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Leadership Effectiveness: A constructive developmental view and
investigation:

(Under the direction of KARL KUHNERT)

The past research and theory on leadership has provided much useful information, yet the field is not satisfied with the predictive capability of existing measures. A review of the literature shows that the majority of the past research and theory on leadership has focused on the measurable content of many leadership factors. However, in this study, another approach is proposed based in constructive developmental (CD) theory (Kegan, 1982, 1994), and a theoretical distinction between content and construct oriented research is proposed. In addition, the relationship of CD level is investigated in relationship to leader position as well as to leader effectiveness. 21 CEOs and executive leaders from 17 US public companies across a wide range of industries with a mean annual gross of \$5.1 billion, and 21 middle managers from the same organizations, were interviewed using a constructive developmental interview technique. 132 excerpts from the interviews were assessed for CD level and effectiveness. The results of the quantitative and qualitative analyses show strong evidence for four major findings: 1) The distinction between the content and constructed oriented ways of understanding leadership are shown to be different, but complimentary sides of the same coin. 2) The effectiveness of responses to leadership themes (e.g., conflict, success, vision, etc.) is significantly and positively related to CD level. 3) CEOs and executive leaders have significantly higher CD levels than the comparison group of middle managers as well as the expected values based on the known population norms. 4) Evidence for the concept of a specific kind of 4th order CD level where the leader's style is more open to other styles, ideas,

perspectives, etc. is presented as a post hoc finding. Limitations and implications for future research are discussed.

INDEX WORDS: Adult development, Constructive development, Constructivism, CEOs, Kegan, Leader effectiveness, Leadership, Middle managers, Position, Public companies, Public organizations

LEADER EFFECTIVENESS: A CONSTRUCTIVE
DEVELOPMENTAL VIEW AND INVESTIGATION

by

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iv
LIST OF TABLES	viii
LIST OF FIGURES	x
 CHAPTER	
1 INTRODUCTION	1
An Introduction to the Content/Construct Dichotomy	3
A Brief Review of Past Leadership Research	
and Theory.	9
An Introduction to CD Theory	28
The Relationship Between CD Theory	
and Leader Effectiveness	61
Summary	76
2 METHOD	79
The Selection of Participants	79
The Selection of Successful Companies	84
Participant Recruitment	87
The Assessment of Constructive Developmental Level	89
Reliability and Validity	98
Testing the Hypotheses	104

CHAPTER

3	RESULTS	114
	Interrater Reliability for Interview Scoring	117
	The Analysis of HI	118
	The Analysis of HII	119
	Interrater Reliability for Excerpt Scoring	125
	The Analysis of HIII	126
4	DISCUSSION	131
	Evidence for the Content/Construct Dichotomy	134
	Discussion and Interpretation of the	
	Effectiveness Ratings	161
	The Open 4: A Case for Openness as Content	189
	The Differences in the CEO Group and the Comparison	
	Samples	198
	Limitations	206
	Conclusion	208
	REFERENCES	213
	APPENDICES	
A	RECRUITMENT LETTER	233
B	CONSENT FORM	235

LIST OF TABLES

	Page
TABLE	
1 Subject-Object Balancing in Piaget's Stages of Cognitive Development	38
2 Distribution of Constructive Developmental Level for Highly Educated Professionals Using the Subject-Object Interview	71
3 Distribution of Constructive Developmental Level for Managers using Sentence Completion Tests	72
4 Demographic Characteristics of the CEO Sample	80
5 Demographic Characteristics of the Control Group	81
6 Demographic Characteristics of the Participating Organizations	85
7 Longitudinal Study of Adult Orders of Consciousness	103
8 Distribution of Constructive Developmental Scores for the Total Highly-Educated Sample	107
9 Chi-Square Analysis of the Differences Between the CEO Sample and the Expected Population Values	120
10 Mann-Whitney U: Two Independent Samples Analysis of the Differences Between the CEO Sample and the Control Group of Middle Managers	122

TABLE

11	Moses: Two Independent Samples Analysis of the Differences Between the CEO Sample and the Control Group of Middle Managers	123
12	Spearman Rank-Order Correlations Between the Effectiveness Ratings, CD Level, and the Raters	129

CHAPTER 1

INTRODUCTION

The basic fact that provides the material for interest in heroes is the indispensability of *leadership* in all social life, and in every major form of social organization. The controls over leadership, whether open or hidden, differ from society to society, but leaders are always at hand--not merely as conspicuous symbols of state, but as centers of responsibility, decision and action. There is a natural tendency to associate the leader with the results achieved under his leadership even when these achievements, good or bad, have resulted despite his leadership rather than because of it. . . .

Whatever the social forces and conditions at work--*insofar as alternatives of action are open, or even conceived to be open*--a need will be felt for a hero to initiate, organize, and lead. The need is more often felt than clearly articulated, and more often articulated than gratified. Indeed, the more frequent the cries, and the higher the pitch mounts for an historical savior or for intelligent leadership, the more the prima facie evidence accumulates that the candidates for this exalted office are unsatisfactory (Hook, 1943, pp. 3-4, 13).

The year has changed, but the sentiments have not. There is a yearning for effective leadership, but the candidates for the position, the theory that

supports them, and the research about them continues to befuddle researchers and theoreticians alike. As the number of publications on leadership has continued to grow, social scientists have struggled to integrate the diverse and often inconsistent findings (Yukl & Van Fleet, 1992). Even though the information that has been made available has generated more questions than answers, Bernard Bass (1990) paints a more optimistic picture about what we as researchers *do* know. He states that the "know-nothings" who simply know little about the subject, and do not take the time to find out, declare that we know nothing about leadership, or what we do know does not matter, or worse still that leadership does not even exist, or even if it exists, that it is antidemocratic and interferes with good team efforts. He concludes, however, that the 7500 publications and research studies that have documented different aspects of leadership should be adequate documentation of the absurdity of such know-nothingism.

The challenge to the research community is to make sense of the different aspects of leadership that have been documented, reconcile the separations between the delineated lines of research, and show how the interactions between different leadership processes do not contradict each other. While this task is currently taking place, there is also a call to awareness that this field may be more subjective and arbitrary than objective and systematic, and that leadership concepts and theories are subjective efforts by social scientists to interpret ambiguous events in meaningful ways (Yukl & Van Fleet, 1992). This call for a more subjective, or interpretive, approach in light of the over reliance on objective measures leads to the introduction of purpose for this dissertation. In short, it is a more qualitative (interpretive) than quantitative (positivistic) investigation of how the ways in which leaders construct meaning affects their ability to lead.

To get to the investigation of that premise, however, I want to introduce several aspects of the research that have been undertaken to date, and juxtapose them to a constructive developmental approach to the subject (Fowler, 1981; Gilligan, 1982; Kegan, 1982; Kohlberg, 1969; Loevinger, 1976; Perry, 1970; Torbert, 1987). Therefore, this introductory chapter will be organized into four major content areas. The first area will be a general introduction to the differences between what will be called content oriented research and construct oriented research. The second area will include a review and summary of past leadership research. The third will be an introduction to constructive developmental (CD) theory. The final section of this chapter will propose the relationship between CD theory and leader effectiveness. Chapters on the methods and the results of the research will be followed by a discussion chapter.

An Introduction to the Content/Construct Dichotomy

Philosophers have been talking about the concept of leadership, and what effective leadership is since the time of Socrates. From Plato's recording of Socrates' philosopher king, to Machiavelli's Prince, to Nietzsche's *Übermensch*, philosophers have explored the characteristics and actions of leadership (Grob, 1984). Since the social sciences, and especially psychology, became formal disciplines, leadership has been the focus of scientific theory and research. However, the approach to studying effective leadership that is proposed in this project is somewhat divergent from the traditional, positivistic approach in that it is viewed from a constructivist perspective. What this is will be presented in depth later in this chapter, but in general it examines how one makes sense of, or constructs meaning about, one's environment and experiences. The constructivist approach will be juxtaposed to the traditional approach that historically examines the content of the factors or variables thought to impact

leadership effectiveness. This content focused approach has lent itself to a positivistic, empirical investigation of the subject that has yielded a significant amount of useful findings. In the review of leadership theory and research that follows, this content oriented focus of past research is highlighted, but with the intent of drawing the readers attention to a concept that is detailed as the content/construct dichotomy.

What is labeled the content/construct dichotomy is not to be confused with the process/content dichotomy raised by Campbell and his colleagues almost 30 years ago (Campbell, Dunnette, Lawler, & Weick, 1970). This well known and useful dichotomy makes a distinction between theories of motivational behavior based on whether they focus on the *processes* that lead to choices among alternative courses of action, varying degrees of effort expenditure, and persistence over time; or whether they focus on specifying the substantive *content* or identity of variables that influence behavior and less with the process by which they do it (Campbell & Pritchard, 1976).

In Campbell et al's. distinction (1970), process theories first try to define the major variables that are responsible for explaining choice, effort, and persistence. In other words, in explaining behavior, process theories answer the question: "what are the forces that make it go?" Major variables identified as such, and that are included in various models would include such items as incentive, need, drive, reinforcement, and expectancy (Campbell & Pritchard, 1976). However, what makes these theories *process* theories according to Campbell and his colleagues (Campbell et al., 1970) is that they focus on how different components such as drive, expectancy, and valence interact and effect each other in a specific behavioral outcome.

Expectancy theory is a good example of what Campbell et al. have classified as a process theory. Although built on a foundation initially

conceptualized by Lewin (1951), Hull (1952), and Skinner (1948, 1971), Vroom (1964) developed what is likely the most well known expectancy theory in which he proposed that the force on a person to choose a particular task or behavior was a function of expectancy (the belief that the behavior will lead to a certain outcome) X valence (the perceived value of the outcome) (Campbell & Pritchard, 1976). Although this theory was expanded by Graen (1969), Porter and Lawler (1968), and Lawler (1971, 1973), expectancy / valence theory (eventually VIE theory) illustrates, for the purposes of this explanation, the general makeup of a process theory. The idea is that there is a process that individuals go through either consciously or sub-consciously, in this case a weighing of expectations and values, which leads to their actions (thus the name process theory).

Content theories on the other hand find their basis in something quite different. In specifying the content or identity of variables that lead to a particular action, content theories focus on the levels of some characteristic of the individual. Content theories lend themselves to a taxonomic format although dynamic relationships between the variables are not completely absent (Campbell & Pritchard, 1976). Examples of content theories are represented in the work of Murray (need for achievement, affiliation, dominance, etc.; 1938), Maslow (physiological, safety, social, esteem, and self-actualization needs; 1954), and Alderfer (existence, relatedness, and growth needs; 1969, 1972). These needs theorists postulate that the substantive content of the needs variables, and the nature of individuals to satisfy those needs, leads to the actions the individual takes. In addition to the aforementioned need theories, equity theory (Homans, 1961; Jaques, 1961; Adams, 1965) is another major area representative of Campbell et al's. content theories. Equity theory is based on the individual's attempt to achieve an equitable balance of

inputs to outcomes, and this desire for equity is the force that leads to the behavior (Campbell & Pritchard, 1976).

Campbell and Pritchard note that there are many consistencies between content theories and process theories. They suggest that both equity theory and need theory, including McClelland et al's conceptualization of need theory (McClelland, Atkinson, Clark, and Lowell, 1953), are in fact subsumed by VIE theory (Campbell & Pritchard, 1976). They state that the difference is that content theories are for the most part restricted to a particular first level outcome defined in a very specific way. For example, desire for equity is the measured first level outcome variable. Differences in individuals levels of desire for equity lead to differences in motivation to undertake some action. However, consideration of the interaction with expectancy or valence of the particular inputs and outcomes is not taken into account as they would be in a process theory.

What is being proposed in this paper from a constructivist perspective is that the process/content distinction made by Campbell et al. (1970), while very useful, is dividing into two sub-categories a bigger group of theories that describe the quantifiable aspects of certain factors that lead to behavioral outcomes. What both content and process theories have in common is that they both measure the values or amounts of a particular factor--whether it is assigned by, or inherent in, the individual--that leads to a particular action. Both, however, quantify the factors in a measurable way. For example, most VIE process variables are even presented as mathematical formulas that suggests the quantification of the content of both the expectancy and valence values, and a content variable such as need for achievement is quantified as high, low, or average.

On the other hand, a constructivist approach is much more subjective, qualitative, and interpretive, and suggests that there are qualitatively different ways of constructing meaning about one's experiences. This approach, in the context of assessing one's meaning construction, identifies the deep structure of one's way of knowing. However, in being subjective, it is not meant to suggest that any given interpretation or construction is right. There are good interpretations and bad interpretations. Ken Wilber (1996) draws a useful analogy about this point as it relates to qualitative/quantitative distinction:

It's like studying *Hamlet*. If you take the text of *Hamlet* and study it empirically, then you find that it is made of so much ink and so much paper. That's all you can know about *Hamlet* empirically—it's composed of seven grams of ink, which have so many molecules, which have so many atoms

But if you want to know the *meaning* of *Hamlet*, then you have to read it. You have to engage in intersubjective understanding. You have to *interpret* what it means.

True, this is not a merely objective affair. But neither is it subjective fantasy. This is a very important, because empiric-scientific types are always claiming that if something isn't empirically true, then it isn't true at all. But interpretation is not subjective fantasy. There are good and bad interpretations of *Hamlet*. *Hamlet* is not about the joys of war, for example. That is a bad interpretation

And this can be determined by a community of those who have looked into the same depth.... the meaning of *Hamlet* is not "Have a nice day." That interpretation can be easily rejected by those who have read and studied the text—that is by those who have entered the interior of

Hamlet, by those who share that depthÖthe point is that interpretation does not mean wildly arbitrary (pp. 97-98).

This dissertation is an interpretive approach to the study of leadership. The empirical, content oriented approaches have accounted for many useful findings. However, what is being suggested in this paper is that there is a distinction between content research and construct research. There has been a history of empirical study on leadership which has quantified the content of various factors that account for some of the leadership variance. This dichotomizing is not meant in any way to diminish the value or usefulness of the traditional, empirical work. Rather, it is intended to draw the readers attention as to how a constructivist approach differs from the traditional ways of studying leadership. The constructivist approach is more qualitative and more interpretive, but this approach should not be construed as "wildly arbitrary." There are good and bad interpretations of qualitative explanations for leadership effectiveness.

Thus, the content/construct distinction is proposed as a syntactical tool to distinguish between a useful and empirically oriented strategy and a more qualitative, interpretive approach, both aimed at the same target: a better understanding of leadership effectiveness. Campbell and Pritchard (1976) suggest that *both the process and content theories* distinguished by Campbell et al. (1970) *are variations on a single approach*, and henceforth I will refer to both as *content theories* for the purposes of this paper, with the acknowledgment that these can be sub-categorized into theories of process or content. Therefore, in the following review of the leadership literature, attention is drawn to the extent to which past theory and research have focused on what is called in this project "the content" of various factors associated with leader effectiveness.

How the content focus differs from the half of the content/construct dichotomy that deals with how the leader constructs meaning of these different contents will be detailed later in this chapter. However, the reader is asked to focus on how each of the areas of past research, reviewed next, primarily investigates the content of any given theory.

A Brief Review of Past Leadership Research and Theory

Trait Theory

Early researchers like James (1880) and Galton (1869) began a trend in research known as trait theory (Bass, 1990; Hollander & Offerman, 1990). The trait conception was founded on the assumption that leaders possessed universal characteristics that made them leaders. Although the first half of this century witnessed some unusual investigations as to what these characteristics might be (many detailed in the next paragraph), most were early evolutions of the "great man" theories put forth by James and Galton (Hollander & Offerman, 1990). Although trait theory has received significant criticism and is seen as simplistic, different and more complex forms of leader trait theory have continued to be investigated to the present day. I have attempted to create a visual representation of the history of leadership research over the past century in a timeline format that is referred to extensively throughout this section (see Figure 1). Figure 1 shows graphically the ebb and flow of different lines of research over the past century, and one can see how as one line of research wanes, another begins to surge.

The content of trait theories has evolved over the decades. Early research (1920s-1940s) focused on everything from physical attributes (height, weight, athletic prowess, and appearance) to fluency of speech, to intelligence and scholarship. A significant body of research was also conducted emphasizing aspects of personality (extroversion, dominance, initiative,

Figure Caption

Figure 1. Historical timeline of the different areas of research that have been conducted over the last century.

Pre-1920s	1920s	1930s	1940s	1950s	1960s	1970s	1980-present
Trait Theory							
Carlisle: 1841 Galton: 1869 James: 1880	Kohs & Irle (20) Bernard (26) Bingham (27) Tead (29)	Wiggam (31) Page (35) Kilbourne (35) Smith & Krueger (33)	Bird (40) Jenkins (47)	Katz (55)	Fiedler (61)	Hummell (75) Zaleznik (77) Miner (78)	Kets de Vries (80) McClelland & Boyatzis (82) Bray & Campbell (88) Sternberg (90) Wagner & Sternberg (90)
Charismatic/Humanistic/Transformational							
	Weber (21/46)	Argyris (57)	Likert (61-67) McGregor (60-66) Argyris (64) Blake & Mouton (64) Maslow (65) Hersey & Blanchard (69a)			Hershey & Blanchard (72) House (77) Burns (78)	Kegan (82) Bass (85) Conger & Kanungo (87) Kuhnert & Lewis (87) Yammarino & Bass (88) Kuhnert & Russell (89)
Psychoanalytic Theories							
	Freud (22)	Frank (39)	Fromm (41)		Erikson (64)	Levinson (70)	
Situational Theories							
Mumford (09)	Person (28) Spiller (29)	Schneider (37)	Murphy (41) Hook (43) Stogdill (47)		Bennis (61)	Stogdill (75)	
Person/Situation & Contingency Theories							
	Westburg (31) Case (33) Barnard (38) Lapiere (38)	Williams (52) Gibb (54) Stogdill & Shartle (55)	Murphy (41) Gibb (47) Jenkins (47)	Bass (60) Kahn et al (64) Blau (64) Fiedler (67) Hersey & Blanchard (69b)		Evans (70) Yukl (70) Jacobs (70) House (71) Newell & Simon (72) Mintzberg (73) Vroom & Yetton (73) House & Mitchell (74) Green (75) Osborn & Hunt (75) Fiedler et al (76) Graen (76) Stewart (76) Pfeffer (77) Salancik & Pfeffer (77) Winter (79) Kerr & Jermier (78) Green & Mitchell (79)	Wofford (81) Yukl (81) Stewart (82) Hunt & Osborn (82) Wofford (82) Blake & Mouton (82) Hunt & Osborn (82) Dansereau, et al. (84) Hunt (84) Fiedler (86) Fiedler & Garcia (87) House (88) Hersey & Blanchard (88) Yukl (89) Howell et al (90)
Behavioral Theories							
	Lewin, Lippitt & White (39)	Homans (50) Carlson (51) Fleishman (53) Hollander & Webb (55) Halpin & Winer (57) Mahoney & Jones (57) Stogdill (59)	Coch & French (48)	Mann (65) Tucker (65)	Kahn & Quinn (70) House (72) Scott (77) Mawhinney & Ford (77) Sharf (78) Kerr & Jermier (78) Davis & Luthans (79)	Sheridan, Kerr & Abelson (81) Kotter (82) Kanter (83) Kaplan (84) Yukl, Wall & Lepsinger (90)	
Power & Influence							
	French & Raven (59)					Zaleznik (70) Thamhain & Gemmill (74) Zaleznik / Kasse DeVries (75) McClelland / Burnham (76) Katz & Kahn (78) Hollander (78) McCall (78)	Yukl & Taber (83) Kotter (85) Yukl (89) Yukl & Falbe (91)

integrity, self-confidence, mood control, etc.). Social skills, popularity, and cooperation among others are also include in this extensive list of traits that have been investigated as to their relationship to leader effectiveness (see Bass, 1990, pp. 59-77 for references; also see Figure 1). This period of research, the bulk of which had amassed by the 1940s, looked purely at traits and attributes as something possessed by fortunate and superior individuals (Bass, 1990). As mentioned earlier, it is important to note that all of these theories focus on the content of a given trait; that is, what amount or type of a specific trait leads to effective leadership.

Although the 1940s, and particularly a review by Stogdill (1948), saw the end of pure trait theory, there has been continued research in the area of leader traits. Bass (1990), Yukl and Van Fleet (1992), and Hollander and Offerman (1990) have noted a category of theories that could be viewed as extensions of trait theory, which are labeled in Figure 1 as Humanistic/Charismatic/Transformational theories. Note that Figure 1 illustrates an increase in these theories that coincides with the hiatus of traditional trait theories. These theories incorporate the interaction of traits with situational elements, but there is still an emphasis on the trait of the leader.

The humanistic theories are those which are “grounded in American ideals of democracy and individual freedoms, . . . [and are] concerned with the development of the individual within a cohesive organization” (Bass, 1990, pp. 43). Perhaps the most well known of the humanistic theories is McGregor's Theory X and Theory Y (1960), but those proposed by Likert, Blake and Mouton, Maslow and others (see Figure 1 for references) would also fall under the humanistic umbrella. The 1970s and 80s were host to theories focusing on the effect that charisma had on leader effectiveness (House, 1977; Conger & Kanungo, 1987) that in many ways are a throw-back to the “great man” theory

posited by Galton in 1869. However, Burns (1978), Bass (1985), and Kuhnert and Lewis (1987) have developed theories of transformational leadership, that in some ways combine the aspects of charismatic and humanistic theories, along with adult development theory to address why some leaders seem more effective at inspiring positive change in their followers than do others. Finally, the last decade or so has seen another evolution of trait theory in the form of motivation (McClelland & Boyatzis, 1982) and intelligence (Wagner & Sternberg, 1990) as traits.

Situational Theory

In direct opposition to the trait theorists, a group of researchers began to develop situational theories which suggested that leadership is solely a matter of situational demands. These theories state that situational factors determine who will emerge as leaders (Bass, 1990). A review of Figure 1 illustrates that in the late 1920s researchers were advancing theories that stated that up to 95 percent of the advance in leadership was unconnected with great men (Spiller, 1929), and that (1) any particular situation plays a large part in determining the qualities required for leadership and (2) that those qualities in an individual that any given situation may call for are themselves the product of a succession of previous leadership situations that had developed and molded the individual (Person, 1928). Others like Murphy (1941), stated that leadership did not reside in the person, but was a function of the occasion. As late as 1975, Stogdill stated that the leader is the product of the situation, not the blood relative or the son of the previous leader. Focusing again on the content argument, situational theorists looked to the content of a given situation to determine the type of leader that the situation would cause to emerge.

Early Contingency Theory

Shortly after situational theorists began to challenge the notion of the great man or trait leadership theories, researchers like Westburg, Barnard, and Lapiere (see Figure 1 for references) began to mesh what seemed valid from both the trait and situational perspectives and developed a line of research known as person-situation theories. These theories later became known as contingency theories as they incorporated leader behaviors and the characteristics of followers. Stogdill's 1948 research concluded that individual traits and situational assessments are both important, as well as the interaction between them. The contingency theories considered leadership effectiveness to be a joint function of leader behavior and situational demands as contingencies which interact to make leader qualities variously appropriate to the task at hand (Hollander & Offerman, 1990). Bass (1990) stated that Stogdill's (1948) contingency thesis "sounded the seeming death-knell of a pure traits approach to the study of leadership." Although the decades since 1950 have seen limited research activity of pure trait theory, this statement is a fairly accurate portrayal of what has happened in trait research since the 1940s.

Note that in the context of Campbell et al's. (1970) process/content distinction discussed at the beginning of this chapter, contingency theory would be classified as a process theory, whereas pure trait theory would be a content theory. However, in the context of the content/construct distinction, proposed as a syntactical tool for establishing a common vocabulary in this discussion, both contingency theory as well as pure trait theory are classified as content theories.

Contingency theory momentum exploded after the introduction of a series of theories known as behavior theories explored ideas regarding the specific behaviors needed for effective leadership. The emphasis on leader

behaviors as opposed to traits lent another element to contingency theory, and leader behaviors play a prominent role in modern contingency theory.

Therefore, the review of contingency theory will continue after a brief review of the behavior literature.

Behavioral Theory

The behavioral approach to the study of leadership is marked by emphasizing what leaders and managers actually do on the job, and the relationship of this behavior to leader effectiveness (Yukl & Van Fleet, 1992). As this opening statement indicates, the focus on content (of specific activities, actions or behaviors), is most poignantly illustrated in the behavioral leadership theories. Early behavioral research focused on developing taxonomies of behaviors. Much of this early research relied on the Ohio State studies by Fleishman (1953) and Halpin and Winer (1957) which revealed that subordinates saw leadership behaviors in terms of two independent factors: Task oriented behaviors (initiating structures) and people oriented behaviors (consideration) (Yukl & Van Fleet, 1992). From this starting point of two contingency factors, factors of leader behaviors have grown to be more specific and encompassing culminating with Yukl and his colleagues identifying 14 categories of behavioral factors applicable to any leader or manager (Yukl, Wall, & Lepsinger, 1990).

Another aspect of the behavioral research that developed over the decades from the 50s through the 80s where those concerned with participative leadership (Coch & French, 1948; Kanter, 1983; Kouzes & Posner, 1987). Participative leadership is defined as consulting with subordinates individually or making joint decisions with them as a group. However, after 4 decades of research the field is left with no definite conclusions about the general consequences of participative leadership (Yukl & Van Fleet, 1992). More

recently empirical research has suggested that effectiveness is predicted better by specific behaviors, and the research focus has shifted toward investigating behaviors like positive reward behavior, clarifying, monitoring, and problem solving relevant to the leadership situation. However, ultimately, behavior research like trait research suffers from a tendency to look for simple answers to complex questions (Yukl & Van Fleet, 1992). This factor turns our attention back to the contingency theories which attempt to address this complexity problem.

Modern Contingency Theory

As alluded to earlier, contingency theories are based on the assumption that different behavior or trait patterns will be effective in different situations, and that the same behavior or trait pattern is not optimal in all situations (Yukl & Van Fleet, 1992). The last twenty-five years have witnessed a flurry of contingency theories as seen in Figure 1. Contingency theory has evolved in increasingly complex forms, each new wave trying to account for more of the interaction that takes place between traits, behaviors, and situations of both the leader and the follower. Below are briefly reviewed some of the major contingency theories, but Figure 1 provides a more complete reference list.

Although Stogdill (1948) and others had developed or suggested contingency models, Fiedler's (1967) *least preferred co-worker* (LPC) model was the first one to gain prominence. He suggested that there was a moderating influence of three situational variables (position power, task structure, and leader-member relations) with two leader styles (task oriented, relationship oriented) measured by the LPC score of the person the leader could work with least well. Low or high LPC score leaders appear to be more effective contingent upon the favorability of the situational variables. Hersey and Blanchard's *situational leadership theory* (1969b) proposes that task oriented or

relationship oriented behavior by a leader should depend on the maturity of the follower. The theory has been criticized for over simplifying the construct and empirical support for the model is weak (Yukl & Van Fleet, 1992).

Evans (1970) and House (1971) developed the *path-goal theory* of leader effectiveness. It is a contingency model based on the leader's effectiveness in increasing the followers motivation along a path leading to a goal. The three contingencies: the task, the work environment, and the attributes of the followers, are juxtaposed against two types of leader behaviors: participative and achievement oriented, which are similar to relationship and task orientations posited by Fiedler (1967). Vroom and Yetton's *normative decision theory* (1973) is another contingency theory that specifies the decision procedures most likely to result in effective decisions in a given situation. Decision styles range from autocratic to group decision making and the situational factors are those like time availability, importance of decision quality, information the leader has, information the followers have, clarity of the problem, and whether followers will likely accept an autocratic decision.

Other contingency theories like *leadership substitutes theory* (Kerr & Jermier, 1978), *leader-environment-follower-interaction* (Wofford, 1981), and the *multiple linkage model* (Yukl, 1981, 1989), are all more complex extensions of the earlier models, each adding different or more situational factors regarding the environment and the subordinates, or adding different variations on the appropriate leader behaviors or traits. *Cognitive resources theory* (Fiedler, 1986; Fiedler & Garcia, 1987) examines the degree to which leader intelligence, experience, technical expertise, and other cognitive resources interact with task structure, environmental factors, and follower characteristics. The major criticism of most of the contingency theories by other contingency theorists is that they do not specify to great enough detail the key variables and the nature

of the interactions. Once again this criticism indicates an emphasis on being more specific about the content of already content laden theories: a research paradigm that has guided most theory and research in leadership for the past century.

Power and Influence

The final area of review for the leadership literature will concern leader power and influence as a source of effectiveness. Most of the power theories of leadership involve distinctions among the various forms of power (Yukl & Van Fleet, 1992). Certainly the most recognized and widely accepted of these taxonomies has been posited by French and Raven (1959). They differentiate five types of power: legitimate, reward, coercive, expert, and referent power. Bass (1960) suggested, and it too has been widely accepted, that these fall into the two broad categories of personal and position power. The theories on how different types or levels of power influence leader effectiveness have focused on how leaders acquire or lose power. Hollander's *social exchange theory* (1978), and theories by Conger and Kanungo (1990) and others (see Figure 1), have increased the contingencies in which this acquisition or loss takes place. In their evaluation of the power and influence theories, Yukl and Van Fleet (1992) state that while research in this area has increased over the last decade, a number of issues regarding power still need to be clarified and further investigated, and more complex contingencies need to be developed. The focus on the *content* of "power and influence" behaviors and how they interact with other factors, consistent with most of the other theories of leader effectiveness, is characteristic of this branch of leadership research as well.

Summary

In conclusion, I would like to end this brief categorical review of past leadership theory and research by focusing on three assessments of the

literature that are more macro in nature, as they tend to subsume the categories reviewed above and that were presented in Figure 1. First, I will quote a brief statement by Bernard Bass (1990) that concisely summarizes this first section. Secondly, I will review the input of several researchers regarding the consistency of thought that there appears to be concerning factors of leadership that have been regularly used as the dependent variables. And finally, I want to make note of another trend that is inspired by Robert Kegan (1994) and Karl Kuhnert (1993) that considers the study of leadership, in fact leadership itself, as a function of the demands that different societal eras have placed upon leaders.

Bass's summary. As noted in this opening section, there have been overall trends in the study of leadership research over the last century. These trends have been summarized in Figure 1, and are reviewed in the opening section of this chapter. However, these trends are summarized quite succinctly by Bernard Bass (1990) in his handbook of leadership.

The earliest social science literature on leadership was concerned predominantly with theoretical issues. The theorists sought to identify different types of leadership and relate them to the functional demands of society. In addition, they sought to account for the emergence of leadership either by examining the qualities of the leader or the elements of the situation.

Early theorists can be differentiated from more recent ones in that they did not consider the interaction between individual and situational variables. Also, they tended to develop more comprehensive theories than do their more recent counterparts. Between 1945 and 1960, students of leadership devoted more of their efforts to empirical research, and as a consequence, ignored various issues that the theorists regarded as

important. But research on leadership became theory driven again from the 1970s onward, although these theories tended to focus on a few phenomena and were less ambitious than those of the past (p. 6).

Though Bass identifies some of the differences in research trends, there have also been some similarities, and they have been in the area of defining the factors that define leadership effectiveness, or, in other words, are the dependent variables for leader effectiveness.

Common factors of effective leadership. Consistently identified factors of effective leadership have emerged over the past century of research, and were recently discussed at the San Antonio Conference on Psychological Measures of Leadership (1990). Kenneth Clark and Miriam Clark (1990) in their review of leadership research have investigated the factors or issues that help to define effective leadership that were raised by the contributors of this conference (Yukl, Wall & Lepsinger; Posner & Kouzes; Yammarino & Bass; Sashkin & Burke; Campbell; Wilson, O'Hare & Shipper; all 1990). The lists of factors that emerged were summarized by the different presenters, and they were extensive and thorough. However, six issues that appear consistently across the participant's lists, in one form or another, are presented below:

- 1) challenging existing processes (creativity),
- 2) inspiring a shared vision (vision / motivating),
- 3) managing conflict,
- 4) problem solving,
- 5) delegating / enabling others (empowering),
- 6) relationship building / individualized consideration .

It is in these areas that leadership has been measured by theories of trait, situation, behavior, contingency, etc., and while the means have changed, the

participants of this conference appear to agree that these issues, which define leader effectiveness, have not. In large part, researchers have determined the degree to which leaders are effective by their effectiveness in these areas. However, the focus of past leadership studies have examined the content of the independent variables, and have attempted to measure leader performance, or competence in the dependent factors listed above, based on the content of these leadership theories which have been the independent variables in past research. While the dependent variables have remained the same to some degree, it can be argued that the selection of these independent variables has depended on research trends that may have been influenced by the societal demands placed on organizational leaders. Therefore, a discussion of that notion follows.

Leadership and the demands of society. In summarizing what has been done in the area of leadership research in the past, it is interesting to note that the focus of leadership research has paralleled in some respects the demands placed upon leaders by the times. The nineteenth century, and especially the late nineteenth century witnessed an unprecedented growth of both opportunity and population expansion, particularly in the United States (Cameron, 1993). These opportunities coupled with the technological advances of the twentieth century, provided new frontiers in all types of businesses. Entrepreneurial types gained unprecedented power and wealth. Leaders like Henry Ford, John D. Rockefeller, J. P. Morgan, and even Walt Disney emerged as leaders to be emulated and studied. It is no wonder that early trait research, and the "great man" theories, coincided with the early stages of the modern industrial age when leaders like those mentioned above were shaping the modern age. Their appeared to be something about these individuals that was inherently different than others (Gross, 1996). The demands that society expected of these leaders; like creativity, focus, drive, and ingenuity; begged

that the study of effective leadership focus on the traits of these unusually gifted individuals, and trait theorists responded with an abundance of trait theories. Even as we view present day "great man" leaders like Bill Gates of Microsoft and William McGowan of MCI, who receive much trait attention, we see a leader emerging in previously uncharted frontiers like computer technology and telecommunications. The ingenuity and uniqueness of individuals like these beg the questions of trait theory.

However, once western world industrialism and the achievements of these great leaders listed above had been firmly established, maintenance of the systems that they created became a critical component of leadership. It is during this era that the shift in leadership research became more focused on behavioral characteristics of the leader and specific elements of the situation. This shift was in large part a function of two major research events: 1) the theory of scientific management, or Taylorism, put forth by Frederick Taylor, and 2) the findings of the Hawthorne studies (Landy, 1989). These theories and supporting research created a new set of demands which shifted the focus of effective leadership. This shift in the demands on effective leaders coincided with diminishing research on trait theories, and a new research paradigm was established in which theory and research began to focus on the situational and behavioral factors that might be responsible for effective leadership. One example that poignantly illustrates this shift in demands, and how the great entrepreneurial leaders of the beginning of century may have been unable to meet these new demands, concerns Henry Ford at the time when the Ford Motor Company was beginning to face competition from General Motors:

At the beginning of the decade [the 1920s], General MotorsÖunder the brilliant leadership of Alfred P. Sloan, Jr., began to offer inexpensive

Chevrolets with the amenities that the [Ford] Model T lacked. Instead of a herky-jerky crank start, a Chevy had an electric starter. Instead of the sturdy but antiquated planetary transmission, it had a smooth three-speed. The market began to shift, price and value ceased to be paramount factors. Styling and excitement suddenly counted to the customer. Even though the Model T cost a mere \$290 in the mid-twenties, dealers clamored for a new Ford that would strike the fancy of the more demanding and sophisticated consumers.

But Henry Ford refused even to consider replacing his beloved Model T. Once, while he was away on vacation, employees built an updated Model T and surprised him with it on his return. Ford responded by kicking in the windshield and stomping on the roof. "We got the message," one of the employees said later, "As far as he was concerned, the Model T was god and we were to put away false images." Only one person persisted in warning him of the impending crisis: his son, Edsel, who had been installed as president of the Ford Motor Company in 1919 (Gross, 1996, pp. 86 & 88).

By the late 1920s Edsel Ford had marshaled design on the new Model A, and it, along with models offered by General Motors and the new Chrysler Corporation, would create a new way of doing business in this maturing market. We see in this example how Edsel Ford and the leaders of the other two auto makers were responding to a new set of demands that required a different set of skills. These demands included responding to the public's demand for a greater variety of options, competing with other equally qualified providers of automobiles, and managing a more complex manufacturing process, one influenced by Taylor's theory of scientific management.

However, in addition to the automobile industry, the steel, railroad and manufacturing industries were also beginning to mature, and these industries also had to respond to this new set of demands. The demands of what many have called the *modern era*. It was during this time that bureaucracies and systems of management began to gain prominence, and naturally the styles and methods of leadership also changed. It is easy to see why researchers began to be disillusioned with the trait approach they had used to study leaders like Ford, and why new emphases emerged for studying leadership in the form of behavioral, contingency, and power theories.

It has been suggested by some researchers (Kegan, 1994; Kuhnert, 1993) that we are currently exiting what has been known as the modern era, and that there is a new paradigm shift underway. They and others (e.g., Clegg, 1992; Feyerabend, 1975; Mason & Miteroff, 1981) have proposed that the demands of efficiently managing systems and bureaucracies are no longer sufficient. They suggest that we are moving into an era of *postmodernism*. The advent of TQM (Total Quality Management) and the style of Japanese management may have been partially, if not wholly, responsible for this shift (Kuhnert, 1993). However, what postmodernism is, is still up for grabs and will continue to be so until we are able to stop calling it postmodernism and are able to call it what it is rather than what it is not (Kegan, 1994). However, it does appear that regardless of what it is called, this new era expects of its leaders more than an ability to manage efficient bureaucracies.

The global marketplace, technology, communications advances, the shift to a customer rather than supplier focused market place, and societal changes have all initiated qualitatively different demands than those required by the modern era (Hammer & Champy, 1993). Kegan (1994) has suggested that the demands of the era prior to modernism, what he labeled the *traditional period*,

which produced the "great man" theories and the leaders which inspired them, are qualitatively different than those of the modern era which produced the effective manager leader, which in turn are qualitatively different than the demands that are placed on the postmodern leader. The source of the postmodern demands, and the expectations created by them, are summarized by Robert Kegan in his most recent book:

These expectations are chronicled, and even shaped, in the growing collection of cultural documents academics call (with no irony) "literatures": "the marriage literature," "the management literature," "the adult education literature," and the like. After reading widely in these literatures, I have come [to the conclusion that] the expectations that run through these literatures demand something more than mere behavior, the acquisition of specific skills, or the mastery of particular knowledge. They make demands on our minds, on how we know, on the complexity of our consciousness. The "information highway" we plan for the next century, for example, may geometrically increase the amount of information, the ways it can be sent, and the number of its recipients. But our experience on this highway may be one of exhaustionÖrather than admiration for the speed of a new kind of transport if we are unable to assert our own authority over the information. No additional amount of information coming into our minds will enable us to assume this authority; only a qualitative change in the complexity of our minds will (1994, pp. 5-6).

As research foci have changed or evolved reflecting these qualitative differences in the demands required for leadership effectiveness in the past, so

too will they have to change for the postmodern era. The way we define leadership must also evolve from that which sufficed in the past. No longer can we call leaders effective because they possess the appropriate levels of whatever content a particular theory suggests, but rather the way they construct or make sense of these different contents will identify the effective leader of the postmodern era.

As the western world moves more fully into this postmodern era, it may be time to look at leadership from a new perspective. This study proposes a theory that may help explain what made leaders effective in the past as well as suggesting what contributes to their effectiveness as society fully emerges in the postmodern era.

Conclusion of the leadership research review. While past leadership research has provided a great deal of insight into the question of effective leadership, it has also raised several significant questions. Could it be that finding the right combinations of traits, behaviors, and situations is not possible, or that it is at least difficult? Will an even more complex contingency model finally allow us to explain effective leadership? Is there some other "missing" aspect of leadership, or of the leader, that will help explain the inconsistencies in the past research? How can effective leaders respond to the increasingly complex demands placed upon them? Is it possible that it is not what leaders do or who they are that matters, but rather how they understand what they do and who they are that makes a difference?

As stated earlier, the research paradigm of the modern era posits that a more complex synthesis of the traits, behaviors, and situations may yield a formula that will identify and predict effective leadership, and will answer the questions raised in the previous paragraph. There is however, a group of researchers, who come out of the schools of education and counseling known as

constructivists who challenge these assumptions. They believe that it is not the content of a behavior or leadership style that matters, that is *what* is actually done or believed, but rather *how* one epistemologically makes sense of the content of the behavior or leadership style that makes a difference.

Traditional research has attempted to identify and control the variance of the content of personal attributes and behaviors. However, Yukl and Van Fleet (1992) note that managers need to be effective at making decisions based on information that is weak and overwhelming. The descriptive research of the past has shown that managerial work is hectic, varied, fragmented, reactive, and disorderly. Many activities upon which leadership decisions are made are based on brief interactions with people other than subordinates such as lateral peers, superiors, and even outsiders. Contingency theories contain situational moderator variables that are often ambiguous and difficult to explain. Yet there is a call for better and more complete operationalizing of these same theories in order to better account for the variance (Yukl & Van Fleet, 1992). In attempting to answer this call, research designs have become more complex, statistical controls have become more sophisticated, and research has become further removed from the complex reality of leading in a functioning organization. These outcomes appear to be the opposite of the intended ones.

What the field has come to understand about predicting effective leadership has demonstrated that to date the empirical, content oriented approaches to the study of leadership have been inadequate in predicting who are going to be good leaders. It is proposed in this project that an approach which examines meaning construction may be a better predictor of good leadership. This "constructivism", and a particular branch of it known as constructive developmental (CD) theory, may be effective in addressing the questions raised above that the traditional research paradigm has found itself

wanting in providing an answer. So it is now that the discussion focuses on CD theory: what it is, how it is measured, and how it may be used.

An Introduction to CD Theory

In order to understand what CD theory has to offer, it may be helpful to show it juxtaposed to the traditional leadership research paradigm. This juxtaposition is perhaps best accomplished through a metaphor from which a common vocabulary can be established.

In the movie *Indiana Jones and the Raiders of the Lost Ark*, Indiana Jones and a group of Nazi archeologists are in search of the lost Ark of the Covenant, which supposedly contains in it the smashed tablets of the original ten commandments. The Ark is located in the Well of the Souls in the ancient city of Tanis. Whoever possesses the Ark will gain the power of the all knowing God. The instructions for finding the location of the Well of the Souls and the Ark are inscribed on the ancient headpiece to the Staff of Ra. When the staff is correctly placed in the map room of the city of Tanis, it will use the light of the noon sun to shine a beam of light to the location of the Well of the Souls. However, critical information is engraved on both sides of the headpiece of the staff of Ra. One side tells the height of the staff and how high to position the headpiece on it, and the other tells where to place the staff in the map room. The Nazis believe they will be the first to find the Ark since they have one side of the headpiece burned into the hand of one of their intelligence men, but only the side that tells the height of the staff. This information leads them close to the Ark, but they are simply mining the wrong area. The protagonist Indy, however, has the actual headpiece and knows how high to make the staff as well as where to place it in the map room to show the location of the Well of the Souls.

The study of leadership effectiveness has been like a search for the Well of the Souls in the ancient city of leadership. Many useful and important artifacts have been discovered, but it appears that no one has yet found the Ark which has the key to effective leadership locked within it. It seems as though researchers have only had the information on one side of the headpiece to help them search. As the first section of this chapter indicated, this focus has led researchers to look for the key to effective leadership through multiple variables. The first of these was the area of personal attributes or traits. When researchers realized the Ark was not there they mined the area of situational factors and leader behaviors. Next came the area of contingency theory and theories of power and influence. More recently the leadership archeologists have mined the areas of transformational and charismatic leadership.

All of these digs have turned up useful information, but none have taken us to leadership's Well of the Souls. Each set of theories has illustrated the incompleteness of the previous set, and has left leadership researchers wondering if there really is an "Ark" for leadership at all. It seems as though the search for effective leadership has depended on too many factors, leading to little optimism that the "Ark" will be found intact.

All this to say that the study of leadership is complex and multivariate. Many of the past theories have given insight to leadership effectiveness in a particular area, and these theories would likely hold true if all the factors could be held constant. However, test and retest reliabilities have brought most past findings into question (Bass, 1990; Yukl & Van Fleet, 1992). What is needed is a leadership "headpiece" for the Staff of Ra which will provide the information on both sides of the headpiece and point the way to effectiveness in the city of leadership.

It seems plausible to suggest that past research has provided the information of only one side of the headpiece--the measurable, empirical, content oriented side--and that the information on the other side of the headpiece--the subjective, interpretive, construct oriented side--is yet to be discovered. Other theorists have provided qualitative explanations, especially in the popular business literature, but these explanations are seldom grounded in solid theory. Most are based on the acute observation of effective leaders in organizations. However, if these observations could be grounded in "good" theory, it may provide the information on the other side of the headpiece, information that would likewise be of little value if not examined in light of the past research that has been undertaken. The point is neither side of the headpiece provides clear information without consideration of the other.

It is proposed here that the theory that comes closest to providing the missing information is one posited by Robert Kegan (1982, 1994) which is founded in the constructivist theory of adult development. Constructive developmental theory, as it is called, may provide the critical information on the other side of the headpiece which completes and makes sense of the historical artifacts uncovered by previous leadership researchers.

Constructive Developmental theory is based on the notion that humans make (or construct) meaning from the experiences that they have. As stated earlier, it focuses not on "what" people know, but rather "how" they know. Initially proposed by Piaget as a way to explain cognitive reasoning and development in children, it has been extended into adulthood as a model of development by researchers like Kohlberg (1969), Loevinger (1976), Kegan (1982), Perry (1970), and others (e.g. Fowler, 1981; Gilligan, 1982; Torbert, 1987). These models of adult development propose constructive development as an invariant hierarchical trajectory that occurs as the result of individuals

interacting with their environment and trying to make sense of it (Hayes, 1994). The further along this trajectory one is, the more effective one is at making sense of more and more complex circumstances. As effective leadership is in part the ability to deal effectively with the complexities of the workplace, so it seems that the further one is on the developmental trajectory, the more effective one should be at responding appropriately and effectively to the complex demands required of the leader.

Constructivism and CD theory allows for this developmental trajectory to take place in the contexts of different personal attributes, in any given environmental circumstances, and using a wide range of behaviors (i.e., the content of past leadership research). For example, two leaders can exhibit the same traits, with the same behaviors, in the same environment, but be at two different constructive developmental levels. In this way, constructive developmental theory does not “compete” with other theories of leadership, but rather “completes” other theories of leadership. It becomes the other side of the headpiece, and provides the critical information that maps a course through the maze of past research. It makes the city of leadership one with purposeful streets rather than a confusing collective of dregs. CD theory may make possible navigating one’s way to the place of effective leadership.

The constructivist suggests that individuals will construct meaning and make sense of these factors differently tomorrow than they will today, for they have had another day's worth of experiences. In addition, the more developed people are, from a constructivist perspective, the more effective they will be at combining increasingly complex factors in a way that works well (Kegan, 1994). So while task oriented leaders, for instance, may perform best in work situations with high or low immediacy, and relationship oriented leaders may function more effectively in moderate immediacy situations as proposed in

Fielder's (1967) LPC contingency theory, it may be a combination of the orientation factor with a sufficient constructive developmental level that leads to effective leadership.

When research in any given area is replicated, reliability and validity often come into question. The study of participants at a different (either higher or lower) constructive developmental level than the original study participants will likely yield results that do not confirm the findings of the original research. The traditional response to this dilemma has been to attempt to gain greater control over the variables or to look for new explanations for their findings. This response reinforces knowing the characteristics of one side of the headpiece more thoroughly, but only the content oriented side. It does not consider the information on the construct oriented side.

However, if CD level cuts through the heart of these different leadership theories, by providing the information on the other side of the headpiece, then it should follow that leaders who are recognized as being effective should have a sufficiently high CD level as to make the most of their contingencies in a given context. This explanation acknowledges and allows for the findings of previous research. Past research has shown that leaders with certain types of traits, using certain types of behaviors, may be more effective than other leaders with different traits, or using different behaviors depending on the context. However, if the contextually appropriate balance of traits, behaviors and contexts is not performed by a leader with a sufficiently high CD level, then although they lead using the "appropriate mix" of traits, behaviors and context, they may still be ineffective leaders. This phenomenon could explain the divergent findings of much past research.

Other theories, however, particularly personality type theory, have also been presented as cutting across different situations and contexts. For example,

Kegan (1994) notes that in the field of management training, Carl Jung's ideas about "personality types" have had an indirect but enormous influence through the use of the Myers-Briggs Type Indicator (MBTI), an easily administered test that distinguishes sixteen different ways that people approach experiences. The types are derived from four polarized pairs of personality preferences. These preferences represent assessments of how individuals prefer to receive stimulation and energy, prefer to gather data, prefer to make decisions, and prefer to orient their lives (Hirsh & Kummerow, 1990).

Personality type or trait theory, such as that based in the MBTI, shares with CD theory two important characteristics. First is the point that individuals actively structure rather than "happen upon" their realities. Second is the claim of consistency across different contexts. But even given these consistencies, CD theory goes beyond MBTI type theory, and other type theories, in that while one's type is not presumed to change over one's life, one's constructive developmental level or way of knowing does change over one's life. While MBTI types are preferences about the way we know, constructivist meaning making is about our capacity to know. In other words, "The difference between types are non-normative differences in epistemological *style* not hierarchical differences in epistemological *capacity* (Kegan, 1994, pp. 201)." Leaders with identical type preferences, even preferences that are perfectly matched to the leadership situation, will be less or more effective depending on their epistemological capacity or CD level. It is in this way that CD level becomes the variable that cuts across the content of other leadership theories and makes them interpretable. It is the other side of the headpiece of the Staff of Ra. The discussion, therefore, now turns to an explanation of CD theory.

Constructive Developmental Theory

CD theory brings together two powerful lines of intellectual discourse that have influenced not only the field of psychology, but nearly every corner of intellectual life in the West this century (Kegan, 1994). These two lines of thought are *constructivism*, the idea that people or systems *construct* reality, and *developmentalism*, the idea that people or organic systems evolve through qualitatively different eras of increasing complexity. These evolutions follow consistent patterns according to regular principles of stability and change (Kegan, 1994). These regularities are the deep structure of personality which generate people's thoughts, feelings, and actions (Kegan 1982, Kuhnert & Lewis, 1987).

In a constructivist review of adult leadership, Kegan and Lahey (1984) state that the constructive developmental approach suggests that:

1. Human being is *meaning making*. For the human, what *evolving* amounts to is the *evolving of systems of meaning*; the business of organisms is to organize , as Perry (1970) says. We organize mostly without realizing we are doing it, and mostly with little awareness of the exact shape of our own reality-constituting. Our meanings are not so much so much something we have, as something we are. Therefore, researchers and practitioners do not learn about a person's meaning making system by asking the person to explain it, but by observing the way the system actually works.

2. *These meaning systems shape our experience*. Experience, as Aldous Huxley said, is not so much what happens to us, as what we *make* of what happens to us. Thus we do not understand another's experience by simply knowing the events and the particulars of the other

but only by knowing how these events and the particulars are privately composed.

3. *These meaning systems to a great extent give rise to our behavior.*

We do not act as randomly, irrationally, unsystematically, or as molecularly as might be thought. Even the most apparently disturbed, irrational, or inconsistent behavior is, as Carl Rogers often suggests, coherent and meaningful when reviewed through the perspective of the actor's constitution of reality.

4. Except during periods of transition and evolution from one system to another, to a considerable extent *a given system of meaning organizes our thinking, feeling, and acting over a wide range of human functioning.*

5. Although everyone makes meaning in richly idiosyncratic and unique ways, *there are striking regularities to the structure of meaning-making systems* and to the sequence of meaning systems that people grow through (Kegan & Lahey, 1984, p. 202).

Most constructive developmental theorists, especially those concerned with adult development, find their roots in the person of Jean Piaget. Piaget's intense interest in the psychology of children, led him to hypothesize that children are not just miniature adults who make mistakes in reasoning by adult standards. Rather, they make uniform mistakes not of the sort that any adult would teach, and Piaget (1960) suggested that they do not learn in the sense that anyone teaches them, or in the sense of copying social models, but rather each child constructs the theory on his or her own. This discovery is the core of the Piagetian revolution (Loevinger, 1987). In Piaget, states Kegan (1982), we discover a genius who exceeded himself and found more than he was looking

for. To appreciate what the constructive developmentalist owes to Piaget, it is necessary to understand some of the concepts that come from his work which lay a foundation for CD theory.

Perhaps the most important concept that comes from his work is the differentiation of *subject* and *object* (Kegan, 1982). *Subject* is the internal structure by which people compose experience that is so basic to human understanding that the individual is typically not aware of it. Kuhnert and Lewis (1987) say that it is the lens through which people view the world and their experiences, and they are unable to examine that lens. *Object*, on the other hand, is that part of an individual that, through development, used to be subject, but can now be taken as an objective part of the meaning making system. Since the object comes from what used to be subject, the newborn is unable to distinguish between itself and anything else in the world; it lives in a completely undifferentiated world in which nothing is on the side of object (what Piaget labeled the sensorimotor stage). The child is embedded or equilibrated in a completely subjective state in which it is subject to its sensations, reflexes and impulses. In other words, the newborn is its sensations, reflexes, and impulses. It is not until the child emerges from embeddedness in the sensorimotor stage that it can take its sensations, reflexes and impulses as object.

Different CD theorists have summed up this transformative process, the emergence from embeddedness, in different ways:

It has been called a process of decentration (Piaget, 1937), emergence from embeddedness (Schachtel, 1959), the recurring triumph over egocentrism (Elkind, 1974); it has been referred to as a process in which the whole becomes part to a new whole (Perry, 1970); in which what was

structure becomes content on behalf of a new structure (Piaget, 1968); in which what was ultimate becomes preliminary on behalf of a new ultimacy (Kegan, 1980); in which what was immediate gets mediated by a new immediacy (Kegan, 1981). All these descriptions speak to the same process, which is essentially that of adaptation, a differentiation from that which was the very subject of my personal organization and which becomes thereby object of a new organization on behalf of a new subjectivity that coordinates it (Kegan, 1982, p. 85).

This movement from subject to object, the process of growth or development, always involves a process of differentiation, or emergence from embeddedness, in which a new object is created out of the former subject. This "space," however, will be replaced by a new subjectivity, or, if you will, a new lens. This movement involves what Piaget called "decentration", the loss of the old center, and what might be called "recentration", the recovery of a new center (Kegan, 1982). For the child emerging from the sensorimotor period, the move from being one's actions/sensations to having one's actions/sensations creates a new subject structure which can reflect on the actions, sensations, reflexes, etc., in a way that distinguishes between a me and a not me for the child. This new subject Kegan calls "perceptions", and it is the lens through which Piaget's second "stage", *preoperational*, child organizes and mediates the newly object sensations, reflexes, and impulses: perceptions constitute the new subjectivity.

Table 1 shows the subject-object balancing in Piaget's four CD stages. At the *sensorimotor* stage there is no object, but as detailed in the previous paragraph, when the next stage of *preoperational* subjectivity begins to structure meaning, the action-sensations and reflexes of the sensorimotor stage become

Table 1

Subject-Object Balancing in Piaget's Stages of Cognitive Development

Stage	Subject ("structure")	Object ("content")
Sensorimotor	Action-sensations	None
Preoperational	reflexes	
	Perceptions	Action-sensations
Concrete operational		Reflexes
	"Reversibilities"	Perceptions
Formal operational	(the "actual")	
	"Hypothetico-deduction"	"Reversibilities"
	(the "possible")	(the "actual")

Note. From *The Evolving Self* (p.40), by R. Kegan, 1982, Cambridge, Massachusetts, and London, England: Harvard University Press. Copyright 1982 by the President and Fellows of Harvard College. Reprinted with permission.

the object of the new stage's subjectivity. As the child decenters, or disembeds, from the subjectivity of the preoperational stage, and recenters, or embeds, in the *concrete operational* stage, what was subject to the preoperational child becomes the object of the new structure. The child obviously, but importantly, also retains as object what was object of the preoperational stage: actions-sensations, and reflexes. The best known of Piaget's experiments, concerning the conservation of volume, is perhaps the most illustrative example of this phenomenon.

In one experiment, the [preoperational] child is shown two identical beakers with the same quantity of liquid in each. The child agrees that the amount of liquid in the two is equal. Then, as the child watches, the liquid in one beaker is poured into another of a different shape, say, a wide, squat one. Now the child is asked which has more. Some say the squat one has less, because they see that the level is lower; some say it has more, because they see the diameter is greater. After the child has announced which has more, the liquid is poured back into the original beaker. The child now says the two are equal. Only older children [concrete operational children] understand that the amount is the same all along because nothing has been added or taken away. That understanding constitutes conservation of volume (Piaget & Inhelder, 1969, in Loevinger, 1987, p. 184).

So, the concrete operational child is able to take as object the perceptions of the preoperational child which tell him or her that the squat beaker has either more or less water based on their perceptions. However, as seen in Table 1, the concrete operational child has a new subjectivity: what Piaget called

"reversibilities." Reversibility entails a capacity to move back and forth between one's perceptions; a psychology that constructs groups and classes and sees the world as "concrete" (Kegan, 1982). Kegan notes that this developmental position is the age of collecting, keeping records, memorizing baseball statistics, and the like. However, as the child begins to decenter from this subjectivity, a new subjectivity emerges: the *hypothetico-deductive* or "the possible". This new subjectivity is characteristic of Piaget's next stage known as the *formal operational* stage, where reversibilities, or the actual, become object to consideration of the possible. Kegan gives an entertaining illustration (from a Jerome Kagan syllogism, 1972) that sums up the differences in the last three stages quite nicely:

"All purple snakes have four legs, I am hiding a purple snake. How many legs does it have?" The ten-year-old [concrete operational child] is most likely to argue with the very idea of there being a purple or four-legged snake. Such snakes are not found in the concrete world, and therefore reasoning about them (which is not just "make-believe") is problematic. Here the notion of truthfulness (or veridicality) is tied to the domain of correspondence to observed phenomena. The [formal operational] adolescent, however, has a whole different notion of veridicality. He or she can transcend the particular givens and see that can be drawn from the propositions themselves. But our five-year-old [preoperational child] has still another notion of veridicality, tied to its own egocentric and idiosyncratic experience. The five-year-old is usually unbothered by purple or leggy snakes, but does not see that anything follows necessarily from the statements either, and is as likely to say, "My brother has a snake" (Kegan, 1982, p. 38-39).

What CD theorists suggest is that at each stage in the above example the child is limited to the degree of his or her own subjectivity. Each stage is defined as an evolutionary truce in which an equilibrium has been struck between subject and object (Kegan, 1982). These truces or equilibriums are periods of dynamic stability rather than continuous augmentation. The periods of dynamic stability are followed by periods of instability and then a qualitatively new balance. New experiences are handled by the meaning making system through what Piaget called *assimilation* and *accommodation*. To the extent that the meaning making system is exercised on these experiences they are assimilated. To the extent that these experiences change the meaning making system it is accommodated. Assimilation is maintenance of the evolutionary truce. Accommodation indicates the instability that leads to the qualitatively new balance. "The guiding principle of such a truce – the point that is always at issue and is renegotiated in the transition to each new balance – is what, from the point of view of the organism, is composed as "object" and what as "subject." The question always is: To what extent does the organism differentiate itself from (and so relate itself to) the world?" (Kegan, 1982, p. 44).

This review of Piagetian developmental theory is important because its premises serve as the foundation of the "Neo-Piagetian" CD theories, of Kegan, Kohlberg, Gilligan, Loevinger, Fowler, Torbert, and others (Kegan, 1982, 1994; Loevinger, 1987). These theorists have extended the work of Piaget into adulthood, principally on the heels of Lawrence Kohlberg, into the areas of: moral development (Gilligan, 1982; Kohlberg, 1969), ego development (Loevinger, 1976), faith development (Fowler, 1981), managerial and organizational development (Torbert, 1987) and the development of epistemology, or meaning making, (Kegan, 1982, 1994). But, however these areas of focus differ, the underlying concept of a invariant hierarchical sequence

of stages, based on equilibration, transition, and re-equilibration, and the idea of subject-object balance are common to all. Even so, in this project, and for the study of leadership, it is Kegan's subject-object theory of epistemology or meaning making that will be of focus.

Kegan's Theory of Adult Development





Kegan has extended Piaget into adulthood in a way that is consistent and can be aligned with the other CD theorists mentioned above. Figure 2 shows a list of these other theorists juxtaposed to one another so as to show the degree to which they are all aligned as different elements of the same developmental phenomenon. In addition, if the reader happens to be more familiar with any of the other CD theorists, she or he will be able to more easily understand the underlying subject-object balance of any given stage of Kegan's theory. Even though the other theorists deal with different content areas (morality, faith, ego, etc.), discussing development from an epistemological framework is general enough that it can be applied to the particular content of any of the other theorists (Lahey, 1986). This more encompassing epistemological, meaning making view seems to be more appropriate for the study of leadership effectiveness. Indeed, William Torbert (1987), whose work most closely parallels the research being proposed in this project, also uses this more general theory of constructive epistemological development as the basis for his research.

In this section, I want to develop a descriptive progression through Kegan's last 5 stages (stage 0 of the infant serves only a foundational purpose and has little utility for the leadership focus of this project). Figure 2 serves as visual representation of the stage progression, and the first and last columns especially can be used for reference throughout this section. Under each stage

Figure Caption

Figure 2. Balances of subject and object as the common ground for several developmental theories. (Sources: Kegan, 1982, 1994; Torbert, 1994, personal communication January 17, 1997)

- a. Torbert (1994) positions his Technician as in the transition between Stage 3 and Stage 4 for both Kegan and Loevinger.
- b. Kegan (1982) states that Piaget does not posit a post-formal stage, but these are his own hunches about where his model points
- c. Torbert (1994, & personal communication January 17, 1997) actually positions his Strategist as early Stage 5 against Kegan's model and the Magician as full stage 5

Kegan		Piaget	Kohlberg	Loevinger	Maslow	Torbert	Underlying Structure	
Stage	0	Sensorimotor	-	Pre-Social	Physiological survival	-	Key: S-O Lines of Development Cognitive: Not Italics <i>Interpersonal: Italics</i> Intrapersonal: Bold Italics	Single point/Immediate/Atomistic
<i>subject</i>			movement - - <i>sensations</i> ,					
<i>object</i>			<i>none</i>					
Stage	1	Preoperational	Punishment & obedience	Impulsive	Physiological satisfaction	Impulsive		
<i>subject</i>			perceptions - <i>social perceptions - impulses</i>					
<i>object</i>			movement - - <i>sensations</i> ,					
Stage	2	Concrete operational	Instrumental	Opportunistic	Safety	Opportunist		
<i>subject</i>		concrete actuality - <i>point of view/simple reciprocity - enduring dispositions/needs</i>						
<i>object</i>			perceptions - <i>social perceptions - impulses</i>					
Stage	3	Early formal operational	Interpersonal concordance	Conformist	Love/affection/ belongingness	Diplomat		
<i>subject</i>		abstractions - <i>mutuality/interpersonalism - inner states/self-consciousness</i>						
<i>object</i>		concrete actuality - <i>point of view/simple reciprocity - enduring dispositions/needs</i>						
Stage	4	Full formal operational	Societal	Conscientiousness	Esteem & self esteem	Technician & Achiever ^a		
<i>subject</i>		abstract systems/ideology - <i>institution - self-authorship/identity/autonomy</i>						
<i>object</i>		abstractions - <i>mutuality/interpersonalism - inner states/self-consciousness</i>						
Stage	5	Post formal ^b	Principled	Autonomous	Self-actualization	Strategist & Magician ^c		
<i>subject</i>		dialectical/trans-ideological - <i>inter-institutional - self transformation/interpenetration of self systems</i>						
<i>object</i>		abstract systems/ideology - <i>institution - self-authorship/identity/autonomy</i>						

(i.e., 1, 2, 3, etc.), there is a description of the characteristics of the subject and object lines of development for that stage. The upper right hand corner of Figure 2 contains a key for understanding what the different type faces of this section represent. In Kegan's (1994) latest conceptualization of the CD theory, he breaks down the areas of meaning making structure into 3 domains: 1) the cognitive domain which has principally to do with ones ability to reason in a logical cognitive way, 2) the interpersonal domain which concerns how one makes meaning and sense of others and relationships, and 3) the intrapersonal domain which concerns the ability to sense, regulate, internalize, and organize ones internal states. In discussing meaning making from these three domains, Kegan (1994) has labeled the stages 0-5 instead of naming them (i.e., the imperial stage, the interpersonal stage, the institutional stage, the intrapersonal stage) as he did in *The Evolving Self* (Kegan, 1982).

Stage 1. In disembedding herself from the reflexes and sensations of the previous stage 0, the stage 1 two-year old now comes to have reflexes and sensations instead of being them. The child is able to recognize objects separate from herself, but she is now subject to her perception of them (this subjectedness is the underlying structure of Piaget's preoperational stage). If her perception of the object changes, the object itself changes in her experience of it (Kegan, 1982). The conservation of volume example presented above (Loevinger, 1987) is an example of this stage 1 subjectivity. The child's capacity to take these impulses and perceptions as object not only brings an end to the liability of the earlier subject-object relation, but brings into being a new subject object relation which creates an endurable self – one which can store memories, perceptions, and feelings rather than being them (Kegan, 1982).

Stage 2. This new subject-object balance of stage 2, one which takes perceptions and impulses as object, has a qualitatively different way of making

sense of the world. This fundamental shift takes place with most children between the ages of five and seven, although it is important, especially in the later stages, to view development in terms of meaning making capacity rather than chronological age. The stage 2 child is now subject to an understanding that the world has properties outside of his perceptions. On the interpersonal level, there is an understanding of point of view and simple reciprocity--that others have their perceptions as well. In the intrapersonal domain, the child now has a sense that he has enduring dispositions in which he can take his impulses as object. However, each new balance has its limitations as well. The stage 2 child is limited in that there is not yet a shared reality but only points of view, and enduring dispositions; each owned by their author. This subjectness effects his interpretation his experiences in terms of his own needs, since mutuality is characteristic of a stage where he is not.

The essence of the stage 2 interpersonal domain, his relationship to others, is a self subject to his own needs, wishes and interests, who relates to others by viewing their needs, wishes, and interests in terms of the possible consequences for his own world view. In other words, he knows the other in knowing whether who or what the other is will help or hinder him in his effort to meet his needs, action oriented goals, plans, or interests (Lahey, Souvaine, Kegan, Goodman, & Felix, 1988). It is in the emergence from embeddedness of his needs that gradually a new evolutionary truce is struck. Rather than being his needs, he has them, and in having them he brings into being that "need mediating" subjectivity that is *mutuality*: one of the significant characteristics of the of the stage 3 self.

Stage 3. Mutuality is the ability to bring inside one's self the other half of the conversation, or the other point of view, that the stage 2 self had always to be listening for in the external world. The stage 3 self therefore, embodies a

plurality of voices, and its strengths lie in the capacity to be conversational, freeing itself of the prior balance's frenzy-making, constant charge to find out what the voice will say on the other end. But its limit lies in the inability to consult itself about that shared reality (Kegan, 1982). The following excerpt from a CD interview will help to illustrate this point (interviewer in italics).

I agreed to become a consultant for this little facility that works with children and parents and so Wednesday was my first day there and I had a lot of kind of misgivings at the beginning, mostly because I wasn't really sure I was competent to do what I was being asked for. I wasn't clear about exactly what I was going to be asked for and primarily because it was with young children, I wasn't sure I had the competence to do the job. And so I just put in my one day there on Wednesday so my initial response wasÖ[that] I was anxious about that. Then after that there was a feeling of successÖ

Can you say in a general way what it means for you to be competent?

I guess it is both internal and external, that partly it's being able to be seen by other people and having something of value, being able to make a specific contribution which most other people wouldn't be able to provide, that somehow something in my learning, my education, experience, gives me something special that I can provide them, but it was like being able to function. I like knowing that I have something special that is individualized that I can deal with the stresses and challenges and come out, you know, in a satisfactory way and prove to myself that I have the stuff (Lahey, et al., 1988, pp. 274-275).

Notice, in this interview, that he (the speaker) is capable of taking on the point of view of another: this ability indicates mutuality and a shared reality. However, the limit of this way of knowing, of embeddedness in stage 3, is that he is unable to consult himself about that shared reality. He cannot, because he is that shared reality. He cannot define his own competence independent of the others point of view: "You are the other by whom I complete myself, the other whom I need to create the context out of which I define and know myself and the world" (Kegan, 1982, p. 100). What characterizes the speaker's abilities as stage 3 is that he can not only distinguish his point of view from the other's (a stage 2 ability), but that he is able to take the point of view of the other taking the point of view of him.

This stage 3 capacity to hold the others point of view internally makes the other subject to a way of knowing that amounts to the internal mediation of the self's own and the other's point of view. However, the source and continued generation of other's point of view, though internalized, rests in the other who must keep making the point of view known and remain, at least psychologically, present in order for the self to feel whole. This tendency is seen taking place with the speaker above in that he has internalized the other's point of view concerning the evaluation of his competence. But if he was able to separate that point of view from those others, he would no longer be bound by the stage 3 mutuality; no longer subject to that mutuality; mutuality would become the object of the new mediating system of a stage 4 epistemology. Evolution to stage 4 is characterized by just this shift of the subject-object balance: the capacity to separate internalized points of view from their original sources in others, and make the self itself a coherent system for their generation and correlation. When this shift has happened, we stop making others responsible for our feelings, and experience it as a kind of violation when others

make us responsible for theirs (Lahey et al., 1988). Kegan (1982) says that the stage 4 individual stops being her relationships and starts having them.

This statement, as well as the scenario presented above, illustrates the aspects of meaning making that are indicative of stage 3 epistemology in the *interpersonal* domain. However, in the *cognitive* domain, where as the stage 2 individual can take perceptions as object but is subject to concrete actualities (see Figure 2), the stage 3 individual gains the ability to take concrete actualities as object, and subject them to a way of knowing that considers the possible. Considering the possible, for the formal operational, stage 3 individuals, was illustrated above in their ability to solve the four legged, purple snake syllogism. Finally, in the *intrapersonal* domain, the stage 3 individual takes as object the enduring dispositions that so efficiently defined the self for the stage 2 individual, but these enduring dispositions become subject to an epistemology that views itself in terms of inner states and self consciousness (i.e. self-reflexive emotions like "self-confident," "guilty," "depressed"), and thus looks to its relationships for definition (Kegan, 1994).

The right-most column of Figure 2 helps recast this stage progression in a more visual way. It can be seen in Figure 2 that the stage 1 child is limited in its subjectivity to the single point, or atomistic way of knowing. These independent elements, as they are, have attachment to the momentary, the immediate, and the atomistic which makes their thinking fantastic and illogical, their feelings impulsive and fluid, and their social thinking egocentric (Kegan, 1994) For the stage 1 child, there is no durable category outside of what is perceived: perceptions are the limit of the stage 1 way of meaning making. The durable categories of the stage 2 child, which usually develop between the ages of seven and ten, allow a capacity to organize things, others, and the self as possessors of elements or feelings to be made up of time-enduring needs and

dispositions rather than momentary impulses. Their social-relating is defined by the capacity to grant to themselves, and to others, a separate mind and a distinct point of view (Kegan, 1994).

As the individual embeds in a stage 2 epistemology, he or she is able to know in a way that conceives of concrete actualities. For the stage 2 child, the outer circle in the right hand column of Figure 2 illustrates visually this ability to create a durable category in which the child is able to see dispositional properties of a group of single points. However, being subject to this way of knowing does not allow her to take a perspective on these dispositional properties in a way that allows her to see the hypothetical or the possibilities of the stage 3 epistemology. The stage 3 individual is able though to see the relationships between these durable categories in a way that abstractions and mutuality are now possible. This ability is what Kegan (1994) calls *trans-categorical knowing*. This epistemology allows the stage 3 individual the capacity to subordinate durable categories to the interaction between them which allows for thinking that is abstract, feelings that are a matter of inner states and self-reflexive emotion (self-confident, guilty, depressed), and social relating that is capable of loyalty and devotion to a community of people or ideas larger than the self (Kegan, 1994).

Kegan (1994) states that these principles (independent elements, durable categories, and trans-categorical knowing) share five important features.

- 1) They are not merely principles of how one thinks but of how one constructs experience more generally, including one's thinking, feeling, and social-relating.
- 2) They are principles for the organization of one's thinking, feeling, and social-relating, not the content of one's thinking, feeling, and social-relating.
- 3) A principle of mental organization is an inner logic or an epistemologic, the root or "deep structure" of which is the subject-object relationship.

We *have* object; we *are* subject. Subject is ultimate or absolute; object is relative.

4) The different principles of organization are intimately related to each other; they are not just different ways of knowing, each with its preferred season. Rather the relationship is transformative, qualitative, and incorporative. Each successive principle subsumes or encompasses the prior principle, and the new principle is a higher order, more complex, more inclusive principle that makes the prior principle an element or tool of its system. 5) The suggestion that individuals may over time come to organize their experience according to a higher order principle suggests that what one takes as subject and what one takes as object are not necessarily fixed: they are not permanent. Transforming one's epistemology, liberating one's self from that which it was embedded in, taking what was subject into object, is a powerful way to conceptualize the growth of the mind (Kegan, 1994, pp. 32-34).

Stage 4. As this evolutionary process of subject-object differentiation, described in the preceding paragraph, moves the individual from his stage 3 epistemology of mutuality to a stage 4 epistemology, another qualitative transformation takes place. An institutional or systems balance becomes the subject of this new way of knowing. Again, the right column of Figure 2 shows that there is now a mediating principle for the various mutualities that the stage 3 individual found his or her self subject to, and these mutualities are now taken as object. In the interpersonal domain, this now means that I have my relationships instead of being my relationships.

This transformation is analogous to the transformation from stage 1 to stage 2. The stage 2 individual is able to create a durable category to make sense of and govern the stage 1 perceptions. In the same way, the stage 4 individual now has a governing body to make sense of all of the trans-categorical abstractions that the stage 3 individual found himself governed by.

These abstractions are the parts of the abstract system whole. "The ability to see 'how the parts relate to the whole' describes the capacity for systems thinking, and it is greatly aided by the capacity to construct the self as a whole – an organization or system – regulative of its parts" (Kegan, 1994, p.184).

Remember back to the case example given in the preceding section with the speaker who constructed his competence dependent upon the evaluation of others. Had the subject made meaning from a stage 4 perspective, he would have based his evaluation of his competence on a self possessed standard which would have seen feedback from others as objective information which could be mediated to influence this evaluation; it would not have dictated his evaluation as it did from his stage 3 construction. He would have seen this feedback as parts of a whole, not as the whole in-and-of themselves.

Kegan (1982) defines this new balance, and its ability to take mutualities as object somewhat succinctly; perhaps as succinctly as possible:

In separating from the context of interpersonalism [the stage 3 subjectivity], meaning evolution authors a self [at stage 4] which maintains a coherence across a shared psychological space and so achieves an identity. This authority – sense of self, self-dependence, self-ownership – is its hallmark. In moving from "I am my relationships" to "I have my relationships," there is now somebody who is doing the having, the new I, who, in coordinating or reflecting upon mutuality, brings into being a kind of psychic institution

This makes stage 4's emotional life a matter of holding both sides of a feeling simultaneously, where stage 3 tends to experience its ambivalences one at a time. But what is more central, perhaps, to the interior change between the interpersonal [stage 3] and the institutional

[stage 4], is the way the latter is regulative of its feelings. Having moved the shared context from subject to object, the feelings which arise out of interpersonalism do not reflect the structure of my equilibrative knowing and being, but are, in fact, reflected upon by that structure. The feelings which depend upon mutuality for their origin and their renewal remain important but are relativized by that context which is ultimate, the psychic institution and the time bound constructions of role, norm, self-concept, auto-regulation, which maintain that institution. The socio-moral implications of this ego balance are the construction of the legal, societal, normative system. But what I [Kegan] am suggesting is that these social constructions are reflective of a deeper structure which constructs the self as itself as a system, and makes ultimate (as does every balance) the maintenance of its integrity.

ÖBut in this very strength lies a limit. The "self" is identified with the organization it is trying to run smoothly; it is this organization. The self at ego stage 4 is an administrator in the narrow sense of the word, a person whose meanings are derived out of the organization, rather than deriving the organization out of her meaning/ principles/ purposes/ reality. Stage 4 has no "self," no "source," no "truth" before which it can bring the operational constraints of the organization, because its "self," its "source," its "truth" is invested within these operational constraints (Kegan, 1982, pp. 100-102).

In reflecting on the excerpt of the stage 3 individual in the previous section, one can see this inability to take a perspective on the feedback he receives from others. He has no ability to manipulate this feedback in a way where he is able to take stock of its content and allow the "self" to regulate the

impact that the feedback has on his self-evaluation. Rather the feedback determines the evaluation. In the following example, I want to contrast this stage 3 epistemology with that of Rebecca, an individual who finds herself embedded in the stage 4, institutional epistemology. Note that while she is able to reflect on and regulate her relationships, as well as the interpersonal feedback she receives through those relationships, she is limited, as Kegan eludes to above, by an inability to take a perspective on this self-regulating system by which she makes meaning.

I know I have very defined boundaries and I protect them very carefully. I won't give up the slightest control. In any relationship, I decide who gets in, how far, and when.

* * *

What am I afraid of? I used to think I was afraid people would find out who I really was and then not like me. But I don't think that anymore. What I feel now is – "That's me. That's mine. It's what makes me." And I'm powerful. It's my negative side, maybe, but it's also my positive stuff – and there's a lot of that. What it is is me, it's my self – and if I let people in, maybe they'll use it – and I'll be gone.

* * *

Respect above all is the most important to me. You don't have to like me. You don't have to care about me, even, but you do have to respect me.

* * *

This "self," if I had to represent it, I think of two things: either a steel rod that runs through everything, a kind of solid fiber, or sort of like a ball at the center that is all together. What you just really can't be is weak.

* * *

I wasn't always this way. I used to have two sets of clothes – one for my husband and one for my mother who visited often. Two sets of clothes, but none for me. Now I dress in *my* clothes. Some of them are like what my mother would like me to wear but that's a totally different thing.

* * *

How exhausting it's become holding all this together. And until recently I didn't even realize I was doing it (Kegan, 1982, pp. 102-103).

In these excerpts from her interview, one can hear a glance back to the long ago transcended stage 3 embeddedness, but more prominently one can hear the system or institution which makes sense, or mediates, all the mutualities she found herself subject to at stage 3: "Respect above all is the most important," "What you really can't be is weak," "I'm powerful." One can hear authorship of the institution which mediates the input from others in each of these statements. This self-authorship is the subject of the stage 4 epistemology.

However, as in every balance, what one is subject to is what one cannot take a perspective on, and this subjectedness defines the limitations of the epistemology. Rebecca is unable to take a perspective on this institution that is her self. The statements Rebecca makes: "Respect above all is the most important," etc., not only indicate an ability to mediate stage 3 subjectivities, or take them as object, but they also show the effort she is making to maintain that balance. Kegan states:

The automatic and unselfconscious moves we make to neutralize what we experience as unbalancing forces reveal not the commitments we *have* but those that *have us*, those with which we are identified. Put another

way, these moves reveal not the commitments we *have* but those that we *are*, the commitments that are "subject" for us (Kegan, 1994, pp. 161-162).

One can sense that Rebecca is now beginning to realize this in the last section of the interview: "How exhausting it's becoming holding all this together. And until recently I didn't even realize I was doing it." As she begins to challenge the ways in which she defines this institution or governing system, and realizes that there may be other ways to organize the self, she will begin to show signs of moving her institution from subject to object. This ability signals the beginnings of a new equilibrium characteristic of a stage 5 balance which frees the self from the displacement of value whereby the maintenance of the institution becomes the end in itself (Kegan, 1982).

Stage 5. Kegan (1982) states that every equilibrium amounts to a kind of theory of the prior stage, which is another way of speaking about the subject to object transition. Recast in this sense then, stage 2 is a theory of impulse organized and ordered by the needs, wishes, or interests. Stage 3 is a theory of needs organized by interpersonal relationships. Stage four becomes a theory of interpersonal relationships governed by institutions, and stage 5 would can be cast as a theory of the institutional which is ordered by that which the self takes as prior to the institutional; or as Lahey et al. (1988) say, by a self that is now *bigger than* its "way" (p. 150). This notion of "prior to" speaks to the principles of the organizing system that makes sense of that which is taken as object. An example in the realm of the moral or the just would be that the stage 5 individual no longer determines rightness or wrongness based on the position of the legal institution, or no longer is "the just " derived from the legal institution, but in the new stage 5 balance, the legal institution is derived from a

broader conception of the just or what is right -- the difference between being subject *to* the law and being an author *of* the law.

In terms of meaning making, instead of morality, it is suggested that one's knowing is no longer determined by their institution, rather knowing comes from a principled dialect, albeit internal, between institutions which can now be taken as object. The abstract *systems* which helped the stage 4 individual mediate, or make sense of, all the possible abstractions in a way that gave structure, are now, at stage 5 being mediated, or being made sense of, by a new structure, the anatomy of which is trans-system, trans-ideological, trans-institutional. No longer does the stage 5 individual construct meaning based on loyalty or obligation to an institution, dogma, or liturgy of which he is unable to take a perspective (which describes the limits of stage 4), rather those institutions, dogmas, and liturgies, become manipulable systems from which he can choose which parts work and which don't as a "value-originating, system-generating, history-making" individual (Kegan, 1982, p.104).

From an interpersonal perspective the stage 5 self--no longer limited to the control of only stage 3 interpersonal mutualities, as is the stage 4 self--expands its "control" (or that which is taken as object) to include its own as well as other's institutions. Kegan (1982) states that if the stage 4 construction of self brought relationships, or the interpersonal, into the self, the stage 5 construction brings the self back into the relationship. The great difference between this and stage 3 is that there is now, at stage 5, a self to be brought to, rather than derived from, others. Where stage 3 is a fused commingling, stage 5 is a commingling which guarantees distinct identities; rather than being interpersonal, he or she is interindividual (Kegan, 1982). This new construction can interact with other "institutions," both internally and externally, to modify and enrich workings of its own and the others' (Lahey et al., 1988).

In the intrapersonal domain of the self, the stage 4 subjectivity of self-authorship, identity, and autonomy begin to be taken as object. This epistemological shift means that the stage 5 individual no longer sees herself as a single system or form, but rather realizes that the self is many forms or systems. Kegan states that at the heart of the difference between stage 4 and stage 5 constructions lies two questions:

1) Do we see the self-as-system as complete and whole or do we regard the self-as-system as incomplete, only a partial construction of all that the self is? 2) Do we identify with the self-as-form (which the self then *interacts with* other selves-as-forms) or do we identify with the process of form creation (which brings forms into being and subtends their relationship)? Another way of putting this second question is: Do we take as prior the *elements* of a relationship (which then enter into the relationship) or *the relationship itself* (which creates its elements)? (Kegan, 1994, p. 313).

This idea that the relationship may create the elements is a way of knowing one's self in which the self has no predetermined form outside of its relationship to other things: i.e. the relationship is prior. Rather it has many forms, and at stage 5 these forms can be taken as object. A stage 4 construction would see the self as form which enters into a relationship: the form (or system) is prior to the relationship. This notion that I don't really exist outside of my relationships to things, persons, events, etc. is somewhat radical, and often hard to conceptualize, but it is at the heart of stage 5 construction. In order to illustrate what this conceptualization looks like, the following excerpt is

provided from a conversation with a couple in the later stages of transition between the 4th and 5th stages talking about their relationship:

If you asked our children or our friends or, to be honest, if you asked us, you'd hear this very clear description and distinction between the two of us. One of us would be described as athletic, the exerciser, the other as sedentary. One looks at the world like a politician, tends to see things in terms of power, the other looks at the world like a visual artist, tends to see things in terms of balance and form. The one who is tough on the kids is carefree about money, and vice versa. These are the ways we have known ourselves for years [stage 4 constructions]. When we're at our very best, though – and this is definitely in the last few years of our relationship – we are able to stop pretending that these differences and opposites can only be found in the *other* person, or that the battles we get into are only with the other person. We realize that this polarizing or dichotomizing serves a purpose for each of us, and we are less enamored with that purpose. We see it's not the whole truth.

When we are at our best, we get a good glimpse at the fact that the activist, for example, also has a contemplative living inside of him. The one who is strict with the kids has a whole other part of herself that has a whole other, looser way of feeling about them. And on and on. It isn't easy, and it doesn't happen all the time, but our favorite fights are the ones in which we don't try to solve the conflicts but let the conflicts "solve us," you could say. We mean that if a conflict doesn't go away after a while we've found it's a good bet that one of us, has gotten drawn back into being identified with our more comfortable position. Like the end we're holding onto so passionately is our whole story, our whole

truth in the matter. When we can get out of the grip of our more familiar side then the fight doesn't feel as if the other one is trying to make us give up anything. The fight becomes a way for us to recover our own complexity, so to speak, to leave off making the other into our opposite and face up to our own oppositeness (Kegan, 1994, pp. 309-310).

It is in this way of knowing, or meaning making, that one's own "way," "theory," or "form" becomes the object; capable of being reflected upon, and the self becomes defined by the relationship, conflict, etc. (Lahey, et al., 1988). An example of this way of knowing that may further clarify what meaning making looks like from the 5th stage again comes from Kegan (1994). The following is a hypothetical conversation that a leader in the transition between stages 4 and 5 might have with herself or her followers when her followers are saying, "What kind of a leader are you? We are ready to follow you, but you say we need to figure our position out together, and what we're really hearing is that you don't have a plan:"

I agree with you that I don't have a whole cut-and-dried plan for how we can get where we want to go. I have my ideas to add, of course, but so do you. And even I agree that a person has no business posing as a leader if he doesn't have something to stand up for. But that's exactly why I think I am a leader, why I think I'm actually being a leader right now in refusing to treat my ideas and plans as whole and complete, however internally consistent and comprehensive they might be in their own terms. I am standing up for something right now, for the importance of our suffering through this inevitably frustrating and awkward process of cobbling together a collectively created plan for

getting where we want to go. And once we have the plan, you know what? I'll want to lead by continuing to stand up for the likelihood of its incompleteness, and for the need to keep seeking the contradictions by which it will be nourished and grow (Kegan, 1994, p. 323).

This leader not only transcends an identification with an internally consistent system, form, or theory, but she goes beyond this to a place, a way of constructing meaning, which identifies a system, form, or theory which is neither prior to its relationship or complete. Instead, having created a disjunction between herself and a fourth order (stage 4) way of knowing, one which takes system, form, and theory as subject, she now is at a place where a reconstructed system, form, theory becomes the object of the relationship which creates it (Kegan, 1994). This disembedding gives rise to a position that bases its epistemology in a dialectical, trans-ideological, inter-institutional way of constructing meaning. It is a self-transformative way of knowing the self (See the subject-object lines of development in Figure 2).

This review of CD theory helps lay a groundwork for understanding the different ways individuals can make sense or make meaning of their experiences. It is hoped that by this point the reader can anticipate where this line of thought is leading. It is shown in the next section how these different ways of making meaning have implications for the study of leadership. So it is there that the discussion now turns.

The Relationship Between CD Theory and Leader Effectiveness

With this review of leadership theory and research as well as a review of constructive developmental theory having now been presented, the challenge turns to drawing inferences about the relationship between CD theory and leader effectiveness. This last section of the introduction will be focused on this

area. One important concept in drawing inferences about the relationship of CD theory and leader effectiveness focuses on how the demands on leaders have recently changed and how leaders of different developmental levels may respond to these demands. This notion of demands was reviewed at the end of the second section of this chapter, but this last section will again highlight these demands in a constructive developmental context. In other words, there will be a recasting of the dilemma of effectively responding to the demands in a way that looks at how individuals at the different stages of Kegan's theory may respond to the demands that are made.

One set of demands of the past, detailed earlier in the second section of this chapter, were the demands of the modern era. They were demands that required efficiency, cost control, and a well defined mission for the organization and its members. Recall that these modern era demands led to organized systems, efficient work processes, and bureaucratic, hierarchical structures that were in many ways the epitome of Taylorism (Taylor, 1911). These ways of structuring organizations, as stated earlier, responded well to the demands of the modern era. However, Kegan (1994) and others (Hammer & Champy, 1993; Kuhnert, 1993; Noer, 1996; Torbert, 1995) have suggested a shift in the demands has taken place that signals the onset of what he and others have called the postmodern era: a time that is denoted by a new set of demands; a set of demands that even calls for a new type of response from the leaders of organizations. Kuhnert (1993) states that postmodernism implies that new demands require new solutions and that postmodern questions cannot be answered through the application of past methods.

The source of these new demands, the demands of the postmodern era, have been brought on by expectations originating from primarily three different forces: customers, competition, and change (Hammer & Champy, 1993). In

essence, these forces have created an instability that threatens the stage 4, or fourth order, balance; a balance which could be characterized as a modern era developmental stage which adequately responded to modern era demands.

The first force suggested by Hammer and Champy (1993) as an agent in creating postmodern demands is the customer. Organizations of the modern era (circa 1945 - 1980) via its leaders were often the party who determined the form of the buyer-seller relationship. In other words, these leaders often determined the norms of the relationship between the organization and its customers. Effective leaders of the modern era were able to effectively regulate the abstractions and interpersonal mutualities of the seller-buyer relationship via the institutions to which they were subject at stage 4. However, since the early 1980s there has been a shift in who determines the form and norms of the buyer-seller relationship. It is suggested that the customers now tell the suppliers what they want, when they want it, and often how much they will pay for it (Hammer & Champy, 1993). These new demands, demands of the postmodern era, have unbalanced the self identity of many organizations, not to mention the leaders and managers of those organizations.

The second force, competition, has also dramatically changed the systems and ideologies of organizations. Niche competitors, an opening of international trade barriers, and technology and transportation advances have all done away with the notion that just getting the product to market at a fair price gave the organization a pretty good chance at succeeding. New competitors are not playing by the same rules as before (Hammer & Champy, 1993). This change has caused a shift from the modern era demand that the organization have well defined boundaries and well understood institutional norms (fourth order characteristics), to a postmodern demand: that the organization be able to effectively redefine itself almost continuously by taking

its boundaries and institutional norms as object (a post-fourth order characteristic).

Third, the nature of change itself has changed. It has accelerated. The two biggest factors possibly being globalization of the economy and technology. The life cycle of most products has gone from years to months. This phenomenon has created companies that look for avenues of commerce in many directions at once. Like the forces of competition, this new way of viewing change as a constant and continuing process has shifted the effective response to those demands from a fourth order capability to a post fourth order capability in order to remain competitive, and even survive, in a postmodern environment because effective response often requires an evaluation and adaptation of the systems by which the organization runs. This way of viewing change is very difficult for fourth order, or pre-fourth order, individuals to do, but it comes more naturally to fifth order individuals.

In addition to the external forces of customer, competition, and change, there are internal forces as well. The postmodern organization differs from the modern organization in that there are three internal constituencies that need to be facilitated in formulating their post-fourth order response to the demands of the postmodern era: the employees of the organization, the subsystems within the organization, and the leadership of the organization. Leaders of the postmodern organization are going to have to respond to these demands in a way greater than a stage 4 epistemology. Reflecting on the characteristics of the stage 4 epistemology (systems or institution oriented), one can see how a stage 4 leader may struggle to be effective in the type of postmodern organization described by David Noer, an honorary senior fellow at the Center for Creative Leadership:

Organizations of the new reality [postmodern organizations] are not orderly, rational places where logic, analysis, and cool contemplation are the underpinnings of management action. They are chaotic, confusing, and filled with conflicting values, choices and demands. Just as Newton's vision of a fixed, predictable, clockwork universe has been undone by the theory of relativity, so has the notion of a rational, calm organization been replaced by a much more messy, creative, and unpredictable reality. Managing in such an organization requires very different skills and perspectives than those in the past. Calm, rational analysis and logical deliberate decision making are not what leaders of the new reality do.

What organizational leaders [of postmodern organizations] who really do make a difference do is to facilitate *transitions*. They know they can't stay relevant to the needs of the new-reality [postmodern] organizations by doggedly holding on to theories and practices of the past [the hallmark of the stage 4 leader]. They don't try to help their organizations survive by applying Newtonian theory of predictable rationality or by dealing with symptoms and not root causes.

What will make a difference between those organizations that make it in the new reality and those that don't is the cultivation of leaders with the ability to facilitate transitions: their own, the organization's, and those of their fellow employees (Noer, 1996, pp. 2-3).

This ability to facilitate the transition of the self requires an ability to take what is the self as object. This ability is inherently not a stage 4 ability. At stage 4, the self is subject to the structure which must be transitioned. One must be disembedding from a stage 4 epistemology to be able to take the institutions,

systems, and ideologies of the self and the organization as object: a stage 5 characteristic. The reason that stage 3 individuals cannot effectively facilitate these transitions, for they, like stage 5 individuals, are not subject to the institutions and systems of the stage 4 individual, is because they have no self to be the judge of these institutions and systems. While the stage 3 individual is able to see the validity and differences of different institutions because he is not yet subject to these institutions, he will make assessments of these institutions based on an epistemology that is subject to interpersonal influences. The stage 3 individual has a tendency to place a greater value on the relationship than the principle or ideology. The stage 5 individual however, bases his assessments of the different institutions on an epistemology that is trans-institutional or trans-system in a way that takes as object both the institution/systems themselves as well as the interpersonal influences or relationships of those who may endorse those different institutional perspectives.

Where meaning construction at or near the fourth order (stage 4) was sufficient, and even often desired, for meeting the demands of the modern era, these new demands of the "postmodern" era may require meaning construction that is *post* fourth order. Kegan (1994, p. 227) describes the leadership style of stage 4 consciousness from a warm, personal style and then from a more traditional, hierarchical style thusly: Leaders with a warm, personal, inclusive style may be collaborative with and inclusive of others as self governing persons, seen and respected as such (including seeing oneself as such). They will use collaboration, inclusion, or non-hierarchic leadership which is expressive of a personal philosophy or belief system *brought to ones work with others*. They may provide a warm "shoulder to cry on", but are only empathetic and in relation to the others pain (versus identified with and responsible for others' pain, as a stage 3 leader would be). On the other hand, more traditional,

formal, hierarchical, stage 4 leaders may lead hierarchically and unilaterally but out of a vision that is internally generated, continuously sustained, independent of and prior to the expectations or directives of the environment. They may have a formal, socially bounded interpersonal manner, but respect others, as well as oneself, as psychologically responsible, self governing persons. This ability preserves psychological as well as social boundaries on behalf of neither assigning to others responsibilities that are not theirs, nor taking on responsibilities that are not ones own.

This stage 4 style of leadership responded quite effectively to the demands of the modern work environment--demands that ask the leaders and their organizations 1) to be the inventor and owner of their work; 2) to be self-initiating, self-correcting, self-evaluating; 3) to be guided by their own visions; 4) take responsibility for what happen both internally and externally; 5) to be accomplished masters of their particular work roles and responsibilities; and 6) to conceive the organization from the "outside in," as a whole, and to see the parts of that whole (adapted from Kegan, 1994, p. 302). This stage 4 leadership style effectively responded to the demands of the rational, orderly organization described by Noer (1996) above. The strengths of the fourth order answers all these "modern" demands quite effectively.

However, the demands of the postmodern era as contrasted to those just mentioned require something qualitatively different. In addition to the description of the demands by Noer (1996) that postmodern organizations are chaotic, confusing, filled with conflicting values, choices, etc., the postmodern demands require, in contrast to the stage 4 demands detailed in the previous paragraph, that postmodern leaders 1) be the assessor of their work and work systems, not just the inventors of them; 2) be not only self-initiating, self correcting, and self-evaluating within their own institutions / systems, but be

self-initiating, self-correcting, and self-evaluating across institutions/ systems; 3) be guided by a trans-ideological, principled vision that is not locked into a single institutional epistemology, nor sees all epistemologies as relative; 4) to take responsibility for seeing how taking or *not taking responsibility* for internal and external consequences of a chosen system may or *may not* be appropriate; 5) be evaluators of the self-system that defines their work roles and responsibilities, not just masters of those roles and responsibilities; and 6) to conceive of the organization from a trans-system perspective--one of many possible "wholes" that can be evaluated in relation to each other.

If the observations about the new work environment being postmodern by placing a qualitatively different set of demands on the leader than did the demands of modern era are viable, then it follows that a fifth order, or at minimum post-fourth order, response to these demands would be more effective than a fourth, or pre-fourth, order response. That, in essence, is the main hypothesis of this research project. However, testing this hypothesis will be difficult because establishing criteria for leader effectiveness is a little unwieldy; a little like picking up a hundred pound marshmallow--it's not the weight, it's getting your arms around it.

Criteria for the Selection of Participants

It is important to address the topic of effectiveness criteria as it may potentially be a sticking point in the research of this topic. Yukl and Van Fleet (1992) state that definitions of leadership effectiveness differ from writer to writer, and that the choice of criteria can bias the findings toward a particular conception of effectiveness. In addition, they state that the selection of effectiveness criteria is usually very subjective and arbitrary. Thorndike (1949) pointed out that criterion measures can be considered immediate, intermediate, or ultimate. Immediate criteria are usually readily available and easy to

measure, but they are usually not sufficiently complete to predict performance in the domain of interest. A criterion like leadership effectiveness is considered ultimate, and is extremely difficult to define or measure. Thorndike states that such criteria are actually *constructs*.

Given the difficulty in adequately defining leadership effectiveness, I am suggesting using a strategy of known group criterion validation (Holland, 1996). This technique defines the characteristics of incumbency such that the leaders selected for the research are those who are "seen" as effective by individuals who are qualified to make that assessment. The quote by Ken Wilbur (1996) presented at the beginning of this chapter (pp. 7-8) made the point that subjective interpretations can be good or bad, but this does not mean that they are "wildly arbitrary." The selection of effective leaders, as well as the selection of effective organizations, is a subjective assessment of a construct that can be made by becoming fluent in the assessment of the effectiveness construct, and then making a subjective, but educated, assessment of the individual's or organization's effectiveness. It will be suggested here that some threshold values to be used in this assessment will serve as controls to help in this assessment, but ultimately the "educated" reader will have to decide whether the assessment is "good" or "bad."

The list of threshold levels for the effectiveness construct will be presented in the methods chapter, but it is intended that they will capture the holistic nature of the effectiveness construct. These levels should allow for the multivariate nature of the construct to be accounted for in a way that does not require statistical or experimental control of each of the multivariate factors that influence effective leadership. Rather, they should capture the holistic, subjective assessment of leadership effectiveness as is called for at the end of

Yukl and Van Fleet's chapter on leadership in the *Handbook of Industrial & Organizational Psychology* (Yukl & Van Fleet, 1992).

In order to manage this criteria problem, I propose doing two things in general: 1) selecting as participants only leaders who appear to have been selected to CEO or president positions of their organizations based on their merit to lead, and not based on privileged position such as the son or daughter of the past president/CEO, and 2) selecting only companies that appear to be succeeding in an established, competitive industry. The rationale of these strategies, as well as the threshold levels for inclusion will be detailed in the methods section.

Proposed Hypotheses

Since 1982, and the publication of Kegan's *The Evolving Self*, which was the original conceptualization of his constructive developmental meaning making theory, a fairly sizable database has been compiled to establish population norms for individual's CD level. Table 2 indicates that that the results of time consuming, structured interviews show that at best 10% of the highly educated, adult population scores at a post-stage 4 CD level, and that 79% score between stages 3 and 4 or score as full stage 4. In addition, a second series of research was conducted on managers and supervisors using Jane Loevinger's *Sentence Completion Test* (1976); a constructive developmental assessment tool which correlates with Kegan's assessment technique (see Figure 2). Table 3 shows the results of these studies on 467 professionals which indicated that 9% of the participants were post-stage 4, while 81% were assessed as being between stages 3 and 4 or full stage 4. The percentage figures from these two groups of research paint a very consistent picture of the CD level population norms for highly educated professionals.

Table 2

Distribution of Constructive Developmental Level for Highly Educated Professionals Using the Subject-Object Interview

	Professional "Highly- Educated" Composite N=207		Bar-Yam Study (a highly educated sample) N=60		Total "Highly- Educated" Composite N=267	
Order of Consciousness	N	%	N	%	N	%
5	0	0%	0	0%	0	0%
4-5	15	7%	6	10%	21	8%
4	83	40%	25	42%	108	40%
3-4	68	33%	22	37%	90	34%
3	31	15%	7	11%	38	14%
2-3	5	2.5%	0	0%	5	2%
2	5	2.5%	0	0%	5	2%

Note. The Professional "Highly Educated" Composite group (N=207) come from the following series of dissertations using Kegan's Subject-Object assessment interview: Jacobs, 1984; Alvarez, 1985; Lahey, 1985; Allison, 1988; Beukema, 1990; Sonnenschein, 1990; Binner, 1991; Osgood, 1991; and Roy, 1993. The Bar-Yam study is from a research project on gender differences and self-evolvment (Bar-Yam, 1991). Adapted from R. Kegan, *In Over Our Heads: The Mental Demands of Modern Life*. pp. 192-195. Copyright 1994 by Harvard University Press: Cambridge, MA.

Table 3

Distribution of Constructive Developmental Level for Managers using Sentence Completion Tests

Order of Conscious- ness	1	2	3	4	5	6	Total
N	37	100	177	66	104	13	497
5	0%	0%	0%	0%	0%	0%	0%
4-5	0%	4%	2.5%	14%	14%	39%	9%
4	8%	31%	40%	33%	39.5%	39%	36%
3-4	68%	54%	43.5%	47%	43.5%	22%	45%
3	24%	9%	9%	6%	3%	0%	8%
2-3	0%	2%	5%	0%	0%	0%	2%
2	*	*	*	*	*	*	*

Note. The six studies (N=497) come from the following series of studies.

Studies 1, 2, and 6 were conducted for doctoral dissertations. All but Study 6 use Loevinger's Sentence Completion Test (Loevinger, 1978). Study 6 uses a Kegan style subject-object interview technique. The studies were conducted by the following authors in order (1-6) respectively: Smith, 1980; Davidson, 1984; Torbert, 1983; Gratch, 1985; Quinn & Torbert, 1987; and Hirsch, 1988. Adapted from W. Torbert, *The Power of Balance: Transforming Self, Society, and Scientific Inquiry*, p. 43. Copyright 1991 by Sage Publications: Newbury Park, CA. (all rights reverted to the author: 11/96), and D. Fisher and W. Torbert, *Personal and Organizational Transformations: The True Challenge of Continual Quality Improvement*, p. 176. Copyright 1995 by McGraw-Hill: London.

If the assumption is viable that the demands placed on leadership are dealt with more effectively from a post-stage 4 CD level, then one would expect that those leaders who would be characterized as successful would be post stage 4. However, if only 10% of the adult population in the age range to be in an executive leadership position are post stage 4 in the population, one would expect that approximately 10% of the sample population of leaders to be tested here would score at the post-stage 4 level. But if a significantly greater percentage of the sample CEO/president population of this research project were assessed at a post-stage 4 level, then this finding should have substantial implications for how leader effectiveness is conceptualized. It is contended here that this would in essence redefine leader effectiveness as having post-stage 4 epistemology. Therefore, the main hypothesis is as follows:

Hypothesis I. Leaders in the CEO sample population will have a significantly higher CD scores than the known, highly educated, professional population norms presented in Tables 2 & 3.

In addition, as a sub-hypothesis, it is predicted that the largest proportion of CD scores of the CEO sample will be stage 4 or greater. Confirmation of this hypothesis would support the notion that CEOs are more effective leaders because they have more effective responses to the demands that are placed upon them, and that that is why they move up to the level of CEO or president of the organization.

One question that immediately comes to mind is: Why not use a group of leaders who do not meet the effectiveness criteria as a comparison group? This strategy presents a dilemma in that the members of that group may or may not be effective leaders, but they were not selected to be the leader based on the assessment that they effectively perform leadership duties regardless of whether or not they are able to perform those duties. Another question that

comes to mind is: Why not select as comparison group a group of organizational heads who have not met the demands of leadership well, in other words, select leaders who have not been successful? The difficulty in having a comparison group of ineffective or unsuccessful leaders is that ineffective and unsuccessful is usually determined post-facto. It would be difficult to assess an individual leader in the midst of his or her being unsuccessful. In addition, if the assessment interview is conducted after a perceived unsuccessful tenure, those leaders may not be at the same developmental place that they were when they were actually leading. Often failure, or perceived failure, contradicts the institutions or systems to which the stage 4 leader has been subject to to the extent that those "unsuccessful leaders" may have begun to question those institutions or systems. The very process of doing this self-evaluation can be a catalyst for development, and therefore, the person who was stage 4 when leading "ineffectively" may be post-stage 4 following the failure.

What is proposed, however, is using a comparison group of middle managers in the same age range and from the same organizations as the CEO participant group. This group of middle managers is expected to align more closely with the established population norms for CD level presented in Tables 2 & 3 (i.e. 10% post stage 4, 80% between stages 3 and 4, etc.). They will be contrasted to the organizational head group because by controlling for their age and experience in the work force, in addition to being part of the same organizational environments, it is assumed that they have been viewed as not having the same leadership ability as those who have risen to the level of organizational head. Therefore, my second hypothesis is:

Hypothesis II: Leaders in the CEO sample population will have a significantly higher CD scores than the comparison group of middle managers.

As a sub-hypothesis it is also predicted that the comparison group of middle managers will not significantly differ from the expected frequencies calculated from the known highly educated population frequencies presented in Tables 2 and 3. This follows the first hypothesis that the CEO sample will differ significantly from the population norms as it does the comparison group.

Again, confirmation of this hypothesis will support the notion that stage five individuals are more effective at responding to the demands of leadership. It is through this effective response that they move up into the top leadership positions in the organization. In addition, the reason that the middle managers have not been chosen to move to the upper levels is because their stage 3 to 4 responses to the demands placed on them has not been as effective as the post stage 4 CEO responses. Therefore, the sample population of middle managers should have percentages of CD scores that match the known, highly-educated, professional population norms presented in Tables 2 & 3. An analysis of this effect will be noted in the results and analysis chapter.

Finally, in the assessment of CD level, participants will be asked to elaborate on how they make sense of several subjects related to leadership: success, change, conflict, and vision/mission. The rationale and support for tapping these areas is presented in the methods chapter, but CD theory posits that the way individuals make sense of these different areas depends on their CD level. For example, a stage 5 individual will construct meaning about success in a qualitatively different way than a stage 4 individual or a stage 3 individual. While the *content* of their decision may be the same, *how* they come to that construction will be qualitatively unique to each level. Therefore, an interpretive assessment by trained scorers will yield scoreable excerpts from the participant interviews that will illustrate differences in how the participants construct meaning about these leadership themes.

Hypothesis III: The CD level assigned to excerpts taken from participant interviews around leadership themes (i.e., success, change, conflict, vision, etc.) will be positively correlated to the effectiveness ratings for the excerpts.

This hypothesis, if confirmed, will yield interpretive, qualitative data that shows that 5th order constructions are more effective responses to the demands of leadership, than 4th order or less constructions. Like Wilber's *Hamlet* illustration from earlier in this chapter (Wilber, 1996), this qualitative technique gets away from the quantitative interpretation toward which the first two hypotheses lean, and taps into the rich depth of interpretive understanding. This is not to say that any interpretation is a good one, or that interpretation is wildly arbitrary. However, the best way to tap this depth may be through the semi-structured CD interview which systematically identifies the individual's meaning making structure. The first two hypotheses make a quantitative, between groups comparison of a qualitative assessment technique. This third hypothesis is a purely qualitative comparison of the two groups.

The standards for testing the third hypothesis, as well as the first two hypotheses, will be presented in the methods chapter.

Summary

In conclusion, a summary of what is put forth in this introduction chapter may be helpful. The different approaches to leadership theory and research have been reviewed, and it was suggested that most of what has been done in the past has focused on the content of different leader traits, behaviors, situations, or contingencies between those variables. It is proposed that each research era, as well as the leaders themselves, have responded to the societal demands of that era. And a metaphorical presentation is made pointing out that the inconsistencies in leadership theory and research may be a function of studying only one side of the "headpiece" of leadership: the side that

investigates the content of leadership traits, behaviors, situations, or contingencies.

However, Kegan and other constructive developmental theorists have proposed another side of the headpiece: one that suggests that leadership effectiveness may be a function of the leader's ability to epistemologically construct meaning about his or her environment, and that individuals evolve in an invariant, hierarchical sequence through constructive developmental stages of increasing complexity and completeness. It is suggested that the reason this higher order epistemological ability may be important is because many philosophers believe that there is a paradigm shift in the complexity of the environmental demands from the modern era to the postmodern era, and that this shift is imposing a new set of demands on leaders of organizations. However, different constructive developmental levels may respond less or more effectively to these postmodern demands because these different levels of epistemological construction lead to qualitatively different ways of responding to, and making sense of the demands of top level leadership.

It is hypothesized that the leaders of successful, competitive organizations, who are perceived as being effective and are in the CEO or president position based on merit, will be at a post-stage 4 CD level using Kegan's developmental schemata in significantly greater proportion than the highly educated population norm (See Tables 2 and 3). As a second hypotheses, it is suggested that these organizational leaders will be at a higher developmental level than equal aged managers from the same organizations. Finally, it is hypothesized that 5th order constructions of leadership work themes will be qualitatively more effective than 4th order or lower constructions.

The following methods chapter will detail the criteria for measuring CD level, selecting participants, selecting the organizations, and testing the hypotheses. So it is there that the discussion now turns.

CHAPTER 2

METHOD

The Selection of Participants

Most research projects, particularly dissertations, that have been performed in the arena of constructive developmental assessment have used a semi-structured interview with between 10 and 30 participants with most projects using around 20 participants (Goodman, 1983; Lahey, 1986; Dixon, 1986; Binner, 1991). Forty-two individuals participated in this project. Twenty-one of the participants were executive leaders (CEOs, presidents, chief financial officers, and chief operations officers)--hence forth referred to as the CEO group. 21 were middle managers at the upper, middle, and lower levels--hence forth referred to as the comparison group. In the CEO group, the mean age was 53.4 years with a range of 40 to 65 years. In the comparison group, the mean age of was 46.2 years with a range of 39 to 63 years. Of the CEO group, all were men. In the comparison group, 16 were men, and 5 were women. The demographic characteristics of the participants are shown in Tables 4 and 5.

The selection of the CEO group was based on the following three criteria: First, they must be board elected CEOs, presidents, or chief officers. The rationale supporting this hypothesis is that a group of individuals (the organization's board) with presumably some interest at stake has made an holistic judgment of the participant's effectiveness and deemed that the individual is qualified to effectively lead the organization.

Table 4

Demographic Characteristics of the CEO Sample

Case	Age	Sex	Mgmt. Level	Organization
1	48	M	2	AA
5	51	M	1	BB
7	47	M	1	CC
9	65	M	1	DD1
10	65	M	1	DD1
12	42	M	2	DD2
16	51	M	1	EE
18	56	M	1	FF
19	40	M	2	FF
22	63	M	1	HH
24	55	M	1	II
26	46	M	1	JJ
28	50	M	1	KK
30	55	M	1	LL
32	56	M	1	MM
33	53	M	1	NN
35	53	M	1	OO
37	49	M	1	PP
38	63	M	1	QQ
39	58	M	1	QQ
42	56	M	1	RR

Note. For Management Level: 1 = CEO or President,

2 = Chief Financial Officer or Chief Operating Officer.

Mean Age = 53.4, Minimum = 40, Maximum = 65

Table 5

Demographic Characteristics of the Control Group

Case	Age	Sex	Mgmt. Level	Organization
2	45	M	3	AA
3	40	M	4	AA
4	40	F	4	AA
6	53	M	3	BB
8	48	F	4	CC
11	39	M	4	DD1
13	50	M	3	DD2
14	43	M	4	DD2
15	42	M	4	DD2
17	45	M	4	EE
21	63	M	3	GG
20	49	M	4	GG
23	46	M	4	HH
25	43	F	4	II
27	56	M	4	JJ
29	48	F	4	KK
31	40	M	5	LL
34	43	M	4	NN
36	50	M	3	OO
40	45	M	3	QQ
41	43	F	3	QQ

Note. For Management Level: 3 = Upper Middle;

4 = Middle Middle; 5 = Lower Middle.

Mean Age = 46.2, Minimum = 39, Maximum = 63

Secondly, all of the executive participants had at least 2 years tenure leading at their current level, although one had recently moved from the head of one division to the head of another. I contended in the introduction that it was important for the leader to have adequate tenure to show either their capability or incapability at leading.

Thirdly, as I suggested in the introduction, executive leaders would not be second generation family members of the organization's founder or be the entrepreneurial founder of the organization prior to the organization's going public (the criteria for the selection of organizations is detailed in the following section). In proposing this limitation, my goal was to eliminate from the population of participants individuals who may be in leadership position for reasons other than their ability to lead effectively, fully realizing that I may preclude some viable candidates with this criterion. This third criterion I was able to meet with four exceptions, and all four of them were retained in the participant population. Explanations of these four participant's situations are presented in the following paragraph.

The first participant was the founder of an organization that has been public for less than five years, but he was re-elected to the position of CEO by the board after a recent event which presented another viable candidate for the position. The second participant was the founder of an organization that went public between five and ten years ago, and he was willing during a time of crisis to step down from that position, but was requested to stay on as CEO by the board. Since then the organization has more than doubled its gross annual revenue. The third participant was related to the founder of a company that has been a public organization for several decades, but was selected to be CEO from a large list of candidates. In addition, this participant oversaw a period of spectacular growth for the company concurrent with many organizational

changes he initiated. The last participant is a second generation family member whose organization was brought in by a much larger organization specifically to lead a floundering business. The business has seen unprecedented growth since this participant's organization was brought in.

Participants for the comparison group were gained by requesting from each executive leader a middle manager that I could contact. In the prospectus, I had hoped to have each executive leader provide me with three middle managers from which I would randomly select one for participation. This proved to be a difficult task. In all but three cases, the executive's assistant asked me what kind of middle manager I needed, told me three names were unlikely, and said that there would be a middle manager for me to interview at a given time--usually before or after my interview with the CEO. The criteria I gave to the assistants or CEOs was that I needed a manager that was performing effectively in the middle of the organization, over the age of 40, and that was expected to remain in middle management for the immediate future.

This selection technique generated participation from middle managers at various levels: 6 in upper middle management, 10 in middle management, and 1 in lower middle management, for a total of 21 middle managers. In retrospect, I realize this unforeseen problem of having each executive leader provide three names of managers who was three to four reporting levels below them in most cases was an unrealistic expectation. Ironically, the group of middle managers who did participate met the criteria of age, perceived effectiveness, and continuing tenure at middle management that I had hoped for without being randomly selected from a group of three of their peers. Several colleagues and two committee members agreed that this problem was not going to negatively affect the research. In effect, the CEO choosing three middle managers was no more random than him or her choosing one, as I was

not the one choosing the manager in either case. In the one case where I was given two names, only one was available for the interview on the day I was going to be in their town.

As stated at the end of Chapter 1, selecting effective leaders for the CEO group was tied to the effectiveness of the organization. It was assumed that organizations that were performing effectively were being led by effective leaders. Therefore, the organizational effectiveness criteria will be detailed next.

The Selection of "Successful" Companies

The second criterion problem is somewhat similar to the first: How does one select companies that appear to be competing successfully in today's market? The criteria for determining successful companies are listed below. In general, the participating organizations spanned a variety of industries including product manufacturing, textile manufacturing, financial services, public utilities, software development, and insurance services. The regional locations of the organizations included five states, and all of the organizations served international clientele. The key characteristics of the organizations are presented in Table 6, and the selection criteria for effectiveness are detailed in the following paragraphs.

The first criterion was that the organizations be in a competitive, well established industry. The primary reason for not selecting organizations in industries that are newly established is that the skills required for initiating and maintaining a vision/ mission in a burgeoning field may be met not only by stage 5 leaders, but by stage 4 or stage 3 leaders as well. Earlier in Chapter 1, I presented the example of Henry Ford and his singular vision of fulfilling a niche in the marketplace. His singular vision, often characteristic of stage 4

Table 6

Demographic Characteristics of the Participating Organizations

Organization	Size* <i>billions</i>	Number of Participants
AA	1.50	4
BB	18.00	2
CC	7.00	2
DD(1)	6.50	3
DD(2)**	6.50	4
EE	5.00	2
FF	1.50	2
HH	1.00	2
II	5.50	2
JJ	2.50	2
KK	18.00	2
LL	5.50	2
MM	1.50	1
NN	2.00	2
OO	5.20	2
PP	1.00	1
QQ	0.50	4

Note. * Size = Gross Annual Revenue rounded to the nearest half billion. ** DD(2) is a distinct division of DD(1).

development, led to great success up to the point where the automobile industry began maturing. However, once it became competitive and well established, his dogmatic adherence to his vision (institution or system) served to restrain the company's ability to adapt to competitive forces. For this reason, organizations selected for this research project have reached a point in their industry's growth curve that competition is well established.

A second criterion was that the organizations must be public organizations. This criterion assured that there would be a board in place to elect the executive leadership. Public companies' financial performance is also obtained more readily. In addition, public organizations are required to meet certain reporting standards and independent audit obligations which made comparison across industries easier. This standard also enabled comparisons of the companies competitive position easier to identify within an industry.

A third criterion for the selection of successful organizations was size. The minimum size suggested in the prospectus was \$100 million dollars in gross annual revenue or \$10 million in net profit. In the sample of participating organizations, the smallest organization was \$250 million, and the other 15 organizations ranged from \$1 billion to over \$15 billion in gross annual revenue, and the net profit figures vastly exceeded the minimum criterion across the board. The mean annual gross was \$5.1 billion.

Finally, each organization's performance was evaluated. Without exception, the participating organizations were performing better than other organizations in their respective industries, and several were leading their industries in terms of growth and position. It was important for this project that the organizations be successful relative to others in their industry, for the goal of this project was to understand the constructive developmental characteristics of successful leadership as inferred by extending the organization's success to

the leader of the organization. It was not the goal of this project to understand the characteristics of unsuccessful, or even potentially successful, leadership.

Participant Recruitment

The recruiting of participants was an arduous task. I first selected from various sources (i.e., business publications, the internet, library data bases) 40 organizations who met the criteria listed in the previous section. From these sources, I was able to obtain contact information, the name of the CEO, as well as the organization's competitive standing in their industry. I drafted a generic letter (see Appendix A) and mailed it to the CEOs of each organization. The letter and the envelope were both on University stationary which appeared to get all of the letters at least opened.

The second step was a telephone follow-up. During this process I spoke to 40 executive assistants, 6 of whom responded affirmatively, 12 of whom regretted, and the remainder of whom required multiple follow-up calls and faxes. By the sixth week of this process, I had secured interviews within 12 organizations, all of whom allowed me access to at least one executive leader and one middle manager. Over the next several weeks a few well connected acquaintances contacted CEOs at several of my target organizations, shared with them the importance of this research, and asked the CEOs to take a second look at my request. From this last effort, I obtained the participation of 5 more organizations.

One story worth noting is illustrative of the effort it took to obtain many of these interviews. After receiving my initial letter, one particular CEO kept it in his open file as he considered my request. Over the next several weeks, his assistant (whom I now consider a personal friend) relayed this lack of response, but no news was good news according to her. He finally declined. An associate of mine who knows this CEO moderately well phoned him and relayed

through the assistant the importance of this research, after which he considered it again for two more weeks before re-declining. After this second regret I met with a very well connected friend of the family, who asked me specifically if this CEO was going to participate--“You have to get him to do this interview, he is probably the foremost leader in the world in [the CEO’s] industry. Let me call him for you.” The friend later told me that the CEO’s response was, “You’ve done what you’re supposed to do.”

Dreading the call to my new executive assistant friend, I phoned about ten days later. The assistant, as shocked as I was, said he would give me 45 minutes. So nine weeks after mailing the first letter, I found myself with five minutes remaining in the interview with this CEO. I stated that this was far-and-away the most fascinating interview I had done to date (and it was), and he said, “How about we go another 45 minutes.” It was this kind of “scheduling gymnastics” I had to endure for many of the interviews. However, it was this kind of enthusiastic participation I experienced as well.

The recruitment of middle managers was much easier once the CEOs agreed to participate. In most cases, I was given a name to contact, and in each case, they were flattered that they had been chosen. In six cases, the executive assistants informed me that they had set up a meeting with a middle manager either right before or right after the CEO interview. Five of these participants appeared enthusiastic about participating, the other was rather obtuse, and I did sense that he would just as soon be doing something else.

All participants in both the CEO and comparison groups were asked to sign a consent form (see Appendix B) and were promised an executive summary of the research findings in return for their time.

The Assessment of Constructive Developmental Level

The Research Instrument

A variation of Kegan's subject-object interview (Lahey, et al., 1988) was used to assess the constructive development of the participants. Normally the participants would be handed 10 index cards, each with a different word printed on it: anger, anxious/nervous, success, strong stand or conviction, sad, torn, moved/touched, lost something, change, and important to me (Lahey, et al., 1988). This list serves two purposes: 1) it directs the discussion right from the start to "ripe areas" for exploration of constructive developmental epistemology, and 2) it renders the interviewee "full" of material for exploration which he or she could not possibly have time to exhaust in the interview. This list is not, according to the developers of the test, an exhaustive list. Others have added words like control, guilt, and conflict (Lahey, et al., 1988, p.291). However, the words that are chosen should be general ones and should not convey to the interviewee a context in which he or she experiences them.

In Lahey's dissertation, she used only one card to set up the interview: a card with the word conflict. Selecting only one kind of experience, rather than allowing the person to choose from the ten areas as in the standard format, allowed her to standardize and limit the interview content to the area of conflict. Her dissertation was specifically about conflict in work and love relationships and epistemological structure (Lahey, 1986).

The interview content for this project used four cards that elicited experiences that CEOs and other managers face in leading their organizations. The topics on the cards were *success*, *change*, *conflict*, and *vision/mission*. These words were chosen because they either directly or indirectly relate back to the

common themes which define leadership effectiveness that were presented in the introductory chapter of this dissertation:

- 1) challenging existing processes (creativity),
- 2) inspiring a shared vision (vision/ motivating),
- 3) managing conflict,
- 4) problem solving,
- 5) delegating/ enabling others (empowering),
- 6) relationship building/ individualized consideration (caring/ supporting).

Recall from Chapter 1 that these common dependent variables were raised by the contributors to the San Antonio Conference on Psychological Measures of Leadership (Yukl, Wall & Lepsinger; Posner & Kouzes; Yammarino & Bass; Sashkin & Burke; Campbell; Wilson, O'Hare & Shipper; all 1990), and presented by Kenneth Clark and Miriam Clark (1990).

The next step was for the interviewer to read a standard statement from the interview form (see the next section on research procedures) and give a brief description of each card. These cards were given to the participants and they were asked to jot down notes about personal experiences that those cards brought to mind. In the course of interviewing, only about 5 of the participants chose to write on the cards, rather most were impatient to get started as an abundance of experience came to mind for most of the participants. In the few cases where the participant did make notes, the interviewer never saw the filled-in cards. In this way the participant could reflect on how willing he/ she was to share the experiences on any given card with the interviewer. At most this part of the interview took only about 15 minutes.

The second part of the interview was an exploration by the interviewer of how the person makes sense of the experiences that the cards brought to

mind. The content of the experiences is not important as far as determining epistemological structure, but sympathetic, understanding, and interested listening created an environment where getting at the structure was more easily accomplished. As far as Kegan and his colleagues know, no one has ever gotten through all the cards (Lahey, et al., 1988), so the interviewer asked the participant to pick a card that they would like to talk about. Most participants got through about two or three of the cards.

Even though the interviews were slated to last about 45 minutes, the interviews were recorded with a 90 minute tape just in case a salient bit came up right at the end of the hour. Approximately ten of the interviews ran over the allotted time, so this precaution yielded significant gains in about 25% of the cases.

The object of the interview was to probe and understand the participant's experience in a way that identified how or why the participant constructed meaning about a particular experience. This meant that probing for information about the content of the person's experience was not part of the process—the goal was probing for an epistemological construction of the given event. The interviewer wanted to know *how* the person thinks not *what* she thinks.

Research Procedures

Each participant was asked for one hour of their time for the interview. After some brief introductory conversation and an explanation of the research topic, I as the interviewer (trained in the subject-object interview technique), made a statement similar to the following:

I am interested in how you understand your experiences of leading / managing in your organization. All the information that we talk about

today will remain confidential and you may stop talking about any experience at anytime you wish. If you wish, you may also end this interview at anytime. In a moment, I am going to ask you to look through four cards with different topics that have to do with leading / managing. I will ask you to think of any experiences that come to mind about the topic area on the card, and I would like you to jot down any notes that may help you to remember those experiences. The notes are for you, and if you want you can throw them away after the interview. After you complete this, we will talk about any of the experiences from these cards you wish to talk about. I will ask you questions about these experiences, and about how you understand or make sense of them. Our conversation will be tape recorded. The tape will be transcribed before anyone else hears it, names and places will be disguised to protect your anonymity to others, and two individuals will score the interview for my research purposes. I want to thank you for your generosity in making time for my learning. Do you have any questions before we get started?

If the participant had no questions, then I handed him / her one card at a time and introduced it similarly to this:

If you were to think back over the last couple of weeks or even months, and going back further if a particularly significant event comes to mind, and you had to think about times you felt [subject on the card] (i.e., in conflict) about something at work—are there two or three things that come to mind. Take a minute to think about it, if you like, and just jot down on the card whatever you need to remind you what they were.

I proceeded through all four cards in that fashion. Then, if nothing came to mind on any particular card the person skipped that card and came back to it if he/she wished. After all four cards were completed, I said:

Now we have about 45 minutes or so to talk about some of these things you've recalled or jotted down. You can decide where we start. Is there one card you feel more strongly about than the others?Ö

Now the probing-for-structure part of the interview began. Kegan and his colleagues have suggested that the interviewer should keep several things in mind in order to identify epistemological structure: 1) The interviewer should not worry about getting through all of the cards, the idea is to let the participant introduce personally salient content, and try to understand it. 2) The participant will provide the "whats", it is important for the interviewer to learn the "whys" (e.g. why is that important? why does that constitute success?). The answers to these questions help the interviewer understand how the meaning construction is shaping real life. 3) Since the interviewer is probing for structure, he or she needs to keep asking the "whys", but in a way that is sensitive to the possibility that the participant's real life experiences are often deeply felt. 4) The interviewer must wear two hats in the conduct of the interview—that of the empathic, receptive listener, and that of the active inquirer. Ignoring the first hat on behalf of the second leaves most participants feeling grilled, and not well understood. The interview will become unpleasant at best and unproductive at worst. And 5) the central activity in the interviewer's own head is the forming of hypotheses during the interview itself. The more familiar the interviewer is with the epistemological distinctions that the interview can generate, the easier it is to form hypotheses. Probing to either

confirm or reject an epistemological hypothesis makes the scoring of the interview much more sound. These suggestions were taken from Kegan and his colleagues (Lahey, et al., 1988).

Forming a Hypothesis and Testing It

The most critical factor in getting good interview data using this type of semi-structured interview lies in the interviewer's ability to form and test hypotheses during the course of the interview. The following example of forming a hypothesis and testing it is taken from Lahey, et al. (1988):

1. If there is something I did wrong
2. and somebody else knows and I get in
3. trouble for it, I get nervous.
4. WHAT DO YOU MEAN WHEN YOU GET NERVOUS,
5. HOW DO YOU FEEL?
6. I get Worried.
7. WORRIED ABOUT WHAT?
8. I don't want to get in trouble.
9. DO YOU GET NERVOUS AND ANXIOUS IF NO ONE
10. FINDS OUT ABOUT IT, THAT YOU HAVE DONE
11. SOMETHING WRONG?
12. Yah, a little bit.
13. EVEN IF NOBODY ELSE IS GOING TO KNOW?
14. Yah.
15. SO HOW COME YOU GET NERVOUS WHEN NOBODY
16. MIGHT EVEN FIND OUT YOU DID SOMETHING WRONG?

17. Like if I am not sure they will find out

18. or not.

Lines 1-8-- In the interviewee's first statement, he demonstrates an understanding that he and other people can know different things. He can do something (e.g., something that is "wrong") and other people can know about it or not know about it. The interviewee constructs the world as one in which people do not share one mind; there is an essential privacy or "separate accounting" to what people know. Hypothesis: The interviewee must not be structuring this in a stage 1 way. Hunch: stage 2. The participant gets "nervous" if he has done something wrong, he gets "worried". A variety of stage interpretations can be made. We need more information about why he is worried, or what he is worried about in order to test the adequacy of our stage 2 interpretation. The interviewer asks a clarifying question, "Worried about what?" The interviewee's response, "I don't want to get into trouble," seems to locate the source of the nervousness in what other people will *do* to me if they find out what I did. This seems to locate matters in "social" consequences or transactions (rather than in some internal feeling like guilt) and "social" consequences that pertain to bad things happening to the participant (rather than concern about the feelings of the people who know, its consequences to *them* or for *their* feelings about the participant or their relationship to the participant) and bad things being a matter of what people will do to the participant (rather than what people will think or feel about him). This response confirms our stage 2 hypothesis. We need to continue probing this however, to check whether the interviewee sees the matter in a different way, a more complex way.

Lines 9-18-- In probes beginning at line 8 the interviewer provides an opportunity for the interviewee to disconfirm our analysis. The interviewer tests the "upper limits" of stage 2 by checking to see if there would still be any cause for concern if the other people did not know anything wrong had been done. The interviewee says that he would still be a little concerned. We hypothesize that there may be an emerging stage 3 perspective. Perhaps he holds another's point of view internally to the extent of experiencing internal dialogue about his wrong doing. The interviewer tests this possibility carefully, getting confirmation in line 12 and again in line 14 that there would be concern even if he weren't found out. But the interviewer follows up with the all important "why" (paraphrased here as "how come?"). The interviewee's response in line 17 makes clear that there is something wrong with "doing wrong" independent of other people knowing, but because there is always a chance that somebody *does* know or *will* know. This seems to confirm the sense the others are constructed by the interviewee in terms of their behavioral transactions or potential transactions relative to his own separate goals, needs or agency. The interviewer from this excerpt has successfully tested the upper-limits of this excerpt (and the lower-limits were spontaneously demonstrated). By creating the opportunity for expression of a more complicated structure, pursuing the response, and then following up with the appropriate final "why" question, the interviewer *confirmed* the initial stage 2 hypothesis and *ruled out* the initially plausible stage 3 or partially stage 3 hypotheses.

This hypothesis testing technique during the course of the interview gives an interview that is scoreable for subject-object or constructive

developmental structure. Until the interviewer pushes the interviewee to test the upper-limits of his or her meaning making capacity, a higher stage of CD level cannot be ruled out. In other words, this pushing is what allows the scorers to limit the CD level—it shows where the participant *cannot* go when it comes to meaning construction. In a dissertation by Binner (1991), the interviewer did not do enough "in-process" hypothesis formation and testing to get scoreable interviews, and all of the interviews had to be re-conducted. Interviews for this dissertation had to meet the same criteria of scoreability.

After the completion of the interviews, they were transcribed. Names, dates, and places were changed to make all interviews anonymous. If the interviewee requested, I sent them a "neutralized" transcript of the interview for their review. Once transcribed and approved, the interviews were scored.

Scoring the Interviews

The scoring phase began once transcriptions of the interviews were completed and the interviews were "neutralized." The interviews were scored by reliable scorers trained and certified at the Subject-Object workshop in Boston, Massachusetts. Scoring the interviews was a difficult task. "Easy" interviews took about an hour, and more complicated ones took up to two. I scored all 41 of the interviews. In addition, 21 of the interviews were scored by a second rater at the Subject-Object Workshop. The first ten interviews were scored by both of us and used to certify me as a reliable scorer (reliable scorers must match with in one distinction on 8 of the ten interviews) We matched perfectly on nine, and within one distinction on one other that was more difficult. The other 11 were sent to her because of their complexity. The results of the interrater reliability data are presented in Chapter 3 (the results chapter).

Each interview was scored for its overall subject-object (CD) level, according to Kegan and his colleagues scoring guide (Lahey, et al., 1988). Lisa Lahey sums up the scoring procedure very succinctly in her dissertation:

[The] scoring system discriminates between five qualitative steps in the evolution from one subject object structure to the next. For example, the development from stage 4 to stage 5 includes four different stage combinations, noted as 4(5), 4/5, 5/4, 5(4). Thus, this system distinguishes between a perspective that is fully stage 4, one that is primarily stage 4 with some stage 5, one that has both perspectives operating but stage 4 dominates, one where stage 5 dominates the two structures, one that is primarily stage 5 with some stage 4, and one that is fully stage 5. [The] scoring system discriminates between 21 different subject-object perspectives (stages 1 through 5 and the 4 transition points between each stage). Each interview [will receive] one of these scores (Lahey, 1986, p. 78).

Reliability and Validity

The following reliability and validity information came from a conglomerate of dissertations and studies using Kegan's subject-object (or CD) interviews in systematic research. All of the reliability and validity information presented in this section, unless otherwise noted, came from Lahey, et al's. (1988) *A Guide to the Subject-Object Interview: Its Administration and Interpretation*, (pages 356-369). Reliability and validity information specifically related to CD level assessment in this project are presented in the following chapter.

Interrater Reliability

Goodman's dissertation (1983) was the first to use the subject object (S-O) interview in systematic research. From his sample of 36 participants, 27 interviews were randomly selected and scored by two raters to establish interrater reliability. Complete agreement between the two ratings across the 21 stage distinctions was 67%, and agreement within 1 / 5 stage was 82%. Disagreements between the two scorers were settled by a discussion where needed, and that score was used in the other analyses of his research. Approximately eight months later, after "the research groups growing sophistication with theoretical, methodological, and scoring issues" (Goodman, 1983, p.80) had been achieved, a second interrater reliability was calculated where complete agreement between the two ratings was 89%, and 1 / 5 stage agreement was 100%. Most of the dissertations and other projects that have used this technique report complete agreement reliabilities in the 70 to 80% range, and most claim reliabilities at 100% for a 1 / 5 stage discrimination.

Across a wide range of similar assessment procedures interrater agreement is in the 70-80% range. A comparison of interrater reliabilities for S-O assessment technique to the Moral Judgment Interview (the most similar measure theoretically, methodologically, and with the longest running track record: Colby, Kohlberg, et al., 1987) shows that the S-O interview has higher reliabilities with more finely differentiated scoring points: The Moral Judgment Interview (MJI) has thirteen distinctions between stages 1 and 5 with two transitional points between each stage. The S-O interview makes 21 distinctions between stage 1 and 5 with four transition points in between each stage. The interrater reliabilities for research using the MJI with complete agreement (using 13 possible distinctions) has a mean of 60% and a median and mode of 63%. Considering the S-O technique has 21 possible distinctions, the

reliabilities for the S-O technique compare quite favorably with the MJI. In addition, considering a "one discrimination difference" is smaller for the S-O interview than the MJI (1/5 vs. 1/3), the close to 100% reliabilities for the S-O interview compare favorably with the MJI's close to 100% interrater reliabilities.

Using the training guide (Lahey, et al., 1988), Kegan and his colleagues have trained other reliable scorers, and the scorers for this project were trained by his group as well. It was expected that interrater reliabilities for this project would be in the 70-90% range for complete agreement, and close to 100% for a 1/5 stage discrimination. Any discrepancies in ratings in this research would be settled by a discussion between the two raters before the rating is used in the testing of the present research hypotheses.

Test-Retest Reliability

Lahey's dissertation (1986) is the only known research that has allowed for a provisional consideration of test-retest reliability. She interviewed 22 participants (11 men and 11 women) in an investigation of structural consistency of a person's epistemology across two domains: love and work. One interview was about love, the other about work, and the interviews were given about two weeks apart. As her research used a form of the S-O interview, since it only used one of the interview cards (conflict), it is not a direct test-retest measure for the 10 card S-O interview. It is noted that this research similarly used only four cards. Nevertheless, Lahey's test-retest reliabilities showed correlations between time 1 and time 2 of .82 (Spearman coefficient) and .834 (Pearson's r), both significant at the .0001 level. These numbers are only a little less strong than the most similar established measure: the MJI.

In addition, any changes between the scores in Lahey's research from time 1 to time 2 were no more likely to be lower than higher. Therefore there is

no evidence for a practice effect to the S-O measure. Finally, there was no evidence of any sex differences in the test-retest in Lahey's research.

Inter-item Consistency

Similar to Lahey's research, research by Villegas (1988) permits a preliminary consideration of inter-item consistency. She used a regular S-O interview and a modified S-O interview in which she only used one card that was not part of the ten cards in the standard S-O interview (a "strong stand" card). The participants were 72 adolescents (36 boys, 36 girls) between 12 and 17 years of age. The correlation scores between the "strong stand" interview and the "regular" S-O interview was .96.

Validity

Lahey et al. (1988) point out that for a developmental measure such as the S-O interview, the most important validity concept is that of construct validity. In the *Standards for Educational and Psychological Testing* (American Psychological Association, 1985), the APA states that evidence classed in the construct-related validity category focuses primarily on the test score as a measure of the psychological characteristic of interest, and as Colby, Kohlberg, et al. (1987) point out about validity tests of a developmental measure:

the two most critical empirical criteria of construct validity correspond to the two most critical assumptions of the stage construct. They are the invariance of the stage sequence, and the structural "wholeness" or internal consistency...We interpret construct validity to mean the fit of the data obtained by the test to primary components of its theoretical definition. The primary theoretical definition...is that of an organization passing through an invariant developmental sequence. In other words, positive results of longitudinal analyses...support not only the theoretical

assumptions but also the validity of the measure; negative results, of course, could be due to an incorrect theory, an invalid test, or both. Furthermore (in this case), validity and reliability of a test are closely related notions since both refer to the generalizability of performance on a test, or a set of test items, to performance in other situations including the performance on other forms of the test or at other times in testing. In the case of structural stage, construct validity demands high generalizability or test-retest and alternate form reliability. If a stage is a structural whole, the individual should be consistent over various stimuli and occasions of testing (pp. 69-70, in Lahey, et al., 1988, pp. 365-367).

With regards to Kegan's techniques for assessing the invariant, hierarchical sequence, Lahey, et al (1988) state that "the real test for the measure has to do with its capacity to 1) capture gradual changes in subject-object development within persons in the expected direction over time, and 2) demonstrate a consistency of structural usage across a wide range of contents" (pp. 367-368). With regard to the latter, the research by Lahey (1986) and Villegas (1988) in the previous two sections on reliability support the validity of the S-O interview. Concerning the former, Kegan and his colleagues (Kegan, Lahey, Souvaine, Popp, and Beukema; See Kegan, 1994, pp. 188-190) have been conducting longitudinal research for the last nine years with 22 adults as shown in Table 7.

The overwhelming impression from the data shown in Table 7 is that an increasingly complex way of constructing reality is gradually unfolding for most adults. With very few exceptions, if a person's CD level changes from one year to the next it changes in the direction of greater complexity, and with no

Table 7

Longitudinal Study of Adult Orders of Consciousness

Subject	No inter view	<u>Subject-Object Position</u>						
		3	3(4)	3/4	4/3	4(3)	4	4(5)
AA			YR 1,2	YR 3	YR 4			
BB	YR 2			YR 1			YR 3,4	
CC			YR 1	YR 2,3	YR 4			
DD	YR 1,4						YR 2,3	
EE	YR 1						YR 2,3,4	
FF	YR 2				YR 3	YR 4	YR 1	
GG				YR 1	YR 2	YR 3,4		
HH			YR 1		YR 3?	YR 3?	Y 2,3?,4	
II	YR 2	YR 1			YR 3	YR 4		
JJ		YR 1	YR 2	YR 3	YR 4			
KK				YR 1?	YR 1?	YR 2,3	YR 4	
LL			YR 1	YR 2	YR 3		YR 4	
MM					YR 3	YR 4	YR 1	YR 2
NN					YR 1	YR 3	YR 2,4	
OO				YR 1	YR 2	YR 3	YR 4	
PP	YR 3		YR 1?	YR 1?,2?	YR 2?,4?	YR 4?		
QQ	YR 2		YR 1		YR 3,4?	YR 4?		
RR	YR 3,4	YR 1?	YR 1?,2					
SS				YR 1	YR 2	YR 3	YR 4	
TT	YR 4					YR 1	YR 2	YR 3
UU				YR 1,2	YR 3		YR 4	
VV	YR 1				YR 4	YR 3	YR 2	

Note. Adapted from R. Kegan, *In over our heads: The mental demands of modern life*, pp. 189-190. Copyright 1994 by Harvard University Press: Cambridge, MA.

exceptions does it ever change more than 2/5 of stage. These results were obtained without knowledge of the previous year's scores and with very high interrater reliability (Kegan, 1994). Lahey et al. point out that this evidence is important for both the construct's and the measure's validity.

Testing the Hypotheses

In the following section, a methodology for testing the three hypotheses is proposed. While all three of the hypotheses lent themselves to quantitative assessment of some sort, the real rigor in this research came not from the statistical manipulation of any of the variables, but rather from the rigorous scoring procedures and the in-interview hypothesis forming and testing. It is through the mastering of the S-O interview (both administration and scoring) that the construct of adult constructive development is validly tapped.

Since the prospectus for this project was written, I have come to a different conclusion about the means of testing differences between two groups. My initial idea was to put the twenty-five different distinctions of constructive development on a numeric scale--1 through 25. This interval type of scale would have allowed for testing the differences between means of the sample population and the comparison group using an independent samples t-test, or a t-test between the sample population and the known population norms, if they were assumed to be normally distributed. Through the course of the interviews, I felt less and less comfortable making the assumption of an interval scale, even though in the social sciences, regular practice is made of this in the study and measurement of psychological constructs.

I have, however, gained even more confidence that constructive development is measured on an ordinal scale--that each increasing level is able to construct meaning in ways more complex than the levels that precede it. Hays (1988) states that when we can state that two values on a given construct

are unequal, that their magnitudes are unequal, and if one measurement is larger than the other, but we cannot say by how much larger the measurements truly differ, then we should use the ordinal scale. The measurement of CD level is ordinal by Hays' definition. However, the use of the ordinal scale precludes the use mathematical equations, such as the calculation of a mean score for a given sample or population.

Therefore, I became less comfortable with the idea of using a difference between means t-test for measuring the statistical differences between groups. While I could have assumed, as is often done in psychological measurement using Likert scales, that the measurement of the constructs of this project approximate an interval scale, I have chosen to use non-parametric, Chi-Square statistical procedures to look at differences between population proportions at a given level of the CEO and comparison groups as well as the CEO group and expected proportions based on the known population norms.

This technique is also not without problems. For example, in the use of the Chi-Square Test procedure, while one does not have to meet the assumption that the shape of the underlying distribution is normal, one does assume that the expected frequencies for each category should be at least one (1), and that no more than 20% of the categories should have an expected frequency less than five. Due to a CEO group size of only 21, neither of these assumptions were met in this project. This problem potentially decreased the power of the test.

My intention for each of the hypotheses then, was to show a frequency distribution for each sample as well as the expected frequencies, and provide the results of the non-parametric methods as the primary means of analysis. In each case, I have pointed out where the assumptions have been violated, and have suggested possible implications due to those violations.

HI: The Difference Between CEOs and the Population Norms

The first hypothesis suggested that the CEO participant groups would have significantly higher CD scores than the known highly educated population sample. Given the assumption that the interview technique employed to measure CD level validly measures the construct, the most appropriate way to determine if there was a significant difference between the CD level of the CEO participant group ($N = 21$) and the known population distribution ($N = 704$) was with a Chi-Square Test. The Chi-Square statistic tests the goodness-of-fit of the observed and the expected frequencies to test that all categories contain the same proportion of values in each category. Table 8 shows the frequencies and proportions of the known highly educated population that combines the work of 16 research projects--ten using the Subject-Object Interview technique (see Table 2) and six using Loevinger's Sentence completion test (see Table 3).

Because of the small size of the sample population, two key assumptions of the Chi-Square Test were not met. 1) the expected frequency was less than one (0.4) for CD scores ranging from of 2-3 (the lowest score obtained for the sample populations). The test assumes that no cells will have an expected frequency less than one. 2) Three of the cells (60%) had expected frequencies less than five. The test assumes that no more than 20% of the cells will have expected frequencies less than five. However, this was the only test statistic that really made sense given the fact that the population was not normally distributed and the scoring was ordinal. Because of these problems, the null hypothesis would only be rejected if the significance test produced a value less than 0.01.

Table 8

Distribution of Constructive Developmental Scores for the Total Highly-Educated Sample

Order of Consciousness	Number	Percent of Sample
2-3	19	2%
3	78	10%
3-4	314	41%
4	287	38%
4-5	66	9%
Total	764	100%

Note. Part of the data (N=207) for the table come from Kegan (1994). Nine studies in the Professional "Highly-Educated" Composite group come from the following series of dissertations using Kegan's Subject-Object assessment interview: Jacobs (1984), Alvarez (1985), Lahey (1985), Allison (1988), Beukema (1990), Sonnenschein (1990), Binner (1991), Osgood (1991), and Roy (1993), and one independent project by Bar-Yam study (1991). The rest of the data (N=497) come from the following series of studies cited in Torbert (1991). Five use Loevinger's *Sentence Completion Test* (Loevinger, 1978): Smith (1980), Davidson (1984), and Hirsch (1988). Gratch (1985), Quinn & Torbert (1987) were from independent research projects. Torbert (1983) used a Kegan style subject-object interview technique.

The testing of the sub-hypothesis that the CEO group would have a greater proportion of CD scores at stage 4 or above than they would below stage 4 was a simple rejection or retention of the null hypothesis.

HII: The Differences Between CEOs and Middle Managers

Being that the same violations to the assumptions of parametric tests took place in the comparison group of middle managers as happened in the CEO group, I used non-parametric tests to test the differences between these two groups as well. To restate the second hypothesis, it was predicted that the executive group would have higher CD scores than the comparison group of middle managers. To test this hypothesis, the Mann-Whitney (1947) and Wilcoxon (1949) tests for independent and matched samples was used. Hays states that these test are generally regarded as the best of the ordered tests for two samples. Both compare well and can even be superior to the t when the assumptions of t are not met, and if those assumptions could be met, they would be fully equivalent (Hays, 1988).

The sub-hypothesis to HII predicted that the comparison group of middle managers would not significantly differ from the expected frequencies calculated from the known highly educated population frequencies presented in Tables 2 and 3 which again, are summarized in Table 8. The assessment of this part of the second hypothesis was tested using the same techniques used in the first hypothesis. That is, a Chi-Square test will be used to evaluate whether the comparison group appears to be from a different population than the known population norms. To err on the conservative side, any test significance greater than .10 will be used to help determine if the comparison group of middle managers, like the CEO group, is different from the population norms. In other words, retention of the null hypothesis, so to speak, even though one should not test for no differences, will be employed to infer that at minimum

the comparison group was not significantly different than the known population.

H III: The Effectiveness of Meaning Construction about Leadership Themes

In my prospectus for this project, I had hoped to test this third hypothesis in a much more narrative and qualitative way. I had hoped to stay away from a quantitative analysis of the data around the area of effectiveness. The following section is taken from the prospectus verbatim.

Testing the first two hypotheses is a quantitative endeavor. Testing the third hypothesis employs qualitative methods. The purpose of analyzing this qualitative data is to determine which meaning constructions about leadership themes (greater than stage 4 or stage 4 or less) are most effective. As noted in the introduction chapter, Thorndike (1949) pointed out that criterion measures can be considered immediate, intermediate, or ultimate. Immediate criteria are usually readily available and easy to measure, but they are usually not sufficiently complete to predict performance in the domain of interest. A criteria like leadership effectiveness is considered ultimate, and is extremely difficult to define or measure. Thorndike states that such criteria are actually *constructs*. Effectiveness, in the context of this third hypothesis, is a construct; one in which the criteria are not readily available or easy to measure. Therefore, the assessment of this hypothesis is going to rely on the interpretive analysis of subject matter experts (SMEs).

In the effort to control the impact of a "bad interpretation" (Wilber, 1996), two SMEs in the area of leadership will be consulted; both with Ph.D.s in whom the area of expertise is leadership. Neither will have scored any of the interviews for constructive developmental level in an

effort to control any bias that may be gained through that process, nor will they know the CD level of any of the interview bits that will be presented for their assessment.

The process by which the SME's "effectiveness analysis" will be gained is as follows: 1) From the participant interviews, "scoreable bits" which contain salient constructions about the leadership themes presented on the cards given to the study participants (success, conflict, change, and vision/ mission) will be extracted from the interview transcripts. 2) In independent tape recorded sessions, the SMEs will be presented these scoreable bits. The SMEs will *not* know the CD score that was given to any given interview. 3) The SMEs will be asked to comment about the effectiveness of such a way of making sense of the particular leadership theme. The assessment will take a narrative form. 4) The transcript of the meaning constructions that are deemed most effective and least effective by the SMEs, followed by the SME's comments about those constructions, will be presented in the Results chapter. In addition, the CD score of the participant from whose transcript the scoreable bit came will be given with each comment. 5) Percentage data will be presented about the number of effective and ineffective constructions at each CD level, as well as an assessment of the interrater reliability of the two SMEs.

This method of presenting recorded excerpts from the interviews was deemed impractical in several ways. First, there was no way to "neutralize" the tapes for many of the salient excerpts in a way that protected the confidentiality of the participants. Secondly, time constraints on both myself and the SMEs did not allow for this type of analysis. And thirdly, I had not anticipated the

financial costs of obtaining and transcribing the interviews to the degree that those costs were ultimately realized. Putting together taped sections of these interviews to be scored would have added substantially to that expense.

For this project and the testing of HII, I have tried to capture the essence of what I was trying to get at in the prospectus. Taking the factors from the previous paragraph into account, the method used to analyze the effectiveness of the responses is presented below.

First, I took salient excerpts from the neutralized transcripts of many of the interviews and put them in survey form around the following content areas:

- 1) What type of environment do you try to create to enable work to be done? (12 excerpts)
- 2) In what ways do you know you have achieved success? (23 excerpts)
- 3) In what way could you have handled the situation differently? (14 excerpts)
- 4) What do you think is the origin of your value system or style of management? (13 excerpts)
- 5) In what ways is being open to ideas meaningful to you? (14 excerpts)
- 6) In what ways do you deal with conflict? (28 excerpts)
- 7) In what ways do you decide on the right course of action? (25 excerpts)
- 8) In what ways has change affected you? (8 excerpts)
- 9) In what ways is vision or mission meaningful to you? (12 excerpts)
- 10) What things are important to you about the people you work with? (8 excerpts)
- 11) In what ways do you see your role as a leader/manager? (8 excerpts)

12) In what ways do you respond or make sense of challenge or contradiction? (15 excerpts)

13) In what ways do you make sense of having to let people go? (4 excerpts)

One hundred and eighty-four excerpts taken from the majority of the 42 interviews were selected from both the CEO and middle manager populations. The document given to the SMEs was 55 pages long and examples from the content areas are included in the discussion chapter. The excerpts were chosen to represent as large a range of CD levels as possible, and the 13 content areas were themes that emerged in most of the interviews.

The second step in assessing the third hypothesis was to have the SMEs score each interview on a Likert type scale based on how effective a response they felt like the excerpt was to the appropriate content area. The scale was as follows: 1) Atrocious; 2) Ineffective; 3) Somewhat Effective; 4) Effective; 5) Very Effective; and 6) Exceptional. The SMEs were asked to make these judgments about the excerpts effectiveness as compared to the counsel they would offer a leader or manager.

Thirdly, I scored each of the 184 excerpts as to their CD level, and a second reliable rater scored 66% of the excerpts (N = 125) randomly. The excerpts were scored on a 5 point scale--less than 3, 3, 3-4, 4, and greater than 4. Contrast this strategy with the notion presented in the prospectus of using the CD level of the participant from whose interview the excerpt originated. The rationale behind this strategy came from the idea that an individual can make statements that can appear to be at either a higher or lower CD level than the individual actually measures (Lahey et al., 1988). Therefore, pulling excerpts from the interviews lent a wider range of CD scores, as well as a greater number

of scores on the extreme ends of the distribution. This technique allowed for a more effective contrast of different level excerpts as to their effectiveness.

Bear in mind that the focus of this last section is to understand whether the CD level of the *excerpt* is related to effectiveness, not whether the CD level of the participant is related to effectiveness. The inference that I hoped to make from HIII under these conditions was that if someone could *usually* give a response of a certain CD level--say stage 4 (something that can only be done consistently if the individual actually constructs meaning at that level), and that response was considered more effective than responses of a different CD level--say stage 3, then it could be inferred that stage 4 individuals will respond effectively more often than stage 3 individuals will.

To assess the relationship between effectiveness and CD level then, I took the effectiveness ratings of the excerpts by the two SMEs and correlated those to the CD levels of the excerpts. Spearman's rank order correlation coefficient and Kendal's tau coefficient for ordered rankings were used to assess the relationship between the scores. In addition, interrater reliabilities were calculated on the SME's effectiveness ratings.

Finally, I have presented excerpts and a qualitative analysis on the scores that were rated as either exceptional or atrocious, as well as some examples of some of the excerpts that fell in the middle in the discussion chapter. This analysis takes on a more narrative form---one which constructs a logical, or rational, case for the third hypothesis.

CHAPTER 3

RESULTS

The analysis of the differences between the CEO sample and the two comparison groups--the known population sample and the group of middle managers--yielded results showing that there were differences, in the predicted direction, between the populations in both cases. Therefore, for Hypotheses I and II (HI and HII) the null hypothesis was rejected.

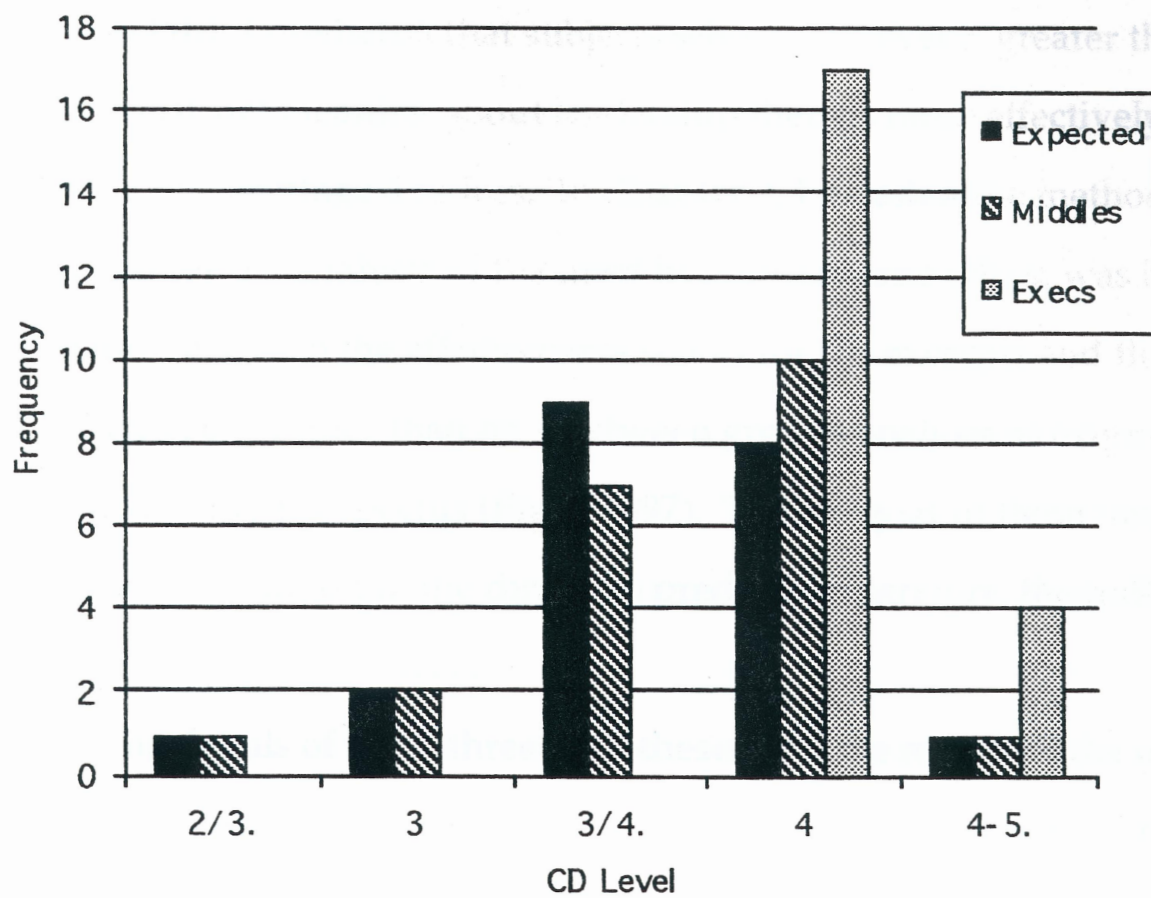
In HI, the hypothesis that the CEO sample would have a significantly higher CD scores than the expected values based on the known highly-educated population sample was supported. In addition, the sub-hypothesis for HI that there would be a greater proportion of scores at stage 4 or higher than below stage 4 was also supported.

For HII, the hypothesis that the CEO sample would have significantly higher CD scores than the comparison group of middle managers was supported. In addition, the comparison group's CD scores did not differ from the expected values based on the known highly-educated sample as predicted.

Figure 3 shows the frequency distributions for the CEO sample, the comparison sample, and the expected values based on the known highly-educated population. This dramatic illustration shows how little the comparison sample and the expected values differ and the degree to which the CEO sample has higher scores than the other two. The visual illustration of this table is supported by the analyses presented below.

Figure Caption

Figure 3. Frequency distribution for expected, middle manager, and executive manager samples.



In HIII, I predicted that subjects whose CD level is greater than stage 4 would construct meaning about leadership themes more effectively than the subjects who are stage 4 or less. In Chapter 2, I detailed the method that was employed for the analysis of the third hypothesis--one which was based on a correlation between the effectiveness scores for the excerpts and the CD scores for the excerpts, rather than on a between groups analysis as originally presented in my prospectus (Eigel, 1997). The analysis of these items revealed a significant correlation in the direction predicted, therefore, the null hypothesis was rejected for HIII as well.

The details of these three hypotheses and the results of the interrater reliability analysis are presented in the following five sections: 1) the results of the interrater reliabilities for the scoring of the interviews used in HI and HII, 2) The results of the analysis of HI, 3) The results of the analysis of HII, 4) the results of the interrater reliabilities (for both CD level and effectiveness) for the scoring of the interview excerpts used in HIII, and 5) the results of the analysis of HIII.

Interrater Reliability for Interview Scoring

The interrater reliability for the scoring of the interviews was statistically significant, although not at the level I had initially hoped. I mentioned in Chapter 2 that the interrater agreement for this scoring procedure (using the 21 stage distinctions) has historically ranged from 67% to 89% for exact agreement and 82% to 100% for agreement within 1 / 5 stage or 1 distinction (Goodman, 1983; Lahey et al., 1988). I had hoped to achieve agreement in the 70% to 90% range for perfect agreement in this project. As I mentioned briefly in Chapter 2, another certified rater (rater B) and I scored the first 10 interviews that were transcribed. Of those, we matched exactly on 90% and within one distinction on 100%.

However, in total, rater B and I scored 21 interviews. The 11 additional interviews that were scored by rater B were done to confirm the CD scores on interviews deemed to be extremely difficult. We matched exactly on only 1 of the 11, matched within one distinction (1/5) on 2 of the 11, and were within 3/5ths on the remaining 7. Therefore, the total percentage of exact agreement for the 21 interviews which were scored by both raters was 52.4%, and agreement within one distinction was 66.7%. While these numbers are slightly lower than those which were established by Goodman (1983), they are still high considering that 11 of the 21 interviews used in the interrater reliability assessment were the 11 most difficult of the 42 that were conducted. Any differences in ratings were reconciled by a dialogue between the two raters.

The Analysis of HI

In the first hypothesis, I predicted that the CEO sample would have significantly higher CD scores than the expected values based on the known highly-educated population sample ($N = 704$, see Table 8 in Chapter 2). Given the assumptions that were made about the sample, Chi-Square analysis yielded a Chi-Square statistic of 24.739 with 4 degrees of freedom and an asymptotic (two-tailed) significance level of $p < 0.000$. While some of the Chi-Square test's assumptions were violated as stated in Chapter 2--specifically that one of the cells had an expected frequency less than one (1) and more than 20% of the cells had expected frequencies less than five--the magnitude of the results in the predicted direction allowed rejection of the null hypothesis with confidence. The scale for this analysis had only five distinctions (2-3, 3, 3-4, 4, 4-5).

This scale only accounts for one transition point between each whole score as opposed to the Subject-Object interview which has four transition points between each whole score. There is no difference in magnitude between the two scales for the whole scores. In other words, the characteristics of any

given CD level, not a transitional level, is the same whether one uses the Kegan scale with 4 distinctions between each whole score (a full scale) or the scale with only one distinction between each whole score (the 5 point scale). Using the 5 point scale was necessary because the population sample used in this analysis was based on the scale which allows only one distinction between each whole score. The range of scores for all the interviews conducted for this project were between 2-3 and 4-5: thus the five point scale. Had I encountered participants who had scored full stage 2 and full stage 5, two more points would have been added to the scale.

Table 9 shows the results of this data including observed and expected frequencies, residuals, and test results. Note that it was expected that more than half the scores were expected to be less than stage 4. However, all of the scores in the sample were stage 4 or greater. This result supports the sub-hypothesis to HI--that a greater proportion of the scores would be at stage 4 or above, and the results show that 100% of the scores were at or above this level.

The Analysis of HII

In the second hypothesis, I predicted that the CEO sample would have higher CD scores than the comparison group of middle managers. This hypothesis was tested using the Mann-Whitney U test. The Mann-Whitney U test is the equivalent of the Wilcoxon rank sum test--both of which test the null hypothesis of whether the two sampled populations are identical in location and shape. If the alternate hypothesis is directional (i.e., one sample mean is predicted to be larger than the other), then the Mann-Whitney U test assumes that the two samples tested are similar in shape. Hays (1988) states that unless this assumption is met one can only say that the populations are different in *some* way, but without additional assumptions the test is not sensitive to all the

Table 9

Chi-Square Analysis of the Differences Between the CEO Sample and the
Expected Population Values

Category	Observed N	Expected N	Residual
2-3	0	0.4	-0.4
3	0	2.1	-2.1
3-4	0	8.8	-8.8
4	17	8.0	9.0
4-5	4	1.7	2.3
Total N	21		

Chi-Square	24.739
df	4
Asymptotic Significance	0.000

Note. Three cells (60.0%) have expected frequencies less than 5. One cell has an expected frequency less than 1. Expected proportions based on N = 704, highly-educated population sample of adults (see Table 8).

different ways in which the populations might differ (i.e., they could differ in shape, but not in means). Since this assumption is violated as seen in Figure 3 (i.e., the variance for the CEO sample is much narrower than the variance of the comparison group), an additional analysis was conducted using the Moses extreme reactions test.

The *Moses extreme reactions test* assumes that the experimental variable will affect some subjects in one direction and other subjects in the opposite direction. It tests for extreme responses as compared to the comparison group. The test focuses on the span of the comparison group and is a measure of how much the values of the experimental group influence the span when combined with the comparison group. Observations from both groups are combined and ranked, 5% of the comparison cases are trimmed automatically from each end, and the span of the comparison group is computed as the difference between the ranks of the largest and smallest values of the comparison group plus 1 (SPSS, 1996).

For both of the tests performed, a more discriminating scale was used than in HI. Whereas the available information of the known population norm provided only one distinction in between whole scores, the two sample populations scores for this project provided four distinctions between each whole score. Therefore, the possible scores for the two sample populations were as follows: $3/2$, $3(2)$, $\underline{3}$, $3(4)$, $3/4$, $4/3$, $4(3)$, $\underline{4}$, $4(5)$, $4/5$ (whole scores are underscored). None of the participants scored lower than $3/2$ or higher than $4/5$.

The results of both the Mann-Whitney U and the Moses extreme reactions test are presented in Tables 10 and 11. The Mann-Whitney U / Wilcoxon W tests show an asymptotic significance level of $p = 0.001$ with a Z statistic of 3.378. From this result a strong inference can be made that the CEO

Table 10

Mann-Whitney U: Two Independent Samples Analysis of the Differences
Between the CEO Sample and the Control Group of Middle Managers

Grouping Variable	Number	Mean Rank	Sum of Ranks
CEO Sample	21	26.98	566.50
Control Group	21	16.02	336.50
Total N	42		
<hr/>			
Mann-Whitney U		105.500	
Wilcoxon W		336.500	
Z Statistic		3.378	
Asymptotic Significance		0.001	
<hr/>			

Table 11

Moses: Two Independent Samples Analysis of the Differences Between
the CEO Sample and the Control Group of Middle Managers

Grouping Variable	Number	
CEO Sample	21	
Middle Managers	21	
Total N	42	
Observed CEO Group Span	N	19
	Significance (one-tailed)	0.000
Trimmed CEO Group Span	N	16
	Significance (one-tailed)	0.000
Outliers trimmed from each End		1

group has significantly higher CD scores than the comparison group. The results of the Moses test, which allows for predicting the direction of the difference, show a conservative, trimmed comparison group span significance of $p < 0.000$ (one-tailed). This perhaps provides stronger evidence than the Mann-Whitney test that the CEO group is different, and higher on CD score, than the comparison group of middle managers.

I predicted in a sub-hypothesis to H11 that the comparison group would not be significantly different than the expected values for that group based on the known highly-educated population norms. As stated in Chapter 2, I fully acknowledge that one should refrain from testing for no differences. However, I considered knowing whether or not the comparison group of middle managers differed from the population norms valuable and slightly different information than is provided by the analysis of the differences between the two samples in the primary hypothesis for H11.

While one might guess from the visual representation presented in Figure 3 that the comparison group and the expected values for that group (based on the known highly-educated sample) do not differ, the Chi Square analysis strengthened that conclusion. The Chi-Square results yielded a statistic value of 1.968 and a two tailed significance level of $p = 0.742$. Therefore, given the caveats mentioned, I have assumed that the comparison group of middle managers were from the same population as the known highly-educated sample from which the CD level norms were gained, as well as from which the expected values for this project's samples were calculated.

It should be noted that had a multivariate analysis been run there might have been some effect between age and CD level. Spearman's rho testing the correlation between these two variables was 0.330 with an asymptotic significance level of 0.033. However, the age ranges and means were not

significantly different between the CEO group and the comparison group of middle managers. Therefore, this effect for age was deemed not relevant to the results of the hypotheses. The correlation between age and CD level was not calculable for the third hypothesis which tested the relationship between effectiveness and CD level, as the excerpts used in that section did not always receive the same CD rating as the interview from which they were taken. Therefore, the age factor was not considered in the analysis of HIII either (see the following section on the analysis of HIII).

Interrater Reliability for Excerpt Scoring

For the third hypothesis, 184 excerpts were taken from the full length interviews, and they were organized around the 13 topic areas presented in Chapter 2. These excerpts were scored on two different constructs: CD level and effectiveness. The reliability estimates for each of these ratings are detailed separately in the following paragraphs.

For the assessment of CD level, I scored all 184 of the excerpts. The certified reliable, rater B from the Subject-Object workshop scored 125 in random order. She went through the instrument scoring every third excerpt, and because time allowed she scored another third in the same fashion. The Spearman rank-order correlation coefficient (Spearman's rho) was 0.795 for the 125 interviews scored by both raters--significant at the $p < 0.000$ level. Cohen's un-weighted kappa was 0.509 and significant at the same level. Following the initial independent scoring process, both raters reconciled the differing scores. Spearman's rho for my original scores with the reconciled scores was 0.912, also significant at $p < 0.000$.

For the rating of effectiveness, two raters (rater 1, rater 2) scored the excerpts on the 6 point scale detailed in Chapter 2 (1 = atrocious through 6 = exceptional). Rater 1 scored all 184 excerpts and rater 2 scored 182 excerpts.

Spearman's rho for the two raters was .359--significant at the $p < 0.000$ level. From the scores of raters 1 and 2, I created a new effectiveness variable by taking the mean score for the excerpts on which the raters differed by one (1) point or less. This procedure eliminated only 48 of the 182 excerpts which both raters scored--they either matched or scored within one point on 134 excerpts. Spearman's rho for the new effectiveness variable with rater 1 ($N = 134$) was .934 and was 0.942 for rater 2--both significant $p < 0.000$. The 134 excerpts with within-one-point agreement were used in all the analyses for HIII.

The Analysis of HIII

As stated earlier in this chapter, I have predicted in this third hypothesis that effectiveness would be positively correlated with CD level. The frequencies of the effectiveness ratings at each CD level are shown in the boxplot in Figure 4. This boxplot shows a positive slope of the median lines corresponding with each increase in CD level. The results of Spearman's rho for this relationship endorses what is visually evident in Figure 4--a coefficient of 0.505 with a significance level of $p < 0.000$. Table 12 shows the results of all the Spearman rank-order correlation coefficients used to test HIII as well as the correlations for the interrater reliabilities. Based on the information presented above, the null hypothesis is rejected for HIII.

The picture painted by these results is even more clear when analyzed qualitatively. The presentation of the qualitative evidence for the third hypothesis will include the presentation of many of the excerpts used in the third hypothesis, and it will be a more judicious use of space to discuss these excerpts while simultaneously presenting them as support for the predictions made in the hypotheses. It was common practice in many of the subject-object dissertations completed by Dr. Kegan's students (Beukema, 1990; Goodman, 1983; Lahey, 1985; Popp, 1993) to undertake the qualitative analysis and the

Figure Caption

Figure 4. Boxplot of effectiveness ratings for each CD level. The Y axis contains the effectiveness ratings 1-6, and the X axis contains the CD levels 2-3, 3, 3-4, 4, 4-5. The number for each set of excerpts included in the analysis is also on the X axis. The heavy black line in each shaded box is the median score for the effectiveness ratings. The shaded box represents the range of values for the scores within one quartile of the median in either direction. The thin lines extending to a "T" from the ends of the shaded box, if any, represent the outer quartile range of scores. The number of outliers, if any, for a given CD level are represented by the number corresponding to the effectiveness rating. For instance, at CD level 4-5 there were 26 excerpts. The median effectiveness rating was 4. One inner quartile of the scores ranged from 3.5 to 4 and one inner quartile ranged from 4 to 4.5. The ratings for the outer two quarters ranging from 3 to 3.5 and from 4.5 to 5.5 with one outlier at both 2 and 6. For CD level 3, with an N of 13, the median and all the ratings in the lower-inner quartile were 2.5 with the upper inner quartile ranging from 2.5 to 3. This indicates a negative skew in the distribution of scores for this CD level. The outer quartiles ranged from 2 to 3.5. There were two outliers at 1.5 and 4.5.

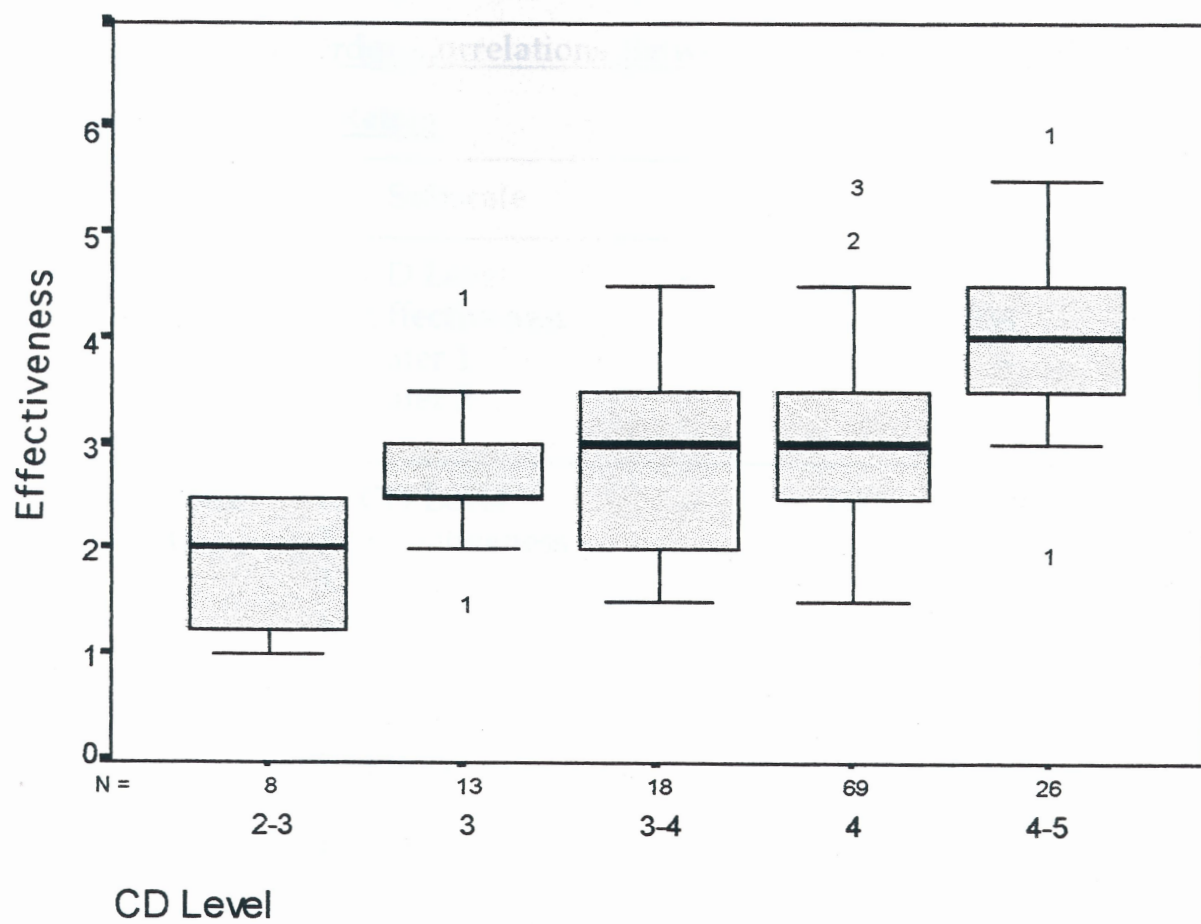


Table 12

Spearman Rank-Order Correlations Between the Effectiveness Ratings,
CD Level, and the Raters

	Subscale	1	2	3	4
Spearman Correlation	1. CD Level	--	.505	.315	.388
	2. Effectiveness		--	.934	.942
	3. Rater 1			--	.359
	4. Rater 2				--
Significance (1-tailed)	1. CD Level	--	.000	.000	.000
	2. Effectiveness		--	.000	.000
	3. Rater 1			--	.000
	4. Rater 2				--
N	1. CD Level	--	134	184	182
	2. Effectiveness		--	134	134
	3. Rater 1			--	182
	4. Rater 2				--

Note. All significance levels $p < .000$

ensuing discussions in the chapter or chapters that followed the results chapter, rather than present it in the results chapter. Therefore, the qualitative support for these hypotheses is included in the discussion section which follows.

CHAPTER 4

DISCUSSION

When you select out for careful study very fine and healthy people, strong people, creative people, saintly people, sagacious people--in fact, exactly the kind of people I picked out--then you get a different view of mankind. (Abraham Maslow, 1971)

This project has been a journey in constructing meaning about people who appear to be constructing meaning, in the environment of business, quite effectively. The project has been inspired by the work and theories of Robert Kegan, whose particular bent on constructive developmentalism resonated with me. The thesis of this project has been to understand a specific aspect of leadership by investigating with depth those who, by the criteria set forth in this project, are the best at what they do. I have tried to acknowledge the self-authored ways of understanding and the biases that I inherently bring to the investigation, but, at the same time, I have tried to bracket those ways and biases as best I can.

The way I want to conclude this project is by presenting in this final chapter a more qualitative analysis of the data which was gathered through the interviews, and to present it in a way that makes more complete the quantitative analysis presented in the previous chapter. I proposed in the introduction a primary hypothesis that effective leaders, responding effectively

to the complex demands imposed by today's postmodern culture, would construct meaning at higher CD levels than one would expect based on the known population norms for CD levels. A second hypothesis was proposed which tested this same premise using a comparison group of middle managers who constructed meaning in the same business environment as the leaders. Finally, I proposed that higher order meaning construction would be more effective than lower order meaning construction. The quantitative results of these hypotheses were presented, in order, in the third chapter, and all three hypotheses were supported.

Discussing the primary hypothesis is, however, a more difficult task than just presenting the results of the differences between frequency distributions. I believe that the discussion of that hypothesis and its implications will have more meaning if it is preceded by the discussion of some of the other findings of this project. Because of this, the discussion of the findings in this chapter are not presented in the same order as they were in Chapters 1 and 3. Therefore, the structure of this final chapter will be broken into four major sections with the discussion of the primary thesis presented last only to be followed by the limitations and conclusion. The four major sections are as follows:

First, I want to investigate a theory which I put forth in my prospectus, and that was explained in detail in the first chapter of this dissertation, concerning the idea of a content/construct dichotomy. There were several content areas that emerged in the majority of the interviews, and meaning was constructed about these content areas across a range of CD levels. A review of the past leadership literature, presented in the first chapter, enumerated many of these content areas, and two of them that were particularly salient in the conducted interviews are presented as evidence of the content/construct dichotomy in this discussion chapter. The qualitative analysis of these contents,

as understood by individuals at different places in their constructive development, provided a great deal of support for this theory.

The investigation and conclusions that can be drawn from the discussion of the content/construct dichotomy inform the third hypothesis that effectiveness would be positively related to CD level. Therefore, the second section of this chapter is a discussion of the effectiveness ratings of the interview excerpts, and a dialogical presentation of what meaning construction about leadership sounds like from the perspectives of individuals at many different CD levels. The upward trend of the effectiveness excerpts as CD level increases is quite fascinating. One of the particularly interesting findings that emerged from the testing of this hypothesis was the relatively large range of effectiveness ratings for the 4th order excerpts.

The range of scores for the 4th order excerpts is very illustrative of one of the more confusing elements of this project. Recall from the first chapter that stage 4 individuals take as object all that the previous stages take as object, but they are subject to abstract systems or ideologies in the cognitive realm, institutions in the interpersonal realm, and self-authorship, identity and autonomy in the intrapersonal realm (Kegan, 1994). The thing that emerged in the interview process is that there are two self-authored polarities in the 4th order: 1) a dogmatic, black and white polarity--the kind that says, "I have taken as object your points of view, our relationship, and our goals, and I have decided our course of action, here is what we are going to do," and 2) an open polarity--that says, "Lets get all the key people in the room, get all the ideas on the table, and then we'll come up with the solution that meets the goals." I have labeled those who exhibit this latter polarity as stage 4s who are open, and the third section explores the characteristics of those individuals.

The fourth section is the discussion of the primary thesis and the implications of the findings. The three sections which precede it make this discussion more potent, thus its place at the end of the chapter. In trying to make sense of the overwhelming “4-ness” of the CEO group, especially as compared to the two comparison populations, the discussions of the content/construct dichotomy, effectiveness, and the 4 with openness helps to put in some perspective what is qualitatively unique about this group in the way they respond to the complex and unclear dilemmas with which they are presented.

Finally, the limitations of the project are followed by a brief conclusion. These two discussions are presented at the end of the chapter.

Evidence for the Content/Construct Dichotomy

In the first chapter of this thesis, I related a story from the movie Raiders of the Lost Ark, and I used the metaphor of the two-sided headpiece to the Staff of Ra. Recall that in order to locate the lost ark, the information on both sides of the headpiece needs to be realized to find the Ark. I suggested that in the realm of leader effectiveness, this metaphor applied to what I put forth as the content and construct oriented ways of understanding leadership--that these two perspectives presented differing but complimentary sides to the headpiece of leadership’s “Staff of Ra.” I believe that the strong results of this research supports this concept.

In this section, I would like to explore several implications of how the interview data inform this notion of the content/construct dichotomy. For example, in what ways do stage 3 constructions of a particular content area differ from stage 4 constructions? A qualitative analysis of the interview excerpts clearly shows there are differences in the construction of events and circumstances around the content areas. As I indicated in Chapter 1, I believe that this phenomenon can be extended to any content area. This would include

trait contents like personality styles (Fleishman & Peters, 1962), behavior contents like task or relationship orientation (Fleishman, 1953), even the content of contingency theory such as normative decision theory (Vroom & Yetton, 1973), among others. Support for this conjecture, as presented in the following sections, explores this dynamic around two content themes that came up in a number of the interviews.

The two content areas that emerged in a great number of the interviews which illustrated this content/construct distinction are: 1) desire to resolve conflict, and 2) the degree to which the interviewee engaged in participative behaviors. As predicted in the introduction, individuals at different CD levels construct meaning around these content areas in qualitatively different ways. Specifically, as CD level increases, the responses or constructions around the content areas becomes more effective. This dynamic is explored in depth in the following two sub-sections.

The Content and Construct of Conflict Resolution

One of the content areas that emerged in most of the interviews was *response to conflict*. Many studies have investigated techniques to resolve conflict. These include measures of the leader's upward and downward orientation (Rosen, 1961a, 1961b), efforts of palliation (Baron, 1984), use of Machiavellian tactics (Read, 1962), appealing to higher authority (Frost, 1986), among others (see Bass, 1990). All of these studies investigate the amount or "content" of a given behavior and how that behavior aides in the ability to resolve conflict, and in many of the studies it was found that certain behaviors do influence the degree to which conflict is resolved successfully. Many of the aforementioned resolution tactics can be implied from the interview excerpts dealing with conflict, and the way the resolution is "constructed" varies

contingent upon CD level. These two dynamics, simultaneously present, help define the content/construct dichotomy.

The following excerpts taken from the interviews, are similar in content in that the conflictual outcome is the same--i.e., all of the individuals desire resolution of the conflict. However, the way each individual understands the conflict resolution--how they construct it--is very different depending on the their CD level. In the first excerpt, notice how the participant's 2-ish construction (one which understands that there are differing positions on a subject but cannot internalize those positions in a stage 3 way--cannot take them as object) needs an outside source to resolve the issue.

Interviewer: So that's the purpose in some ways of the hierarchy, is to make the calls when there is a difference?

In my mind that's one of the only purposes. This is a very flat organization. There is a hierarchy. It's more for -- I think my opinion is it's more for two reasons: one to resolve conflicts or to just choose between the two; and secondly, there needs to be a hierarchy for the outsiders looking in. There is a great comfort in thinking that this is very organized and that everybody has got a little defined thing. In reality, I doubt any company today operates effectively in little cubicles doing exactly what your job description says. I can't imagine that that operates that way today.

But, yeah, if a peer has an idea of what we should do and I have an idea and my boss says we are going to go with his, that's not necessarily the wrong thing to do. It may take longer, in my opinion, it may take longer, cost more money, cost more people, or I would have gone with it, but it's not necessarily the wrong thing.

Do you feel in any way like they are doing something to you when they do that, choose the other way?

No, not doing something to me, but you have to understand, I hate to lose. So I absolutely have a horror of losing, so to me it's a personal loss that I didn't convince the decision maker that my way was better. But, no, they are not doing anything to me, I just didn't do my job well enough. Or maybe I was wrong. I will accept that.

How do you know when you are wrong? I ask people a lot how do you know when you're right, but how do you know when you're wrong?

Well, if you are working with the right people, you are never wrong because they just picked another right way and your way was right, you just didn't get chosen. You were wrong when you get to the end of the game and it didn't work. And I'm wrong every day. There are a lot of things we try that don't work, but that's not a reason not to try, you know, to me, that's losing again if my way didn't work. But you don't know until you try it. Until then I assumed my way was right or one of the right ways, you know, and we didn't chose it, someone else's way worked, so that's fine too. And that self-preservation, you know, that way I'm never wrong.

The lack of complexity of this 2-ish construction is evident in that there is an inability to see how the differing positions may be mutually related.

Another characteristic of 2-ish construction is the focus on how the outcome may affect the self. The interviewee states that just because his way was not chosen doesn't necessarily mean it was wrong, but he is stating that it is a loss, and even if the other's way worked that doesn't mean he is wrong--it just means he lost. The ability to bring the other's position or point of view inside

the self is absent in the way he makes meaning. Contrast this excerpt with the following stage 3 excerpt, and note the ability to take the others perspective as object--to bring into the self the other's position.

However, being able to internalize the other's position does not mean that the stage 3 individual can take it as object. The stage 3 individual is now subject to mutuality--an inability to separate who she is from the relationship or from the other's position. In addition, resolution is no longer choosing a position or having it chosen by an outsider as in stage 2, but rather it is a need to bring coherence back to the relationship. By bringing coherence back to the relationship, because she is subject to the relationship, it brings coherence to the self. Bringing coherence to the self helps maintain the balance of how she understands herself, and this understanding the self through others is what being stage 3 is all about. This phenomenon is evidenced in the following excerpt.

Personally — I think, one of the things that — I have very little tolerance for conflict, like almost zero. And I just — it has to be solved. If there's a conflict between anybody — between myself and someone else or between two people that work for me — if there's a conflict — it has to be resolved.

What's important about resolving --

It's just the level of discomfort. I mean, it's very uncomfortable. Conflicted situations or having a conflict with anybody is just very uncomfortable and it's just — gets in the way of everything that you need to get done. So I — it just makes me feel — in some ways it's almost like I'm conflict avoidant, but I don't avoid it. I just want it to be solved right away. And in some ways, maybe I force a resolution sooner

than it can be correct — correctly solved....Because it's very uncomfortable. I don't want — if I have a conflict, personal level — two days ago an employee and I had — she wanted something and she couldn't get it, so there was this — we ended the meeting in a way that it was just sort of like we can't do that. There's no way we can do this. I don't know how else to make you understand this, but we can't do this. So now for the next couple of days, I'm walking — every time I walk out into the hall and I see her, I'm uncomfortable. I don't want to feel that way towards her. I don't want to feel that way when I see her. It's very uncomfortable. So — and I just can't tolerate that.

And so you want — I get it now. And you want to clean up — whatever it takes to clean that up quickly so —

So the next time I see her in the hall, it's okay.

One can feel the way that this individual is unable to take a perspective on the relationship and the pain it causes to be in conflict with another. Kegan (1982) states that the self expends a fair amount of energy maintaining balance at this stage 3 "evolutionary truce". The process of assimilating these differing perspectives can be a draining task. The reconciliation of the self and the other's points of view is part of remaining, at least psychologically, whole. As the individual transitions to a 4th order construction of conflict, as illustrated in the next excerpt, relationships begin to be taken as object, but as in any transition between equilibriums, the self has not yet let go of the what the previous stage was subject to--in this case mutuality.

The next excerpt is an example of an individual in transition between stages 3 and 4. The mutuality of stage 3 is identifiable, even though the individual resists it, as is the self-authored position that mediates the degree to

which the other's point of view has an influence on the self. The reason the bit is given a CD level rating of 3-4 is because there is evidence of both stage 3 and stage 4 characteristics present.

But I try to stay out of conflicts with people because of people and more of trying to resolve conflicts with the issues. I may not agree with how people approach things, I may not.

Tell me what is important to you about making that separation?

What's important to me about making that separation is that it doesn't become personal, you can attempt and probably be successful at keeping the emotion out of it so that people don't get to literally shouting and screaming and shutting down. I think if you attack people physically or otherwise, they are going to shut down. They are going to either be defensive and not be productive, or they are going to shut down and not be productive. And that if you focus on the situation, then it's like individuals out here looking at this thing, this situation, versus if I focus on the individual and say, you are just a complete mess up. I don't like what you do here, here, here and here. What am I going to accomplish about that situation? I will just attack that person, yet I have a very particular issue and we haven't even addressed the issue. And so I think it's human nature, you attack a person, they are going to go on the defensive or they are going to shut down and you are not going to make any progress.

Lahey et al. (1988) state that the transition to a stage 4 epistemology is characterized by a capacity to separate internalized points of view from their original sources in others, and make the self itself a coherent system for their

generation and correlation. This ability was emerging in the previous excerpt, but the individual had not yet “caught his balance” in the stage 4 equilibrium. When this full separation happens, and the person takes the other’s influence as object. The full stage 4 individual stops making the other responsible for his or her feelings, and experience it as a kind of violation when others make him or her responsible for theirs (Lahey et al., 1988). In the previous excerpt, the individual was clearly authoring a new position for himself in which resolution is a priority and one doesn’t take personally the difference of opinions, but the stage 4 equilibrium had not yet been established--the self had to consciously resist the influence that the other had on them. As the individual gains equilibrium in the 4th order, this resistance to the influence of the other becomes a non-issue, and the position of the other becomes fully object. Notice in the next excerpt how the focus on the resolution of conflict is not about the impact the other might have on the self, rather on how the resolution aides in achieving the goals of the stage 4 system.

Well, first of all, all of us like to get along with one another, but we can have conflict and still go out that evening and play tennis with each other. That's the best way I can describe it. And I'll give you one that's even closer. Yesterday, two of my direct reports came to see me and wanted to do something. Another direct report, [Bill], came to me and didn't want to do what they wanted done. And it had to do with an individual. And they felt like that--those [other] two people--felt like I ought to talk to [Bill's] employee to get an objective opinion. And so [Bill] said, well, I really don't want my employee talked to, but it's probably the thing to do because he's going to expect you to do it and if you don't do it, he's going to go home and tell his wife that [the CEO]

didn't think enough of me to call me. So I got him to agree to let me talk to his employee. I spoke to the employee and I was very objective because either way in this case we win because the company wins. And so I was very, very objective with the employee and then once the decision was made by the employee, I got this person and that person and that person on the phone today because I couldn't get them all here because they're not all in *Our City*, and I said here's what I did, here's what I said, here's what the employee said, and here's what I think the next move is and they all said that's fair, that's equitable. Well, yesterday, there was tension, particularly with the head of *area H*, one of my direct reports, one of my direct reports and they were kind of bumping heads. So is it stressful? Yes, it is. But what I've learned is that when you have that, get it fixed in a hurry. Don't let it sit there for a long period of time and simmer. Jump on it in a hurry.

What's important about doing that?

Because these guys need to work together. Together they can be much better as a team than they can independently. And I want the team to do well. So if there's some sort of a conflict get on it in a hurry and they will respect you for being that way. The real key though is make sure that you are totally objective. Do not be subjective. Look at the facts and make decisions based on the facts. They might not always agree with my decision, but they know that I will get rid of the biases that I might have, and that I won't take it personally.

The ability to internalize the other's perspective but not be mutually bound to it is clear in this excerpt. Resolution for this individual is about meeting the objectives of his self-authored institution, and the differences

between individuals are separated from the relationship-- "we can have conflict and still go out that evening and play tennis with each other." However, as much as this individual can take as object the perspectives, the relationships, and the other's feelings, he is still subject to this stage 4 institution that constructs conflict and its resolution in a way that he "gets on it in a hurry," and he clearly values a quick but fair resolution.

A very interesting dynamic takes place with the disembedding of the self authored institution and the development of 5th order meaning construction. The self's old institution, as well as other institutions, are taken increasingly as object. The focus for the stage 5 individual becomes one of process. This excerpt, while long, is fascinating in that the process, not the outcome, defines the new subjectivity. Note that even when he talks about achieving results, he appears to be taking a perspective on that goal, not necessarily stating that results are ultimate, rather seeing them as a necessary goal of the environment in which he leads.

I think conflict is a very positive, very desirable component, of a corporate culture. It needs to be respectful of individuals, but having a group of people that agree with one another, and with respect to which there is still a conflict, I think is indicative of things that are generally unhealthy about that organization--it could be any number of things. Umm, passion and emotion and respect for individuals, but if you're going to succeed, you're going to need people that are committed and dedicated and focused very much on those things that will result in achieving success, and those opinions will vary, and the functions that those leaders represent are inherently in conflict with one another which is a very healthy thing, and I think is something that I try and encourage

people to speak out. You need an environment that is open—that communication is open, in which there is a great deal of trust, in which there is a great deal of personal ownership, accountability, personal responsibility. The culture of the past—I think the distant past in most successful corporations where all those old adages that your father told you: keep your nose clean and keep your head down and stay out of trouble and don't volunteer--is a culture that will lead to mediocrity at best. I think it is a culture doomed to failure. A culture that will succeed is the one that is predicated on trust, open communication, candor--a culture that rewards differences of opinion. A culture that rewards results and not effort. The culture of the past, if you got to work at 8:00 and stayed there till 5:00, and you did what the boss told you to do—you had job security because the corporation was going to be paternalistic and take care of you, and the culture that exists today is not that culture. It is a culture that requires accountability, personal ownership, and responsibility, and results over effort. We appreciate effort. We appreciate people that have been out on the road 125 nights out of the year, who miss their kids' soccer games, who have not been home for their wedding anniversary. We appreciate that very very much—we cannot reward it. We can only reward the result that is achieved. And I can be very --, have very high regard for that commitment, but in the final instance if the result isn't achieved, then there isn't going to be the possibility of creating an appropriate reward for that kind of effort. That sounds harsh in some ways to some people, but I think it is reality in today's environment. I think that people are the most differentiating characteristic among competitors. A brilliant strategy can differentiate you, but there are few new brilliant strategies. I think there are some,

and there are some good examples of that. A great strategy certainly can differentiate you. Exceptional tactics can differentiate you. How you execute a strategy which is similar to a lot of other companies' strategies can help you, but fundamentally I think you differentiate yourself through people, and so I think you have to value people very highly. You have to create an environment where people are comfortable and don't feel there is any risk in conflict or in disagreeing, or are all committed to the success of the enterprise, and you have eliminated the walls of we verses they, and the field verses the home office, and the marketing department verses the *department A*, or *department B* or what ever they are, and those walls come down—it is a—only in team environment of mutual trust that your going to be able to really excel.

This individual is post 4 but still in the transition between stages 4 and 5. His commitment to the system that he thinks works best is still evident. However, one can sense that he takes a perspective on the system that is different than the stage 4 individual in the previous excerpt. It is this perspective taking that allows him to say that given today's business culture he believes openness, honesty, and trust lead to success as measured by results. The achievement of results is a standard by which he measures the effectiveness of different systems or ways of generating solutions.

In each of the previous excerpts, the content of the outcome was the same--resolution of the conflictual situation. In content oriented research, a leader could be measured on a desire to resolve conflict as a criterion of leader effectiveness. However, this measure would only reflect the "content" side of the headpiece. The "construct" side of the headpiece makes more complete this notion of effectiveness in a way that allows for the understanding how the

individual makes sense of the resolution. As the stages increased in each excerpt, the individuals made sense of the conflict and its resolution in increasingly complex ways. The more that a person can take an individual's disposition or personality, the relationship, and different perspectives as object, the more effective they can be at reconciling the different factors that come to bear on a situation.

For the stage 2 person, this means taking as object their perceptions, impulses, and social perceptions, but by being subject to theirs or other's points of view, an outside judge or force will ultimately choose a way in which the conflict is resolved. The value of the outcome, whether it is good or bad, is determined by whether the stage 2 person's needs were met or not. For the stage 3 person, everything the stage 2 person could take as object (perceptions, impulses, etc.) is taken as object, plus the concrete actuality, points of view, simple reciprocity, enduring dispositions, and needs to which the stage 2 person was subject. Whereas the person in the stage 2 excerpt above was limited by his understanding of the other's point of view only, the stage 3 individual in the second excerpt brings can bring those points of view is inside the self, reconcile them, understand them, take them as object. But it is this internal reconciliation of multiple points of view that gives congruence to the stage 3 self.

What gives congruence to the stage 4 individual is the maintenance of the system or institution to which he or she is subject. In the way that the stage 3 person can take as object what was subject for the stage 2 person, the individual in the stage 4 excerpt can similarly bring inside the self the abstractions, mutuality, interpersonalism, and inner states that limited the stage 3 individual; and in this way be the mediator of not only all that was object for the stage 3 person but also what was subject for stage 3. As this dynamic of mediating increasingly complex factors is extended to the post stage 4

individual, those things that bound the understanding of stage 4--abstract systems, ideologies, self authored identity, autonomy--leads to the powerful understanding of the content of conflict resolution that is illustrated in the post 4 excerpt.

In each of the excerpts, the resolution of the conflict was the common content. The stage 2 participant understood the resolution in terms of whether his needs were met. For the stage 3 person, resolution meant a reconciliation of the relationship, and for the stage 4 person it was about the effective maintenance of the integrity of the self-authored system or institution. For the post stage 4 participant conflict was all about process--the points of view of the stage 2 person, the relationships of the stage 3 person, and the institution of the stage 4 person could all be taken as object. As object, they became the multivariate and complex factors which could inform the process that led to growth, effectiveness and the successful resolution of the conflict.

Conflict resolution, however, is not the only "content" that is constructed differently at different stages. As I stated at the beginning of this section, I believe the dynamic of effectively handling increased complexity (taking more as object) as level of meaning construction increases may be characteristic of any and all content areas. To lend evidence to this proposition, the example of content of participative behavior at different stages is presented next.

The Content and Construct of Participative Management

In Chapter 1, I briefly mentioned participative leadership as one of the content areas researched in the past. Participative leadership refers to a simple distinct way of leader-subordinate decision making in which the leader equalizes power and shares the final decision with the subordinates often by seeking consensus. Participative leadership suggests that the leader creates an environment where group members feel free to participate actively in

discussions, problem solving, and decision making using a variety of techniques (Bass, 1990).

The content of this measure of leadership (i.e., delegation, consensus building, active listening, engaging others in decision making, etc.) was a topic of discussion in many of the interviews. However, the ability to engender participation in others looks very different at different CD levels. Similar to the qualitative analysis of conflict resolution and CD level presented in the last section, I will present several excerpts around the content of participative leadership at several CD levels.

In this first excerpt, an individual in transition between stage 2 and stage 3 speaks of delegation--one of the content areas in participative leadership. Although he speaks of it in terms of letting people do their jobs the way they want to (sort of an unintentional empowerment behavior), his construction of this situation is classic stage 2. He sees the reasons for delegating in terms of how he benefits. In addition, there is very little evidence of an ability to internalize the other's point of view, rather the other's point of view and what abilities the other offers are "out there." As a stage two person he can recognize this, but he can't internalize it. He only sees how it is good or bad from his point of view.

I think [involving other people is] critical. It really is critical. I mean, you have a task in front of you that you are trying to achieve for some reason, they are your reasons, and when you get there, you did it either to make yourself feel good or to get a better job someplace or to go qualify to do something else. I assume you are not just doing it because you didn't have anything else to do today when you got up.

For me, that's a driving factor and if I want to be successful, I have to make the people around me make me a hero. In order for me to be successful, they have to be helping me get there or I can't do it by myself, if they are going this way.

In what way?

Whatever their activity is during the day. If their job is to answer the phones, so that when someone calls me or this nebulous staff, this wheel with all the spokes, the phone always gets answered, then that's good; that's a reflection on me and the group below me. I really believe that it is my job to make that man (his boss) look good and it's his job to make the guy above him look good and it's his job to make *The CEO* look good and really, *The CEO's* job is to make the board of directors and the stock holders look really good, like they did the right thing by buying our stock. That is kind of what it boils down to, and then what you want along the chain...

[This] became real important when I started to manage other peoples' activities because I could clearly see the difference between my thought process and somebody working for me because it was different, if, in fact, it was different. When you are working on your own, I think you have a tendency more to my way works, so I don't worry about how you think or anybody else thinks. If you give me a task, I will get it done.

So as you start to interact with people who are, again, trying to achieve things to make you better, so you can make the next level better, you really have to at least be aware -- if you want to get the most out of those folks and their talents, then you have to be aware of how they are operating.

I think I do a very good job of getting more than a person's talents out of them. I think a lot of that has to do with that kind of awareness that they think different than I do, or they think the same as I do, whatever the case may be. And to me, that's real important because they are going to make me better if they can do more better. And if I can be better, it builds. It's like a big pyramid.

Intrapersonally, meeting one's own needs is often the measure of success at stage 2 (Kegan 1994). In this excerpt, the individual always comes back to how the other's skills benefit or hinder him. Every time he appears to internalize the other's point of view (a stage 3 characteristic), he keeps talking and reveals that he only understands the other in terms of how it is beneficial or punitive for the self. Therefore, his mediation of the other's point of view is ultimately based on his own needs.

Where the meaning making in the previous excerpt illustrates that the stage 2 motivation for participative leadership is all about how delegating "effects my success," the motivation for participative leadership in the stage 3-ish excerpt that follows is all about getting feedback and direction so that the self can construct itself. Since the stage 3 person cannot author this identity of self, it looks to others for help. It is important for the stage 3 individual to have cohesive relationships with those who he or she deems important (Popp, 1993). In the following excerpt, the individual is in the 3 to 4 transition. This means there is evidence of self authorship, but there is no balance at that level yet (that balance would be characteristic of full stage 4). There is also evidence of the need to define the self through others, and an affirmation that "I am still heading in the right direction," which illustrates the 3-ness of the person's construction.

The thing that is important about involving others in the work is to the extent that you can effectively interact with knowledgeable, capable, informed people who will test your plan, will test your direction, will challenge your thinking, to the extent you can successfully convey understanding to them or convince them that you're okay, then that's a pretty good indication that you're probably okay, not guaranteed but certainly an indication that you're okay with the people that count--that know best at the time. To the extent that you can't or to the extent that they open an area that needs further inspection, that's an area I better go spend some time on--that I'm likely not doing well in. Am I still in the right direction? Do I need to change? What do I need to do different? Or do I need to spend more time trying to convince them now that they've raised some issues that I haven't been able to move them on, as an example? So it -- the testing is not necessarily -- you get some satisfaction out of, yeah, I, you know, parried swords and was successful, but the real value is you get validation or the lack thereof about where you're going and how successfully you're doing it.

Can you feel you're being successful without this feedback that you get from others?

You kind of have a sense, but the feedback helps you know for sure.

The value of participative leadership behaviors for this individual is that it helps him reconcile how he is doing. The emerging stage 4, self-authored system gives him some indication of his success, but the feedback "helps you know for sure." What is being mediated by the self, i.e., what is taken as object,

are the other's points of view--not the degree to which they validate and let him know he is doing "okay."

The stage 4 leader no longer has this need for validation that was illustrated in the previous stage 3-4 excerpt. Instead, the reason for including others, delegating, and consensus building is because it supports the self authored system and helps to achieve the goals of that system. As mentioned earlier, the stage 4 individual is subject to this self-authored system or institution as the theory or dogma which guides behavior. Notice in the stage 4 excerpt that follows, how the self-authored theory appears to guide the behavior, yet, at the same time, that there is no indication that the participant can take a perspective on this theory. This inability to take as object his own theory is especially evident at the end of the excerpt when I ask him what is most important about consensus building? His reply indicates that this stage 4 system or ideology, that clearly appears to be his, is not one that he can yet take as object.

It can be a decision that some people feel like we ought to do this and another group feels like we ought to do that; generally though I'm a real consensus builder. If, for example, there's a decision to make to build a new building out there, I get a group together and say, okay, you all bring me back your decision -- well, I don't know how many square feet that building has got; I don't know anything about that building they're building out there, and I have absolutely no interest; all I want to know is number one, are we going to make our budget; number two, is it going to be a nice place for employees to work and make it a great place, and that's about it. I don't care what the color wall is, I don't care anything about it, other than what ultimately helps the company. So, I try to give

autonomy to everybody, to say, okay you're in charge of this, and I don't want to be brought in on the minutia, day to day activities about the building, or whatever we're going to do. Whatever you think we need to do is okay with me, or if it's -- and so I generally set lines that if they fall in those parameters, there's no problem. . . .So, within that scope --

You let them go --

-- I let them go and do whatever they want to do; but they keep me updated on what they do. I think that most people would tell you, that work with me, is they have an enormous amount of power to control their own destiny; and sometimes, there are conflicts in with that, and somebody will say, why don't you stop -- such and such wants to get rid of such and such -- why don't you go get involved and stop that? And my answer is, if in our department X, if they want to get rid of somebody, and I go get involved, I have times that I think, well, Joe's making a mistake, but if I tell Joe he can't do, and then all of a sudden this person screws up, Joe's going to say, I told you so. So, my theory is on things like that is, you either go with the person in charge or you take them out; but you can't override them to too much of a degree. Every once in a while, I can say to whoever that person is, well, Joe, look, give John one more chance, and if it comes back -- I recently had that happen, they wanted to get rid of this person [for] a real long time, I said, do me one favor; give him one more time. You set the goal, you make sure they follow it; if they don't follow it, I'll back you up, but I want a warning shot sent to him, where they can't say -- and I said, you document it all and you show me this document. Well, they did; this was back in August. Well, they came to see me this week and said, look, he didn't

improve; it's gotten worse, here's his stuff, and I said, go do what you got to do.

What's -- it sounds like consensus building, and somehow that's tied to autonomy, I think. What's the most important thing to you about consensus building?

Well, I think compensation. I think that the thing that I really work on is that everybody's compensation is tied to such a way that we all have the same objectives. If you do that, then it unites people.

This CEO's take on consensus seems one dimensional in some respects. It is true that he takes as object, and in doing so effectively makes sense of, many complex variables: performance and compassion, delegation and control, the details and the big picture, a sense of what he does and does not enjoy being involved in, etc., but in the last two sentences of the excerpt, he went right to the maintenance and support of the system that endorses consensus. One of the things that I noticed consistently about the stage 4 CEOs is that the goal or system seemed ultimate--that is the goal was the end point, and there was often confidence in that end point. The system that the CEOs used to get to the end point was clearly theirs, but all these things were means to an end--the goal. They almost always answered questions without hesitation and often, in my estimation, effectively. But the stage 4 CEO lacked the ability to take a perspective on their "way," and often couldn't or wouldn't see value in other "ways," even hypothetically, when pushed.

The post 4 CEOs, on the other hand, seemed to take as "ultimate" the process, not the goal. The stage 4 system--which for the stage 4 individual was an *ends*--became a *means* for the post 4 individual. The *ends* for the post 4 leader appeared to be process. The process was what they were now subject to. In this

way, they could take as object all of the complex factors that the stage 4 individual could, but, in addition, they began to take their own systems as object. The post 4 CEOs often hesitated more before offering an answer, and appeared to compare the goal against some higher standard that in their minds could be achieved via several goals.

Notice several things about the next post 4 excerpt: 1) the leader surrounds himself with others because it will create a process that can make the process, not the system, successful; 2) relationships are taken as object--in the consensus building process the leader can identify individuals who may need to be moved to areas of the company or out of the business without creating a dilemma for himself; 3) consensus appears to be a process not a system--a means not an ends--as in the previous excerpt; 4) there is a commitment to the process, not to a right answer, and the process leads to *an* answer which everyone can "buy in" on; and 5) the question he offers at the end of the excerpt as a correction-- "*Is this the one we are going to go with?*" is very different than the statement I make, "*This is the one we are going to go with.*"

You look at your competitors, you look at your customer groups, and from that set of capabilities and customers and competitors, you then form a vision of where it is that you want to take the company and you start building a consensus around that. And the issue with change is how do you -- if people are resistant as they are to change -- how do you get them mobilized and energized around it?

What is the importance of building a consensus around this vision once you've formulated it?

Well, if all you do is form a view for yourself, of where you want to go, it's a pretty lonely trip and probably fraught with opportunity for

failure. If you can't energize and mobilize everybody in the organization around it, there is just no way you are going to get there. There is no one person, even in a small entrepreneurial business, that can carry an organization itself. You've got to be consistent with, down through the organization, everything you're doing and every person; you've got to be consistent with that and you've got to be doing the things that are going to help you get there because otherwise it just won't happen.

And so it's, one, getting all of them enthusiastic and understanding of why it is and beginning to find ways to, I think, reward that kind of behavior that you want to reward and incent the kind of behavior that you want to incent and begin to identify the people that are not going to be a part of that, and you need to get them into a different situation or out of the business....

Do you have a set of good thinkers that you turn to when those kinds of strategy--

Yeah.

And what do they bring to the table that is unique for you?

Well, they bring knowledge of the industry. They bring an ability, themselves, to question status quo and to have a sense of asking questions and pushing against issues that creates an environment where you really can get the best thinking of all the people collectively around the table. And sometimes that group changes, it isn't necessarily the same group of people for every issue for every business, but in general, there are within any company or any business, some people who are more comfortable and maybe more skilled at brainstorming ideas and thinking about alternatives and getting those positioned. What we do is use flip charts, you know, try to get as much of that thought as we can

captured and organized and try to build a consensus, pushing and testing each other around that idea or straw man and then zeroing in on one idea and saying okay.

This is the one we are going to go with.

Is this the one we are going to go with?

Is this the one we are going to go with?

And then everybody says yes, then when they walk out of that room that is their idea; it's not my idea, it's not an idea that is questioned, it becomes at that point, that's what we've all bought into, that's what we are going to do and how do we all then collectively begin to deliver these messages and create the energy and the crisis and the communication that helps us to move forward?

The process of moving forward is what is ultimate for the post 4 leader-- it is to this that he or she is subject. Techniques or systems to move forward are taken as object. They are the means, and these means can be evaluated and mediated in a way that is trans-ideological and trans-institutional (Kegan, 1994). In this way, the post 4 leader more effectively utilizes participative leadership in a way that deals with a greater level of complexity than is dealt with by the stages that precede it.

This progression of excerpts at the different developmental stages in the area of participative behaviors, informs this theory of the two-sided headpiece in the same way that the excerpts around conflict resolution did. In both examples, the qualitative analysis yields very different information about how the individual leader or manager constructs meaning around these content areas. My contention, in proposing the content/construct dichotomy, is that the measurable content of a given area provides different information than the

construction of that content does. More importantly, either side of the headpiece is incomplete without the other. Consider the following findings:

The correlation between effectiveness and CD level indicates that CD level is positively related to effectiveness (this relationship is more fully explained in the next section). From this information an argument can be made that stage 4 leaders might be more effective at leading in conflictual situations than stage 3 leaders. However, without considering the content side of the headpiece, this conclusion may be incorrect as illustrated in the following stage 4 excerpt where conflict is avoided or even exacerbated.

It was -- now, okay, I suffered through that. I knew this guy, it went on for weeks and almost into months. And there were daily type of things. But I didn't change how I related to my people. I was trying to be, I guess, a filter between that group and this guy. But they knew the wrath. I mean, it was very clear that the wrath was coming; it was out there. You just tried to dodge and weave. But it made it a whole lot easier for me to say, yeah, I wanted to come back to City 1 when I got the call because -- now, I do know and I knew that this guy would either burn out or be fired or whatever. And sure enough, four months after I came back here, he was axed; he was out of there. They fired him.

So I knew I could have out-last-ed him, but I chose not to and it can become a game of how you can out maneuver someone like that and how you can stay out of the firing line and how you can deflect or how you might even piss them off more, excuse me for that, but I mean, it doesn't, you know, that in-your-face, that dictating, that micro managing gets no results. Yeah, excuse me, it gets results, but not positive results. This is the only way to get positive results in my opinion. And here you

are talking about people XX, XX years of experience, vice president level being treated like a plebe in the Marines or something; a rookie.

The stage 4-ness that is evident in that this individual is authoring his own system to deal with this problem. However, in not resolving the conflict, and in a way increasing it, his response is much less desirable and likely makes him less effective as a leader. If selection to a leadership position was based only on CD level, this individual would have “made the cut.” But when the content side of the headpiece is evaluated--a low assessment of desire to resolve conflict--a more complete picture is presented with regards to overall effectiveness.

Another example of bad content comes from an excerpt that would get a low score on participative leadership, but like the previous excerpt it exhibits all the characteristics of stage 4 meaning construction. Note that this individual acknowledges the benefit of participative leadership as though he knows the answer he is supposed to give. One can infer from the whole excerpt that it is likely that his skill in including others, being open to ideas, and consensus building is probably low. However, he still has the 4-ish ability to mediate the relationship with others, internalize their positions and points of view, and decide the way he wants to be.

That’s enough thinking, that’s enough analysis. Let’s not beat this up anymore. And that’s where we differ. He won’t pull the trigger. So he will constantly challenge me on whether I’ve thought things through in detail and far enough and I will say, Okay. It’s time to pull the trigger. Now he’s way over here in the spectrum. I’m way over here and we play with each other well. So it — because he makes me think things

through more than I might ordinarily, I don't let him think things through to 100 percent absolute perfection. So he challenges me in that way and I respect it because I know it's good, but sometimes I get frustrated because I just can't go to the 100 percent detail. And the company can't afford to either. We can't wait. Things move so fast. So it's somewhat frustrating in that regard, but I recognize it for what it is and that overall we balance each other off well.

Would you say that you value openness to ideas?

I like to think I value openness to ideas. I get frustrated with our operational management. I don't think there's a lot of good idea people. I know it's — I have hard time finding somebody I really want to brainstorm with. Because they immediately get down to the detail and I'm constantly trying to keep them up and — but I — we get — there's good ideas flowing. Am I open to ideas? I am, but I'm not open to bad ideas. And there's a lot of them. And sometimes I shut them off quicker than I should, in danger of being [able to do] more thinking later. . . . So I make sure I — I think I'm very good listener, but I don't — I'm not patient with bad thinking.

If one values participative leadership, then this excerpt is less than desirable, but being less desirable does not make it any less stage 4. This excerpt is perhaps an even more powerful argument for the two sided headpiece of the content and construct than many of the "more desirable" participative excerpts are. Throughout this particular interview, this individual displayed a meaning making capacity which indicated an ability to make sense of complex variables. However, the more dogmatic, less-open way in which he led--his non-participative style--would support my contention that it is more

than high order constructive development that leads to effectiveness. Similarly, as illustrated in the 2-ish and 3-ish participants' excerpts, it is also more than the content of being participative that leads to effectiveness.

Therefore, if the only thing that was considered was CD level, then one might decide that these stage 4 managers (represented in the last two excerpts) would be effective. However, when the other side of the headpiece is considered, the stage 4, self-authored construction seems ineffective. Even though the manager in the first excerpt is able to take as object the relationship with his superior, separate the way he relates with his subordinates from the way he relates to his superior, and author his own response to the unfortunate situation he is in, both of the effectiveness raters used in the testing of the third hypothesis viewed his response as ineffective. Similarly, the response of the leader in the second excerpt exhibits many of the same stage 4 characteristics, but this response was also rated as ineffective. This dynamic supports the theory that there are two different but complimentary measures of effective leadership--the desirable content of a given trait, behavior, etc., and an advanced level of meaning construction.

In the next section, this notion of different levels of effectiveness within a CD stage, as well as trends of overall effectiveness as related to CD level are explored.

Discussion and Interpretation of the Effectiveness Ratings

The effectiveness ratings, which were significantly correlated to CD level (Spearman's $\rho = .505$, $p < .000$), provide exceptional quantitative support for the third hypothesis. To compliment this quantitative analysis, I will use this chapter as a forum to present both a qualitative analysis of the third hypothesis and a discussion of how these findings inform and change the overall thesis of this project. Both effective and ineffective excerpts will be presented for each

CD level. The section begins with a discussion of the effectiveness ratings and then is organized by CD level, starting first with 2-ish excerpts, then 3, 3-4, 4, and finally post 4 excerpts. This progression allows for an investigation of different levels of effectiveness within a given CD stage, and it paints a clear picture of increasing effectiveness as CD level increases.

The Criteria for Rating the Excerpts

I should first mention that CD level and effectiveness, while related, appear to be different constructs as I had hoped. The two raters for CD level made a conscious effort to not look at the content of an excerpt, no matter how good or bad (two examples of “bad” content that received high CD level ratings were presented at the end of the last section). Instead, the two raters for CD level focused only on the epistemological structure. On the other hand, the two effectiveness raters considered the *content* of the excerpts in many areas--i.e., the possible effect on others, the level of consensus building, the creation of purpose, depth, and goal attainment. Effectiveness raters 1 and 2 used slightly different conceptualizations of effectiveness, which are presented in the following two paragraphs, but both judged the excerpts in a more holistic fashion; comparing the “sense” or feel of the excerpt against their own effectiveness criteria.

Rater 1’s criteria for effectiveness were primarily two-fold. First, he looked for *depth* which he defined as, “being able to talk about a given subject in a way that reflected depth of understanding--acknowledging the many facets of a subject. [i.e.,] Did they take into account the variability of issues related to the subject?” His second criterion was *self-awareness* which he defined thusly: “Was the person talking about [the subject matter] purely in the abstract, or did they show self-awareness and personal understanding--an ability to reflect in a

personal sense? Personal sense not being narcissism, but more a sense of personal accountability.”

Rater 2’s criteria could also be divided into two areas. Of the first, he said he looked for “whether the [individual] was creating a context in which all the parties, including him/herself, were able to come together and create a purpose which everyone could uphold? [By uphold, meaning] that there is a level of consensus that whatever they were confronted with, they could resolve it so that the people would leave the room and uphold what they agreed to.” His second criterion had less to do with outcome and more to do with the treatment of others. He looked for “whether they could both challenge and support people. The idea of support could be anything from caring, empowerment, participation--creating an environment where people feel open to being in a dialogue with other people--or productive conversation.” Rater 2 measured excerpts against the level at which the response was meeting the goals of the above criteria, and he stated that this could take on many different languages.

These sets of criteria are both similar and different--Similar in that they both judged the interview by the “sense” they got from the excerpt as it compared to their criteria, different in the content of what they specifically compared this “sense” to. However, even with these differences the raters matched exactly on 52 of the 184 excerpts, and they matched within one point on another 82. These 134 excerpts on which there was high agreement were the only ones used in the analysis, and, as noted in the results chapter, the interrater reliability of these 134 excerpts was high. The other 50 excerpts were discarded.

Given the construct of effectiveness which was just presented, the discussion now turns to the relationship between effectiveness and the different CD levels.

Introduction to CD Level and Effectiveness

Because I will review a significant number of excerpts in the following section--approximately four to six for each CD level--I will use the following notation system to identify each excerpt: The excerpts within a given CD level are lettered A, B, C, D, etc.. Following the letter is the question that indicates the content area of the excerpt (i.e., *In what ways do you make sense of conflict?*). These content questions are printed in italics. Following the content question is the score that the effectiveness raters assigned to the excerpt. This rating is in parentheses. Again, the rating scale for effectiveness is: 1) atrocious, 2) ineffective, 3) somewhat effective, 4) effective, 5) very effective, and 6) exceptional. Half scores, such as 2.5, would indicate that one rater assigned the excerpt a 2 (ineffective) and the other rater assigned a 3 (somewhat effective). In the text I may refer to a 2.5 as "less than somewhat effective" in order to keep the use of numbers low as they are also used to indicate CD stage.

The results of the analysis of the third hypothesis paint a picture of effectiveness increasing as CD level increases. However, as figure 4 (see page 128) illustrates, there is a great deal of overlap in effectiveness scores from one CD level to the next. This phenomenon was realized primarily because the range of scores for both CD level 3-4 and CD level 4 was fairly large. Nevertheless, the lowest and highest CD levels (i.e., 2-3 verses post 4) had virtually no overlap, and the qualitative analysis of the middle CD levels, forthcoming, will show a trend in which effectiveness is related to CD level to an even greater extent than the quantitative data indicate. This finding is

explored in the sub-sections on stage 3, stage 3-4, and stage 4 which are presented following the next section on 2-ish effectiveness.

Effectiveness From a 2-ish Construction

The effectiveness ratings for stage 2-3 CD ranged from 1 (atrocious) to 2.5 (less than somewhat effective). The following five excerpts, which were given a CD level rating less than stage 3 (which I will also call a stage 2-ish construction) are arranged in ascending order of effectiveness. Note how in each of these 2-ish excerpts, the participants are limited to taking as object only their perceptions, and how in being subject to their own needs and points of view, they cannot mediate their needs or these points of view. With only an ability to mediate these few things (perceptions in the cognitive realm, social perceptions in the interpersonal realm, and their impulses in the intrapersonal realm), stage 2 individuals are limited in the level of complexity around which they can construct meaning. It is for these reasons that these excerpts seem less effective.

A. How do you make sense of contradiction? (1.0)

My initial reaction is it makes me mad because they don't understand.

There again, it gets to seeing it my way versus seeing it their way. And I don't know, I just kind of expect people to see things my way for some reason, I always have.

B. How do you make sense of contradiction? (1.5)

It's a loss. I don't like to lose. I didn't do the job I should have done convincing him that my way was a better way. So I take it personal in that sense. And again, I go back to the analogy of my dad being a

football coach. I like to have the decision made and once the decision is made, then that is what we are going to do and that's what we do.

Now, if I'm working for somebody who gets halfway down the road and then says, this isn't right and throws it out, I don't like that. That makes me a little bit crazy because then we have just wasted that amount of time. Even if they then adapt my idea and start over, I'm still upset because you've wasted that amount of time.

C. *In what way could you have handled the situation differently?* (2.0)

If I would have vacillated on that and changed my mind again, then I wouldn't have been worth my salt, myself, as manager.

What do you mean by that?

Well, I mean, if I made up my mind we are going to go down the road this way, and you now convince me that we are going to go down the road that way, then either I didn't think it through or I don't have the courage to defend the position that I'm going to take. I think there is room for negotiation, but once I made the decision we were going to do it, we were committed to getting it done.

D. *In what ways do you decide on the right course of action?* (2.5)

I like to preach that there is always more than one right answer and they are both equally good, it's the question of which one you choose.

Do you -- go with this for a minute, this is very interesting. Do you practice that actively, the idea of seeking multiple right answers, or do you think that--

Multiple right answers come from having multiple opinions. I suppose all of us sometimes think I don't know if I should do A or B. I

can usually wrestle that one to the ground or close my eyes and guess. It will tend to be if I feel strongly about something and a peer feels strongly about something else, then somebody has got to make the call and that's why there is another level.

E. *In what ways do you decide on the right course of action?* (2.5)

Well, if you are working with the right people, you are never wrong because they just picked another right way and your way was right, you just didn't get chosen. You were wrong when you get to the end of the game and it didn't work. And I'm wrong every day. There are a lot of things we try that don't work, but that's not a reason not to try, you know, to me, that's losing again if my way didn't work. But you don't know until you try it. Until then I assumed my way was right or one of the right ways, you know, and we didn't chose it, someone else's way worked, so that's fine too. And that self-preservation, you know, that way I'm never wrong.

These stage 2-ish responses; because they are limited to a mediating system which can only account for concrete actuality, points of view, simple reciprocity, and enduring dispositions; do not allow the speaker to take into account many variables like abstractions or interpersonalism the way a stage 3 person can. In this way, they are limited in their potential to make an effective response. In excerpt D, the speaker starts out as though his response may be more complex when he states, "I like to preach there is always more than one right answer." Similar statements were made by some of the post stage 4 individuals. But when pushed by the interviewer as to how that notion is constructed, the speaker exposes his stage 2-ness (I'll close my eyes and guess

or get someone else to decide), and his response appears ineffective. Kegan (1994) states that at stage 2 there is not a self system (or for that matter even a mutuality) to bring the decision back to, therefore, he “guesses” or looks to “another level” to help him decide.

Effectiveness From a Stage 3 Construction

In contrast to the stage 2-ish excerpts, an examination of the stage 3 excerpts reveals an ability by the speaker to bring inside the self the points of view, concrete actualities, etc. to which the stage 2 individual was subject in a way that takes them as object. However, the inability to take a perspective on the abstract ways that points of view, or relationships, impact the self limits the stage 3 person’s ability to separate who they are from the other. The effectiveness ratings for the stage 3 excerpts ranged from 2 (ineffective) to 3.5 (more than somewhat effective).

The first three excerpts (A, B, and C) below reveal a more consuming mutuality between self and other (whether other is a person or a perspective) than do the excerpts D and E. The increase in effectiveness ratings for these last two excerpts, although never rated “effective,” parallel the increased level of ability to separate the self from the other. Note especially in excerpt C, how the participant’s mutuality with his organization dictate his identity and feelings of success. This bounded-ness to his organization limits the number of influences which help him to decide, thereby limiting the complexity of his decision. It is this dynamic that I believe led to the low effectiveness ratings of the stage 3 excerpts.

A. In what ways do you know you have achieved success? (2.0)

It gave me a feeling of success. Because my company saw value in me and was willing to do this arrangement. Which gave me a lot of

motivation. Which was recognition that I really needed. And it gave me a different thrust.

How did you feel prior to sort of getting that confirmation?

I kind of felt stagnant. I kind of felt punished. Because I don't want to leave the area. Because I don't want to uproot my family. Because I don't want to do these things, I'm going nowhere. Basically, that's what I felt. And I did not think that that was fair.

B. *In what ways do you deal with conflict?* (2.0)

We have. Personally — I think, one of the things that — I have very little tolerance for conflict, like almost zero. And I just — it has to be solved. If there's a conflict between anybody — between myself and someone else or between two people that work for me — if there's a conflict — it has to be resolved.

What's important about resolving --

It's just the level of discomfort. I mean, it's very uncomfortable. Conflicted situations or having a conflict with anybody is just very uncomfortable and it's just — gets in the way of everything that you need to get done. So I — it just makes me feel — in some ways it's almost like I'm conflict avoidant, but I don't avoid it. I just want it to be solved right away. And in some ways, maybe I force a resolution sooner than it can be correct — correctly solved.

C. *In what ways do you know you have achieved success?* (2.5)

My mission professionally is to be respected as an overall general manager within The Company. And what is particularly, I guess, unique for me is that nowhere else will work. It's got to be This Company. I

can't go to work for The Competitor and feel successful. If I were the CEO of The competitor, I would be a total failure to my way of thinking.

And why is that?

Well, I believe in Our Company. I couldn't go to work for another similar type of business in another industry and be the CEO of that business and feel good. I have to be successful with This Company to feel good. Not even another franchise in our parent company operation would work. It would work in a crunch, I would do that if someone just said, hey, you know, thank you, we don't need you anymore. I would go find a another franchise in our parent company to work for somewhere.

D. *In what ways is vision or mission meaningful to you?* (3.0)

Again, I think it's important because one person can't have all the ideas. I like to think that there is this broad objective that we are all trying to get to. And I have a little slice of it that kind of comes down and if I do my little piece and everybody else does theirs, it all works. I can't be successful unless I'm going in the same direction. And I can't know I'm going in the same direction unless somebody over here is telling me, your off track; don't do that. It's a good idea, but don't do it because we are trying to go that way.

You get the right people in place and then just kind of basically get out of their way and they know where they are trying to get to. They will get the job done. And you don't have to give them a lot of feedback. I don't know if we are lucky enough to have all of those right people all the time.

E. *In what ways do you see your role as a manager?* (3.5)

I think I am halfway to coach because, just like I'm saying, I can't do all the work. And they have to -- I think they have to know that they can't -- failing is -- I shouldn't say "failing." Making a mistake or coming up with the wrong answer is not bad because number one, you've got to come up with an answer and if we find out what is wrong and everybody has come up with something that is wrong, I mean, the answer is over here and they are over here. But we get to that and that, especially in the X area, if you can't have people bring up either their ideas of what they think is wrong or if they are concerned that they have screwed up in some way and they try and bury it, it is something that festers and it will just come and just tear you up down the road.

In all of these excerpts, there is a "bounded-ness" to other, and as this bounded-ness seems less extreme, the likelihood that the excerpt is viewed more effectively increases. An interesting phenomenon begins taking shape in these excerpts that will be more apparent in the next two stages--that the more a person is open to other ways or ideas, the more the excerpt is viewed as effective. So in excerpt D, where the manager talks about his slice being part of many slices, his recognition of the many parts is viewed as more effective even though he needs another to tell him whether he is off track or not (it is this, by the way, that makes the bit stage 3). In the excerpt E, the manager again acknowledges the benefit of people bringing up their ideas even if they are wrong. This openness is viewed as more effective than the first two excerpts, but he goes on to expose his 3-ishness in that others' actions can "fester" and "tear you up" which is more indicative of not taking the others' actions or perspective as object.

I still want to emphasize that the effectiveness raters only viewed the very best stage 3 excerpts a little better than somewhat effective. And, while they clearly rated these excerpts better than the stage 2 excerpts, the median scores for both CD levels was less than 3 (somewhat effective). It is when self-authored constructions emerged, which is indicative of emergence to the 4th order, that the effectiveness ratings increased. In addition, this notion of openness which I introduced in the previous paragraph, had an even bigger influence on the range of scores for excerpts at the both the 3-4 and full 4 CD levels.

Effectiveness From a Stage 3-4 Construction

The openness to multiple ideas, perspectives, styles, etc., in a way that can truly make sense of them, not just recognize them as the stage 2 individual does, begins to emerge in the transition between stage 3 and stage 4. The primary difference between an individual in the stage 3-4 transition and one who is fully 4 is that there is still a looking outside the self for validation or authorship. The stage 4 individual, on the other hand looks outside the self for information to help them author a more effective self-construction, not for validation of how they are doing. So the main difference between the full stage 4 individual and the one in transition between stages 3 and 4 is that “other” (again, other can be person, idea, perspective, etc.) is not fully object. The self in transition cannot fully take a perspective on these influences the way the stage 4 individual can.

What this led to as far as effectiveness ratings for the stage 3-4 excerpts, was a range of effectiveness scores that was the same as the full 4 excerpts, a median score that was the same as the full 4 median, and proportionately the same distribution of scores above the median as the full 4 scores. However, there were a proportionately greater number of scores that were less effective

below the median (see figure 4 for clarification). All this to say that the effectiveness ratings for the individuals in transition to 4 were only slightly lower than the effectiveness ratings for the full stage 4 individuals. The difference in Ns between the two groups (stage 3-4: N = 18; stage 4: N = 69) likely contributed to the similarity of the distributions of effectiveness scores for the two groups. In addition, had the 3-4 transition excerpts had a larger N, the distribution might not have had a negative skew, and the median score may have been slightly lower than the stage 4 median, as is seen in Figure 4. However, even given this caveat, the correlation of effectiveness ratings with CD level is both positive and linear.

As I alluded to earlier, I believe that the reason for the large range in effectiveness ratings for both of these stage groups is the phenomenon I brought up in the last sub-section--that openness to multiple ideas, styles, and perspectives is seen as more effective than a more black and white, dogmatic orientation. By the time the individual is transitioning to stage 4, and especially once the stage 4 equilibrium is gained, he or she is much more able to understand and consider the validity of multiple perspectives. What really differentiates those in transition to stage 4 from those equilibrated at stage 4 is the degree to which they look to others for help in authoring their understanding of the perspectives.

In the following excerpts, with CD levels in the 3 to 4 transition, mutuality is still present, but it is not dominant like it was in the stage 3 excerpts. The individuals are beginning to author their own way of constructing meaning about their circumstances, and they don't look to others for direction or feedback as much as the stage 3 individual does. However, still evident is this looking to the other for validation or the right way. It is this looking outward that will differentiate the stage 3-4 excerpts from the stage 4

excerpts--*the between groups comparison*. On the other hand, it is the level of openness to multiple perspectives that differentiates between the lower and higher effectiveness ratings--*the within groups comparison*.

Therefore, in the following five excerpts, contrast the “only one answer” perspective of the first three excerpts, which were rated low with regards to effectiveness, with the more open perspective of the last 2, which were assigned higher effectiveness ratings.

A. *In what ways do you deal with conflict?* (1.5)

Well, I suppose it's in the past from the standpoint, I guess, you could say she's effectively clipped my wings. And so for the most part, I just sat there with my mouth shut and let them do what they wanted to do.

So you tend to withdraw more in this

Yeah, I do. But now, that is probably in a situation where it's the upper management meeting, that sort of thing. I tend to sit in in those sorts of meetings and pretty much withdraw, keep quiet, you know, whatever. I'm not as vocal to speak my mind.

But, now, outside of that, other things, other meetings, other situations, if they ask me and I know it, I tell them. And I mean, I go to other departments and other meetings and that sort of thing. And I just go right on telling them what to do the same way I did before CC.

B. *In what way could you have handled the situation differently?* (2.0)

I guess what I'm trying to say is, I could probably say, hey, oil and water man, let's go out and get a beer after work and just try to meet on common ground in a non-corporate environment and start finding out what makes each of us tick, find out maybe about his family, he find out

about my family, get to know each other better and to know that he's got, you know, some blood flowing through his veins and he knows I have blood flowing through my veins. And talk sports, whatever. But just establish some type of rapport that you can build on from that point. I can do that. I can say, oil and water man, let's go out and get a beer this afternoon. I can do that. I don't want to.

C. *In what ways has change affected you?* (2.0)

You mean if he changes his management style to something more autocratic or dictatorial? Well, my belief on that and I've got a very strong belief on that, I mean, I listen to people bitch and moan about any management team or any manager. Bitch and moan, bitch and moan, bitch and moan. And I want to tell them and I have told them many times, hey, no one is forcing you to come in here. If you don't like the way this company is run, if you don't like the top guy's vision, get your ass out. Life is too short. You need to have a little more fun and enjoy yourself. It just wears me out. I will get a call, there are about a dozen guys that I know that network with me and they will go on and on and on. And I don't have time to listen and I just want to tell those guys, get on with it, either get on the ship or get off the ship. That is why I went to City 3. I didn't sit here and bitch and moan about, golly, I don't know if I -- I might get a pink slip, I might be on the street and bitch and moan. I don't know what the CEO is doing; he's firing all my buddies. I don't agree with that. Well, he probably let some of those guys go because they needed to be let go. I just didn't know if my turn was next or not.

D. *In what ways do you know you have achieved success?* (4.0)

If you believe that you can have an impact on the business over not only your own little business but the business overall and that your mission is really bigger than just doing this one little job, however important it is, well, then there are other things that you take on yourself, to be a role model; to try to affect culture, mind set; to, in fact, accomplish change because you can see that. I mean, to me, I can see that. In other words, I can look out, and I can say, yeah, people are thinking differently or people are becoming more flexible in what they'll let me do in my job. I mean, I can measure my success against behavior of my management and of my peers and others I deal with as well as I can measure having accomplished actual bench marks, things that, you know, I mean, are obvious to the casual observer. So I kind of look for both of those as measures of success.

E. *In what ways do you deal with conflict?* (4.5)

I might -- you know what? If I lose an argument, I don't feel good about it. What it basically tells me is the next time I go out, I better be more prepared, you know. But at the same time, I think how does a group view me on how I handle that? Do I all of a sudden pull rank, which would be a complete turnoff for the rest of them. What is the message that that sends? You know, when you are right it doesn't matter because he is still the boss and that's the wrong attitude. So what happens the next time, instead of you pushing the point that you're right to me, you will back off and then I won't have the right information. So it's important for them to see how I act in that. And a lot of times, you know, when I've bet and I've been wrong, they see, okay, he was wrong

and he was willing to admit he was wrong. Okay, next time, I will bring the problem to him and if I think I've got the right answer, I'm going to push it.

So I've created an environment that says, hey, you can argue back to the boss and not have to be worried about him chopping your feet out from under you or not worry about him, when the argument is over and you've won, that you've got to worry that you don't have a job tomorrow. And that happens in this business, by the way. It's not something that people just conjure up in their head. You lose an argument with some people and they will spend the next five years trying to get even with you.

Excerpts D and E illustrate openness to other perspectives that is absent in the first three, and the effectiveness ratings correlate with that openness. In fact, the last excerpt was rated as very effective by one of the raters and effective by the other. The same trend of a positive correlation between effectiveness ratings and openness is exhibited with the level 4 excerpts in the next sub-section, but the level of authorship is complete and the mutuality is virtually extinct.

Effectiveness From a Stage 4 Construction

The stage 4 excerpts accounted for more than half of the excerpts in the testing of the third hypothesis. This percentage paralleled the number of stage 4 individuals interviewed in both sample populations in which 26 of the 42 participants were stage 4. As noted in the previous sub-section, what distinguishes the stage 4 excerpt from the stage 3-4 excerpt is the level of self authorship. Whereas the stage 3 individuals were subject to mutuality and abstractions between points of view, the stage 4 individuals were subject to

abstract systems and ideologies in the cognitive realm, institutions in the interpersonal realm, and self authorship and autonomy in the intrapersonal realm (see Figure 2). It is also a characteristic of the stage 4 self to take as object the abstractions, mutuality and inner-states of the stage 3 self. Again, this difference in what is subject and what is object was the major difference between the excerpts in the stage 3-4 section, just previous, and the stage 4 excerpts which follow.

The other item of interest, as noted in the previous section, is the correlation of the effectiveness ratings with the level of openness which is exhibited. In the following eight excerpts, taken from the effectiveness survey, note the dogmatic, black and white, orientation of the first four excerpts, all of which both effectiveness raters viewed as ineffective or less, and contrast these with the final four excerpts. Excerpt E was rated of 4.5 (one rater rated it effective and one rated it very effective), excerpt F was rated 5.0 (both raters viewed it as very effective), and excerpts G and H were rated 5.5 (one rater rated it very effective and one rated it exceptional).

A. In what way could you have handled the situation differently? (1.5)

I think we did what we had to do, and we did it in a cost-effective manner. Again, I've not been on the other side, nobody—people we fired probably would say, Gosh, they could have done that differently, but no. Again, to me, it's business; it's not the church or the softball team. We did ruin people's lives or affect their lives; but we didn't have the luxury of doing it much differently than we did.

B. *What type of environment do you try to create to enable work to be done?* (2.0)

Probably the most important thing you have here, for me, knowing—I know and they know that if they need it done, they know where to come and we'll get it done. We've never let them down in that aspect of the business; so, that's how you get opportunities, that's how you get promoted, that's how you get bigger opportunities is by getting it done.

C. *In what way could you have handled the situation differently?* (2.0)

See, I've done it all my life. I don't know another job. That is a strength and a weakness. I've never worked anywhere else; I believe I know this job better than anybody, but my weakness is I don't have the experience of other things and so I count on those two to help bring me other expertise. AA said that he never dreamed how many decisions have to be made on a daily basis, and how fast and how big they are. I think that's -- I mean, there are constant decisions to make; and the other thing that he said that he didn't dream, is he said when he was not working. He could relax. And he said the thing that he has seen with me is I never quit working; no matter where I am, no matter what time it is.

D. *In what ways do you deal with conflict?* (2.0)

Feeling that they haven't been treated fairly, feeling that there has been some kind of promise made several managers ago, several years ago or early in their career that has started to disappear and evaporate and if I'm seen as the reason for that, then there is probably some pent-up misgivings towards me. You know, you always have some of those, an anonymous letter now and then and things like that.

How does it make you feel to maybe be the object of that sort of feelings that maybe someone is blaming you?

It doesn't bother me a bit. I'm making the right decisions and moving the business forward right now.

E. *What things are important to you about the people you work with?* (4.5)

I mean, all the way from the bottom line to social acceptability to whatever. But I think everyone has different styles. I deal with a lot of chief executive officers and managers, and I think the one arbiter of success that I think is most important is tolerance and is an ability to select people for their abilities and what they bring to the organization rather than any other particular standard. A lot of people want all of their employees, all of their key employees you know, they feel comfortably socially with. These people nearly always fail. They try to clone themselves you know, try to clone all these people into the same pot. You don't find talent doesn't come in any particular guise, you know it comes in all sorts of different – Our company president AA and I have worked together since 198X. We're very close. He was the president of my former organization. He is the president of this organization. We've worked hand in glove. We rarely have any disagreements on how to run the business. We're completely different people. We don't socialize. We don't engage in the same sporting pursuits. We don't live in the same place. We see each other at work. We're good friends. And we get along fine. But if AA were to go out and find his closest away-from-business associates, I wouldn't be one of them nor would he be one of mine. We're different people. We have different

viewpoints on life. But he's a very talented individual. He's been a lot to me and I think I've been a lot to him.

F. *In what ways is being open to ideas meaningful to you?* (5.0)

It's extremely tough. Extremely tough because I was convinced my way was the right way and it's interesting to sit down and talk to someone on the other side of the table or in a round table. At the acquired company, and they have, you know, they are sitting there saying, you're crazy as you can be, it's my way that is the best way. So you have to work through those things. And a lot of times your bias is so deep, it goes beyond being stubborn or it goes beyond a bias, it goes to what you believe is right. And you know that you're right. And so it makes you do a lot of analytical data mining on your own person to articulate your bias or your position on a point. You just can't say, well, I think I'm right because we've always done it that way. That's not good to do. So you have to articulate, you have to be fact-based oriented, you have to be a good listener. You have to learn to sort of, it's sort of a give and take process that you've learned over a period of time. You know, you go in there and I think the initial 15, 30 minutes or so is good to be together. And then all of a sudden you get over good to see you or nice to meet you and then you start talking about specific issues or things in general and their feathers start ruffling up and people start posturing themselves and it's a very interesting dynamic to be a part of that and to observe peoples' reaction to it.

It's very painful, but it's also a very -- it's part of a learning process and part of, I guess, growing in the business. And particularly since this was not just a company that was out of our business line.

G. *What type of environment do you try to create to enable work to be done?* (5.5)

The kind of culture that I think that is requires is one that empowers the individuals who deal with the customer to make decisions, and to be well trained, to be knowledgeable, to be able to respond without long delays and approval processes—so you've got to trust people, and not everybody warrants that trust, and you'll be disappointed from time to time, but that's a price because the way to avoid—the way to have employees that you don't trust is lots of controls and approvals and bureaucracy which makes it very difficult and unpleasant for the customer to do business with you.

H. *In what ways do you decide on the right course of action?* (5.5)

I do some homework. Based on the subject, I go to those people who I respect, get their opinions. If it's possible, I do some reading on it. And then I actually just let it settle for a while and think about it. And I'm also a spiritual person who believes in prayer. And I'll pray about it. And somehow it just comes. I've learned I used to think that the sign of a leader was one who can make a snap decision. And there are times for that. But I've also learned now that it's deeper and more important to take some time with the decisions that can wait. And make sure you've exposed yourself to everything.

And once you've exposed yourself to all these different perspectives, what is it that pushes you to go one way or the other? What's the basis, the foundation for going one way or the other?

It's interesting. I wrote the word intuition down. I think my intuition helps me make decisions. But I also feel very led spiritually. I think it's the foundation of my experiences where that it The foundation

is my experience. That's the answer. It's not a book. It's not Tom, Dick, or Harry. It's what have I learned through my life's experiences?

The last four excerpts indicate an openness to other perspectives. What makes them stage 4 excerpts and not stage 5 is that they don't appear to acknowledge any other way to make sense of their circumstances. Granted, these excerpts are pulled from a larger context, but the effectiveness raters and the CD raters were both asked to make their judgments about the excerpt based on what was given. Had the excerpts been presented in the context of the interview which they were pulled from, one could see that the individual, from whose interview excerpt F was taken, was actually a stage 4/3 individual, and excerpt G was taken from an interview with individual who scored 4/5. But what appeared to be appealing from an effectiveness standpoint was their openness to multiple perspectives and ideas that interact in complex ways.

This idea of stage 4 individuals constructing meaning from a self-authored, "open" institution or ideology is explored further in the next major section. But first, the next section contains a discussion of the effectiveness ratings for the post stage 4 excerpts.

Effectiveness From a Post Stage 4 Construction

The post stage 4 excerpts had the highest effectiveness ratings of all the CD levels. The median score for this group was 4 (effective). The lowest score, with the exception of a single outlier, was 3.5 (one rater: somewhat effective, the other: effective). The upper half of the excerpts had effectiveness ratings ranging from 4.5 (one rater: effective, the other: very effective) to 6.0 (both raters rating the bit exceptional). Richard Hayes (1997) stated that at stage 4, tolerance is optional, at stage 5 it is necessary. This notion, when extended to openness,

helps explain the substantially better effectiveness ratings of the post 4 excerpts. In almost all cases, the excerpts exhibited openness not only to ideas and perspectives, but even an openness to not being open if the situation called for it.

This perspective taking is what sets post 4 meaning construction apart from the stages which precede it. Not only can the post 4 individual take as object all of the things that the previous stages can, but he or she can begin to take as object the very systems and ideologies that the stage 4 individual was bound by. The more one can take as object, the more one can mediate the complex variables that may impinge upon any given circumstance.

In the following five excerpts, this ability to take a perspective on the very institution which governs decision making can be inferred. Characteristic of maintaining one's balance at the stage 4 equilibrium is the protection or defense of the institution (Kegan, 1994). The following excerpts, taken from interviews with individuals who were either 4(5) or 4/5 (which means they had not yet exhibited that their meaning construction was beginning to stabilize predominately in the 5th order), indicate at minimum less defensiveness or protection of a 4-ish institution, and at best indicate that the individual has taken as object the institutions or ideologies of the 4th order. The last two excerpts in this section lean more toward the latter.

This then is what distinguishes them from the lesser stage excerpts which have preceded it. Note that even in the first two excerpts, A and B, which were given lower effectiveness ratings than latter three, the way in which one mediates the circumstances can still be taken somewhat as object (a characteristic of post stage 4 meaning construction). The lower ratings may be a product of the effectiveness criteria used by rater 1. Recall the two key components of his criteria were self awareness and depth. Neither of these first

two excerpts show a great deal of self-awareness or depth, and both excerpts were rated as only somewhat effective by rater 1. Rater 2 rated both the bits as effective, thus the 3.5 rating. Even though these excerpts don't show a great deal of depth or self awareness, they still indicate a level of openness and perspective taking on the institution that mediates their meaning construction.

A. *What type of environment do you try to create to enable work to be done?* (3.5)

In terms of defining the game, is having a good understanding of what the business considers a win. In other words, I think you've got to have a good understanding of what it is the business wants to get out of the investment or the activity that you're involved in. So I think once you understand where it is they want to go, then you sort of in your own mind define how do you get there, you know, and what are the things you've got to do to get there, and you set your own internal bench marks measuring your success. Sometimes you've got to change the end point. I mean, at some time as you get down the road, you may see, gosh, the business doesn't really understand the objective in the right way. We've got to move the target. And then your challenge becomes how do you move the target, how do you convince people that it's got to change.

B. *In what ways do you make sense of challenge or contradiction?* (3.5)

Yeah. I think you have to challenge [the way you do things] often. I have a tendency to want to resist changing them sometimes, but I challenge them because I think it's terribly important. Particularly if you are stretching beyond the safety line, you want to be sure that you're reading the sign posts and things along the way to make sure you're still on track. I mean, to the extent that the road turns and you're still trying

to go straight ahead, and straight ahead ain't the right answer, you've got to sense, hey, there's a curve starting in the road. What do I do? Do I continue straight, do I turn here, do I turn there, do I slow down, do I -- what do I do? So you have to know what it is that you fundamentally believe and what you're trying to achieve and try to assess as you go down the road, am I still on track or not. And that can be a very disciplined process, it can be a learned process that you just take your own temperature.

C. *In what way could you have handled the situation differently?* (5.5)

Two aspects of it is that it let me take my nose off the grindstone, where it had been for 20 years, and the running of the company in a very autocratic way and I had to essentially learn to let go and get out of the way and stay out of the way and become a cheerleader and redefine my own role in the company. And that was really hard. That was the time when I wondered if I had a new role. I mean, the new team were doing so well on the operational side that I went through quite a long period of time of questioning whether I had a role to play myself, and whether I should maybe retire too. Like [maybe I had] been part of the problem, and I eventually redefined my role in a very satisfying way, and that — the person who is the great success, I mean, success of the company is — very gratifying.

D. *In what ways do you deal with conflict?* (5.5)

Well, there's several kinds of conflict that go on in business. There's — conflict between people's values. There's conflict between the quarter and the future. There's conflict between people with the same values

and what the right next step to take is. Conflict is sort of absolutely critical, but if not managed becomes absolutely debilitating.

What do you mean by it's absolutely critical?

'Cause you have to have some — you have to have people who challenge ideas, who challenge directions, who, you know, counter your views of — who are — who see the world differently, who see the way it plays out differently, who sees actions differently. And an organization has to be able to take in that dissent, if you will, that difference of opinion, understand it and leadership can say I reject that and this is not a consensus decision, this is a consulting decision and consultative decision. You've given me your view and your information and I thank you and [end of] conflict and discussion. And sometimes it's, Well, you know, that is a better way and maybe we ought to change the way we're doing it and sometimes it's, you know, the only way we're gonna get this done is if we have consensus. What can we achieve consensus on? If we all want lunch, but want different things for lunch — I want turkey, you want steak, she wants eggs, and she wants fruit — and we can't have it all. Can we all compromise in something that we can believe in. And leadership's job is to say is this a decision that I have to compromise what I think is the best way to do this, because I've got to get consensus here to make this happen and is this an acceptable choice, or, to be able to get this done, I'm not sure the right way, but I have to reach a compromise with — these folks have to reach compromise with each other and I have to lead them to that compromise, because if I don't lead to compromise, they won't be able to take action. So conflict is always around you and it's — it's a matter of using it well so that you insert it —

sometimes you purposely get it inserted. You know, who you want to invite to a meeting to be able to say —

E. *What is the origin of your value system or style of management?* (6.0)

I can probably find pieces if we had an unlimited amount of time, I could probably find places or pieces from so many different places and times. I — one of the things that still stays with me today is something from my sociology class and one of the philosophers — I think it was Socrates, maybe — who said the unexamined life is not worth living. So that it's important to continue to reevaluate what you believe. It doesn't necessarily mean that you change your belief, but you leave them open. You know, you sort of leave them exposed. And you say, Sure, I'll think about this and think about that and I think too many people don't do that. You know, they form their beliefs and their opinions, but they're not open to evaluating them. But I think that if you think about them, there's less to think about when you need to use them. You know, 'cause you've already thought about them. You don't have to say — Well, is that right or — you know, whatever, 'cause I think about that every day. You know, I think about certain things that are — situations or whatever and, you know, what's the right thing to do and if you're continually leaving them open to different view points, I think that when you need to use that it's pretty well thought out. And so decisions, I think, become easier as opposed to harder.

It's like if you presented me with situation A and situation A involves this value set and I've already thought about values — this value set from all these different perspectives. I've already thought

about, you know, what would happen if it came from this way or from that way or that way. I've already evaluated possible choices.

Incidentally, this final excerpt the other CD rater and I agreed exhibited more evidence of being full stage 5 than any other bit, and the participant's overall interview was closer to being scored at a stage 5/4 CD level than any other interview. In addition, this excerpt was the only excerpt that both effectiveness raters rated as exceptional. Every time I read that excerpt I am impressed by its depth and complexity. This way of constructing meaning is very rare if the established population norms do truly represent the population (none of the 764 participants in the aforementioned studies scored a full 5; see Table 8)--thus, my level of enthusiasm about this excerpt.

In summary, the way in which I construct meaning or make sense of the information in this last section is that with regards to effectiveness, both the quantitative and qualitative analyses suggest that the CD level is good predictor of leader effectiveness especially at either end of the continuum. And for the stage 3-4 and stage 4 leaders, the meaning construction of the leader appears to be more effective if one constructs meaning in a way that is open to a multitude of ideas and perspectives. So, it is to a presentation of the stage 4s who exhibit openness that this discussion now turns.

The Open 4: A Case for Openness as Content

As I have alluded over the last two sections, one of the interesting things that emerged during the process of obtaining and scoring the interviews was that most all of the stage 4 individuals in the CEO group were subject to a self-authored system which endorsed openness. In my prospectus, I suggested that as business culture became "postmodern," the complexity of the culture would demand a way of seeing things at a level greater than stage 4--stage 4+ if you

will. However, 17 of the 21 participants in the CEO group were solidly stage 4: that is, they didn't exhibit post stage 4 meaning construction. What did emerge through the interview process was that this stage 4 way of constructing meaning that most of the CEO group exhibited was very open to ideas, challenges, conflict, differing personalities, etc. in a way that at times appeared to be stage 4+. It was not until they were "pushed" to take a perspective on this epistemology that it became clear that this openness was their institution--their self authored way of making sense of things--it was what was "subject" for them. In this way, the content of their style was open.

This ability--to take as object all that the stage 4 person can take as object in a way that allows for the open expression of other perspectives and ideas, but does not allow for the mediating of that system that endorses openness--I will label the "Open 4." I am not suggesting that openness from the 4th order is a construct issue, rather it is a content issue--a polarity that is contrasted to closed-ness on the other end of the spectrum. In this way, the concept of an Open 4 is also in support of the content/construct dichotomy discussed earlier in this chapter. The label "Open 4" is simply a syntactical device which is not laborious to read or speak. Its position from a constructive developmental perspective is the same as a level 4, but the content of the exhibited behaviors indicate a preference for openness as opposed to closed-ness, and may very well be related to boundary permeability (Popp, 1993). A case could just as easily be made for an "Open 3" or an "Open 3-4", but the characteristics of the participants of this project limit the discussion here to that of individuals who construct meaning from the 4th order who are open.

This notion of the Open 4 was perhaps the most unexpected finding of the interview process. It was also the single biggest factor leading to the difficulty in scoring many of the stage 4 interviews. It was often difficult to

distinguish between open stage 4 individuals and individuals who scored 4(5). The 4(5) individuals would characteristically be at a developmental place that would be questioning the efficacy of the self-authored system to which they would be subject. The Open 4s on the other hand, were willing to entertain a plethora of ideas and ways without questioning the efficacy of their own ideas or ways.

Stage 4 individuals can take as "object" the mutualities to which the stage 3 individual is subject. These mutualities would include dogmas, management techniques, ways to handle conflict, business decisions about friends, and others that the stage 3 individual adopts from important relationships or respected sources, but never really makes their own in the way a stage 4 individual does (Popp, 1993). This self-authoring allows the stage 4 individual to understand and respond to situations and events that are different or more complex without looking to an outside source to help them to respond--they are that source.

So openness as a stage 4 system allows for an institution that endorses the seeking of multiple opinions, in a complex environment, and to obtain an effective response--because, as the open 4 would say, a single individual cannot have all the answers--thereby responding to the cultural demands in a way that can take as object, or make sense of, the often conflicting ideas, relationships, and perspectives with which he or she is presented. That system or institution becomes the mediator of those ideas, relationships, and perspectives. It does not, however, become the mediator of itself--that very system that mediates in an open way. Rather, the individual is subject to that mediating system. Openness is the lens (Kuhnert & Lewis, 1987) the open 4 is looking through, but he or she cannot see the lens. The post 4 person can see that the "openness" lens is one of several lenses that they could choose.

Consider the following excerpts from several stage 4 CEOs who have as their institution this open way of solving problems:

I pretty well understand the business, but I really listen to the different areas, and we have group meetings on issues and everybody in their area speaks up. I have this theory that if you override a manager in charge of something, then it's no longer their responsibility; it becomes yours. So, if the manager says, I want to change and start selling this product and I say, no -- then that manager's no longer responsible for those sales, because I wouldn't let him do it. So, I'm very reluctant to change anything that our management team comes up with. I do it and I do override every once in a while and say, I don't care what any of you said; and a good example is that we had this commercial that was going to be going to run during a *major event*, and our *major event* spots were very expensive, and I didn't think the commercial worked; and they all thought it did; and I hired a firm out of the West coast. They came in and they analyzed it, and they said, you're right, those commercials are terrible, you shouldn't run them. So, we ran an old commercial and I overrode everybody.

I had another situation where we changed our sales contract and I didn't think it was a particularly good idea, and I said no I don't think you ought to do it. And they came back and said, no we think you're wrong and I said, okay; we'll go with what you said. And I was wrong and they were right. So, I did the right thing in letting them do what they said was right. I believe with a CEO, there is a certain amount of gut reaction to things that it's inherent and it is very hard to give an explanation of how you're learning

* * *

Yeah. I've seen it — I've seen — wouldn't necessarily put it under the heading of conflict, but I've seen the idea that, you know, I had one direction in mind and someone else had another direction in mind and we sat down and talked about it and I was with them when we were through talking about it. And my method of — you know, the way I like to work with people that work for me is I don't want any yes people. I want people that tell me what they think because that's the way I am and I know everybody's not going to be like I am, but I want them to be comfortable in saying, Respondent, I really got — I have problem with what we're talking about here. And let me tell you why I might -- this might be a better answer. Because I love it when — you know, when a plan comes together. I love it when you can sit down with people and come to a better decision than you would've had individually. And so it's kind of fun once in a while to say, You know, you're absolutely right. I hadn't thought about that piece. Let's do it your way and so it — you know, I don't feel like I lost in that, you know, in that scenario.

* * *

That really doesn't bother me. If you are going to be successful, you better have some good people around you. Those good people are most likely going to have ideas that don't always coincide with your idea. And there really isn't a conflict, I mean, you could say it's a conflict because you have very -- but basically, I try to keep a very open -- if I've got smart people, I want to listen to them and let them try to convince me they are right. If they convince me, we are going to do it their way, not my way. My strategic point of view, normally -- I shouldn't say normally -- from my point of view, basically, I try to develop the strategy

first, what I think the right strategy is and then not tell the organization until I've got their input. And basically, you know, you have the best of both worlds. You are really not in a confrontational mode, you are really basically, you know, if you done your homework, and we do a lot of benchmarking of our competition of our customers and so forth. So we have a pretty good feel for what is happening in the industry and directionally what is happening with the individual major customers, with the major competitors.

And, basically, what you are trying to do is to analyze what is the right implementation, what is the right strategic short term, the tactics to implement the long-term strategy? And I haven't found it to be a huge conflict. And I've never found it to be confrontational, you know.

In each of these excerpts, there is an element of openness--openness to ideas, openness to other personalities, and openness to styles. However, one can also hear a system or self authored position which serves as a judge of the different positions. There is a self who can take as object the different perspectives, the relationships, the styles in a way which the self decides what is the best solution. The concern that the relationship might be damaged or that the speaker might be uncomfortable being with the others who differed with him or her is not an element of the Open 4, and it is in this way that the stage 4 leader responds to complexity such that the criteria for deciding what is right or wrong is within the self. Contrasted with some of the stage 3-ish responses presented earlier, the Open 4 individual, in seeking other perspectives is not looking for validation of his or her position or validation that the relationship is okay. Kegan (1994) states that the stage 4 individual, instead of gaining identity through relationships, now has relationships.

Looking for validation and ideas to understand the self system would be characteristic of the a stage 3 response. The stage 4 individual internalizes those outside voices, takes them as object, and mediates them such that the self either discounts them or factors them in to the what the response to a given situation might be. An interesting and informative contrast to the Open 4 excerpts presented above is the following post 4 excerpt. As the self transitions out of its 4-ness, this self authored system which endorsed openness becomes object. That system can now be mediated, taken as object, seen as one of several perspectives one could choose. The basis for deciding which “system” is often a higher *value* or *standard* that is chosen by the individual. The following excerpt comes from an interview with a CEO who scored 4/5. The value which guides this individual’s decisions in the business arena is results, but note the ability to detach himself from the institution which he normally chooses to use and take it as object.

What’s important about the result and achieving the result, as opposed to maybe —making the right decision, and do you

I don’t think there’s a “right decision”. I mean there’s not a right or a wrong. There’s an enormous amount of gray, and there are right and wrong on the opposite ends of it, but there are lots of different ways to achieve the result. You trust people, and charge them with the accountability to achieve it. You gotta let them do it in the way, as long as it is ethical and legal, the way in which they want to do it. And they may have far greater success than I would. And if I forced them to do something the way I would do it, they may fail because of 1) they don’t buy into it, they don’t want to do it that way so it won’t work. Number one they’ve gotta believe in it. Number 2) their style may be so different

than mine that trying to execute a plan using my style or decision is totally at variance with their experience or capability to execute it in that way, so you gotta let them execute it in the way that they feel it'll work, and hold them accountable for achieving the result. If they achieve it, if they fail using—and it's been their decision how to do it, I can hold them accountable for that, whereas if they fail trying to execute the thing—using the tactic imposed by me—it's much more difficult for me to hold them personally accountable for the result. I told them they had to go to point A before they went to point B, and they didn't want to go to point A before they went to point B—they wanted to go to point C first. Well, you know, maybe they were right. Maybe there's not a right, but it doesn't matter to me whether—I mean—did they get to the point they were trying to go to. I don't really particularly care which route they took to get there.

Can you imagine yourself leading in a way that's different than the way you've been telling me.

Yeah-----I think it would depend on the---the---circumstances that you inherit or that you're faced with. I think there could be an environment—there could be problems so intractable, there could be urgency surrounding the situation that is such that a different style or approach is called for. I think you just have to evaluate that—it wouldn't be a long term change in leadership style. I would modify it to meet the particular need that I felt the style that I prefer would not be successful at. I have—I have to change something very quickly—I have to achieve a result either in a time frame or in an environment that wouldn't accommodate readily. But it would be a short term thing. It would be a

stylistic modification of a finite duration. Because frankly, if it required me to modify my fundamental values, I wouldn't do it.

This individual is much more committed to a process where the decision is ultimately based on a standard or value that is held, and he is not as committed to a particular way--"I don't think there's a right decision." It is this post 4 way of constructing meaning that can (given appropriate levels of contents like motivation, intelligence, etc.) most effectively take into account a level of complexity that responds most effectively to postmodern demands. It is this openness to ideas and ways that the Open 4 person tries to emulate, but it is post 4 individuals who really begin to own the openness and truly make sense of it in a way that takes the systems or "ways" as object. In other words, they *are* open to not being open.

The irony is that the stage 4 CEOs who behaved in open ways because the system or institution they authored endorsed openness as the "right" way, were *not* open to not being open. The questions that I asked during the interviews to determine whether these open 4 leaders could construct meaning beyond stage 4 were questions like: "How invested are you in that position?" "Can you imagine yourself being another way?" "Have you had someone you admire challenge that way of seeing things, and if so, how did you respond?" The way judgments were made that ultimately determined that the individuals were stage 4, and not post stage 4, was that the responses were almost always expressed in a way that indicated 1) that considering another way besides openness had never crossed their mind, 2) that it was uncomfortable to consider another way, or 3) they became defensive and protective of their way.

If an individual has not yet developed to post 4 meaning construction (which very few have), then being an open 4 may be the next best thing. The

major thesis of this dissertation has been that because of the complex demands imposed by today's postmodern culture (Kuhnert, 1993; Noer, 1996), that effective leaders would construct meaning in post-stage 4 ways, that the CD stage of effective leaders would be post stage 4, and that this is why they were selected to lead in the postmodern culture. The unanticipated finding of the Open 4 may explain why about three quarters of the effective leaders, who are presumably responding effectively to the postmodern demands, are not post 4, rather they are clearly embedded in the 4th order. Could being an Open 4 be a way to still be stage 4 and respond effectively to post 4 demands? I hope to propose an answer to this question in the next section.

It is my contention that the discussion of the content/construct dichotomy which led to the discussion of the effectiveness ratings which in turn informed the concept of an Open 4, allows for an informed discussion of the basic thesis of this project. This thesis--the subject of the first two hypotheses: that those leaders who are sanctioned to effectively run large, competitive organizations will have higher CD scores than the comparison group or what would be expected based on the population norms--is discussed next.

The Differences in the CEO Group and the Comparison Samples

The discussion of the differences between the CEO group and the two comparison groups is sub-sectioned into 4 areas. In the first, the analyses of the primary hypotheses are presented. In the second, the quality of the participants and the participating organizations is discussed. In the third area, the relationship between CD level and the cultural demands is explored. Finally, a summary of this section concludes the discussion of the primary hypotheses.

Discussion of HI and HII

The discussion of the content/construct dichotomy, effectiveness and constructive developmental stage, and the notion of an Open 4, will, I hope, at

this point culminate in an effective presentation of the primary hypotheses of this dissertation. In the first hypothesis, I predicted that leaders in the CEO sample population would have significantly higher CD scores than the known, highly-educated, professional population norms summarized in Table 8. In the second hypothesis I predicted that leaders in the CEO sample population would have significantly higher CD scores than the comparison group of middle managers. Both of these hypotheses were supported quite conclusively by the quantitative analysis.

In addition, both sub-hypotheses--that a greater proportion of the CEO group CD scores would be at stage 4 or above than below stage 4, and that the comparison group of middle managers would have a distribution of scores similar to the population norms--were also supported quite conclusively. The frequency distribution of scores presented in Figure 3 (see page 116) was perhaps the most graphic illustration of this finding. Based on the expected proportions from the known, highly-educated sample, 12 of the 21 CEOs should have scored below stage 4. However, none of the CEO group participants scored less than stage 4. The comparison group of middle managers, on the other hand, had 10 of 21 participants score below stage 4, and, in addition, the obtained frequency of scores for a given CD level never missed the expected frequency by more than two participants.

From the analysis of these sub-hypotheses two important inferences can be made: 1) the CD interviews that I administered were getting at the same construct of CD level that the established highly-educated population was measured on--i.e., that there was construct validity, and 2) that characteristics of higher CD levels exhibited by the CEO group--the ability to respond to the complex demands of today's postmodern culture--are valued by the stakeholders who select individuals to lead their organizations.

The first of these points, that what was measured in the interviews, validly represented the construct of CD theory, was evidenced primarily by the correlation of the comparison group scores with the expected frequencies. If my interview technique had not allowed the full range of CD scores to emerge at the middle manager level, it could have been argued that the technique I used was flawed in that it was not effective at testing the lower levels of constructive development. However, the testing for the lower CD levels was evidenced in that the identifiable CD elements of the interviews could be aligned with the elements that CD theorists use to determine CD level. For example, the theorists claim that a subjected-ness to points of view, enduring dispositions, and concrete actualities is what characterizes stage 2 meaning construction. Albeit a surprise, because most individuals begin to transition out of this phase in adolescence, one participant did score a 3/2. It was this interview that provided much of the fodder for the stage 2 excerpts that have been presented in this chapter. Another nine participants presented constructions that were either stage 3, or in the transition between stages 3 and 4, again, exhibiting the elements of stage 3 subjected-ness that are identified by the theorists. All this to say, I feel that the interviews, and the techniques used to push the upper and lower bounds of a given individuals meaning construction, validly represented the construct of CD stage theory.

The second conclusion, that higher CD levels are valued, either intuitively or explicitly, by those stakeholders who select individuals into leadership positions, is inferred from the distribution of CD scores of the CEO group. Many other ways this point could be argued, I believe, would not preclude this conclusion. One could argue for instance, that these leaders were successful in past endeavors, which most of them were from what I could gather, and that they were asked to lead because they had had past successes,

and that past success is a good predictor of future success. I would contend, based on the findings of this study, that it is possible to have past successes and be stage 3, or in the transition from stage 3 to stage 4, but that being stage 4 or post stage 4 would allow them a better chance to make sense of the increasingly complex factors in a way as to be successful in the future. I acknowledge that this inferential step is not a small one, but it is grounded in the sound theoretical underpinning presented in the introduction. In addition, the proposition of this inference was the basis for the hypotheses that were presented in the prospectus.

I interviewed individuals at all different CD levels who shared similar contents. These contents, as noted in the first section of this chapter, included a desire to resolve conflict and the use of participative behaviors. I believe the presentation of those two contents supported the point that the content can be the same at different CD levels, but that the effectiveness of the content response is better at higher CD levels. There were, however, other common contents that were exhibited by participants of both the CEO and comparison groups which included similar personality characteristics, high intelligence, average intelligence, high task orientation, high relationship orientation, athleticism, middle aged, older aged, wealthy, highly educated, high school educated, hunters, golfers, readers, commitment to the organization, and the list could go on. While the limited gift of both the CEO group and comparison group's time did not allow for a testing of all these different contents, the ones just mentioned emerged with both groups during the interviews and in the conversations that preceded and followed the interviews. Unfortunately, the only content characteristics present in the comparison group that were not present in the CEO group were race and gender diversity. Incidentally, there

were CD ratings across the stage 3-4 to full 4 continuum for both race and gender.

All this to say, the only thing the CEO group had that the comparison group didn't have were any CD scores below stage 4. Given that the entire CEO group had CD scores of stage 4 or higher, it seems that CD level should be one of the criteria used in the leadership selection process. What I have suggested in these last few paragraphs is that the stakeholders, whether they were board members or the CEO of the holding company, likely had a sense of the meaning making ability of these leaders even though they might not say it that way. But nevertheless, the CEOs exposed their meaning making capacity in their ability to make sense of complexity. This phenomenon was also supported with the effectiveness raters as indicated by the strong correlation between their effectiveness scores and CD level.

The Quality of the Participants: A Best Practices Model

The thing that lent special credence to these findings was the quality and level of effectiveness of the leaders and their organizations. The results, therefore, reflect a "best practices" model. Thus, the finding of post 4 or Open 4 epistemology or meaning construction being predominant in this highly effective participant group speaks to the level of meaning making that may be required to lead effectively in today's organizations.

Of the 21 executive leaders that were interviewed, 11 were CEOs, 6 were Presidents, 1 was a COO (chief operation officer), 1 was a CFO (chief financial officer), and 2 were executive vice presidents with responsibilities for divisions doing more the \$300 million dollars in gross annual revenue. These 21 interviews generated over 1000 pages of interview transcription. With only two exceptions, every one of these individuals was either post 4 or an Open 4--the other two were "closed 4s" so to speak. Given that the comparison group of

middle managers had a distribution of scores that was not different than one would expect, the positive skew of the CEO group distribution, that none of them scored below stage 4, really is remarkable.

Another interesting happenstance was that the effectiveness of the participating organizations far exceeded what I had hoped for in my prospectus. The goal I set was that the organizations would be doing more than \$100 million in annual gross revenue, and that they would be at least as effective as other organizations in their respective industries if not better. The obtained group of organizations that participated averaged an annual gross of \$5 billion and were in all cases either leading their industries or growing as fast or faster than any other organizations in their industry, and in some cases both. In addition, the executive leaders of these organizations were cumulatively responsible for over \$75 billion dollars in gross annual revenue. So as far as effectiveness goes, not only were the organizations effective, they were the cream of the crop. It is probably not making too great an inferential leap to say that the leaders of these organizations were also the cream of the crop. This characteristic may help explain why there were no participants of the CEO group who scored less than stage 4, and that those who did score stage 4, did so with a style that was very open.

High CD Level as a Response to Postmodern Demands

One question that might be asked is, why is this ability to make sense of complexity important? When it comes to leading, why couldn't charisma, motivational ability, or intellect make for a successful leader? I believe the answer to these questions lies in the demands that the current culture places on today's leader. It is this subject which is addressed next.

A conclusion that can be drawn from these findings is that given other threshold levels of certain traits--intellect, skills, drive, charisma, etc.--that CD

level is a good predictor of leader effectiveness. At minimum, an argument could be made that a candidate with low CD level should be excluded as a potential candidate for the position of CEO. Robert Kegan, the author of the subject-object interview technique that was used in the analysis, and the theorist who has been one of the leaders in applying constructive developmental theory to the construct of meaning making, endorses this idea that individuals with the higher CD levels are the ones best equipped to respond effectively to the postmodern demands that impinge upon today's leaders. In his book, *In Over Our Heads: The Mental Demands of Modern Life*, he relates a conception of leadership success that demands a post 4 way of responding to today's postmodern demands. Kegan believes that successful leaders will provide "*a context in which all interested parties, the leader included, can together create a vision, mission, or purpose they can collectively uphold*" (Kegan, 1994, pp. 321-322).

If what Kegan is proposing is correct, and I believe it is, then an Open 4 way of meaning construction (at minimum) is the most effective way to respond to this postmodern demand. If, either by intuition or an overt understanding of this demand and the characteristics which best respond to it, those charged with selecting the leaders to these positions see these Open 4 or post 4 leaders as capable of responding to these demands, then this may help explain the selection of nearly all of the leaders who participated in this project being Open 4 or beyond. It may be that the only individuals capable of effectively leading in this environment are those that construct meaning at or above the 4th order, with the caveat that if the leader is embedded in the 4th order, that being an Open 4 is the most effective response from that developmental position.

When one considers the presentation of evidence from this project, the theory that the Open 4 or, even better, post 4 responses are the most effective responses to postmodern demands, the inference that effective leaders will be at one of these two developmental positions appears tenable.

Summary

The first three sections of this chapter support this theory of leader effectiveness in three qualitatively unique ways. First, the qualitative analysis of the content/construct dichotomy suggests an increasing level of complexity with each CD stage around any given content area. Postmodern demands are primarily demands of divergent, paradoxical, complex factors that come to bear on a situation. The excerpts presented in the content/construct section clearly indicate that the higher developmental stages are defined by the degree to which they can take more and more variables or factors as object. The more variables one can take as object, the more effectively one can respond to postmodern demands. That the “effective” leaders in the CEO group take more as object as a group than the population of managers in general, suggests that the inference that Open 4 or post stage 4 meaning construction should be considered as one side of the headpiece of effective leadership.

Second, the qualitative analysis of the effectiveness ratings, when combined with the quantitative analysis, paint an vivid picture of the relationship between effectiveness and CD level. This evidence corroborates the placement of “effective” CEOs by their electors into leadership positions. That two independent raters support the prediction that effective leaders of successful organizations would have higher CD scores than the comparison populations they were compared to is another piece of evidence that supports the idea of higher CD levels considered as one side of the headpiece of effective leadership.

The third section of this chapter, proposing the idea of an Open 4, also supports this theory. As mentioned earlier, 15 of the 17 participants of the CEO group who did score a stage 4 epistemology, were stage 4 in a very open way. This way which seeks input to solutions from multiple sources in order to inform the response to postmodern demands, emulates what post stage 4 leaders do merely by being post stage 4 leaders. That is, they take a perspective on multiple positions, ideas, or perspectives--they take as object multiple positions, ideas, perspectives--including the position of not being open. It is this capacity to take as object the institutions or positions that they may usually endorse that separates them from the Open 4 leader in terms of meaning construction. Therefore, this third piece of evidence also supports the theory that higher order meaning construction should be considered as one side of the headpiece of effective leadership.

These three sections of evidence, combined with the quantitative support of the first two hypotheses, that the CEO group would have higher CD scores than the two comparison populations builds a strong case for considering CD level as part of the equation of leader effectiveness. Given that the preponderance of postmodern thought suggests that postmodern demands can only be responded to effectively by post 4 leaders, or in the case of the Open 4, leaders who emulate post 4 behaviors, the case for high order CD level being a component of effective leadership is even more tenable. Therefore, I am proposing that the CD level be considered as the other side of the headpiece of leadership's Staff of Ra.

Limitations

The results of this project confirm, based on the results obtained from the participants, that effective leaders, as they were defined in Chapter 1, construct meaning at higher levels than others in the comparison samples. However, this

research is limited in a few significant ways. First and foremost, this was a middle aged, mostly white, mostly male participant group. The effectiveness raters also fit this demographic profile, as do I. Although constructivist researchers and theorists (Kegan, 1982, 1994; Kohlberg, 1969; Lahey et al, 1988) believe that this developmental phenomenon is not discriminatory with regard to gender, race, or culture, this project did nothing to either confirm or deny that position. In addition, I do not pretend to assume that as a white, middle aged male I can understand how these findings might be different for those individuals from other groups, although I think the investigation of that topic would be very informative. Nevertheless, the demographic aspects of this project potentially limit the generalizability of these findings to the aforementioned groups and cultures.

Secondly, scoring the CD interviews is a very subjective process. A great investment was made to insure that my training in the conducting and scoring of the CD interview was sound, and in addition, a highly qualified scorer was secured to gain reliability. These efforts aside, the research is also limited by the subjective nature of this process. The difficulty of doing CD interviews in the workplace, and about work themes, may also have exacerbated the problem. There is a business mantra so to speak that is learned and repeated daily. This “mantra” can sound very self-authored or stage 4. This factor may have been a limiting element of the project.

Similarly the effectiveness scorers for the excerpts, while demonstrating high interrater reliability, scored the interviews from a paradigm which took for granted the definition of effectiveness as being the Euro-centric preference for productivity and the attainment of goals. The race, gender, and age of the effectiveness raters was such that they could not be demographically

distinguished from the CEO group. These things may also be limitations of this project.

In addition, the data that were obtained through the interview process concerned a developmental process that takes one many years to make an incremental shift, and it is one that has no endpoint--no culmination (Kegan, 1994). The scores that were assigned to the interviews were cross-sectional in nature. Even with the understanding that the test-retest reliabilities are good for this developmental measure and technique, it is unclear how the cross-sectional nature of this process may speak to the longitudinal process.

Finally, I have attempted to restrain the positivistic tendencies in which I have been trained, and for which I have a natural propensity. However, in not being able to change the history of who I am, or construct my self to be, I realize that my biases and constructive developmental position have influenced the way in which I structured the methodology of this research in ways which have also limited it.

Hopefully these considerations, in addition to the ones the reader may notice, will lead to a better understanding and more effective ideas for future investigation.

Conclusion

Given the limitations just mentioned, this research is, I believe, an important first step in bringing the concept of CD theory into the realm of executive leadership. The doors that this research opens for continued investigation of this theory are many. But the most fruitful extension of this project may be in examining more specifically the ways that CD level is the other side of leadership's headpiece. This investigation should include the simultaneous measurement of many of the content factors that were presented in Chapter 1. In addition, combining both quantitative measurements and

qualitative measurements appears to paint a more complete picture of the effectiveness construct--a construct that I don't believe should be examined under the assumption that the sum of the content parts are equal to the whole. Rather, due to the two sided nature of the effectiveness headpiece, and the additional information that the construct side brings, I believe the sum of the parts, when the leaders CD level is considered, are much greater than the whole.

Obtaining the time of the executives who participated in the research was very difficult. That I was a doctoral student at a research institution was one of the primary factors in many of the subjects agreeing to participate. Had there been a perception that this research was somehow going to financially benefit me, I don't believe they would have been as altruistic with their time or the time of their middle managers. In addition, many of them responded favorably to my request in part because they would be privy to an executive summary of the results. For these reasons, individuals who are consulting with executive leaders may have the best opportunity to forward what has been accomplished in this project.

Consultants who are involved specifically in executive selection could have an especially significant impact. By gaining the results of intelligence tests, personality tests, assessment centers, and 360 degree feedback results, among others, these consultant/ researchers could paint a much clearer picture of the dynamics of the complementary aspects of the content and construct sides of the headpiece.

Another interesting line of research that could be extended from this research is the longitudinal aspects of CD theory as it related to leader development. Kegan (1994) has suggested that individuals need a "safe" environment in which to advance their constructive development. If leaders

were viewed as the drivers in a car race, these “safe places” could be developmental pit stops. I don’t believe many leaders of the organizations who participated in this project would be willing to explore the possibilities of development while going 200 miles per hour around the race track with all their followers hoping to see a developmental wreck. But those individuals who do work in leadership development and coaching may have a forum, a pit stop, where an investigation of one’s meaning construction and how it might be advanced, could take place. If the leaders see benefit in this participation for themselves and their organizations, the opportunities for understanding the dynamics of how this theory of constructive development applies to leader effectiveness could be much more richly tapped.

Finally, I want to end on a point that has become very salient to me through the process of spending time with the 42 participants who gave me their time. This theory proposes an invariant, hierarchical developmental sequence. There is a great danger in this theory being construed as exclusionary. There is a real beauty in the diversity of all these developmental positions. A postmodern view requires “a resolute emancipation from the characteristically modern urge to overcome difference and promote sameness. . . . In the plural and pluralistic world of postmodernity, every life form is permitted on principle; or, rather, no agreed principles are evident which may render any form of life impermissible” (Kegan, 1994, p. 326).

No one group, as Kegan says, should feel any more privileged than another because they are able to construct meaning in ways more complex than the other. This point seems critical to me in that one’s CD stage is not something that one chooses to be. It is a developmental progression that takes place based on experience, age, and challenge more than on intellect or

personality type. This creates a different and higher level of responsibility for those at higher stages. Kegan (1994) states:

[S]ubject-object theory makes operational the criteria for determining whether one position is actually more complex than the other or merely fancies itself so. A status conferring or judging relationship to difference is still a relationship: it does not have to create a discounting of what is less advantaged; it creates instead a connection to it. If one position is actually more complex than the other, it should be able to understand the others position *on the others own terms*, to extend empathy for the cost involved in altering that position, and to provide support for, rather than dismissal of, the prior position. If the positions are of equal complexity, each may be able to understand the other, but neither can build the bridge between orders of consciousness its false claim to superiority would imply. If ones position is actually less than the other, it should not even be able to understand the other on terms that allow the other to feel that its being is adequately understood. (pp. 333-334)

Given this, I want to emphasize what are perhaps for me the three most important learnings from this project. First is an increased understanding of the importance of constructive development and the powerful ways that different meaning constructions can affect ones ability to lead. It is not just the content of ones behavior, but how one makes sense of it that makes him or her effective at leading. Second is a renewed respect for the depth of responses that the 5th order person can generate in response to postmodern demands. The individuals who were beginning to move to the 5th order were individuals who, based on our brief interaction, appeared to be both wise and humble. As

Maslow (1971) stated in the quote presented at the beginning of this chapter, these people give you a “different view of mankind.”

Finally, I now have a more potent belief that those individuals who construct meaning at higher orders should bear the responsibility for the inclusion of those with whom they interact, regardless of the other’s developmental position. This belief is a personal value judgment I choose to endorse--that it is the responsibility of those who endorse the benefits of higher order meaning construction, and support the use of it in the selection of one individual over another, to communicate as clearly as possible that there is one demand to which only the higher order meaning maker can respond--to meet the lower stage individuals where they are; to value the diversity that they bring; to empathize with the difficulty of letting go of the old self and embedding in the new; and to create safe places and opportunities for the other to experience the freedom of taking a greater variety of situations and relationships as object in a way that allows them to respond to the demands that at times can feel suffocating.

In conclusion, I hope it is clear to the reader that CD level is not the only criterion which determines effective leadership, and that the assessment of CD level should not be used as the sole criterion in the process of selecting leaders. It may be more effective to use the assessment of CD level as the last step in the selection process. Many content oriented leadership characteristics may be highly desirable to a given organization, and those characteristics can be present at a variety of developmental positions. Assessing a candidates constructive development should be a complimentary factor in making a selection decision, and in this way, lend consideration to both the content and construct sides of leadership’s headpiece.

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January 10, 1997

Title FirstName LastName

Company

Address1

Address2

City, State PostalCode

Dear Title LastName,

I am a doctoral student in Industrial Organizational Psychology at the University of Georgia, and I am conducting research on leadership effectiveness for my dissertation. My investigation of this topic is predicated on the idea that individuals make sense of their environment in qualitatively different ways. It is my hypothesis that one of the reasons some individuals rise to highest levels of leadership in organizations is because they make sense of their environment and circumstances differently than individuals who remain (while performing effectively) in middle management. I am contacting board-elected CEOs of public companies to see if they would share the fruits of their hard won expertise with the research community, as well as an hour of one middle managers time from the organization.

I fully realize and appreciate the value of your time, and would be honored if you would allow me to impose on it. For this research, I will interview twenty CEOs of public companies for one hour each, and in addition, will interview one middle manager from each company for the same duration. The purpose of the interview is to gain an understanding of how each individual conceptualizes or makes sense of several aspects of leadership. These interviews will be recorded, transcribed (with alterations to insure the confidentiality of the participants), and evaluated for the specific ways in which the participants conceptualize different aspects of leadership.

I will share the results of this research, as well as any published work that may come from the findings, with all who participate. Your involvement in this project will benefit the field's understanding of leadership effectiveness, in addition to being a great help to me.

I will call your office in the next week to see if you would be willing to make yourself and one of your mid-level managers available for the interviews, and if so, to set an appointment. Thank you for your consideration. Your participation will be greatly appreciated.

Keith M. Eigel, Ph.D. candidate

University of Georgia, Applied Psychology Department
(770) XXX-XXXX; (404) XXX-XXXX

APPENDIX B

Consent Form

Consent Form

I agree to participate in the research titled Leadership effectiveness: A constructive developmental view and investigation, which is being conducted by Keith M. Eigel, Applied Psychology Department, 404-257-0203. I understand that participation is entirely voluntary; I can withdraw my consent at any time without penalty and have the results of the participation, to the extent that it can be identified as mine returned to me, removed from the research records, or destroyed.

The following points have been explained to me:

1. The reason for the research is to investigate the differences in the way individuals make sense or understand different leadership topics as a function of leadership effectiveness. The knowledge that is gained through this research is expected to contribute to the understanding of leadership effectiveness, and to the body of leadership research. The participant may learn from the results of the research as well.
2. Each participant will be given 4 cards with leadership topics written on them. They will be asked in a recorded interview about specific personal situations which the cards bring to mind. These interviews will be scored by qualified scorers for the qualitatively unique ways in which the individuals make sense of these situations.
3. The only discomfort that is foreseen is the potential discomfort that comes from self disclosure. No other discomforts or stresses are foreseen.
4. Participation will have no effect on employment status. The results of participation will not be included in any employment records nor will the results of any participants interview be shared in any identifiable form. All tapes will be destroyed or erased after an anonymous transcription has been made.
5. The results of this participation will be confidential, and will not be released in any individually identifiable form without my prior consent, unless otherwise required by law.
6. The researcher will answer any further questions about the research , now or during the course of the project.

Signature of Researcher

Date

Signature of Participant

Date

PLEASE SIGN BOTH COPIES. KEEP ONE AND RETURN THE OTHER TO THE RESEARCHER

Research at the University of Georgia which involves human participants is overseen by the Institutional Review Board. Questions or problems regarding your rights as a participant should be addressed to Julia Alexander; Institutional Review Board; Office of the V.P. for Research; the University of Georgia; 606A Graduate Studies Research Center; Athens, GA 30602-7411; Telephone (706) 542 6514.
