people, by rewarding creativity and risk-taking, to develop greater consciousness, new perceptions of reality, and whole-brain knowing.

Another means by which organizations must reflect their beliefs in human ability is through empowerment, that is, by helping people achieve fulfillment through exercising independence and personal initiative. Again, to reflect democratic ideals, organizations must foster the values of diversity and equality as well as participation in governance. Members need to be given the opportunity to participate in collaborative problem solving and consensus management as well as to establish a sense of shared connectivity, to build satisfying, synergistic relationships, and to experience a strong sense of unity in purpose.

Organizations need to redefine their members' rights and roles in order to fully incorporate member talents. Members want opportunities to make meaningful contributions--to be of service, to take care of their own needs and the group's needs at the same time, to develop a sense of ownership and to fully embrace innovations because they've had a hand in shaping them. Members also want to exercise personal influence. They want enhanced personal discretion, greater responsibility for their

own actions, and increased individual latitude. They want dispersal of power and release of resources in order to exercise an appropriate scope of direct influence. They want to experience being at the center as an expert.

Such support for human ability requires trust. Organizational cultures must reflect respect for individuals, belief that people are basically trustworthy, regard for their abilities and, confidence in their intentions and commitment.

In conjunction with member fulfillment and empowerment, and in the context of a shift to new organizational values, the pre-eminence of male energy will need to be dissipated and the yin/yang qualities of female and male will need to be integrated and a balance of power achieved. Female gender-related values of cooperation, nurturing, integration, intuitiveness, creativity, and so on are reflective of desirable behaviors for organizations moving to the future, and such qualities will play a major role in organizational transformation.

Support and empowerment of human abilities also requires a new approach to management. Power shared with all levels requires a shift from controlling to stewardship. The primary purposes of management in transitional organizations are to encourage and support member development of autonomy and authority, to develop harmonious cooperative team relationships as needed, to coordinate and integrate information and ideas, and to align members' talents.

In order to carry out these tasks, management must be practiced not only by participating in real, supportive relationships but also by engaging in nonrational, intuitive approaches to decision making. In addition, new management must be sensitive to uncertainty and to the changing environment and must focus on overriding organizational purposes and goals. Managers in this new view must serve as agents of organizational learning--remaining flexible and restructuring as necessary to achieve a dynamic balance between change and continuity.

Organizational learning is the key to changing organizational culture and to transformation. Such learning is the responsibility of organizational leaders. In order for individuals to qualify as leaders capable of helping organizations move toward the future, they must themselves have moved beyond old beliefs and practices. They must be aware of the need for social improvement, for example. They must be aware

of evolutionary potential, and, through introspection, they must have developed a vision for the future and be willing to step forward to help others perceive needs and develop vision.

Such individuals need to have developed a desire for personal mastery beyond competence. They need to be self-aware, to be constantly in touch with their own feelings and needs through knowledge and trust in their inner voices. They need continuously to review, challenge, and clarify who they really are. They must be open to constant learning, to changes of perception, and to adopting creative viewpoints in order to develop and hold the strength to deal with what is and to leap into the unknown. Contemplating the future and anticipating directions requires creativity, intuition, and time to reflect in the subconscious, spiritual realms.

Another reason that leaders must engage in a continuous program of self-critique is to renew focus on moral authority and commitment to ethics. Leaders must continually examine their own beliefs and behaviors to ensure that they give up their own egos in favor of empowering others and of working for the common good. The need for real leadership is partly due to the pervasive uncertainty about values in society, and leaders are needed to reconstruct an understanding of the common good, belief in civic virtue, and responsibility for participation in public interest. Therefore leaders need to engage in self-critique and spiritual introspection in order to sustain integrity and high moral standards in themselves and ultimately in others.

To ensure continued learning, leaders in transitional times must engage not only in introspective pursuits but also in gathering data from the external environment. Leaders need to attend to both internal developments, within themselves and within their organizations, and to external changes in the environment. They must not be overly preoccupied with the present, however, but should devote time to contemplating the future. In order to generate images of the future, leaders must scan all possibilities, develop long-range thinking, to operate their minds in a future tense.

Along with continuous learning about the future and virtuous actions during this transition period, writers also recommended that leaders must develop insights into the change process itself. In order to guide thoughts, choices, and behaviors of those engaged in change, leaders need to perceive how change takes place. First they

need to perceive change as a natural process--a continuously dynamic situation with never-ending challenges and opportunities. They need to be able to see beyond the confusion of immediate needs and to view life and the situation differently. Then they can think freely to develop methods for bringing ideas together and for translating insights into reality.

For organizations to respond to new methods for moving to desired futures, the organizational culture must be changed and new strategies and structures must evolve to support new beliefs and directions. Leaders must understand that they have a moral responsibility for developing new cultures based on higher assumptions. They must be dedicated to improvement.

Leaders need to begin by reading the existing culture to identify the most intense positive and negative elements and the patterns and structures of influence to be tapped. They should then shape the culture by honing those elements which match group needs and support change--while avoiding direct attack on the negative elements--in order to develop new meaning about what the organization stands for and to develop new values and codes of behavior.

Cultures are created, propelled, and changed through the use of symbols--which call forth associations of conscious and unconscious ideas--such as myths, narratives, metaphors, rituals, language, role models, and so on. Symbols are vehicles for creating meaning from both emotions and feelings as well as thought and cognitions. They create perceptions of logic and rational understanding of actions and behaviors and they stimulate emotional responses to feelings where meanings are abstract. They create meaning both by presenting an illusory reality in a tangible form and by placing facts and real events in the broader context of values and purposes. They create attention, appeal to a broad base of believers, enable group members to disengage from the personal to perceive events in larger proportions, and help them both to understand the past and to project the future.

Leaders are responsible for shaping new cultural beliefs through selecting and using appropriate symbols as well as through orchestrating symbolic structures to communicate, promote, and solidify new images. Leaders must promote recognition and assimilation of the ideals toward which organizations strive as well as of a greater

good or a higher social conscience.

Leaders must themselves become symbols of the new culture. They must be role models--personifying, communicating, demonstrating, and teaching the doctrine so members can see it. Leaders need to communicate by their presence and impress by their personality--conveying personal passions, epitomizing strengths, and personifying values. Leaders must exhibit spiritual values, for example, communicating beliefs that morality exists within people rather than institutions and that morality and ethics are expected behaviors.

Leaders must also exhibit humanistic values--showing concern for relationships, caring for members, communicating openly, and challenging and inspiring people to personal mastery. In addition leaders should demonstrate holistic approaches--participating in collegial, consensual, collaborative relationships while at the same time supporting autonomy and empowerment. They must establish and demonstrate leadership as an interactive, collective phenomenon between leaders and members for purposes of attaining a shared vision and mutual purposes.

Having determined an appropriate culture base and established morally-founded value and belief systems, leaders, and ultimately leadership, becomes responsible for ensuring that organization contexts and operational mechanisms reflect those ideals. Both leaders and leader-member collectives need to perceive organizations as instruments for creating the future, and they need to assist in developing appropriate frameworks which enable and support movement toward the attainment of a desired future. Leadership becomes responsible for discovering, shaping, and maintaining systemic organizational design which align structures, strategies, subordinate goals, policies, procedures, and so on with organizational visions and purposes.

To determine the appropriateness of new processes, organizational leaders and leadership groups need to appreciate the larger whole and to take direction from the whole organizational system, its environment, and the evolutionary process it is trying to go through. Those in leadership roles must direct all aspects of the holistic organization--continuously adjusting its designs and directions in response to the external environment. Leadership groups need to stay in tune with the entire human

cultural community and with the general drama of human development. They should, for example, maintain informal information sources through other organizational systems for continued support, growth, and understanding of the mutually causative aspects of the world, taking responsibility for guiding the supra-system of which the organizations are a part as well.

In addition, leaders must perceive organizations as flowing across time. Leadership groups must keep up a continuous process of redesigning and reorienting directions as organizations move forward. Observing organizational actions from a distance can help those in leadership roles to maintain awareness of how the vision is operating in the dynamic organizational environment. It is also important to examine closely internal aspects of the organizational content and context in order to monitor and make necessary mid-course changes in procedures and structures. It is important for leaders to attune organizational parts to wholes--creating resonant harmonies among the parts--and to align subordinate values and purposes into an integrated whole--releasing untapped potential, channeling creative energies, and inspiring members to move forward. Political systems should be perceived constructively as a purposeful medium for attuning and aligning interests and power.

Attuning and aligning power is a primary role of leaders, which is carried out as leaders maintains cultural perspectives and constructs social realities which emerge from leaders' visions. The key to organizational transition to the future is a guiding vision of what the organization is seeking. Purposeful organizations begin with individuals who passionately embrace visions of human and social improvement and who activate, nurture, and serve as stewards to those visions in organization, generating the commitment of members to build a better world and stimulating organizations to accept sacred stewardship for a common good.

Holding a vision of a better world stimulates members' inner sources of energy. Awareness and exploration of a gap between an improved and the current reality generates power. People will innately move toward growth, health, and self-preservation, and an element of struggle rouses life to fuller effort. Belief systems are a vital force of energy which can bring about what people want. By focusing on what they want, people call on their own energy and resources. Human intention

precedes and creates action.

Vision, then, helps people clarify what they want and motivates and inspires them to reach beyond their fears toward accomplishment. Because clear images of the future have the power to become self-fulfilling, they must reflect a desirable future. New and superior ideals are necessary in order to establish and support a moral framework for organizations and in order for them to become transformed. They must raise the moral order and guide humanity to greater heights. People need spiritual and emotional harmony and direction.

In addition to being desirable, perceptions of what the organization can accomplish must be desired. Leaders are responsible for ensuring that organizational vision is a shared vision and that there is common caring and joint commitment for moving toward a perceived future. Transformation requires hope held in common. It requires people of good will uniting to achieve a new dream.

Shared vision is achieved through alignment of leaders' visions for a desirable future with members' personal purposes. Desire for connectedness motivates people toward unified goals for a sane and humanistic future. A shared understanding of purpose for humanity invites and feeds the spirit, it provides a context for purpose in life, and it provides a holistic frame of reference and an internal guidance system.

Shared vision gives unique meaning to personal aspirations, it gives members a positive sense of direction, it promotes personal identity and belief in self, and it challenges people to develop personal mastery. Contributing to a higher cause gives meaning to organizational membership. It helps people see the value of events and stimulates responsibility, active involvement, and willingness to coordinate efforts.

Leaders' core tasks, then, are to inspire organizational members with visions--to articulate them, to promote collective adoption, to link organizational elements, and to align members' energies toward accomplishment. Since leaders' visions don't automatically become a group's visions, and since leaders, as stewards of organizational visions, are responsible for ensuring that members share and are committed to common visions, leaders must engage in educational functions. They must become teachers--designing and implementing learning processes.

Leaders' first educational tasks are to help individuals make personal

transformations, which are necessary for a systemwide shift to higher level purposes and values. Many people need to make core changes in their perception of reality, and this is accomplished through inner exploration and deep learning--examining and changing constraints through dialectic interaction between themselves and their contexts, for example.

One important shift is for people to understand their ability to create reality and to manifest good things. To accomplish this learning, leaders need to help people shift from the intellectual and rational mind to a new mental model which is based on a higher or deeper understanding that people can create or cause a better future, that beliefs are cause maps, and that a view of reality creates boundaries, is controlling, restricts growth, and is self-fulfilling. People need to perceive that worldviews are created and that humanity has a free will to choose other views. The challenge, then, is to help people change their perception of reality and to develop a new intention to view the world in a new way. This shift in perception requires deep level learning.

Leaders also need to educate members in order to balance individual needs with organizational directions. Leaders need to rouse members' perspectives. They need to speak with a prophetic voice from a spiritual place, to carry out symbolic, inspirational, and normative functions and behaviors which represent the highest side of people's natures, and to tap into people's higher consciousness--teaching high values, providing liberating knowledge, and inspiring people to reflect democratic ideals and to perceive and create new social realities. Through education, leaders stimulate shared visions.

Shared values and visions can result from members engaging in open dialogue which creates the opportunity for them to air mental differences, to look within, to identify commonly-held points of view, and to attain mutual understanding. Shared vision, then, is the result of the process of working through the tensions of opposites, and the resolution of the tension of opposites is the major role of leaders.

Leaders need continually to focus and refocus the organizational vision. They need to help people continuously to develop insights into reality and to understand the phenomena occurring in their lives. They need simultaneously to communicate the vision and to guide people toward creating a culture of responsibility and moral

credibility, toward a perception of harmony with the total environment, and toward the necessity of change. Leaders need to generate a perception of opposites and of creative tension as a basis for change, to show the way to the future, and to guide the intention to attain it.

Communicating the vision and generating the intention to pursue it are engaging in the process of empowerment. Educating people to adopt new views includes educating them to take responsibility for pursuing those views. It includes empowering them to exercise leadership in pursuit of the vision.

In order for leaders to ensure empowerment they need a new view of what leadership means. Leaders must perceive individuals as responsible--as creators of energy and as capable of validating higher values. They must be willing to relinquish control and able to share authority--giving people more choice and responsibility. And they must be committed to ensuring democratic values and to finding ways to redistribute power--removing constraints, providing resources, and establishing supportive conditions.

Leaders must perceive that power is from the people, that individuals control their own lives, and that all leaders can do is influence them to attempt to catalyze their spirit and energy. Leaders become engaged with members, then, in complex, collaborative interactions in which leaders attempt to influence members through non-coercive discourse to identify shared visions and to unite in common efforts to achieve them.

The success of this interaction depends on the ability of the leaders and members to relate to one another. Love and trust are the only means through which unity can be achieved.

Member empowerment is the heart of leader-member relationships. As members become empowered to take responsibility, the relationship becomes one of leadership, with members as well as leaders becoming stewards of the vision and accepting responsibility for moving forward toward attainment.

Model

The review of the literature examined in this study suggests that the many theorists included held a large number of ideas in common. As their views on

societal turmoil and its impact on organizations and their recommendations for moving to the future were examined, a number of these ideas recurred. This researcher suggests that these consistent themes form a theoretical base on which to propose a model of organizations in transition to the future.

The following model reflects the major themes reiterated by theorists throughout the study. These themes recurred in many contexts, they wove through many topics, and they were discussed from many points of view. They are largely inseparable from one another. Although this inseparability makes linear observation and discussion of them difficult, the interrelationship of ideas accurately reflects the reality of the phenomena they attempt to address. Organizations are, in fact, live, messy systems involving constant interaction and changing overt and covert occurrences which must be accepted in total. They must be approached with the knowledge that any attempt to understand them involves examination of elements in isolation which in reality cannot be isolated. The reader is asked to keep the totality of the whole in mind while contemplating these elements of a model of organizations of the future.

Establishing parameters. On the grounds that defining an entity is partly a matter of establishing boundaries which delineate what it is not, I will begin by pointing out what organizations of the future are not. They are not based on old paradigm, science-based beliefs or on practices which have emanated from those beliefs. New age organizations are no longer structured as formal, mechanical hierarchies with their traditional orderliness, attempts at predictability, and decision making based solely on data analysis. Work is no longer segmented, people are no longer isolated, and communication and processes are no longer purposefully kept close, meaningless, and limiting.

New organizations have moved away from emphasis on the economics of capitalism with focus solely on financial concerns and profits, with concerns based on beliefs in scarcity and competition, and primary attention given to economic growth, consumerism, and market-based decision making. Operations are no longer focused totally on acquisition of resources, increased production, and advancements in technology without regard for consequences. There is no longer a preoccupation with

material gain and a belief that personal satisfaction, achievement, or status are measured solely through wealth and power. Leadership has moved beyond position power exercised by dominant, white, male, patriarchal authority figures from the top of a hierarchy which supports class systems, obstacles to equality, stereotyping, and an oppressive climate.

Boundaries are rarely precise, of course, and the above description of what organizations of the future are not is not to say that all structure, market orientation, achievement through wealth, or whatever will totally disappear in new age organizations. Rather, it is to say that those elements will no longer be primary foci. It is to say that there are other, more pervasive concerns and that there is balance, which is a primary theme in organizations of the future.

A description of organizations of the future: An outline. The following description and outline of the major components of a model reflect the recurring themes of this study. The components are discussed in detail in the section which follows.

Organizations are holons in open systems. Their cultures reflect holistic beliefs, and their primary purpose is to advance toward a desired future based on those beliefs. They are guided by leaders with mutual beliefs toward the attainment of that future.

1. Organizations are holons in open systems.
 - a. They perceive their position in a larger, ever-evolving reality.
 - b. They operate on the bases of interaction with that reality and are, therefore, change-oriented.
2. Organizations are cultural entities which reflect holistic belief systems.
 - a. The belief systems focus on human values.
 - b. The belief systems are grounded in spirituality.
3. The primary purpose of organizations is to advance toward a vision of a desired future based on holistic beliefs.
 - a. The vision is a shared vision based on mutual beliefs.
 - b. Organizational structures and strategies support organizational beliefs and movement.

4. Transformed leaders reflect, support, and direct organizational views, cultures, and purposes.
 - a. Leaders interact with organizational members to generate shared visions.
 - b. Leaders maintain balanced alignment of personal and organizational energies toward attainment of the vision.

Components of the model for organizations of the future. 1. Organizations of the future are holons in open systems. As members of holistic systems these organizations operate from a perception both as total systems replicating the whole and as members of a larger reality beyond themselves. Organizations are part of a living, dynamic interaction among autonomous systems of which they are one. They are members in a world of total connections and relationships--a whole supra-system consisting of interdependencies between each single system and the whole or between themselves and nature or the universe.

From this position organizations understand the relationship between separateness and unity. As holons or autonomous systems which replicate the larger system, organizations have unique internal identities--values, visions, structures, and so on. They are comprised of subsystems or individuals and groups which also replicate whole systems within themselves.

Organizations therefore perceive their members as members of the larger human community, and they show concern for that position by supporting members to achieve their full potential, not only as organizational members, but as members of a larger, democratic society. Organizations perceive themselves, then, as being in partnership with their members--helping people see the connectedness between their actions and organizational outcomes and between their actions, both independently and through organizations, on the larger environment.

Organizations, then, see themselves as loosely controlled by individuals who comprise plural, diffuse centers of power and decisionmaking. Organizations attempt to unify these separate systems through shared core purposes.

New age organizations recognize the need to perceive themselves as connected to the whole and as part of their environment. They are aware that from their unique position they perceive their own reality of the universe. They also recognize that

interaction with other groups comprises the total environment. They therefore recognize the importance of interacting with other members of the whole--of exchanging ideas and information about beliefs, values, and cultures, for example, in order to better understand the total universe and their place in it as well as to maintain harmonious relationships.

Membership in the total whole includes accepting responsibility for creating, guiding, and challenging the supra-system as well as for being accountable to, responding to, and guarding it. Organizations are aware that they are appropriate instruments for guarding society's best interests and that they must take responsibility for community involvement, for their impact on the world, and for the effects of their actions on all constituencies--members, customers, the community, national and global societies, nature, the planet, and the universe. Organizations of the future are aware, then, as they operate within the larger whole, that they must be sensitive to social needs and pressures and that they must embrace social change.

Understanding of the need to be responsive stems not only from concern for the larger whole but also from awareness of the need to discover continuously an appropriate place in the universe. In their effort to sustain themselves, transformed organizations are sensitive to uncertainty and change in the universe, and they are open to continuous feedback as a means to learn, change, and evolve.

As holons in the larger system, these organizations perceive links between the systems, specifically between elements of the organizational system and variables in the larger system, and they are aware that problems of interaction and mismatch occur at the boundaries. They perceive information as flowing in large circuits through fluid boundaries, and they regard both positive and negative feedback as important information. External interaction, then, is considered the key to change, and organizations understand that systems must constantly change in order to adapt to the total system.

New age organizations, therefore, trust in change. They see it as an inherent property of interactive and unfolding systems, a natural process, and a never ending challenge or opportunity. They operate in a state of constant readiness to respond to social shifts, recognizing the importance and responsibility of continually shifting their

views and practices. They support an interactive flow of communication. They not only remain open to altering the premises on the basis of information received, they also continuously seek out and examine the environment in an effort to perceive any patterns or logic of change to which they might respond. They continuously ask questions, explore assumptions, identify variables, detect variations, evaluate multiple causes, and, in general, check out any condition which might threaten survival.

Dedication to taking action in response to a volatile environment is reflected in organizational willingness to use information from the environment to assess their own inner workings, to engage in self-regulation, and to decide which elements to keep and which to slough off. Dedication to change is reflected in their ability to overcome obstacles such as inertia and intolerance for ambiguity. It is also reflected in their ability to achieve deep learning and to support their members through times of change.

2. Organizations are cultural entities which reflect holistic belief systems. As mentioned, organizational holons have unique identities. They have shared values, assumptions, and meanings which are reflected in their fundamental characteristics.

Transformed organizations understand themselves as cultures. They know that cultures are expressions of human consciousness and that their cultures have been constructed subjectively through the organization's history from the minds of people within them--developed from shared meanings and patterns of thought, discourse, and symbols. Cultures are known to be imprinting forces which socialize members, give them a sense of commonality, and influence what they do. These organizations understand, then, that their cultures, having been consciously formulated, can be consciously changed. Organizations which hold holistic beliefs, then, have developed cultures which both reflect belief in the importance of change and support change in response to that belief.

Organizational cultures which support change reflect the need to interact with and gather data from the environment in order to stay in tune with the larger cultural community and with advancement in human development. They support organizations as flowing across time and needing continually to reorient their direction, to realign individual values, and to restructure in order to move continually forward.

Holistically oriented cultures perceive the change process as one of education, and they support continuous deep learning.

Belief systems which form the bases of holistically-oriented organizational cultures focus on two interrelated areas: spirituality and humanism, which may be perceived as the holon maintaining both suprasystems and subsystems views.

Humanism reflects a sensitivity to and focus on a totality of humanness and human values. It reflects beliefs that people are meaningful, that individual energies and abilities matter, that, along with a sense of self, people are attuned to higher purposes, and that individuals are attentive, responsive, trustworthy, and committed. Belief in humanity also reflects new-age organizations recognizing that there are only people, that success comes through human satisfaction, and that organizations need person-centered perspectives and human bases.

Organizational cultures, by holding human values, show recognition of and support for human drives and desires. They focus on meeting human needs, supporting personal development, and building self-confidence and self-respect. These organizations reflect caring and concern for people. They value diversity, they treat women like significant entities and equal parts of the human experience, and they exhibit relationships of stewardship--treating people with honesty, fairness, humility, compassion, and love.

Stewardship and love reflect an even more deeply held set of beliefs. Stewardship suggests a relinquishment of ego for a greater responsibility to others or a willingness to assume a subordinate position for the good of the whole. It reflects a belief in a greater whole and a common destiny with all people. It reflects a grounding of beliefs in spirituality.

Organizations of the future perceive a need for spirituality as a confirmation of the existence of a greater whole of which they perceive themselves to be a part, and as ground for culture, meaning, and values. They recognize the need for a spiritual base or orientation, the need for inner and deeper meanings of existence, and the need to honor forces greater than the self. They see the spiritual dimension as the heart of the organizational culture and organizations as appropriate places to focus on and pursue spiritual values.

In organizations of the future, values are based on a spiritual orientation. Organizational cultures reflect beliefs that life is a constant search for higher values, and they reflect higher order assumptions which align with members' desires for higher purposes. There is concern for morality and for morally-based values. These organizations are aware that people want moral and ethical traditions and leadership. They believe that they have a moral responsibility to the greater whole and that moral and ethical principles are conditions of survival.

Transformed organizations reflect moral values of acting for the greatest good and the least harm and consider their actions from a spiritual basis. They consider the impact of actions on the quality of life in the present and on future life. These organizations recognize and support spiritually-based democratic values: equity, justice, and freedom with responsibility.

Spirituality, in organizations of the future, is perceived as the animating life force or energy which furnishes the will and strength to adjust and survive. It is seen as the basis of wisdom, which stems from becoming aware of inner and deeper meanings of existence. It is perceived with the awe and wonder which comes from the feeling of connection with a creator or a universal presence. It is experienced as delight and aliveness which results from being open to creative and mystical experiences and being in touch with a higher self. It is the basis of freedom which comes from the awareness of having choice, from comprehending humanity as having unity with the creator and, as co-creator, having the ability to create a meaningful and satisfying existence and to determine destiny by using the mind to project solutions and envision a positive future.

3. The primary purpose of organizations is to advance toward a vision of a desired future based on holistic beliefs. Spiritual connectedness with a creator provides a basis for belief in advancing to higher levels and greater good. Transformed organizations recognize that adherence to views based on beliefs in unity with a greater good is a prerequisite of organizational transformation and that maintaining those underlying premises is essential for overcoming conditions which threaten survival.

Fundamental beliefs in a greater good are necessary for survival as

organizations continually adjust and find their place in an ever-advancing world and as they exercise their responsibility to challenge society to greater heights.

Organizations of the future reflect the belief that the key to a better future is a belief system based on higher-order assumptions. They also understand that striving to attain spirituality-based and higher-order goals provides a holistic reference, a context for life, an external guidance system, or a sense of direction. It feeds the soul. For members, then, organizational purposes are worthwhile and the visions of what organizations are seeking to accomplish are worthy. Organizational values, images, and behaviors all reflect higher purposes.

Transformed organizations understand that people ultimately desire integration and unity of purpose toward a common cause, and they focus on creating attunement among personal and organizational goals and alignment toward a shared vision or a commonly held hope. Members then experience meaning in cooperation, see value in events, participate consciously and purposefully, and are challenged to develop personal mastery.

Since organizations and their members are holons in an ever-changing environment, and since adjustment and change are on-going realities within the system, shared visions must be continually maintained. Tentative equilibrium is maintained through constant examination of the present reality in conjunction with continuous evaluation of the vision. This results in a balanced tension in which the organization is poised for action--a position of readiness which reflects available energy. This tension of available energy can be viewed as the intention of organizations and their members to move forward, the life-force for moving toward accomplishing the desired future.

New age organizational structures and strategies reflect culturally based values and beliefs. Since such organizational designs are themselves creative forces, they are carefully and creatively implemented to support continuous change and to reflect organizational beliefs. Such organizational designs actually emerge from cultural changes and operational adjustments in response to interactions with the environment, therefore they are facilitated rather than decreed. Physical changes, methods, and practices all develop gradually and shift as necessary on the basis of continuous

evaluation and the need to maintain both stability and flexibility.

Organizational designs primarily reflect cultural focus on humanism and concern for the human experience. Transformed organizations are concerned with providing support for members to develop personal mastery, to experience creativity and inner knowing in connection with their spiritual centers, to develop meaning through relationships, and to autonomy and empowerment.

Organizations perceive the importance of people experiencing growth, accomplishment, and satisfaction through exceeding themselves and achieving their full potential. Through education, training, and opportunities for continuous learning, organizations support members' development of new skills and perspectives.

Members are also supported in developing their inner knowing or self-knowledge. Based on a belief in the importance of uniting with a higher energy or larger mind, organizations of the future perceive a moral obligation to support members' use of and trust in their inner directedness. Members are encouraged to develop their imaginative powers. Organizations model and reward creativity, intuition, dialoguing, nonrational decision making, risk taking, and so on.

These organizations also support connectedness. They focus on providing meaning through supportive relationships. They support interactions among members and encourage interrelated wholeness, participation in collaborative problem solving, and consensus management. They favor harmonious, synergistic relationships and development of a sense of unity of purpose within the organization. They also encourage the unity of work goals with other life goals such as family and leisure.

Organizational cultures and practices also reflect the belief in individual self-worth and self-reliance by supporting member autonomy and authority. They share power and resources by shifting them to all levels and thereby increasing individual capacity to exercise control, personal influence, expertise, discretion, initiative, and responsibility. These organizations encourage members to participate in governance, to make meaningful contributions, and to experience a sense of ownership.

Each organization designs its structure and strategies in response to its own purposes, interactions with its environment, specific member needs, and so on, however some approaches are common. For example, designs generally reflect open

flows and integration of communication, information, and ideas. Face-to-face interaction is facilitated through relatively flat, decentralized arrangements and through such interlacing strategies as networks. Flexibility, fluidity, self-organization, and other emphases on operating in a flow state in order to respond easily to change are also common.

4. *Transformed leaders reflect, support, and direct organizational cultures and purposes.* Future organizations are described as making choices, actions, decisions, and so on. But organizations are, in reality, personifications of their leaders and their leadership.

New age organizational leaders are transformed and spiritual individuals. They are in touch with their inner voice. They continuously go inward to reflect in the subconscious realms and to seek guidance from the larger mind. They are open to learning, to changing their perceptions, and to adopting creative views. They critique themselves and they desire personal mastery.

These leaders feel a moral responsibility to develop new cultures based on higher assumptions, and they see superior ideals as necessary to support a moral framework for guiding humanity to greater heights. They know that people need a spiritual base for harmony and direction. They go inward to review their focus on moral authority and their commitment to rouse people to higher consciousness, to inspire ethical behavior and reflections of democratic ideals.

Transformed organizational leaders have personal visions for the future. They are aware of needs for human and social improvement--aware of a gap between the current reality and a desired future. This gap stimulates their energy and intention, and they see organizations as instruments for creating the future. They see people as desiring a sane and humanistic future, and they perceive the reality of stimulating people to call on their own energy and resources to fill the gap. They see their core tasks, then, as aligning energies, promoting collective adoption, and inspiring attainment of a shared vision.

Transformed leaders are also aware of the need to focus and refocus the vision continuously. They are aware of the importance of thinking freely and seeing things differently, of contemplating the future and operating the mind in the future tense,

and of generating images to translate future possibilities into visions. They are aware of the need to communicate the vision as well as to help people develop insights into the current reality in order to guide them toward a culture of responsibility and harmony.

Leaders of the future perceive the larger whole. They take direction from the system's interaction with the environment and perceive the whole as advancing in an evolutionary process. They see from a distance and they also see closely. They interact informally with other organizations, they take responsibility for guiding the suprasystem, and they align the sub-parts of the whole.

Being in tune with an advancing universe, transformed leaders are agents of change. They perceive needed changes, and they understand the process of change and how to guide others through it. They know how to read the existing culture and to identify patterns and elements to be addressed in engaging in initial change. They select and utilize appropriate symbols such as myths and narratives as well as symbolic and functional structures and strategies, which touch both logic and emotion in order to help people recognize and assimilate ideas, to create new meanings, and to propel and change the culture.

Leaders, as change agents, are able to match group needs with developing cultures. They serve as role models to personify and demonstrate new ideas and values, and they teach. They design and implement learning processes to help individuals make personal transformations. They support inner exploration and encourage dialogue--guiding interactions by generating perspectives of the present in opposition to views of the future as means to working through the tension of opposites to arrive, through shared meanings, at the tension of balance.

Transformed leaders exhibit human values. They see people as responsible, as desiring connectedness, and as capable of validating higher values. These leaders care for their members. They view them with trust and love. They focus on helping people to understand their needs and to clarify what they want, to reach beyond their fears and controlling beliefs, and to perceive their free choice and their ability to create reality and to manifest desired ends. Transformed leaders inspire their members, that is, they inspire them, generating the tension of intention toward

personal mastery.

These leaders have a new view of leadership. They perceive leaders' powers as limited, with people as holders of power. They see real power as emanating from leadership--from engaging others' personal powers in a unified effort. They are willing to give up their own egos in favor of sharing authority, empowering others, and working for a common good.

Transformed leaders demonstrate holistic practices--openly communicating, engaging in collegial, consensual, collaborative interactions, and generating common caring and joint commitment. They serve as stewards to facilitate member autonomy and empowerment. They educate people to take responsibility for new views and exercise leadership to attain them. They perceive leadership as an interactive, collective relationship for attaining shared vision--as a unified stewardship responsible for attaining a desired future.

Comments. As noted, this is a holistic model attempting to reflect the totality of a living, evolving, intertwined set of activities. Although elements can be examined individually, a certain amount of redundancy reflects that they are inseparable. This researcher perceived five main strands which interweave among themselves and among all the elements which serve to unify and strengthen the whole and which may be perceived as helping to identify what future organizations are as opposed to what they are not.

One strand is the holistic view. The importance of organizations perceiving themselves as co-active with others as part of a larger systems as well as perceiving their members as whole systems cannot be overemphasized. This view must include the realization that what one sees depends on where one stands, so that organizational leaders and leadership cooperatives are encouraged to view their enterprises from both global and microscopic viewpoints.

Another major strand is the focus on change. Organizations of the future will need to do everything possible to create acceptance and eagerness to change. They must find ways to make their members comfortable with change and to assist the environments within which they operate to lessen rigidity and welcome adjustability. To survive, societies, organizations, and their members must learn to thrive on

change.

A third main thread running through the model, which also cannot be overemphasized, is spirituality. A deep belief in and connection to a larger force is absolutely essential, not only to enable organizational members to perceive their lives as meaningful as they strive to accomplish shared visions, but so they can proceed from a well of faith and trust in a greater good for which small inconveniences can be discounted, in personal accomplishment being measured on a higher plane, in a belief that the world is ultimately headed in the right direction, and that each individual is innately able to create a better existence as measured from a broader view. People need an abiding belief as a basis for giving up fear and experiencing love.

A fourth pervasive thread weaving throughout is the notion of balance and balanced tension. In addition to the state of balance which must occur as organizations attempt to adjust to their environment and to move forward, and balance between the present and the future, balance must occur in all aspects of the organizations. Balance between science-based and spiritual views, between internal and external views of the system, between competition and cooperation, between market-based and social orientations, between solid and open structures, and between male and female energies are only a few of the widely varied and endless examples. People need to be helped to accept balanced views and to relish the tension of tentative balance as a positive source of energy with which to fuel progress.

The last major thread is transformed leaders. Transformed organizations will not exist in the future without people who have visions and beliefs which prompt them to guide others and on which organizations can rely as they attempt to move ahead. All aspects of organizations of the future will reflect inspired leaders.

Discussion

Findings

The issue addressed in this study is that we are currently experiencing turbulent times in our society, yet we have an unclear understanding of our times, of the future we are moving toward, and of any means to help organizations and their leaders adapt and survive during this period of change.

The study's exploration of the concepts of paradigm shift as well as the review of history and of our present situation suggest that there is an explanation for the turbulence: We are caught in the throes of a major shift in belief systems and in the values and practices which emanate from them. We are experiencing a rejection of a centuries-old subjection of humanity to scientific views of the world, and we are turning toward adopting a new view of humankind as connected to an ascendance toward a unified consciousness.

By exploring the relationship between our society and its organizations, the study also suggests that the turbulence being experienced as a result of this shift in belief systems is affecting organizations--creating stress on organizations both to adapt to changes and to accept responsibility for guiding not only themselves but also the larger culture through this period of transformation toward a new view and a desired future. The close examination of these theorists' views of the many impacts this turbulence is having on organizations and of possible responses to them further suggests that some prognosis for organizations of the future and their leaders is possible along with insights into the beliefs and behaviors necessary for their successful adjustment.

I believe that I have successfully answered the research questions that initiated this study. (1) Current literature has provided a sound base for comprehending today's turmoil. A large number of theorists confirmed one another's perceptions that the cause of current upheaval is a major shift in beliefs. (2) Theorists again concurred and presented a convincing case that the stresses being experienced in today's organizations are directly relatable to societal turmoil. (3) Insight into these social and organizational problems indeed provided a theoretical framework for organizations and their transition toward the future. As theorists discussed a shift to new worldviews, they focused on the adoption of new views, suggesting and predicting likely perspectives and practices which would accompany the adoption of these views. Such discussions, along with various recommendations for new worldview behaviors, allowed for the formulation of a theoretical base on which to construct a model for organizations in transition toward the future. (4) A general model was therefore constructed.

The research questions therefore led directly to the results of the study: the model. The researcher found a great deal more interrelationship of topics and views among the theorists reviewed that was anticipated. Although this congruence added to both the length and breadth of the study, I continued to be amazed and delighted by the amount of confirmation which occurred as authors reiterated particular ideas from various points of view and by the way in which different topics seemed to dovetail precisely. The holism of the inquiry was brought home again and again.

In addition, this researcher was intrigued by finding totally unsuspected topics recurring with frequency and urgency. The importance of spirituality and the idea of balanced tension are two prime examples. This study relates to the research of other scholars, then, in that it seemed by its size and generality of topic to encompass many other works. No other study like it in magnitude or breadth is known to the researcher. One of the delights of producing the study has been in relating the many, varied theorists whose works have likely never been compared or assimilated before and in developing a more all-encompassing view of the problem than may exist elsewhere.

Summary and Implications

Lincoln noted that sweeping application or the broadcast of startling news of general social laws as the result of naturalistic studies are unwise because each study is unique and controlled by contexts which may not apply elsewhere (1985b, p. 149). Harman stated that it is difficult, no matter what research method is used "to achieve enough objectivity about the future to avoid being misled" (1979, p. 14). Harman (p. 15) and Smircich (1983a, p. 355) both wrote that it is difficult for researchers to overcome the biases that result from being immersed in and a product of a particular culture in order to achieve objectivity. Harman also opined that forecasts of the future are difficult due to the need to predict a fundamentally different society (p. 13).

All of these cautions apply here. Perhaps it is possible at least to state that the implications of the study suggest that society and organizations are likely to experience a great deal more turmoil before a transformation can occur and that adoption of new worldviews will require a major change in belief systems.

Meanwhile, recommendations resulting from the study begin with the plea for

further research in several areas. One is to extend the study by continuing to review ever available new literature. With continued change and evolution, new insights and ideas are rapidly forthcoming and must be added to and compared to this treatise in order to keep it current. Otherwise it will be of little value. The study must reflect its own premise that it is necessary to explore the environment continuously and to adjust accordingly in order to move ahead.

Another recommendation for further research is to explore selected topics in further depth. In the breadth of this research, many areas of importance to transition and the future were discussed briefly. New investigations could focus on nonmarket-centered economics, global cooperation, multicultural approaches to shared visions, flexible organizational structures, and so on. Possible topics are widespread and nearly endless. In-depth understanding in any areas is likely to help in a period of transition.

A third research suggestion is to research the study by applying it--by evaluating the model against a number of advancing organizations and honing it to include observable elements.

The study suffers from a number of limitations. Two were alluded to above: the inability to stand outside the area of study to get a more objective view and the inability to include the very latest information under press of concluding the investigation. Two other limitations concern the selection and application of the literature materials. One is that few voices in opposition to the mainstream of thought are included, partly due, perhaps, to their unavailability, but also partly due, perhaps, to the researcher's lack of diligence because of the amount of conforming material to consider.

The other limitation regarding the literature concerns the authors' works themselves. Because the study included mostly current materials and because we are currently in a period of transition, authors wrote from various perceptions and positions in the transition--some perceiving it as just beginning, some seeing it as well advanced, and so on. These different viewpoints were not specified in the study. Although there can be no real agreement on society's progress in a period for which the end is unknown, and therefore the whole problem of perspective is very muddy.

To some researchers the various perspectives might have created particular weight for the theorist's remarks. This researcher chose not to address so complex an issue in this context.

Another limitation of the study, which has been mentioned, is the inability to convey a holistic view of organizations through a written model. Morgan noted, in referring to the use of metaphor as an image for studying a subject, that such confinement of attention calls for a "somewhat irrational commitment to the image of the subject under investigation [and] provides but a partial or one-sided view" (1980, p. 611). The same applies here. In addition, this researcher must admit to a certain bias. I believe in a viable, obtainable, and improved future. There are those who suggest that all is lost. Although those views are acknowledged here, I chose not to follow those paths or to present an alternative model of organization for either peacefully or warringly moving into the night. I chose to follow the possible path to the light.

Conclusion

I hope that the study will be found useful in some way. It was mounted for the purpose of education--for myself, primarily, but with the vague hope that whatever I learned might also be educative in a larger arena. Throughout the study I grew in knowledge and understanding, and with that growth I became more and more excited about what I was learning. I also become convinced of the importance of stimulating greater awareness of the many thoughtful as well as urgent messages these authors had emitted.

The study is offered, then, with the hope that it will stimulate both greater learning and greater awareness of these important messages. As research, perhaps it will encourage students and scholars, whose task it is to investigate and write about worthy ideas, to further explore and broadcast findings in areas which may help the members of organizations and society to understand and meet the challenges of this transition period.

As an education text, perhaps the study will assist organizational leaders, whose role it is to align their members through educative means toward shared visions

of a desired future, to stimulate greater awareness of the present as well as future possibilities and the desire to attain them. As a reference, perhaps it will provide managers or consultants, whose job it is to assist organizations to respond to challenges and move toward enhanced capabilities, with a widened perception of our time and a few suggestions for generating new and future-oriented responses.

As a compilation of ideas, perhaps it will stimulate any reader, whose part it is to contemplate and wonder, to ask questions, to read further, and to discuss ideas with all who will participate as a means to generate wider thought and interest in ideas which may ultimately bring about a transformation to a new worldview.

Through whatever means the information here may be absorbed in the universe, this writer hopes and intends that it move the people it touches one small step forward toward greater peace and unity. The study is offered in the spirit of holism as a system for transformation envisioned by a leader in the hope of generating understanding of the present, stimulating a shared vision, and creating an energizing tension for moving toward a desired future.

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