FROM CRISIS TO GROWTH AT MIDLIFE:
CHANGES IN PERSONAL PARADIGM

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ABSTRACT

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   Adult development is becoming a critical component of an organization's effectiveness in our rapidly changing world (Torbert, 1987). While transitions in adulthood have been shown to be inevitable and patterned, they do not necessarily result in personal growth. In this exploratory study, data were collected from 64 men and women experiencing midlife transitions. Several factors were identified (scope of transition, progression through a transition sequence, ego development, inner directedness, and commitment to learning) which enabled growth during the midlife transition in the form of a personal paradigm shift. Positive emotional tone as well as enthusiasm for career were found to be consequences of these paradigm shifts. Implications for organizations are discussed.

INTRODUCTION

"Although no easy task, efforts to foster adult development may be crucial to the attainment of truly meaningful and enduring increases in managerial and organizational effectiveness," (Fisher, Merron, & Torbert, 1987).

A variety of new ideas and images of what is organizationally possible have recently surfaced in the fields of Organizational Theory and Organizational Development. Self designing systems (Weick, 1976), organizational learning and models 1 and 2 (Argyris & Schon, 1978), alternative images of organizations (Morgan, 1986), dissipative structures (Gemill & Smith, 1985), community of inquiry and action inquiry (Torbert 1976, 1987), paradigms for societal transitions (Perlmutter & Trist, 1986), organizational paradigm (Sheldon, 1980), understanding and changing organizational cultures (Ouchi, 1981; Schein, 1985; Hurst, 1984), primary and secondary adaptation (Shepard, 1965; Wolfe, 1988), appreciative inquiry (Cooperrider & Srivastva, 1986), the egalitarian organization (Srivastva & Cooperrider, 1986), and organizational transformation and transformational leadership (Adams, 1984, 1986) are all attempts to recognize and describe qualitatively distinct forms of organization and to specify the processes of transition between them.

Yet theories of organization and organizational transformation are not enough. Self designing systems, egalitarian organizations, and model 2 systems all require individual people who are ready to create, to cope with, and be productive in such worlds. Recent research has begun to show a relationship between managerial effectiveness and later stages of adult development (Torbert, 1987), yet more research is needed to reveal the processes involved in advancing to a higher level and to discover effective ways for stimulating this growth (Merron, Fisher, & Torbert, 1987).

In this context, the midlife transition is a crucial time that holds possibilities for growth and development in the lives of many adults (Levinson et al 1978; Jacques, 1965; Jung, 1971; Gould, 1978; Wolfe and Kolb, 1980; Erikson, 1950; Neugarten, 1968; Vaillant, 1977; Havighurst, 1979). While these theorists have helped to illuminate the forces that drive transitions in midlife

and in adulthood and have plotted the general possibilities and directions for growth inherent in the midlife transition (e.g. integration of the male-female opposites), whether personal growth and increased maturity will accrue and under what conditions is less clear. This is an exploratory study which seeks to better understand the factors which enable personal growth in the form of a personal paradigm shift during a major transition of adulthood, the midlife transition.

THEORETICAL REVIEW

The Process of Transition.

Most adult development theory traces back to Jung's clinical and theoretical work on the dynamic interplay of psychological opposites, particularly as they manifest themselves at the junction of youth and middle age. The serious problems of life are often solved in youth by restriction to the attainable, that is, a fitting to outer demands. A considerable achievement, but as Jung notes, "We cannot live the afternoon of life according to the program of life's morning; for what in the morning was true will in evening become a lie." This midlife transition, as a time which bridges two major eras of life, early adulthood and midlife, is a crucial period that impacts a person's career, family, and self. Levinson (1978) sees this midlife transition as one of a series of transitions occurring throughout an adulthood that resembles a series of rolling hills in its alternating periods of stability and change, rather than a gently rising plateau of steady rationality and slowly evolving maturity. In these contexts, transition and crisis can no longer be viewed as deficiencies of character or spirit, but rather the norm. Yet even though the experience of transition and crisis has been thoroughly explicated, the actual process of transitions in adulthood has remained relatively unexplored until recently. Several recent works have focused more closely on just how these transitions proceed (Bridges, 1980; O'Connor & Wolfe, 1986, 1987). Bridges richly portrays the many elements of transition and crisis using case study and mythological materials and has set forth a three step model of transition: ending, neutral zone, and beginning. In an intensive study of midlife transitions, O'Connor and Wolfe proposed a grounded theory model of transitions progressing through regular phases or steps: Stability (pre-

transition), Rising Discontent, Crisis, Re-Direction and Adaptation, and Re-Stabilizing. In this model, endings and beginnings are not as sharply separated. While some cases were neat and linear, many others revealed lengthy processes of ending and beginning which overlapped. These individuals were frequently engaged with "multiple simultaneous equations," rather than a sequential set of problems related to ending and beginning.

With this five step model, we furthered explored the specific contours of the midlife transition using quantitative data (O'Connor & Wolfe, 1987). We found that people in the different steps of transition varied in several systematic ways. For example, those who were pre-transition, or in the Stability phase (1) were only mildly positive in their emotional tone and were also under-energized or flat. The emotional tone became very negative for those in the Rising Discontent phase (2). While this group had not yet plunged into actual changes in their life structures, they were expending increased energy to simply cope with their emotional arousal. Their emotional energies were not being well channeled by their purposes and goals. This misalignment of emotional energy peaked during the next phase of transition, Crisis. The Crisis group (3) undertook (or were plunged into) a wide scope of change in their lives. Finding guidance from internal feelings and values as opposed to external expectations emerged as a personal issue of great concern. This concern remained relatively high during the Re-Direction step (4). Emotional energies were becoming better channeled during this time of tentative experiments. Those in the Re-Stabilizing group (5), the final step, reached a peak in terms of positive emotional tone and alignment. They were the most balanced in career and family investments and were still highly concerned with becoming more in touch with feelings and values. Even with these positive outcomes, the question still remains whether transitions at midlife involve personal growth, increased maturity, and enhanced organizational effectiveness.

Paradigms and Paradigm Shifts

To better understand the nature of personal growth at midlife, we have found the concept of paradigms and paradigm shifts useful. Kuhn (1970) has made the term popular in his attempts to

understand the evolution and revolution of scientific knowledge and method. He observed that while much of science is a slow, gradual elaboration of a paradigm (core ideas and basic theory), key breakthroughs do not follow this pattern. During the systematic testing of hypotheses, anomalies inevitably arise. The work of science is to press forward though and consequently, a set of anomalies eventually gather. At rare points, individuals make intuitive leaps and piece together the basics of a new, overarching frame or paradigm. Generally, it then takes some time for the paradigm shift to gather strength and take root in the wider scientific community as its more useful explanations of the phenomenon under study become articulated.

While Kuhn limited his arguments to scientific knowledge in general, we believe that the concept of paradigm can be usefully applied to the individual-as-open-system level. It is, after all, individuals who experience anomalies and create theoretical breakthroughs. In fact, Wilhelm Dilthey and Max Planck, scientists/ philosophers at the turn of the century, anticipated and articulated much of Kuhn's arguments (Gernand & Reedy, 1986) with their concepts of Weltanschauung (world view) and Weltbild (world picture). These "terminological analogues" of Kuhn's paradigm were descriptions of both individual and collective processes of being and change. We prefer the term, paradigm, for several reasons however. Terms like world picture, world view, cognitive set, perceptual world, etc. connote a more conscious, rational, and controlled phenomenon than what we hope to convey. Furthermore, words like "world picture" and "world view" are visual metaphors which leave out other basic forms of representing experience, e.g. auditory, kinesthetic, and logical/digital (Bandler & Grinder, 1976). Finally, paradigm is a concept that has recently captured theorists' imaginations in a variety of fields by helping to describe the complex process of system transformation. We hope that its usage here at the individual-as-system level will help spark intuitive connections for our readers.

In terms relevant to adults, we are defining the individual's paradigm to be the system of assumptions, perceptions, expectations, feelings, beliefs, and values organized to understand an extensive range of situations and events. The paradigm is the central source of one's meaning making. At a cognitive level, the paradigm defines what is real and makes sense out of

regularities and fluctuations. It frames sequences of events into wholes and screens out irrevelancies, and gives coherence to a range of thinking, feeling, and behavior. Paradigms also serve affective and motivational functions by identifying and prioritizing problems, facilitating imagination vis-a-vis potential courses of action, and bounding ambiguity which might otherwise overwhelm the person with feelings of chaos and anxiety.

Paradigms are intangible and internal, but permeate everything concrete and external. They emerge out of the recurrent experiences of life and the parallel needs for psychological coherence and a manageable self-concept. A paradigm is not the life structure (the set of activities, relationships, and life spaces that bridge the individual and the world), but is manifested in the workings of it. One's paradigm permeates and is expressed by the life structure in its activities and form. The workings of the life structure refine and elaborate the personal paradigm.

At any moment, the individual is embedded in his or her paradigm. In this sense, it is like culture. We all operate within a culture, but are typically hard pressed to say exactly what it is. And ordinarily, it is not necessary to do so. The same is true of paradigms. The current operating paradigm is not fully articulated. Much of it is tacit and often some of it is emergent. If it is working well, it does not tend to come under scrutiny or enter into sharp awareness. As such, paradigms are sets of complex working myths, both explicit and implicit. They are simply useful and not necessarily true or false, even though there is often great conviction in their truth.

The workings of a paradigm, however, eventually create the seeds of its own demise in a variety of ways (Kuhn, 1970). Through use, in the concrete happenings of the life structure, anomalies come to the fore. One begins to feel less satisfied with and less sure of the current paradigm. The "success paradigm", typical of those aged twenty through forty, is a common example. It is a congruent whole which provides a set of boundaries and guides within which to operate and to pursue one's ambitions, e.g. what to pay attention to, where to find directions, how to add up benefits and costs, how to handle feelings, etc. The success paradigm requires a strong narrowing of experience: directions and guides for behavior are found externally and one performs largely within previously conceived roles. It does much, but its restrictions of self

increasingly take their toll. A paradigm is helpful in dealing with some, but not all of life's circumstances.

Midlife, as a time of inevitable changes both internal and external, strains the adaptive capacity of the old and established paradigm. External conditions may help transform a mere anomaly into a source of acute crisis. As the grip of the old paradigm loosens, the rules, methods, and norms governing one's life, so ingrained and taken for granted, become foci of attention and concern. A questioning of beliefs, values, and assumptions may take place. As past formulas fail or succeed less well, a search for new arrangements results. Often the makings of a new paradigm is waiting in the wings. A paradigm shift refers to fundamental, underlying changes in a person's structure of beliefs, values, feelings and knowledge. It is a re-configuration of the basic premises that frame one's field of action and being. A new perspective is taken. There are new pieces to the puzzle, as well as new, creative re-arrangements of the old pieces. One's constructions of reality are fundamentally different. While the "claim" of a new paradigm is that it can solve the problems that led the old one into crisis, the early versions of a new paradigm are usually crude and clumsy and require time and experience to refine. Moving to a higher level of organization requires an extensive passage through uncertainty, much like re-designing the proverbial plane in flight.

The Context of Stage and Phase Theories of Development

Several "stage" theories of human development have spoken to the issue of paradigm-like change in adulthood (Kegan, 1982; Loevinger, 1976; Kohlberg, 1969; Rogers 1958, 1962; Gould, 1976; Piaget, 1952) and in the management context, (Torbert, 1987). They have focused on building logically distinct and holistic stages of development and functioning. In their models, there is an invariable sequence of development where each stage encompasses a wider, more complex relationship between self and other and represents a developmental advance over the previous state. No stage can be skipped and each stage has an inner logic which accounts for its stability. To a large degree, these stage theories capture the essence of what we are referring to as paradigms and paradigm shifts. They point to changes in the person's underlying set of

beliefs, values, assumptions, and philosophy of life which consequently have impact on the person's management of self, experience, and world. They handle the same bundles of data as before, but place them in a new system of relation to one another by giving them a different framework (Kuhn, 1970).

Of the stage theorists, Kegan perhaps goes furthest in articulating _how_ such changes take place by describing the relationship between stages and the process of moving from one stage to another. Kegan views the self as a meaning making process which composes reality. Such composing achieves periods of relative balance, but occasionally undergoes periods of major shifts. The movement to a higher stage involves a differentiation from and often a repudiation of what the self had been in its previous subjectiveness.

In his model, the "holding environment" (significant others, groups, activities) plays a critical role in the evolutionary process of development. Its role is to confirm and later disconfirm one's meaning making process. Unfortunately, at the higher levels of development, this push to further growth through disconfirmation while offering support for self-maintenance is often not a common feature of most interpersonal and organizational networks (Kegan, 1982; Torbert, 1976). Both Kegan and Loevinger observe that most adults do not reach the highest level of development in their normative models. This is unlike Piaget's model of cognitive development which is paced by the disconfirmation provided through experience with natural, rather than social phenomenon.

In contrast to these theorists, we can identify a final group of adult development researchers: the phase theorists. The phase theorists (e.g. Erickson, 1950; Havighurst, 1979; Schein, 1978; Levinson, 1978) have tended to view the life course as seasonal in nature. They have been much concerned with laying out the sets of issues and/or tasks characteristic of each age-linked adult period. While they have often had clear ideas on what represented good resolutions to each challenge, they have been less concerned with building hierarchical models that identify qualitatively different and increasingly inclusive paradigms. The stage theorists, on the other

hand, have concentrated less effort in judging specifically when the later stages in their models occur during the life course.

Factors Enabling Paradigm Shift at Midlife

Returning to the question of growth at midlife, the Transition Sequence model (O'Connor & Wolfe 1987) could equally result in a cycle or a spiral of development. While phase-like transitions are inevitable, stage-like growth and development are by no means guaranteed. Midlife brings new issues to the fore, but often they are approached and managed in the same old ways. Such a process is essentially cyclic in nature. The content may be different, but the processes of coping and meaning making remain the same. A spiral of development occurs however when the issues of life are dealt with in a qualitatively new way. In the context of a spiral of development however, the transition sequence would seem to be a prime opportunity for paradigm shifts to take place. There is usually a phase of rising discontent where the individual has become dissatisfied with his or her current life arrangements (O'Connor & Wolfe, 1986). Typically, some crisis follows in the form of peaking negative emotions with some scope of real world changes. Other times, an organizational event (merger, re-structuring, transfer) may cast the individual into a midlife crisis. In Lewin's terms, an unfreezing has taken place. The post-crisis phases require a re-integration. One could ask at that point, "Under what conditions is personal growth more likely to take place during and after these steps of transition?"

In the frame of our current work, the cycle becomes a spiral of development through the extent of basic re-examination or paradigm shift. In our view, each phase of life brings forth critical issues and tasks which call for timely resolution. Facing up to and working through these issues provides a fertile ground for paradigm shift. While the midlife transition would seem to be a particularly fertile ground in that questioning of self and re- examination of personal paradigm are common processes during that period, we must ask what specifically triggers and enables paradigm shifts at this time and what consequences are there for the individual who makes such a change.

METHOD

This research took place in and emerged from an extensive program of research into adult development and midlife. Its purpose has been to explore the learning processes in adult development and the social, emotional and cognitive factors of midlife transition.

General Design

The general design of the total project was guided by the philosophy of co-inquiry (Wolfe, 1980). A challenge of co-inquiry is to create conditions of trust and openness where the participants are able to join with the staff to examine their lives and experiences. The researcher's need for valid self disclosure on topics that are highly complex and very personal, can link, under favorable conditions, with the participants' personal stake in uncovering, examining, and making sense of their own data. Activities within the project were designed to insure the participation of and benefit to both the researchers and the subjects.

The four major activities were:

1. An initial two to three hour intensive interview covering current career, family, self, and interpersonal issues, as well as personal history. A battery of personality inventories was also given at this time.

2. A set of four three day self assessment workshops each with a different group of 13-22 participants. These workshops contained eight four-hour modules each focused on a specific theme. Each module included an introduction by the staff, individual work centered on an inventory or exercise, and a sharing of the information in subgroups with two other participants and a staff member.

3. A clinical review, a major source of data for the current study, was held after the first workshops. The total staff spent two to four hours reviewing each case. The primary staff member, who worked most closely with the participant, began the individual review with a presentation including life history, life map, and the stress and coping data. Other data and

observations were shared and the following issues and dimensions were among those discussed and/or rated by the entire research group and recorded:

    a. What are the focal issues the person is facing now in life?

    b. In what areas or domains (if any) is the person undergoing transition? How comprehensive is it? How intense? How far through the process?   What precipitating events?

    c. What kinds and intensity of emotionality were expressed or implied?

    d. Is there evidence of significant change in identity, psycho-social paradigm, or philosophy of life? What is the nature of the change?

    e. What adaptive styles or coping mechanisms are used? How are they working?

    f. What degree of crisis or stress is being experienced?

4. A second set of three day workshops was held one and a half years later to mark what changes had occurred in self and circumstances.

Participants

    The time of onset and resolution of midlife transitions varies considerably, since these transitions are not solely driven by biological changes as those of childhood. What constitutes a midlife transition (vs. some other transition in this age range) is a qualitative judgment based on the themes defined by Jung, Levinson, etc. The 64 subjects in our sample consisted of 33 men and 31 women ranging in age from 35-50. These participants had responded to notices sent to local organizations or to letters mailed to past participants of training programs offered by the Weatherhead School of Management at Case Western Reserve University. Of the 130 who responded and were interviewed, 66 met the following criteria and chose to participate (2 did not complete the whole process): 1. engaged in or anticipating significant changes in life or career, 2, were open to self exploration and sharing of experience with others, 3. revealed a realistic awareness of the purposes, interactive processes, and the time commitments of the workshops, and 4. were not seeing participation as a substitute for therapy. These participants represented a wide range of occupations, e.g. law, medicine, nursing, teaching, entrepreneurs, engineering, managers, CEO's, etc.

With this sample, one cannot address the prevalence of midlife transitions within the general population. Our aim was to engage a diverse sample of people undergoing such transitions in an inquiry into the issues, processes, and concerns related to their transitions.

Measures

Degree of Paradigm Shift. Paradigms are coherent clusters of values, beliefs, assumptions, and expectations by which we make meaning and in which we are embedded. As the personal paradigm serves as a frame to guide life, the individual is "being it," and, in the general case, is not articulating or labeling it. The present variable, "Degree of Paradigm Shift," does not attempt to specify individual paradigms as such, but rather it seeks to measure the extent to which they are being re-examined and changed. This scale is geared to assess how active the process of paradigm shift is. The data from the initial interviews and the clinical reviews was used to rate each participant. (see Table 1).

Transition Sequence. The transition sequence concept and model emerged from our attempts to understand the process of transition. It became clear that the people in our sample were at several different points in transition. Some were only beginning to contemplate change, While others were consolidating changes that they had already made. Those who had progressed further often talked about past experiences that others were currently going through. A grounded theory approach (constant comparative method) was used to construct a set of meaningful categories (Glaser and Strauss, 1967). The interview data were subjected to an inductive analysis in which tentative hypotheses concerning steps in transition were constructed and revised. Themes and categories eventually emerged from the back and forth movement between data and concepts and these formed the basis for the conceptual model of steps in the midlife transition sequence. A fuller description of this model can be found in (O'Connor & Wolfe, 1987). After the model had been constructed, each participant was scored in terms of the transition scale in Table 1 using the interview and clinical review data.

An important subset of measures also draws on data from the clinical reviews (which involved a considerable weighing of each case from a holistic viewpoint). Because of these reviews, it became apparent that the transitions under study varied in ways that had not been captured by other measures. We found that some people were undergoing narrow, well-bounded changes, while others were being plunged into extensive changes. There were other participants who were only mildly dissatisfied with their current situations, while others were in the midst of emotional upheavals. There were some who felt good and positive, while others displayed a highly negative affect. Several theoretical constructs emerged from this process which had not been adequately instrumented.

Scope of the Current Transition. While most of the participants spoke of changes taking place, some referred to changes occurring in only one life context, while others made reference to multiple changes. We labeled this dimension as "Scope of Transition." Similarly, some spoke of modest changes that were not really core to their makeup, while others vividly described intense transitions that were very central to their sense of self. We called this dimension "Intensity of Transition." Originally, these two dimensions were rated separately, but because the outcomes were so highly correlated, they were collapsed into a single scale. This required a recoding of several cases with one point differences on the two original scales (see Table 1).

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   table 1 about here

Emotional Tone. Participants also varied in their emotional states at the first workshop. Some were vocal and loud in their frustration and anger; others were enthusiastic and positive about their current state. Observations on the affect and tone of each participant during the first three day workshop were recorded at the clinical reviews and were the basis for rankings on the "Emotional Tone" scale. (see Table 1)

Outer vs. Inner-Directedness. A 30 item, self report instrument with five point Likert-type scales measured the participant's orientation to inner and outer directedness along five

dimensions: 1) power owning or power attributing, 2) roles defined by self or by other's wishes and expectations, 3) self or other as primary source of values and behavior, 4) initiating or passive stance, and 5) independent or dependent (see Schott, 1981). An alpha reliability coefficient of .77 was computed for a 15 item inner-directedness scale and .82 for a 15 item outer-directedness scale.

Personal Life Issues. Participants rated the importance of 23 issues related to career, family, and self on a 1 (not important) to 7 (very important, a key issue now) scale. The items, "Learning New Skills and Ideas" and "Maintaining my Physical Health and Well-Being" are used in this study.

Career Inventory. Participants rated current experiences of career on a 1 to 9 scale (Bocialetti, 1984). The item, "Current Experience of Career: Excitement, Enthusiasm" is used in this study.

Loevinger Sentence Completion Inventory. Participants in the project were rated on their level of ego development as measured by a 36 item sentence completion inventory (Loevinger, 1976; Pazy 1985). Ego development, as defined by Loevinger, includes increases in cognitive complexity, impulse control (character, ego strength), quality of interpersonal relationships, and a progression of particular focal conscious pre-occupations. These ratings of ego level were used to group our sample into three categories: low ego level (pre-conscientious), medium ego level (conscientious, stage 4), and high ego level (individualistic, stage 4/5 and autonomous, stage 5).

Involvement in Higher Education. Based on the interview data, participants were coded on their enrollment in a higher educational program or not.

RESULTS AND DISCUSSION

Paradigm Shifts as a Consequence of Scope of Transition and Progression Through the Transition Sequence.

From table 2, we see that both scope of transition and progression through the transition sequence effect paradigm shift. Personal paradigm shift increases as one progresses through the

midlife transition sequence and consequently experiences some degree of crisis, peak emotions, and higher than normal uncertainty. During the crisis phase of transition, for example, paradigm shifting averages 2.8. At this point, there is a good deal of questioning and doubt concerning the current operating paradigm. Crisis has created an unfreezing that provides the opportunity for creativity and the substance or material to fashion new adaptations. For our sample, the post-crisis phase (Re-Direction/Adaptation and Re-Stabilizing) provided the possibilities for deeper changes to occur, particularly if the person has engaged in some scope of actual life changes.

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table 2 about here

In both the crisis and post-crisis phases, paradigm shift is higher with wider scopes of transition. There is an additive effect. Additionally, a major shift in paradigm seems to require at least a moderate scope of transition. To the extent that concrete specifics of the life structure are in flux and are also central to the person's sense of self, then the chances of a paradigm shift are increased. The working through of actual changes in one's life structure (moderate to high scope of transition) which call into question important core beliefs is one basic process underlying the paradigm shift. Gender differences were not significant in this relationship. While there are very real differences in the specific struggles of men and women at midlife, (e.g. Jung, 1971; O'Connor & Wolfe 1987), the process of questioning and re-working a paradigm at these higher levels is similar for the two groups as far as we know. The underlying dynamic is one of addressing undeveloped sides and striking new balance.

Level of Ego Development: An Enabler of Paradigm Shift and Scope of Transition

Successively higher levels of ego development are defined by increases in cognitive complexity and ego strength (impulse control and channeling), as well as a clearer understanding of self in the world and more mature interpersonal relationships (Loevinger, 1976). From Table 3, we can see that higher levels of ego development did, in fact, enable individuals from our midlife sample

to undertake and manage wider scopes of actual changes in their lives. Those at lower levels of ego development were involved in modest changes at most.

Degree of ego development was also a significant factor in the ability to question one's core assumptions and beliefs, to cast some off, and to build a new coherent set (paradigm shifting). Those at lower levels of ego development at the time of midlife transition (conformists, Loevinger stage 3) were relatively unable to question the basic core of assumptions that they were living by. Moderate ego development (conscientious, Loevinger stage 4) were able to go somewhat further in their questioning of self, although they average only 2.4 on a five point scale. Those in the higher ranges of ego development, as they embarked on and managed their midlife transitions, were more deeply involved in the process of paradigm shifting. They were able to more closely examine the personal philosophies, assumptions, and beliefs that they had lived by and were beginning to alter and experiment with them. Those who had entered midlife with higher ego level were better able to manage the rigors of a major paradigm shift. To take on a wide scope of change and the consequent possibilities of a paradigm shift requires a well developed ego that is capable of maturing further in the process.

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table 3 about here

Paradigm Shift and the Movement towards Inner Directedness at Midlife.

Several researchers have noted that there is a general movement from outer to inner-directedness from early adulthood to midlife (Schott, 1981; Wolfe & Kolb, 1980; Kolb & Wolfe, 1981), which the midlife transition seems to amplify and solidify (O'Connor & Wolfe, 1986). Paradigms may be rooted in either outer or inner realities. Career and family role expectations dominate the early adult life. The mastery of such roles and the desire to find in oneself the source of purpose, meaning, and action helps to correct some of the excesses and deficiencies of these earlier adaptations. The participants were grouped by whether they were high or low on inner directedness as defined by Schott.

The high inner-directed group averaged 3.1 on paradigm shift, while the low inner-directed group averaged 1.9 (p <.01). Those who have sought to loosen the grip of the demands and rhythms of the external world and to find more inner-directedness were more likely to be involved in and following through on the work of a major paradigm shift. The letting go of the high outer-directed approach to managing one's self and circumstances and the inevitable search for new sources of direction acts as a powerful catalyst in developing a new paradigm at midlife and, in a sense, is a paradigm shift process. The progression to the higher levels of development as described by the stage theorists (Loevinger, Kegan, and Rogers) is largely defined by a movement from outer sources of direction and meaning making to inner ones. Since a paradigm shift involves a questioning of core values, beliefs, and assumptions, the movement from an outer-directed existence (e.g. success paradigm) to a more inner-directed life is a major paradigm shifting vehicle during the midlife transition. This process of movement typically involves an imbalance in favor of inner-directedness before an integration where both inner and outer realities can be respected and appreciated in the workings of the life structure (Schott, 1981). Learning New Skills and Involvement in Higher Education as Concomitants to Paradigm Shifts at Midlife.

Paradigm shifts entail a questioning of self and a new reliance on inner-directions, but not in isolation. Generally, some scope of external change is a prerequisite e.g. Table 2. Additionally, such external changes, whether in relationships or activities, are experienced in new ways, from an emerging perspective grounded in a new gestalt of values, beliefs, and assumptions. The individual must learn to function in new arenas and in new ways in old arenas. Table 4 illustrates that the further along a person is in the process of paradigm shifting, the greater concern he or she is likely to have for developing new skills and ideas. While the creation of a new paradigm for living involves a greater concern for the development of new skills and ideas, it also seems clear that the actual development of new skills is also an enabling factor in carrying forth a paradigm shift successfully.

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tables 4 about here

Not only are many people at midlife concerned with learning new skills and ideas, 15 participants (of 64) were engaged in programs of higher education. This group was more involved in the process of paradigm shifting than those who were not enrolled (3.4 vs. 2.3 on our five point scale, p<.01). Beyond offering new skills and pragmatic possibilities for career development, many programs press the student to question some of their assumptions. Along with the questioning process, alternative frameworks for making sense of one's field and personal experience are usually presented. In this way, such programs are supportive of paradigm shifting.

With paradigm shifts, learning is an important agenda. A growthful transition inevitably involves the person in new learning ventures, directed both outwards and inwards. In a related vein, Ferguson (1981) notes the wide range of methods and disciplines (e.g. meditation, psychotherapy, hypnosis, yoga, training groups) designed to create transforming experiences: unfreezing of the old self and a finding of new inner voices. While no quantitative measures were developed in this area, interview data suggest that such methods and disciplines were often important features in the personal change processes of our participants.

Varieties of Paradigm Change

Many people begin to question and doubt their current beliefs and preferences during times of crisis, particularly as they contemplate changes not well governed by their paradigm. For some, this leads to a casting off of old tenets and a constructing of new understandings and values which serve them better as they change their career and life commitments and involvements. For others, the stress of change proves too much and they re-confirm old arrangements and retrench in the old paradigm. Not every transition results in significant changes in paradigm, nor can we view every change as growthful. Two cases will help illustrate large shifts in paradigm and the impacts on career and family.

Dan S., an engineer, recounted, "For my first 30+ years, I equipped myself with an elaborate array of facades. I worked hard and excelled, but I found that I wasn't satisfied." While working towards an MBA and after moving into sales, he was asked to attend a human relations lab at work. "For the first time, I was associated with people who accepted me as being me. This freed me up to do a lot of changing." He evaluated his growth in the following terms: from highly structured to flexible, closed to open, insensitive to sensitive, aloof to self disclosing, quick with put-downs to less judgmental, and from smart ass to being more tolerant of others. Interpersonally, Dan discovered that he had acquaintances and not friends. There was nothing below the cocktail level. Dan now views most of his work relations as "much closer, no bullshit relationships." He described his progress as follows: learning it was OK to be myself, learning about self with a vengeance, gaining a sense of confidence that I was OK, developing friendships and intimacy, and building professional competence. As in many of the paradigm shifts that we studied, this period was characterized by an increasing excitement, a gathering momentum, an expansion across the life structure, and finally a deeper sense of purpose and self.

Jane T. was another participant who had shifted paradigms in our view. At age 30, with a husband, three children and little money, Jane was depressed and lonely. She sought counseling and eventually she entered a social work program and spent 5 years earning her M.S.W. The following three years were spent in part time work at a family services agency. Jane views this as a time when she established her professional identity. She knew her role and could play it well.

At 42, she was encouraged to apply for an opening as director of a new mental health center. This new position was to provide her with a constant menu of fast paced and stretching experiences. She began to reach for a deeper level of inner directedness, beyond the self regulation provided by a professional identity and a well defined role. She was becoming her own person and was increasingly confident in her own judgment. Yet, she also expressed a desire to be "cogent in her different settings", that is, responsive to the varying demands of each, "while being the same person." A balance of inner and outer directedness requires tolerance for ambiguity and flexibility of behavior without a loss of one's own purpose and is characteristic of the higher levels of ego development (Jane scored highest in our sample). Organizationally, she was transcending the rigid role conceptions of leader and subordinate. She had begun to see herself as steward in the joint building of the new program and she was deeply committed to the growth of her colleagues and subordinates in this process. She provided resources for conferences and workshops and worked to involve others in the day to day operations and program development in ways that stretched them to grow and moved them closer to autonomy and responsibility.

An idiographic examination of those who made substantial shifts in paradigm shows great variety both in how they conceived their former lives and how they now make sense of who they are and what they seek. Many different kinds of shifts were manifest (e.g. from engineer to

humanist, from child- centered housewife to professional to agency director, from tightly structured marriage to open marriage), but yet there were several directions of change that were widely shared in this group. First was the increasing sense of responsibility for oneself and an accompanying sense of autonomy and self directedness. Second was a movement from rigidity to flexibility, or, in Rogers' terms, organic flow. Third was an expression of increased interest in and appreciation for spontaneous interpersonal relationships, as opposed to tightly role bounded interactions. Finally, there was a widespread attempt to incorporate career and other aspects of life in the same framework, both to gain a better balance and to anchor one's identity less in career or family roles and more in the nature of one's true self.

While the process of changing paradigms was much the same for men and women, as were some of the key directions for change, there were also some differences. Many of the women in this sample had devoted much of their early adulthoods to bearing and raising children. They were now starting (or re-starting) careers, a considerable impetus for developing a new paradigm less centered on family and more in touch with organizational life. Many women were shifting from a relational orientation to one involving more proactive agency, while many of the men were moving in the opposite direction-- less focused on accomplishment and more on meaningful relationships. Both were becoming more self directed and balanced, but from opposite sides.

Towards Personal Fulfillment: Paradigm Shift and Positive Emotional Tone

A final question might be, "Is personal growth in the form of a paradigm shift worth the effort and struggle?" Table 4 reveals that it is, at least in terms of positive emotional affect. At each successive degree of paradigm shift, the emotional tone is more positive. Those who have gone the farthest in paradigm shifting are visibly the most positive in their affective expression.

Two other variables also were significantly correlated ($p<.05$) with paradigm shift and help to highlight its positive impact: "Maintaining my Physical Health and Well-Being" (.31) from the Personal Life Issues Inventory and "Current Experience of Career: Excitement, Enthusiasm" (.30) from a career questionnaire. Those who are involved in significant paradigm shifts are

enjoying themselves more than their counterparts in midlife transition, they are finding more excitement in career, and they are looking forward to a future positive enough to be attentive to their health and well being.

SUMMARY AND CONCLUSION

As national and global environments have become more complex and dynamic, theorists have envisioned more organic, humanistic organizations which are flexible and better able to innovate and adapt. These designs, however, have tended to outpace the theoretical attention given to the individuals who will embody such organizational visions. Theories of organization tend to lose their focus on the individual, just as theories of individuals tend to blur the larger open system background variables.

Recently, Torbert (1987) has articulated a framework for both individual and organizational development based on structural (stage) development theories. In his view, only individuals who have developed to later stages can successfully lead their organizations to the correspondingly higher stages of its potential development. It therefore becomes critical to understand the processes of adult development and how the organization can influence them.

In this current study, we have found that personal growth is not a necessary outcome of a midlife crisis. The process of shifting paradigms during the midlife transition is a phenomenon that requires <u>both</u> inner and outer changes. Progress through a transition sequence involving some actual scope of external changes (along with the related disruptions and emotionality) is just as integral to the process of shifting paradigms as the discovery and expression of one's inner self. We cannot say that a paradigm shift is the cause or the result of changes in the environment. For some, an inner push begins the process; for others, an external event initially stimulates the questioning of the current operating paradigm. For all, the process becomes an ongoing interaction between the inner and outer worlds.

Finding and expressing one's inner self, as well as managing some scope of real world change involves some minimum level of competence and ego strength, plus an investment in one's ongoing learning, both formal and experiential. Such investments and the riskiness of constructing, in essence, a new self and a new reality do seem to pay off though. Those who had progressed farthest in the process of paradigm shifting were also the most zestful and positive emotionally. They were enthusiastic about their careers and were anticipating and preparing themselves for the future.

We further expect (and found) that new ways of acting and managing more effectively flowed naturally from the more accurate and true orientation to self and surrounding events which results from the paradigm shift process. Each higher stage transcends the issues that tie up energy at the previous level. The outer directed conformist learns to set his or her own goals and works hard to achieve them. This competitive achiever learns to join others in win/win collaboration towards joint goals. In short, increasing awareness of self and world leads to greater choice and realistic confidence on a range of issues: in working interdependently, in re-defining one's work in wider perspectives, in joining others in collaborative rather than coercive relations, and in more openly dealing with authority and handling conflict.

Sounds good! but how difficult is this process of shifting paradigms? In our study there were no one minute paradigm shifts. The process generally took several years. Torbert (1986) has made similar observations. Reaching higher levels of development is a difficult and imperfect process, yet the advantages are obvious the more that we appreciate the reciprocity of developing organizations and developing individuals.

There are also costs in this work of adult development. As we recognize the complexities of more holistic personal change, we know that there will be some period where the individual is not totally devoted to the organization's purposes. Organizations offer paradigms which members incorporate as they try to fit in. As the person struggles to grow and rejects the old paradigm, he or she may be perceived as rejecting the organization. Furthermore, initial attempts at self directedness and other new forms of behavior tend to be clumsy and imperfect. Because

we are dealing with a basic <u>self-creative</u> process, some tolerance for change and mistakes is necessary (as in any innovative effort). These costs are easier to bear when the price of not developing is kept in mind. Organizational problems like stagnation, biding time, status quo, and lowered energy are less dramatic and attention getting and probably more dangerous because of this. Similarly, more destructive acting out and self absorption may not be diagnosed from a developmental perspective as failures to grow. It is also necessary to realize that most people are lowering their career investments at midlife (O'Connor & Wolfe 1987). The paradigm shifters are able to compensate though: they are increasingly powered by new inner drives and needs and are apt to act autonomously (and so require less supervision). Typically, they have also worked to better integrated career, family, and self and therefore are less likely to suffer unknown energy drains from the inevitable conflicts between these life spaces.

   Organizations can do many things to promote the personal growth of members at all levels and ages. Organizational development specialists and human resource departments can work to incorporate an adult development perspective into the variety of activities that they and their organizations conduct. When the development of the whole person is the target, opportunities to examine one's assumptions and ways of acting will become a more regular, pragmatic feature of organizational life, not a self indulgent luxury. As the large, "baby boom" generations enters its 40's, the midlife transition is one obvious opportunity. Yet, given the finding that those at higher stages of ego development make wider and deeper changes at midlife, organizations will also gain from creating environments that support such development before midlife. In fact, all collaborative, data based methods (T-groups, action research, team building, culture change, appreciative inquiry, etc.) provide potential for members to discover themselves anew, to re-energize, and to re-orient to their work and work relationships. Career and life planning, for example, can be a self confrontation for the purpose of creating a life worth living (Shepard, 1975) or it can be done in a more mechanical, bottom line way.

   Corporations spend large sums of money on skill training and management development. Engaging in both self study and collaborative inquiry will encourage individuals to develop to

higher levels (Torbert 1986) and such personal growth will tend to become a catalyst for skill acquisition. While skill training can stimulate some people to growth, those who have grown already are often hungry for new skills, ready to absorb what is available, and able to create whatever else they need in the frame of their new understandings. Furthermore, the capacity for acquiring skills or learning how to learn expands as the person grows. Finally, given a particular developmental position, training programs can be better tailored.

Just as organizations need to be more attentive to promoting developmental processes in the various stages of adulthood, schools of business and professional schools can also focus on the development of the whole person in the range of programs they offer. In addition to classroom lecture, opportunities for dialogue and contact, practice in the field, feedback on performance, reflection on personal experience, and support for developing an integrated personal style and professional identity need to be built into the curricula of professional education programs (Wolfe, 1980). For example, Neilsen (1987) describes an EMBA program as an "opportunity for personal renaissance... an important event in the broader life space of participants." As competent managers, they face increasingly frequent demands for quick answers to emergent problems with little time for reflective thinking. Such demands significantly stress their family lives as well. They have a 2 fold agenda: a need for technical catching up <u>and</u> a need for expressive activity (by stepping out of their tightly accountable roles). In this context, the EMBA can be a rare opportunity: 1) to deal holistically with others who share the same problems as normal adults at midlife, 2) to mount a personal revival, using classroom to question, ponder, explore, and engage in learning for its own sake without the pressure of having to come up with actionable answers at every turn, 3) to explore one's life situation (career, family, and friends) and one's own socio-emotional growth without the ordinary requirements for modelling confidence, competence, and commitment (Neilsen 1987). Such programs can use off campus residencies to develop the class as a learning community, workshops that involve spouses, and a mix of hard and soft methodology to tap both the instructor's and the participants experiences and expertise.

In a similar vein, we would call for those who study culture to go beyond the more immediate questions of culture-environment-task fits, to more consciously focus on the nourishing aspects of culture as they relate to individual development in all layers of hierarchy. While the urgency would seem greatest at the top, numerous job enrichment and socio-technical systems experiments have demonstrated the capacity of the least educated at the lowest levels of the organization to take responsibility, do quality work, and exercise more discretion than previously thought possible.

Many organizations are moving from autocratic, control-based management to greater reliance on group and self management in the quest for greater commitment, better problem solving, and innovation. As people develop an integrated perspective, they can make contributions to the organization that they were unable to do when they were less whole. Yet, in this process, there is a certain paradox in ordering dependent employees to be autonomous and self directing. Those who have grown and are seeking ways to create organizational settings that support their new levels of functioning may overlook the need for others to experience a process of change. A mutually interdependent process exists though: as individuals grow and develop, then organizations can (and will be pressured to) institute structures and systems to take advantage of their greater capabilities; as organizational leaders and theorists envision and construct cultures that tap dormant needs, unfreeze individuals, and provide growth experiences where members can safely question and inquire into their own and the organization's paradigms, then individuals will more readily grow and develop.

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Table 1 Scales and Inter-Judge Reliability *

Paradigm Shift (.83)
    1) Fully embedded in current paradigm; no evidence of questioning it.
    3) Actively engaged in questioning and doubting the basic assumptions that   they
live by; has recognized relativity of current paradigm and its inadequacy in current situations.
    5) Have actively questioned paradigm and have cast off some old assumptions   and
beliefs; new ones have been sufficiently examined and expressed in regard to their coherence and
workability.

Transition Step (.98)
    1) Stable or pre-transition: no evidence of engaging in change
    2) Rising discontent: expression of much discontent with current state
    3) Crisis: critical juncture, peak of the transition process in terms of uncer   tainty
and upheaval
    4) Re-direction and adaptation: evidence of tentative new directions
    5) Re-stabilizing: re-committing to new directions.

Scope of Transition (.81)
    1) Undergoing relatively minor transitions
    3) Experiencing some significant amount of transition of moderate intensity
    5) In the midst of extensive changes in important arenas of life; intense   involving iss

Emotional Tone (.91)
  -2) Predominantly negative affect and tone; depressed, despairing, angry, etc.
   0) Neutral or expressing both negative and positive emotions equally
 +2) Positive, optimistic, zestful tone. Able to express negative emotions, but   not
dominated by negative affect.

* (Numbers in parentheses indicate initial interjudge reliability for each scale. Each participant
was independently ranked by two judges who had access to all the qualitative data. These
rankings (and disagreements in particular) were reviewed by a third judge, who had worked ex-
tensively with many of the participants, and this generally led to resolutions of the differences.
While these are rough measures, the inter-judge reliability coefficients gave us some confidence
that they are indeed dimensions that can be replicated.)

Table 2

Mean Paradigm Shift by Transition Step*
and Scope of Transition

Scope & Intensity of Transition

Transi-		low	medium	high	Row means
tion	Pre-Crisis	1.4	1.0	---	1.4
	Crisis	1.0	2.7	4.0	2.8
Sequence	Post-Crisis	2.5	3.4	5.0	3.4
	Column means	1.6	3.0	4.5	2.5

TWOWAY ANOVA, F Values: Transition Step 9.88 *** Scope 13.84***
          *** $p < .001$ n=64

* The transition sequence variable has been collapsed to three categories (pre-crisis, crisis, and post-crisis) and the scope of transition variable to three (low, medium and high) in order to maintain adequate cell frequencies.

Table 3

Mean Scope of Transition
and Paradigm Shift by Ego Level

Level of Ego Development

	Low	Medium	High	ONEWAY ANOVAS	
Scope of Transition	2.4	2.7	3.3	F=2.93*	$p <.06$
Paradigm Shift	2.0	2.4	3.2	F=4.57**	$p <.01$
N's for both (63)	(15)	(28)	(20)		

* df between/within 2/60 MS 3.9/1.33
**df between/within 2/60 MS 6.84/1.5

Table 4

Mean Importance of Learning New Skills and Ideas & Emotional Tone
by Degree of Paradigm Shift

Paradigm Shift

	1	2	3	4	5	ONEWAY ANOVA

New Skills and Ideas	5.1	4.9	5.8	6.1	6.2	F=2.93*	p <.05
N's (62)		(18)	(12)	(18)	(8)	(6)	

Emotional Tone	-1.2	-.8	-.2	.4	1.2	F=5.86**	p <.001
N's (64)		(19)	(12)	(19)	(8)	(6)	

*   df between/within 4/57MS 3.31/1.13
** df between/within 4/59MS 8.3/1.4