

THE CREATION OF CURRICULUM REALITY:
METAPHORS IN EDUCATION

By

PAMELA G. FRY

Bachelor of Science in Education
University of Oklahoma
Norman, Oklahoma
1979

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1986

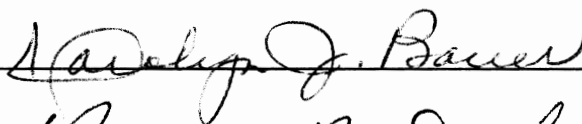
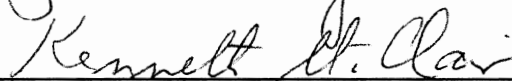
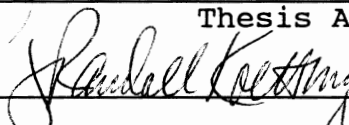
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Dean of the Graduate College

PREFACE

This study explores the metaphorical expression of teachers to gain insight regarding beliefs and values which constitute ideas concerning curriculum. Metaphor is presented as a fundamental means to organize and communicate thoughts concerning reality. A description and interpretative analysis of metaphoric language suggest new visions of curriculum are needed and may be expressed through the vitality of metaphor.

It is with much gratitude and appreciation I thank the members of my committee who collectively displayed tremendous trust in my ability throughout this endeavor. Special thanks are given to Dr. Russell Dobson who inspired my initial interest in curricular language and, as adviser, contributed greatly to the meaningfulness of this study. I am also grateful to Dr. Carolyn Bauer who has provided boundless support, encouragement, and wisdom throughout my doctoral program. The thoughtful suggestions and insights provided by Dr. J. Randall Koetting and Dr. Kenneth Saint Clair were appreciated and compose an integral dimension of this study.

It is to my family I extend the deepest thanks for their love and patience. My husband, Don, remained a source of

strength and confidence in which to launch and pursue a personal vision. My son, ADAM, always provided necessary, unplanned diversions and at four years of age requested his name in "big letters" so he could read it in my "book." To my parents, Joe and Benna Martin, I convey heartfelt thanks for a life time of beautiful experiences.

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CHAPTER I

INTRODUCTION

Significance of this Study

Recent headlines in Education Week (June 7, 1989) proclaimed "(Secretary of Education) Cavazos Unveils Plan to Combat Loan Defaults." The article continues by framing the discussion in military vernacular using words and phrases including: "graduated attack"; "cracking down"; "sanctions"; "to enforce"; "throw bombs"; "removal trigger"; "Trade schools (are) hit."

By framing the situation in terms of war, a certain reality is created whereby aggressive economic and political actions can be more easily justified. This is but one example of how language creates reality specifically through metaphorical language, that is, representing "the facts of mental life as if they belong to one logical type or category (or range of types or categories) when they actually belong to another" (Ryle, 1949, p. 16). As Hawkes (1972) states:

Language, . . . , is emphatically not the 'dress' of thought, that is, the medium through which we communicate to each other information about reality that already exists in the 'real world' outside us. On the contrary, language causes reality to exist. . . . By

the juxtaposition of elements whose interaction brings about a new dimension . . . metaphor can reasonably be said to create new reality, and to secure that reality within the language, where it is accessible to people who speak it. (p. 58-63)

The underlying assumption of Hawkes' position is that each human subjectively constructs reality. Ortony (1979) presents a useful description of constructivist and nonconstructivist approaches to metaphor which are best visualized as a continuum spanning the two extreme positions. The nonconstructivist approach is based in positivism whereby beliefs are thought to be validated only through verifiable experiences (positive methods). Such evidenced reality is expressed through unambiguous, literal description. Therefore, other uses of language such as the creative use of metaphor are deemed meaningless by the positivist searching for objective reality. In the nonconstructivist framework, metaphors are considered deviant or parasitic upon normal usage. Ortony (1979) summarizes this position:

Metaphors characterize rhetoric, not scientific discourse. They are fuzzy and vague, frill appropriate for the purposes of the politician and of the poet, but not for those of the scientist, who is attempting to furnish an objective description of physical reality. (p. 3)

In contrast, a constructivist approach characterizes reality as based on the interaction of new, contextually-based experiences and of knowledge assumed from past experiences. Language provides the conceptual categories to organize and communicate thoughts concerning reality. Therefore, the objective world is inaccessible although humans attempt to approximate it by the construction of personalized realities within the limitation of individual knowledge and language. Language, perception, and knowledge are inextricably interdependent (Ortony, 1979).

A second assumption of this study amenable to the constructivist view considers metaphor as a fundamental thought process for creating language thereby structuring thought. Thus, metaphors significantly constitute one's reality. "Metaphors are not only symptoms of the way events are perceived but also factors in shaping perception" (Rappoport, 1952, p. 205).

Metaphor, . . . , is not fanciful 'embroidery' of the facts. It is a way of experiencing the facts. It is a way of thinking and of living; an imaginative projection of the truth. As such, it is at the heart of the 'made.' (Hawkes, 1972, p. 39)

Curriculum theorizing may be defined as the potential "creation of reality" (Macdonald, 1982, p.56). Therefore, language as characterized in this study is an integral dimension of the curriculum theorizing process and a crucial

area of study. Within this orientation and for the purposes of this study, curriculum is "broadly conceived as encompassing the total educational environment of the school" (Huenecke, 1982, p. 292). The nature of the curriculum theorizing process is further clarified by Dobson and Dobson (1987) as the construction of reality through congruence ("introspection"); definition ("a personal frame of reference"); and language ("ordering and reporting of curriculum thought"). These components work in an interdependent, reciprocal manner (p. 281) not unlike the aforementioned constructivist synergism of language, perception, and knowledge. Due to the interplay of the three aspects of curriculum theorizing, language form including metaphor, structures curriculum thought (reality). In addition, curriculum theorizing is an expression of personal values reflecting one's subjective reality; therefore, the types of metaphors we create for curriculum reflect those values and subsequently the way schooling occurs. Dobson and Dobson (1987) state:

Words serve to produce a paradoxical situation, the freezing and unfreezing of reality. With the current emphasis on utilitarian interpretations and product definitions in the field of curriculum, words tend to provide more of a freezing function. . . . Language, which is intended to describe curriculum reality becomes reality. (p. 276)

An example of this process reflecting utilitarian values regarding curriculum is the metaphor of "school is factory." Eisner (1985) writes:

The dominant image of schooling in America has been the factory and the dominant image of teaching and learning the assembly line. These images underestimate the complexities of teaching and neglect the differences between education and training. (p. 355)

The two subjects of this metaphor, school and factory, have a long and close association as illustrated by historical analysis. J. F. Bobbitt (1912) was the first to translate Frederick Taylor's principles of scientific management to curriculum with his article, "The Elimination of Waste in America" (Kliebard, 1986). In following this metaphor of schooling based on management principles (as factory), Bobbitt referred to the school building as "the plant"; the superintendent as "the educational engineer"; and reaching educational goals in terms of "percentages of efficiency." Kliebard (1986) contends, "It provided the emerging curriculum field with the root metaphor on which a new and powerful theory of curriculum could be built" (p. 98). As documented by Getzels, Lipham, and Campbell (1968), similar approaches specifically designed for educational administration including the standardization of time for administrative tasks were also developed. Contemporary models have flourished, exemplified by the use of such systems as Management by Objectives applied to educational

settings. The influence of the efficiency movement in education is best characterized by the pervasiveness of the "Tyler Rationale." The rationale introduced in Ralph Tyler's book, Basic Principles of Curriculum and Instruction (1949), is based on the following four questions:

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained? (p. 1)

These questions have been translated into mechanistic formulas and significantly influenced the direction of curriculum theory (Schubert, 1986). These translations include specific behavioral objectives, constrictive "scientific" teaching models, and the widespread use of standardized testing.

As illustrated by a brief historical analysis of the metaphor, "the school is factory," its influence is well documented. Has this metaphor become moribund, that is, frozen as reality? Consider the following excerpt from a newspaper's editorial page:

In what other field can employees demand salary increases when they are failing to meet the goals of employers? Only teachers can produce defective

or mediocre products and claim that the product will be better in the future. (Tulsa World, 3/16/88)

The need for further exploration of the factory metaphor is apparent and constitutes one focus of this study although not the extent of the exploration of metaphor. Rather, study of various metaphoric language used by teachers will serve as a means of gaining insight into curriculum thought (theory-making). For example, other common metaphors for schooling as identified by Kliebard (1972) are: 1) the metaphor of growth -- "The curriculum is the greenhouse where students will grow and develop to their fullest potential under the care of a wise and patient gardener" (p. 403); and 2) the metaphor of travel -- "the curriculum is a route over which students will travel under the leadership of an experienced guide and companion" (p. 403). Examples of additional metaphors will be presented in chapter three.

The importance of the examination of metaphor is further illuminated by Kliebard (1982): ". . . although metaphors are not identical to theories as we know them in the curriculum field, they provide the seed from which theory may take root" (p. 15). In this capacity, "as seeds of theory," the study of metaphors provides for increasingly meaningful curriculum discourse. Furthermore, as Dobson, Dobson, and Koetting (1987) propose: "The power of words (language) is probably the most overlooked, least understood, and ultimately neglected phenomenon in the field

of education" (p. 10).

Guiding Questions of this Study

The intent of this study is to explore metaphorical expression of teachers as a means of understanding the beliefs (values) which constitute their respective realities concerning curriculum. The importance of understanding such values can not be underestimated since these values are translated to practices of schooling. Comments concerning curriculum reality were gathered by interviewing teachers in a conversational mode of research. The guiding questions of this investigation can be summarized as follows:

1. What is the significance of metaphoric language in the creation of reality, specifically the reality of curriculum?
2. What metaphoric language do teachers use to describe perceptions of curriculum reality?
3. What implications, if any, does the language of teachers yield?

Assumptions of this Study

This exploration of metaphor is a hermeneutical venture to gain and share insights concerning curriculum study through interpretative dialogue. Emerging from this orientation, assumptions are:

1. Humans subjectively construct reality based on the interaction of new, contextually-based experiences and of knowledge assumed from past experiences. Language provides the conceptual categories to organize and communicate

thoughts concerning reality.

2. Language, perception, and knowledge are interdependent.

3. Metaphor is a fundamental process for creating language; therefore, structuring thought.

4. The generation of metaphor is a means of perceiving, structuring, and communicating one's reality. It may be considered a theorizing process.

5. Curriculum theorizing is an expression of personal values (subjective reality); therefore, the types of metaphors we create for curriculum reflect these values.

6. The study of language form, specifically metaphor, as it relates to curriculum persists as a neglected yet crucial area of inquiry.

Organization of this Study

An introductory discussion concerning the study's significance, guiding questions, assumptions, and organization is presented in chapter one. The second chapter addresses the nature of metaphor including the definition, creation, interactional qualities, generative potential, and danger of metaphor. A review of literature regarding studies in education which examine metaphor is the focus of chapter three. Chapter four provides demographic information and a description of the research process as well as the guiding research orientation assumed in this study. The fifth chapter entails an interpretative analysis of the metaphoric language of teachers utilizing a

Habermasian framework reflecting three areas of knowledge-constitutive, human interests -- control, understanding, and emancipation. Implications conveyed by the interpretative analysis are addressed in chapter six. Finally, chapter seven summarizes my endeavor to describe the realities of contemporary curriculum.

CHAPTER II

THE NATURE OF METAPHOR

Metaphoric Language

Capturing the essence of metaphor with a concise definition is a formidable, if not impossible, task.

Consider the following characterizations of metaphor:

Any supreme insight is metaphor.

-H. Parkhurst

To know is to use metaphor.

-M. Friquenon

Whole works of scientific research, even schools are hardly more than patent repetition, in all its ramifications of a fertile metaphor.

-Kenneth Burke

All thinking is metaphorical.

-Robert Frost

Poets, it is said, anticipate science. . . The finest instrument of these discoveries is metaphor.

-Sir Walter Raleigh

The Greek word "metaphora" derived from "meta" meaning over or across and "pherein," to bring across, serves as a linguistic antecedent to the word metaphor. Ryle's definition of metaphor presented in chapter one conveys the nature of the transference process whereby aspects of one

concept are "brought across" to another. An example of metaphor is eloquently expressed by Shakespeare:

Life's but a walking shadow, poor player
That struts and frets his hour upon the stage
And then is heard no more.

(Macbeth, V. 24-26)

The significance of the interactional process between two concepts such as life and shadow will be addressed later in this chapter.

Although metaphor is considered the fundamental trope, other forms of transference exist as versions of "metaphor's prototype" (Hawkes, 1972, p. 2). While a metaphor implies a comparison between concepts, simile states the comparison between concepts using "like," "as," or occasionally "than." For example, in the words of Emily Dickinson, "there is no frigate like a book." Although Hawkes (1972) asserts that expression of simile is often considered metaphor's "poor relation" (p. 3), Wheelwright (1962) explicates its potential importance: "The test of essential metaphor is not any rule of grammatical form, but rather the quality of semantic transformation that is brought about" (p. 71).

Another form of metaphoric transference is metonymy, that is "the name of a thing is transferred to take the place of something else with which it is associated" (Hawkes, 1972, p. 4). For example, in reference to the evaluation of a school-based writing program, authors reported, "Teachers . . . have set aside their red pencils"

(Educational Leadership, April, 1989, p. 70). "Red pencils" metaphorically represent traditional grading practices .

In addition, synecdoche is a special form of metonymy whereby "the part stands for the whole" (Lakoff & Johnson, 1980, p. 36) as in "The automobile is clogging our highways (= the collection of automobiles)" (p. 36).

Although distinctions can be made among metaphor, simile, and metonymy, all serve to conceptualize one idea in terms of another. Therefore, these forms of literal to figurative linguistic transference compose metaphoric language as analyzed in this study. Their significance as a transmutational means to organize, communicate, and construct reality will be established in this chapter.

The Creation of Metaphoric Expression

Lakoff and Johnson (1980) characterize metaphors in three interrelated ways: structural; orientational; and ontological. Structural or basic metaphors present one concept "metaphorically structured in terms of another" (p. 14). For example, "Time is money" (p. 7). Corollary metaphorical expressions reflect the basic metaphor:

"You're wasting my time."

"This gadget will save you hours."

"I don't have the time to give you."

"How do you spend your time these days?" (p. 8)

Lakoff and Johnson note a deceiving aspect of such metaphorical systematicity: "In allowing us to focus on one aspect of a concept . . . , a metaphorical concept can keep

us from focusing on other aspects of the concept that are inconsistent with that metaphor" (p. 10). For example, when argument is framed as war ("Your claims are indefensible," p. 4), one may neglect the cooperative dimensions of arguing (p. 10). The authors propose a particularly pervasive and deceptive metaphor as "conduit metaphor," that is, "(t)he speaker puts ideas (objects) into words (containers) and send them (along a conduit) to a hearer who takes the idea/objects out of the word/containers" (p 10). For example, I got an idea from him.

Another type of metaphor is considered "orientational" since it derives from experiential spatial orientations such as up-down, front-back (p. 14). Examples include: "Happy is up; Sad is down" -- "I am feeling up. . . . My spirits sank," and "Conscious is up; Unconscious is down" -- "Get up. . . . He fell asleep" (p. 15). With regard to orientational metaphor, Lakoff and Johnson observe, most "fundamental concepts are organized in terms of one or more spatialization metaphors" (p. 17).

Spatialization metaphors are rooted in physical and cultural experience; they are not randomly assigned. A metaphor can serve as a vehicle for understanding a concept only by virtue of its experiential base. . . . So-called purely intellectual concepts, e.g., the concepts in a scientific theory, are often--perhaps always--based on metaphors that have a physical or cultural basis. The high in 'high-energy particles'

is based on MORE IS UP. (p. 18-19)

A third category of metaphor emerges from experiences with physical objects which "provide the bases for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions, ideas, etc., as entities and substances" (p. 25). For example, science is often viewed as an entity and even personified as in the following example: "As science becomes bigger and more ponderous, it may face paralysis because of its own weight" (The Chronicles of Higher Education, June 7, 1989, p. B1). Other examples include: "Inflation is lowering our standard of living" (Lakoff & Johnson, 1980. p. 26) or with reference to the mind as a machine, "We're still trying to grind out the solution to this equation" (p. 27).

In its broadest interpretation, all knowledge may be considered metaphorical. Edie (1963) maintains, when mental operations or processes were first named, they were named by means of a metaphorical use of the terminology of sensation" (p. 550-551). Using the first Greek word for "sight," Edie explains: "Derkesthal" meaning to have a particular look in one's eye is derived from the word for snake, "Drakon" -- "the seeing one." In this manner the abstract-conception of sight was metaphorically drawn to the concrete-conception of snake. Edie further suggests, "Every word was originally a designation of a concrete world phenomenon. . . . The building of metaphors on metaphors . . . enabled man little by little to extend his ability to

discover and express meaning. Human comprehension involves metaphor at every step" (p. 552).

Another example of the relationship between metaphor and construction of subjective reality is provided by Egan (1988). His essay notes the functioning of the heart eluded understanding until the invention of the pump was accomplished. Egan states:

The function of the heart became clear -- perhaps we might even say 'became knowable' after the invention of the pump. . . . (T)he pump did not just provide clues to the functioning of the heart, but rather that until its invention we had nothing adequate to think with about the heart. Our technologies provide analogies which we can use to reflect back on ourselves. (p. 70)

In addition, Egan speculates that we are proceeding through a similar process of formulating metaphors to understand the brain with the most recent example being "the brain is a computer." As illustrated by these examples, abstract-conceptions are attempted to be explained by the concrete-conceptions of reality. Thus, metaphor unites imagination with reason (Lakoff & Johnson, 1980). The significance of the metaphoric creation between the unknown and known will be further explored by analyzing the interactional function of metaphoric thought.

An Interactional View of Metaphor

The value of metaphoric language has long been debated.

Black (1962) proposes three distinct views of metaphor reflecting this controversy: substitution theory, comparison theory, and interaction theory.

Substitution theory assumes metaphors as decorations of speech which are nice but not essential as described in a nonconstructivist framework. Metaphorical statements such as "Richard is a lion" may be translated to congruous literal statements such as "Richard is brave" (Black, 1962, p. 33). Simply stated, the substitution of a literal phrase or word for the metaphor is possible. Metaphor serves to lend pleasure to rhetoric and "plugs the gaps in the literal vocabulary" (p. 32).

A second view, comparison theory, is considered by Black as a special case of substitution theory. Regarding the phrase, "Richard is a lion," the comparison view goes beyond the substitution view by interpreting the statement "as being about lions as well as about Richard," that is, "Richard is like a lion (in being brave)" (p. 36).

A third conception of metaphor, amenable to the assumptions of this study, is an interaction definition. Black argues, "It would be more illuminating . . . to say that the metaphor creates the similarity than to say that it formulates some similarity antecedently existing" (p. 37). Metaphor creates similarities rather than merely a linguistic catachresis. Brimfield (1983) states, ". . . the power of metaphor lies in its inability to be paraphrased"; thus, the conception of metaphor as an expendable

substitution for literalness is dismissed. Paivio (1979) and Ortony (1975) characterize this premise as the "inexpressibility hypothesis." Haynes (1975) writes that it is "an irreducible synthesis by juxtaposition" (p. 273). The interaction definition may be summarized as follows:

1. Two subjects constitute each metaphorical statement. One is identified as primary subject and the other as a secondary (or subsidiary) subject. (Black, 1979, p. 28)
2. The subsidiary subject may be regarded as a system rather than as a thing. In other words, a single word may convey many associated implications. (p. 28)
3. The metaphor proceeds by applying to the primary subject the system of associated implications of the secondary subject. (Black, 1962, p. 44)
Turbayne (1962) regards this process as "sort-crossing."
4. "The metaphor selects, emphasizes, suppresses, and organizes features of the principal subject by implying statements about it that normally apply to the subsidiary subject" (Black, 1962, p. 44).
5. In the context of the metaphorical expression, the primary and secondary subjects interact in the following ways: "a) the presence of the primary subject incites the hearer to select some

of the secondary subject's properties; and b) invites him to construct a parallel implication-complex that can fit the primary subject; and c) reciprocity induces parallel changes in the secondary subject" (Black, 1979, p. 29). This aspect of the metaphorical statement is the hallmark of the interactional position.

The following example by Kliebard (1982) further clarifies the interactional process:

When we say that Charley (principal subject) is a rat (subsidiary subject), we are setting up a system of interaction in which some 'commonplaces' that we associate (rightly or wrongly) with rat-ness are transferred over to Charley in a way that makes us see Charley differently. (It is also possible that we will see rats as more human). (p. 14)

The interactional nature of the primary and secondary subjects creates new meaning. The new meaning provides a different way of perceiving and subsequently of structuring reality. Regarding the epistemological link between the interactional process of metaphor and theory-making, Kliebard continues:

It can be argued that metaphors and theories have in common the effort to organize thinking by setting in motion an interaction between the familiar and/or comprehensible on one hand and

the thing to be explained on the other. (p. 14).

In summary, the power of metaphor lies not only in its inability to be literally translated but due to its use in the generation of alternative views of reality; thus, in the formulation of theories to explain phenomena. Kliebard (1982) writes, "Not all metaphor, obviously, achieves the status of theory, but much, if not all theory, has its roots in metaphor" (p. 14). Furthermore, the literal language of the nonconstructivist position is restricted and unable to generate necessary new perspectives (theories) to view multiple subjective realities. Regarding this point, the focus of this chapter will now be directed to the importance of the generation of metaphors as a means of perceiving structuring, and communicating reality.

Generative Metaphor

Schon (1979) describes metaphors which offer significantly different ways of perceiving as generative metaphors -- "a special version of SEEING-AS by which we gain a new perspective of the world" (p. 255).

Metaphor, . . . allows us to expand or alter reality by transposing features of present reality on new territory, abstracting from both to create new meaning. (Jones, 1982, p. 10)

Schon (1979) contends the interpretation and understanding of experiences are a hermeneutical problem whereby generative metaphor is a heuristic tool of analysis. Supporting this notion, Nowottny (1962) suggests,

"(Metaphors serve) as a prime means of seeing into the life not of things but of the creative human consciousness, framer of its own world" (p. 89).

The significance of generative metaphor can be further established by examining its relationship to paradigmatic realities known as world views. A world view may be characterized in an ontological sense as how reality is perceived and ordered. It is a frame of reference which establishes "an order to explain the hows and why of daily existence . . . (I)ts individual adherents are, for the most part, unconscious of how it affects the way they do things and how they perceive reality around them" (Rifkin, 1981, p. 5). It is internalized and remains unquestioned. "It is unquestioned because it does not seem questionable" (Schopen, 1989, p. 9). In this manner, our unconscious internalized perceptions of reality remain literally inexpressible. Since language is the means to order and communicate ideas concerning reality, metaphor becomes a vital way to express our "tacit knowledge" (Polanyi, 1966) in so far as it may be expressed (Nisbet, 1969). Therefore, generative metaphors emerge as means to describe world view, that is, internalized perceptions of reality, since we continually formulate comparisons between the known and the unknown.

Pepper (1942) proposes four root metaphors (formism, mechanism, contextualism, organicism) and demonstrates them as the frames of reference from which paradigmatic

thought, specifically scientific paradigms, emerges. Formism and mechanism represent analytical world theories and the other two, synthetic. Pepper regards the root metaphor of formism as similarity:

The theory of truth which grows out of the formistic categories is the correspondence theory. Truth consists in a similarity or correspondence between two or more things one of which is said to be true of the others. (p. 180)

The machine is the root metaphor for mechanism according to Pepper. Ting-Toomey (1983) succinctly summarizes its implications:

- 1) Individuals respond to their outer reality in a lawlike, 'mechanistic' manner (mechanism);
- 2) Reality assumes an objective, ontological existence separate from the individual cultural members; and
- 3) Individuals process external information through classification, typification, comparison and contrast procedures (formistic thinking). (p. 11)

Pepper contends root metaphors for contextualism which are exemplified by Pragmatism "cannot be denoted even to a first approximation by well-known common-sense concepts such as similarity, the artifact, or the machine" (p. 232). Unlike the analytical theories, "there is no final or complete analysis of anything" in contextualism (p. 249). Pepper continues:

The reason for this is that what is analyzed

is categorially an event, and the analysis of an event consists in the exhibition of texture, and the exhibition of its texture is the discrimination of strands, and the full discrimination of strands is the exhibition of other textures in the context of being analyzed -- textures from which the strands of the texture being analyzed gain part of their quality. (p. 249)

No "preferable terms" offer "safe reference" to the root metaphor of organicism (p. 280). Valuing the organic process of every event in the world, assumptions based on the organicist's position are stated by Ting-Tooney as:

1. Individuals sustain and create symbolic reality within rule-like, patterned structure (organicism);
- 2) Reality assumes a subjective and an intersubjective existence and is manifested through the interactive process of symbolic discourse; and
- 3) Individuals process streams of information . . . with the flow of the social and cultural contexts (contextual thinking). (p. 11)

The four root metaphors serve as fundamental generative metaphors to express ontological orientations to the world and were derived by Pepper largely through philosophical analysis. Further indicative of the significance of fundamental generative metaphor is a historical analysis of the relationship between metaphor and world view by Robert Nisbet (1969). Pepper's and Nisbet's commentaries may be

considered complementary depictions of root metaphor. As revealed by Nisbet's analysis, root metaphors expressing world view generally transformed from synthetic to analytic interests.

The early Greeks adopted an initial world view of "physis" --the world is engaged in cycles of growth and decay (Nisbet, 1969). Similar to eastern religions' conceptions of a cyclical universe, the Greeks assumed an organic view of the universe based on concrete observations of seasons and plant life. Heraclitus (533-475 B. C.) introduced that cyclical changes are guided by intelligent laws (logos), and wisdom is the understanding of the hidden harmony of these laws. Subsequently, physis gained a sense of ideal norms. Cycles of growth were no longer viewed as simply existing but existing in the direction of an ideal state. Later Greeks known as Ionians further revolutionized the concept of physis by proposing: the universe possesses internal order and is knowable and predictable. As Nisbet (1969) writes:

(T)he task of the philosopher or scientist (was) clear . . . to find out the physis of each; to learn its original condition; its successive stages of development, . . . and finally, what its 'end' is; that is, its final form which may be said to be the ultimate cause. . . .(p. 23).

Drawing from Greek and Hebrew tradition, St. Augustine presented a startling metaphor of genesis and decay whereby

the cycle was singular, never to be repeated. The singular cycle was also paralleled to each human's life as in traditional Christian theology (Nisbet, 1969).

For once Christ died for our sins, and, rising from the dead, he dieth not more. (St. Augustine as quoted by Nisbet, p. 62)

Furthermore, the doctrines of historical necessity (inevitability) were established whereby "all that has actually happened . . . has necessarily happened; that, not merely the development of forms and types, but the history of events, acts, and motives, has been necessary" (Nisbet, p. 79).

Another rendition of world view was ushered in by Francis Bacon and Renee Descartes during the seventeenth century. Bacon attempted to find a methodology to control and predict the universe. In the process of formulating the scientific method, he separated the observer from the observed to establish the neutrality of objective knowledge. Complementing this position, Descartes considered mathematics as the key to understanding the universe. As Capra (1984) recounts, Descartes strived to construct a "complete science of nature The belief in certainty of scientific knowledge lies at the very basis of Cartesian philosophy and the world view derived from it," (p. 57). The shift to an inorganic world view was crystallized by the discoveries of Newton. Subsequently, the metaphor of a mechanistic, clockwork universe became ingrained in human

consciousness and unconsciousness. The Newtonian metaphor of a clock represented a concrete conception in which to explain the abstract conception of the universe. Lucas (1985) observes, the humanistic qualities of the earlier world views were replaced by "mechanomorphism," that is, ". . . reducing knowable reality to mechanical dimensions . . . the view of people as automatons or machines without independent will or volition of their own" (p. 168).

Various contemporary writers including Capra (1984); Ferguson (1980); and Rifkin (1981) contend a new world view is emerging as the mechanistic world view of Newtonian physics fails to address the discoveries of quantum physics. An emerging generative metaphor is the conception of a holistic universe. A potential derivative metaphor is that of a hologram (Ferguson, 1980; Capra, 1984). Holography connotes an open system that is interconnected whereby causes and effects can not be separated.

In sum, generative metaphor has been presented as the fundamental means to express and create paradigmatic realities which are ultimately inexpressible through literal language. Abuse of metaphor occurs when metaphor is taken as a literal interpretation of reality thereby constricting thought and providing deception. This point will be examined by the following discussion concerning victimization by metaphor.

The Danger of Metaphor

Related to the generative nature of metaphor is the possibility that metaphors eventually become interpreted as reality, often with deleterious consequences. "Metaphors have a way of becoming literal and if we lose sight of what is metaphorical about metaphor, we may restrict our thinking or simply deceive ourselves" (Kliebard, 1982, p. 14). To further explain this process, Turbayne (1970) describes three stages in the life of a metaphor. First is the assignment of a name given to a subject whereby the name belongs to another. Our first response is to deny the metaphor in favor of literalness. For example, consider Turbayne's (1970) metaphor, "the human body is a machine" (p. 22). At first, one rejects the expression since a body is a living organism -- a person, machines are merely inanimate combinations of parts working together. In the second stage, one accepts the metaphor and suspends disbelief to engage imaginatively in its newly illuminated dimensions. Since the metaphor is "new," one is not deceived or thinking is not restricted by it. The final phase represents a dangerous stage when the metaphor is taken literally. The thing pretended has now become real -- "What had before been models are now taken for the things modeled" (Turbayne, 1970, p. 26). The metaphor is "dead: and our "willing sense of make-believe is converted into a literal prison" (Kliebard, 1982, p. 14). Turbayne (1970) proposes a reductionist process leads to the "victimization"

by metaphor. Simply stated, rather than consciously using metaphors, we become unconsciously victimized by metaphor. "The long continued association of two ideas, especially if the association has theoretical and practical benefit, tends to result in our confusing them" (Turbayne, 1970, p. 26). Returning to the earlier example of "the body is a machine," by the third stage machine has become a mechanism for human bodies which "now differ only in degree, not in kind" (Turbayne, 1970, p. 26). It should be noted that not all moribund metaphors translate to harmful constrictions of thinking. For example, a person described as feeling high or low is a metaphorical expression which has lost its "as if" quality and now taken as literal (Eisner, 1985, p. 228). Nevertheless, the potential of metaphor includes not only the power to articulate new ideas but the power to constrict thinking as well. Kliebard (1982) suggests that "sophistication" is the best defense against victimization by metaphor -- "Conscious pretense, after all is not delusion" (p. 15).

CHAPTER III

REVIEW OF LITERATURE

Historical Antecedents

Attention to metaphor is traceable to Aristotle whose writings in the Poetics and the Rhetoric evolved to the classical view of metaphor previously discussed as comparison theory. Three uses of language were proposed by Aristotle as logic, rhetoric, and poetics with distinctions among them due to metaphor (Hawkes, 1972). Lacking clarity and precision, metaphor was relegated to poetics. The Aristotelean tradition was adopted by Cicero, Quintilian, (Hawkes, 1972) and later by philosophers such as Locke and Hobbes who found the use of metaphor absurd and misleading (Lakoff & Johnson, 1980).

Related to a Platonic view of the universe, the Romantic Movement of the nineteenth century, exemplified by the writings of Shelley, Vico, Wordsworth, and Coleridge, provided:

. . . sharp reaction to Aristotelean thinking of the preceding century. (The Romantics) tend to proclaim metaphor's 'organic' relationship to language as a whole, and to lay stress on its vital function as an expression of the faculty of imagination. (Hawkes, 1972, p. 34)

More recently, the works of I. A. Richards including The Philosophy of Rhetoric in 1936 provided the groundwork for contemporary study of metaphor. "Words are the meeting points at which regions of experience which never combine in sensation or intuition come together" (Richards, 1936, p. 131). Further examining the importance of language in reality creation were W. A. Urban's Language and Reality (1939); the works of Benjamin Whorf and associates including Language, Thought, and Reality (1956); and Language, Thought, and Culture edited by Paul Henle (1958). Notable publications specifically addressing the relevance of metaphor included those by Phillip Wheelwright (1954, 1962), Max Black (1962) and Colin Turbayne (1970, first published in 1962). In addition, Metaphor and Thought published in 1979 as a collection of essays written by distinguished philosophers, linguists, educators, and psychologists firmly established the multidisciplinary nature of metaphor.

Writings in education regarding metaphor can be arbitrarily divided into three related categories: acquisition of metaphorical understanding by children; language arts methods of teaching metaphor; and metaphor as a means of analysis for various types of educational inquiry. The last category is germane to this investigation and will be reviewed in this chapter.

An early attempt to address the importance of language and educational thought was Israel Scheffler's philosophical analysis entitled The Language of Education published in

1960. One chapter is devoted to educational metaphors specifically the discussion of growth and molding. Scheffler contends that metaphor may be criticized in two ways: 1) Is a given metaphor "trivial" or "sterile," therefore unimportant? 2) What are the limitations of a certain metaphor?:

. . . (A) comparison of alternative metaphors may be as illuminating as a comparison of alternative theories, in indicating the many-faceted character of the subject. . . .(W)here a particular metaphor is dominant, comparison helps in determining its limitations, and in opening up fresh possibilities of thought and action." (p. 49)

Interest in the language of schooling continued and was manifested by the proceedings of the 1966 Association for Supervision and Curriculum Development (ASCD) Research Institute under the leadership of Arthur Combs. The institute was devoted to "the problems of language and meaning" in education. Combs stated:

. . . (M)any educators are deeply concerned that the human aspects of schooling are often neglected. Language, after all, is the vehicle by which most teaching is accomplished. Meaning is the human goal of learning, the ultimate test of any curriculum change. (p. V. in Macdonald & Leeper, 1966)

James Macdonald (1966), co-editor of the publication of the proceedings, Language and Meaning, metaphorically

proclaimed the purpose of the new area of curriculum inquiry:

. . . to stretch the rubber band of educational thought a bit to include a clearer understanding of language, meaning, and motivation within the knowledge package. (p. 6)

In the same publication, Dwayne Huebner attacked two myths in curricular language, that is "learning" and "purpose." Myth in this context may be considered extended metaphor. Furthermore, he proposed five value frameworks -- technical, political, scientific, aesthetic, and ethical -- in which to view educational activity, specifically the language used to describe such activity.

Nine years after the institute, Schools in Search of Meaning, edited by Macdonald and Esther Zaret, was published as the 1975 ASCD yearbook. Among the most urgent issues to be addressed was that "the development of relevant personal meanings in schools is a precarious and doubtful endeavor" (p. 1). To illuminate the ethical dimensions of this issue, Michael Apple examined educational language, for example, "labeling," "poorly motivated," "slow learner," and "underachiever." "(M)uch of our language, while seemingly neutral, is not neutral in its impact nor is it unbiased in regard to existing institutions of schooling" (p. 123). The overarching theme of Apple's essay entails awareness, that is, awareness of the language we use in creating the reality of schooling.

Contemporary Studies of Metaphor
in Education

The study of language utilizing metaphor as a means to gain insight has recently been addressed by numerous educational scholars. As with Apple's contribution to the study of metaphor, the uniting contribution of the works to be reviewed is increased awareness regarding the role of language in our lives and specifically in our schools.

Most significant in the area of supervision is the work of Thomas Sergiovanni (1987, 1989) who refers to the reliance on educational models and theories which "do not reflect the realities of teaching and supervisory practice" (1987, p. 231) as "dominating landscapes that program our thinking and create our reality" (p. 231). Sergiovanni (1989) clarifies the role of metaphor in supervision:

As metaphor, a model would enlarge our vision, enhance our understanding, and inform our professional judgment. It would help us make better decisions about practice but would not tell us what to do. (p. 104)

The eager embrace of metaphor is sharply refuted by Pratte (1981) who in the interest of "precision and sophistication" regards metaphorical modeling in education as "soft" modeling, that is, models of theoretical matters which cannot be empirically tested because "it is not at all clear what is being suggested by the model (i.e., what the testable generalization is)" (p. 311). In contrast, "hard"

modeling reflects actual events such as a road map detailing land features. Pratte proposes the study of curriculum should ascribe to establishing models reflecting the latter approach.

Miller (1987) supports a similar view of metaphor and considers the role of metaphor in the scope of theory-practice as limited and dubious. "This is especially the case if (an educational theorist) is suggesting that metaphors constitute a type of explanation for either the theory or practice side of the equation" (p. 224).

These arguments are not new and are firmly situated in the classical, Aristolean view. In response to such criticism, a constructivist response is that even empiricists can not escape from metaphor (for example, Pratte's use of "hard" and "soft" modeling). Boyle (1954) writes:

. . . (T)hose who most effectively attack metaphor do so in metaphorical language, for our minds, in dealing with reality are cabined, cribbed, confined if they cannot breathe metaphorical air. (p. 261)

Other research has emerged from administrative sciences including Morgan (1980, 1983). In "Paradigm, Metaphors, and Puzzle Solving in Organizational Theory," Morgan (1980) examines habitual metaphors of the functionalist paradigm and suggests metaphors expressing other paradigmatic thought such as radical humanist; radical structuralist; and interpretive, offer promising alternative realities for

organizational theory.

Bates (1982) critiques traditional positivistic metaphors in educational administration, specifically, the metaphor of the machine or factory. "Metaphor is a major weapon in the presentation of self and the management of situation" (p. 16). Bates argues the factory-related metaphors of the child as "nigger, cog, machine" are translated into the rituals of classroom.

Bredeson (1985) reports metaphors for the daily practice of administrators, identified as maintenance, survival, and vision, based on interviews with five school principals. The author suggests a "redistribution of role emphasis among the three metaphorical themes" (p. 48). In a later essay, Bredeson (1987) argues that metaphors are useful lenses for viewing organizational leadership and communication in educational administration.

Based on interviews and close associations with two junior high school principals, Pugh (1987) describes metaphoric language in educational leadership. He concluded metaphoric language as useful in understanding school settings. For example, a principal characterized the school setting in terms of crazy days, brush fires, crunch items and the need to wear a gorilla suit (the need to project a tough image).

House (1983) and Felker (1980) examine metaphorical thinking and program evaluation. House suggests the nature of evaluation is based on metaphor with current evaluative

language reflecting industrial production in terms of targets, goals, and construction terminology. It is argued these metaphors emerge from prominent societal values of competition and production.

Felker (1980) contrasts two types of base metaphors of evaluation -- iconic and analytic. Iconic metaphor presents a holistic orientation to describe the uniqueness of a situation to be evaluated. Analytic metaphor reveals differential (relational) aspects among events as in model making. The two types of metaphor are held respectively analogous to qualitative and quantitative approaches to evaluation. Similarities also exist regarding Pepper's (1942) distinction between analytic and synthetic root metaphors.

In The Educational Imagination, Elliot Eisner (1985) proposes an artistic approach to the design and evaluation of school programs. His conceptualization of connoisseurship is a process of educational evaluation within an aesthetic framework. Its purpose is to aesthetically and vividly describe, interpret, and render judgment on the significance of school experiences. An integral dimension of his proposal entails the use of nondiscursive language in a literary and poetic sense. To reveal the "particulars" of life, specifically classroom life, and its "essences," Eisner suggests:

. . . (O)ne must not only perceive their existence but also be able to create a form that intimates,

discloses, reveals, imparts, suggests, implies their existence. In this process of transformation, metaphor is, of course, a centrally important device. . . . (W)e use such language not simply because it is more economical than its discursive 'equivalent' but because it has no discursive equivalent. (p. 226 - 227)

The review of literature will now turn to studies concerning the metaphoric language of teachers. Munby (1985, 1987a, 1987b) reports interviews with teachers to identify practical curriculum knowledge through the exploration of metaphorical expression. The studies attempt to describe ways teachers "name and frame" curriculum content. Utilizing a computer to detect isolated metaphorical terms, Munby (1985) analyzed comments of two teachers regarding a previously identified metaphor of "a lesson is a moving object." For example, key words included ahead, along, back, cover, direct, fast, and step through. Phrases were identified by the computer when key terms were detected. In the case of "ahead," phrases from one teacher were: "I just went ahead; They've read it ahead of time; Sixth period is a little bit above, and uh, always ahead of the rest of the classes because we get so much more done in there" (p. 31). In addition, Munby (1987a) reports initial metaphorical analyses concerning a continuing descriptive study of the acquisition of professional knowledge by beginning teachers. Metaphor is again used as the tool of analysis.

Anglin (1982) also utilizes metaphor as a means of analysis in his survey of seventy-five, K - 12 teachers and a random sample of ten interviews of those surveyed. Each teacher was asked to choose the metaphor from a list of five which best reflected the position of the school, superintendent, Board of Education, parents, and other teachers. The five metaphors from which to choose included: 1) The curriculum is "medicine" (student as patient); 2) The curriculum is "growth" (greenhouse); 3) The curriculum is travel (a route); 4) The curriculum is production (student as raw material); and 5) The curriculum is natural resources (utilizing the natural resources of student ability). The study revealed no predominant metaphor although other patterns were identified. Elementary teachers were characterized as "growth-oriented." Secondary teachers were characterized as "production-oriented." The ideal perception of the superintendent was "growth-oriented." The Board of Education was perceived to be "production-oriented." Anglin concluded:

The teachers reported disparate curricular approaches being used at the classroom level but a unified idealism among teachers and between teachers and administrators. Board of Education members and parents were perceived as production oriented and as controlling the curriculum in conflict with the ideals of the professional staff. (p. 17)

Guay (1986) presents a critical analysis of metaphors

used by twenty-one teacher educators and credential analysts. Interviews were conducted to examine teacher credential programs in California. Guay found scientific, technological, and bureaucratic norms encompassing the use of metaphors reflecting those values:

The unquestioned use of such metaphors has fragmented the profession and alienated its practitioners Through process rather than product-oriented approaches, educators must attempt a performative rather than a quantitative meaning to 'excellence' in teaching and credentialing. (p. 148)

Cinnamond (1987) adopted a different approach to the study of metaphorical expression in educational language. He examined the use of metaphor in twelve educational policy reports including "Tomorrow's Teachers" (Holmes Group); "A Nation Prepared: Teachers for the 21st Century" (Carnegie Foundation), and "To Secure the Blessings of Liberty" (American Association of the Colleges and Universities).

The reports use metaphor as the means of producing reality, in this case western civilization and its conceptions of rituals of truth. . . . (T)he dominant metaphor is that of education being some type of manufacturing or fabrication process that will turn out a particular type of end product dependent upon raw material and resources called for in the report. (p. 31)

This position regarding the production metaphor in

Higher Education is corroborated by Fazzaro (1986) and Laramee (1987). In addition to these studies and as indicated by the initial discussion of metaphor and curriculum, the factory metaphor may be pervasive at all levels of educational thought. At this point I will briefly describe several discussions illuminating other metaphorical conceptions of schooling.

Dobson, Dobson, and Koetting (1985) identify not only the industrial metaphor but two other dominant, pernicious metaphors for schooling as the military metaphor reflected by phrases such as "target population"; "govern"; "maintain"; "training"; and the disease metaphor characterized by language including "diagnostic"; "prescriptive"; "treatment"; and "remediation." The authors suggest, "responsible educators spend time and effort in examining the value base(s) of their perceptions and the professional language used in 'looking at and talking about' children" (p. 13).

Egan (1988) also rejects the assembly line/ industrial metaphor, specifically in the area of teacher planning. An alternative vision is proposed -- "Teacher planning is a story."

The content of the curriculum as a whole will no longer be seen as a set of subject matters or forms of knowledge to be taught, but a set of great stories to be told. Planning lessons or units of study, similarly, will not be seen in terms of objectives to

be attained but, again, as good stories to be told.

(p. 79)

Skau (1989) proposes three prevalent metaphors for principals (manager, coach, guide) and for teachers (weavers, fishermen, mountaineers). The following descriptions by the author clarify the three metaphors for teachers:

Weaver - The weaver (teacher) can make up her own rules as she goes along. The weaver (teacher) plans her weaving project carefully. (p. 53)

Fisherman - The fisherman (teacher) is well equipped with tacklebox full of a variety of hooks (methods and motivational materials), fishing rod (strategies) and baits (concepts). (p. 13)

Mountaineer - Climbing, as in teaching, involves total trust and commitment amongst team members. (p. 33)

Skau proceeds to chart the interactional implications regarding types of principals by types of teachers. For example, the interaction between principal as guide and teacher as weaver implies "(l)ittle need for reports -- lets the pattern evolve" (p. 56)

In an essay entitled, "If Education Is a Feast, Why Do We Restrict the Menu?" Gregory (1987) proclaims, "the most powerful and widespread metaphor in education is also the worst. It is the mechanistic metaphor, learning is storage" (p. 101). Subsequently, emphasis on discrete fact learning, memorization, and recall permeate pedagogy. Gregory also

identifies three corollary metaphors as "teachers are experts, students are clients, and experts are morally neutral conduits of information" (p. 103). The author rejects the assumptions of these abusive metaphors due to the value-laden nature of education as well as the need to promote critical thinking, ethical judgment, and logic.

Tiberius (1986) highlights a related metaphor for teaching as transmission, a transference of information from teacher to students. The author presents an alternative as "dialogue" or "conversation." The work of Paulo Freire is presented as an example of the proposed process.

Instead of merely telling the students that 'two plus two equals four,' it might also be important for the teacher to learn, through dialogue with the students, what kind of experiences they have had with combining pairs and what they call the sum.

(p. 148)

Tiberius considers the dialogic metaphor as reflecting the ideas of a democratic society and "predicts" a shift in thinking to accept the new metaphor for teaching.

Continuing the discussion of the transmission metaphor, Bowers (1980) examines the metaphor of curriculum as cultural reproduction. The author refers to the writings of Michael Young, Basil Bernstein, Pierre Bourdieu, and most notably to Michael Apple to analyze the metaphorical use of those who critique this metaphor as a carrier of ideology. Metaphors emerging from Bowers' analysis include: the

concept of knowledge as cultural capital; social class; classless society; hegemony, and hierarchical social structure. Bowers argues:

A basic problem of the metaphors of the cultural reproduction theorists writing on schools and curriculum is that they have treated their key and background metaphors, inequality, class, hierarchy and hegemony - in a literal sense where they become culture-free images that can be generalized to a variety of cultural contexts. This generalization of reified images becomes a new form of cultural imperialism when the historical-cultural epistemology out of which the metaphor is derived is ignored. . . . While we may think we can achieve revolutionary-sounding language, we also have to remember that it may be important to liberate ourselves from certain controls embedded in the structures and imagery of our language. (p. 287)

Schlechty and Joslin (1984) describe images of schooling including factory, hospital, family, and war zone. These authors contend the emerging literature of new management and organizational theories yields promising visions for schooling. Among the literature cited are W. G. Ouchi's Theory Z and The Art of Japanese Management by Richard Tanner Pascale and Anthony G. Athos. Within the new vision, students are conceptualized as "knowledge workers"; that is, an insider with increased control over what

knowledge is to be pursued and how. Teachers are characterized as executive managers, possessing enhanced status and principals as manager of managers.

Utilizing a Ricoeurian framework of text interpretation, Brimfield (1982) analyzed the works of curriculum theorists Alice Miel, James Macdonald, and Elliot Eisner to formulate holistic metaphorical description of each person's orientation to curriculum. The work of Miel is presented as a town meeting based on her philosophy "that people can work together to bring about meaningful change and to aid in their own personal growth" (p. 72). Based on Macdonald's attention to awareness of personal values, reflection, and understanding, Brimfield characterizes his orientation to schools as consciousness-raising groups. Thirdly, "the school is an exploratorium" portrays Eisner's work reflecting "the significance of the environment, the freedom to engage in self-selected activities . . . , and many approaches applicable to both education and artistic problems" (p. 150). In addition, Brimfield projects new metaphors conveying "imagination," "rigor," and "caring" including: The school is a comedy; The school is a laboratory; The school is a newsroom; The school is a canvas; and The school is a celebration.

Similar to Brimfield's approach, Brookes (1988) offers an innovative metaphor to describe the work of Shirley Brice Heath, a notable scholar in the area of reading and writing pedagogy:

The role of the anthropologist suggests a way of thinking about literature. In reading literature, the student is like an amateur anthropologist entering a culture that is different in some degree from his or her own. If the student understands, then he or she can make proper hypotheses or predictions about the work, can participate imaginatively. (p. 251)

Concluding the survey of literature is an essay entitled, "Dissipative Structures: New Metaphors for Becoming in Education," by Sawada and Caley (1985). As the title suggests, educational metaphors are emerging from new physics and related to the previous discussion of transformational theory.

When systems approach the far-from-equilibrium state (on the threshold of Becoming) they are subject to spontaneous, dramatic reorganizations of matter and energy. Systems capable of this kind of reorganization are called dissipative structures. (p. 14)

The authors contend the machine metaphor based in Newtonian physics dominates education. It is also suggested that the shift to a new metaphor, schools as dissipative structures, will encounter tremendous resistance by the "stabilizing forces" of tradition. Sawada and Caley propose the new metaphor as promising: Educational phenomena will "take on new meaning when viewed as participating in the new metaphor" (p. 18).

CHAPTER IV

THE RESEARCH PROCESS

Orientation to Research

The idea of metaphor as seeds to theory (Kliebard, 1982) is an important consideration for this study. If accepted, one may characterize the comments of each person in this study as an exercise in curriculum theorizing. By formulating metaphor (theory) each person communicates an aspect of his/her subjective reality. Comments concerning curriculum are value statements which guide each person's actions and subsequently what occurs in our schools. By talking to teachers, this study attempts to gain understanding of these values which may lead to new perspectives of not only where we are as curriculum theorists but why we are here and what it means.

The fundamental human quest is the search for meaning and the basic human capacity for this search is experienced in the hermeneutic process, the process of interpretation of the text (whether artifact, natural world, or human action). Macdonald, 1988, p. 105)

The hermeneutic process is consistent with the constructivist orientation to language, that is, research methodology and analysis emerge from an interpretive

paradigm which appreciates multidimensional subjective realities. In contrast, a positivist orientation considers reality a "given" (Koetting, 1984), and seeks to explain it through positive methods. Naturalistic research emerges from the interpretative framework as a means to gain understanding of realities. Lofland and Lofland (1984) defend "naturalistic research" as the preferred term among various labels for qualitative social research which is defined as "the techniques of participant observation and/or intensive interviewing and data analysis techniques that are nonquantitative" (p. 1). In a sense, I have served as a participant observer of schooling most of my life including five years of elementary teaching and five semesters of college teaching. Subsequently, I continually draw on these experiences to guide this investigation. Specific data collection for this study entailed varying degrees of intensive interviews with numerous teachers as a basis for further interpretation of schooling perceptions. The interviewing process can best be described as a conversational approach to research. Drawing from the work of Gadamer, Carson (1986) proposes conversation as a mode of curriculum research and a hermeneutical activity. Conversation is considered a "moral discourse." Within this context moral conveys authenticity between the researcher and others whereby the inherent values residing in the research situation are recognized. In this manner, conversations progressed more as discussions between colleagues

rather than as formalized researcher-participant roles. Carson notes that the distinctions between the two roles are unlikely to be forgotten, yet conversational research does offer a more humane approach to educational questions.

Trumbull (1987) cites the growing accumulation of research examining teachers' beliefs and various means to understand those beliefs to support her contention that "by understanding how teachers view and do their practice can genuine change occur" (p. 45). The dialectal mode of research as described and utilized in this study is a vital means to fulfill this purpose. This approach allows "meaning to emerge through language" (Carson, 1986, p. 78):

In the final analysis, the practice of conducting conversations with participants is in itself a form of action which helps forge a reformed practice. By engaging in conversation, researchers are helping to create spaces within educational situations for thoughtful reflection oriented towards improving practice. (p. 84)

The role of metaphor as a significant and valuable heuristic tool of exploration of language and subsequently reality has been presented in the previous chapters. Through the reflective process of the researcher, interpretations of metaphorical expression may be rendered. The interpretation may suggest possible meanings and entails, "an informed intelligence upon a body of content" (Berelson, 1971, p. 121).

With regard to the disadvantages and advantages of the stated research orientation employed in this study, Berelson (1971) asserts:

(Qualitative analysis) ordinarily means less systematic and less precise analysis though it may also mean more clever or relevant analysis because of the lack of a rigid system of categories, allowing for more subtle or more individualized interpretations. . . . Quantitative analysis tends to break complex materials down into their components so that they can be reliably measured. 'Qualitative' analysis is more likely to take them in the large on the assumption that meanings preside in the totality of impression, the Gestalt, and not the atomistic combination of measurable units. (p. 125 - 126)

Description of the Study

Fifteen elementary (grades K - 8) and twelve high school (grades 9 - 12) teachers were interviewed for this study. The teaching experience of the teachers ranged from one to twenty-four years with ten years serving as the median. All elementary teachers were female and taught in various urban schools in the Tulsa area with the exception of two who taught in smaller cities (populations less than 20,000). Eight females and four males composed the high school level participants. Subjects taught included English, mathematics, home economics, art, Spanish, industrial arts, physical education, and science. All

taught at the same high school in a community of approximately 4,000 people. Most conversations with the teachers were held in each teacher's classroom, the faculty lounge, or a vacant office. The interviews varied in length from twenty-five minutes to several hours. Lengthier interviews spanned two or more days. In some instances, interviews were followed by telephone conversations to continue a discussion or clarify a previous discussion.

Being a teacher as well as the researcher seemed to quickly establish a sense of trust and rapport with the participants. Although the interviews were conducted in a conversational format, I participated as an active listener much of the time especially during the shorter interviews. The conversations remained unstructured with the exception of clustering around four general themes which emerged as the interviews progressed: 1) the purposes of schooling; 2) the role of the teacher; 3) the role of the student; and, if possible, 4) the generation of a metaphor to represent each person's conception (theory) of schooling. On several occasions a teacher was unclear as to the development of a metaphorical expression. Therefore, I provided an example as described in the survey format to follow.

After completing most of the conversations with teachers, I became acutely aware of the language form of others --especially that of the undergraduate teacher education students in the classes I was teaching. Since most will soon be entering the classroom, I felt their contribution would be important and add

to the meaningfulness of this study. An essay-format survey was developed in line with the four thematic clusters which emerged from the teacher interviews: 1) What do you think are the purposes of education? 2) What do you think is the role of the teacher? 3) What do you think is the role of the student? and 4) Schools are often viewed as factories whereby the product of the system is the student. Do you agree with the metaphor of school as factory? Why or why not?. . . If you do not agree with the comparison, what would be a better metaphor for schooling in your opinion? Twenty-six student surveys were examined.

It should be noted that the provision of the example of school as factory may have "led" the responses of some students (and in the interviews of several teachers). After unsuccessfully conveying the essence of metaphor without an example on a trial survey and in a few initial conversations, I found it helpful, if not necessary, to provide a metaphor for schooling. Therefore, for the sake of consistency, "The school is a factory," was chosen. Upon examining the responses, any leading effect was not readily apparent due to the variety of disagreeing responses. For those who agreed with the comparison, it was supported with corroborating comments and metaphorical speech. Nevertheless, the provision of an example may be viewed as a necessary limitation.

Furthermore, due to this study's commitment to the qualitative value of inquiry, specifically regarding the study of language form as part of subjective realities, comments of the participants will not be objectified by

percentages or other statistical procedures, for example, quantitative content analysis. Rather, as illustrated by the following interpretation of comments, the importance of comparing ideas (theorizing) of the persons in the study could be lost in the quest to quantify the responses. In addition, excerpts from all interviews and essays are not provided in this study although all comments were studied. For the purposes of reporting the comments in a succinct manner, excerpts representing types of metaphoric expression are provided.

Finally, all teachers' names in this study are fictitious to ensure anonymity.

CHAPTER V
AN INTERPRETATIVE ANALYSIS
OF METAPHORICAL LANGUAGE
A Conceptual Framework

As discussed in chapter one, an assumption of this study is that each human actively constructs a subjective reality based on the interdependency among language, perception, and knowledge. Language form, specifically metaphor, serves as a means to express one's subjective reality. Each person's conception of curriculum is based in his/her reality and expressed through value statements reflecting that reality. The clarification of the source of value statements concerning curriculum as given by the participants in this study will serve as one means of understanding and presenting the comments. This approach to the presentation of data is noted by Berelson (1971): "In qualitative analysis the interpretations . . . are more often made as part of the analytic process . . ." (p. 122).

Upon careful study of the data, distinction among the responses reflected a differing value base underlying the construction of the teachers' realities of schooling, that is, the overwhelming majority of language reflected an interest in control. Whether expressed by "schooling is a factory" or "the teacher is gardener," the interest in

control dominated. Value statements indicating interests in cooperative understanding and/or emancipation were virtually ignored. Habermas (1971) has proposed a framework identifying three such areas of human interests: control, emancipation, and understanding. It will serve as an analytical device clarifying my interpretation of the teachers' language. Moreover, Macdonald (1977) contends the three areas of human interest expressed by Habermas "may be seen as the basic source of value difference in curriculum" (p. 289). Habermas (1971) defines an "interest" as:

. . . the pleasure that we connect with the idea of the existence of an object or of an action. . . .
Either the interest presupposes a need or it produces one. (p. 198)

The interest in control emerged as humans attempted to control the environment for survival. The interest in understanding arose as humans strived to make sense out of cultural information, and the interest in emancipation as humans resisted constricting forces of the physical and social environment. Grundy (1987) states, "The knowledge-constitutive interests do not merely represent an orientation towards knowledge or rationality, but rather constitute human knowledge itself . . . and determine the categories by which we organize that knowledge" (p. 10). Thus, metaphor, as a fundamental means to organize knowledge about reality, reflects the three interests -- metaphor of control, metaphor of understanding, and metaphor of

emancipation.

Simply stated, knowledge is grounded in basic human interests and as an integral part of the interrelated interaction which constructs one's reality can not be divorced from human interests. Furthermore, expression of reality as inherently based in these interests conveys personal values. For this reason, the statements concerning the reality of schooling reflect values which reveal underlying interests. As fundamental human interests, all are present in constituting a person's reality, yet:

. . . (O)ne interest characterizes a teacher's consciousness and hence will be the predominant determinant of the way in which that teacher constructs his/her professional knowledge. (Grundy, 1987, p. 100)

It is the intent of the interpretative analysis to examine which values dominate teachers' perceptions of schooling. In this manner, the second guiding question of this study may be addressed: What language, specifically metaphor, do teachers use to describe perceptions of curriculum reality?

Metaphors of Control

Curriculum theory representing interest in control is concerned with the effectiveness and efficiency of schooling. This position is translated into technical action as exemplified by the Tyler Rationale. Due to the interest in control, educators adhering to this view are usually more concerned with what is to be taught rather than

why it should be taught. "What" is usually a transmission of cultural values indicative of an Essentialist attitude.

Wingo (1974) summarizes this position:

1. From the standpoint of the individual, the purpose of education is intellectual discipline and moral discipline. . . . From the standpoint of society, the purpose is to transmit the essential portion of the of the total heritage to all who come to school.
 2. The curriculum of the school is an ordered series of subject matter, intellectual skills, and essential values that are to be transmitted to all who come to school.
 3. Teaching is, in essence, transmitting. The art of teaching is the art of transmitting effectively and efficiently. The teacher is the active agent in the transmitting process.
 4. The role of the school in society is preserving and transmitting the essential core of culture.
- (p. 61 - 62)

In this study, metaphors clustering in the realm of control theory are overwhelmingly represented by the responses of the teachers and students. All but three interviews can be grouped under the interest in control. These control metaphors can be subgrouped for the purposes of this discussion by representing the continuum of extreme interest in control to a less extreme position but none

reaching emancipatory or hermeneutical interests.

At the extreme end of the continuum is the perennial notion of "The school is a factory." The following comments are indicative of this position:

We need to make a better product out of what we have. It's hard to do with students that don't care. . . . We must take students minds and help develop them better. No doubt we've got to make them better and get that total product.

School is like a job. Especially in high school where a person needs to take responsibility for self. . . . I teach about life, how to cope with life. A factory is a good analogy to some extent because we strive to be better, more knowledgeable.

School is more or less like a factory. With big classes you put them through their courses and hope they make it. Teachers set standards. If the student can't meet standards, teachers help. . . . The product (of the schools) should be an educated student; very self confident; feels good about self; can go along with society; live in society; and bear responsibility. They should know basics of English, know how to communicate with fellow man. . . . Grades are pretty much necessary. I'm human enough to know I would not have done much without them.

Further illuminating the scope of this metaphor are excerpts from several student surveys:

A school is like a factory because the entire time spent in school is the perfecting of the product until there is a finished product.

. . . you want the end product to be perfect (well educated).

We go in with little knowledge and in the end we leave as better products.

The role of the student is to encode and decode information and ingest as much as possible to be the very best product possible.

Every little part of school has its own function like a factory.

The purpose of education. . . is to help students learn important information. . . The role of the teacher is to pass this information to students in a way they enjoy.

Students should have the same classes and the same things expected out of each. Just as all shirts might be blue and expected to hold up.

As illustrated by the comments, the focus of the schooling experience is often expressed as the outcome of a product. Conformity and training are hallmarks of this metaphor. Although the labels utilized in the next metaphor -- the school is a molding process -- are different, both the factory and molding process represent extreme positions based in the control interest.

Scheffler (1960) proposes that the molding metaphor emphasizes cultural, personal, and moral development which is dependent on the character of the adult social environment. This Essentialist posture is well illustrated by the comments by the teachers who provided the molding metaphor. One interview will be described in detail to convey the ramifications of this metaphor as well as its similarities with other control metaphors.

The first impression of LeAnn's fourth-grade classroom was of order and precision. At the end of the day, the desks were arranged in neat rows with the teacher's desk situated in the front of the classroom. The bulletin boards were uncluttered. One featured the "A" essays and another the spelling words for the week. LeAnn was enthusiastic to express her ideas and noted that after a day of talking to the students, it was a relief to say something "intellectual." She described her conception of schooling in terms of a molding metaphor as follows:

It's sort of a molding process that starts in first grade and when you get them in school even though

they are five or six, they're sort of just there. As years go on, it's sort of like working with clay. You push them and prod them and encourage them and scold them to the point that you have them sort of to the person you want them to be -- that you've formed. And hopefully, the person that's the best for them to be and that they think they've achieved it through their own desire not because you put the pressure on them. . . . I could name every child in my classroom and tell you what they can do and what they can't do; where their strengths are; what their weaknesses are; and if someone asked if they would be good at this or that, I feel that I could say no, yes, or maybe.

The transmission of certain facts and values in addition to the sense of conformity was also important to LeAnn's conception of schooling. She continued:

If it's important to the system (referring to the school system), then it's important to me. Standardized tests are a good measuring tool but not for grouping because I know what's on down the line. . . . I'm pretty strict. They know what I expect and when I don't approve. . . . You know what they need to know like diagramming sentences or the parts of speech. Although not everyone gets these things at the same time, we herd them through like cattle. That's part of the system. I don't like it, but you have

to end up doing it. . . . I think that those who say to see each child as an individual use it for an excuse lots of time when a student is not achieving what they're capable of. . . . Essential skills (are) to read and comprehend; put thoughts down on paper; how to answer essay questions; learn how to study. I do that by making them highlight the book. I tell them what to highlight. I make them write it down on paper. I tell them what they need to know.

Further indicative of the positive nature of the interest in control was LeAnn's respect for evidenced learning:

If they can't get it down on paper, I'm not convinced they know it. . . . I grade by giving a certain percentage of accuracy. Percentages and letter grades -- that's what I'm used to. A letter grade is very definite. An "N" (Needs Improvement) or checkmark doesn't tell a fourth grader very much. It's not concrete enough for them.

Another elementary school teacher, Karen, also provided the metaphor of school as a molding process:

Teachers are sculptors because we begin with the clay and mold and shape students. You have this clay and move it and pat it to a work of art. That's when I enjoy teaching the best -- when a parent says 'You know, Johnny has really changed this year with you' because I know I had a part in changing that student

for the better.

When asked about her views on evaluation, Karen professed:

Oh, I'd like to go by the heart, but that's not good. I think there needs to be other ways -- more objective ways -- so you can be sure of what you're doing.

Still another molding metaphor was expressed by Shirley:

As a sculptor, a teacher molds (the students) and makes them into what they want to be. . . . When they are not interested, we must push them toward goals. They may not know things about themselves, be shortsighted. . . . The teacher's role is to let students see life in a different way, also see the basic right and wrong, let them explore on their own to a cut-off point. The student must get the basics down then be on their own to carry on as far as they can. I show them what I know then they are on their own. . . . I grade them because I know what to expect so I grade them by ability.

The next metaphor implies a molding of students by emphasizing "pushing" as well as reveals its integration with transmission of facts:

If I really pushed a student like he really probably needed to be pushed I would have a lot of people mad. I grade differently here because of the socioeconomic

group of people, you have to deal with that. So you have to get (the students) to learn as much as you can throw at them. Whether they learn it or not is still up to them. The chance is there if you present it.

In addition to the comments by teachers, students write:

School is like a river. The child is the water rushing down the river. The teachers are shaping the child throughout his journey, sometimes broadening his mind and sometimes narrowing his knowledge.

Instruction (is) the forming of a person who can live in today's society. . . . The learner is a follower changing into their own individual person.

(The teacher) should orient children to the type of work she wishes them to do and understand.

A third group of control-oriented metaphor is, "The student is a sponge." Neither of the two who expressed this metaphor would or thought they could elaborate. In fact, Jane a kindergarten teacher of twelve years was ambivalent about her feelings of what school should be:

I don't know. . . I don't think of it as a factory-- maybe in high school. I don't know. Our products are not very good right now. Now we have such an early introduction of skills like on Sesame Street yet we are not producing. . . maybe it would be better to

say that students should be like sponges absorbing all this information we have for them.

Similarly, a student's words reflected an "unconscious" adherence to this metaphor:

The role of the teacher is to be a translator of unknown knowledge by being interesting as possible.

. . . The role of the student is to soak up as much knowledge as possible and retain this knowledge

The next collection of metaphors reflect various expressions of interest in control.

Schooling is a miniature of life--

School is a miniature experience of life. We have to train students to adjust to society. Show them where they belong. Show what mental abilities are there. Tests show if we're not doing a good job.

. . . If a student doesn't put the full effort into it (school), encourage them to reach higher goals.

. . . We need to expose them to different situations.

The student should treat school like a job. Get ready for society and be honest with themselves about what they can do. . . . I went into teaching to help kids but there can be improvements. Students should feel more responsibility. They blame everything on others.

We should start early so by high school they can accept responsibility. We should start competency testing at third grade. . . . The teacher should be a guide, direct students to the things they need to learn. Like

responsibility for own work and morally respect others.

The school is a coach--

School is a coach who takes the students with their own abilities and tries to train and condition them to live and compete in the human race. . . . The teacher should be leader. The student should be open to what the teacher presents. . . . Education should prepare students to make a choice as to what goals they will work toward.

The schools are weavers--

Schools are weavers. These weavers are weaving feelings, thoughts, knowledge, friendship into individuals. . . . The purpose of schools is to open avenues of knowledge to an untrained mind. . . . The command of knowledge of the subject matter being taught demands respect from the student.

The school is a tree of knowledge--

The school is a tree of knowledge wherein the student can climb as high as he wants. . . . I feel that a few of the most important phases in educating our young people are. . . encouraging them to become goal oriented, stimulating them in the sense of patriotism and national pride, and teaching them the importance of moral values.

The school is a body shop--

We take in partially complete pieces. Some dented.

Some totalled. We perfect what's already there to where it's capable to function like a car out of a body shop --get most of the dents out of it. Drive it on the road. Not just pretty but capable.

The student is a computer--

They're (students) sort of blank slates but that's not it. Perhaps, a student can be thought of as a computer where you program in certain information that's needed to produce something else. You know, plug in a few facts. . . . There are some basic materials and knowledge -- reading skills, mathematical skills, and thinking skills -- that needs to be internalized and to be able to apply them. . . . Students need to know how to find information and how to process it. Education has gotten away from its basic philosophy --teaching skills so that children have internalized them. . . . We can not teach morals to students. Schools' hands are tied. We are keeping children in school who do not fit in. There needs to be alternative schools. Those that don't fit in are disruptive. . . . We have the curriculum on a computer. All skills and concepts for each grade level have been compiled from area schools. Then we can just pick out what to teach. Soon I'll be able to sit down at my computer and pull out my first quarter curriculum and whether it is mastery, introduced, or review.

In addition to these metaphors of control, two

metaphors characterizing a less extreme control posture will be presented. One is the metaphor, "School is a family" and the other "School is a garden." Both appreciate a nurturing environment as part of education. Yet, as illustrated by the comments, ultimate control is maintained by the teacher/parent or the teacher/ gardener roles. In this manner, interest in emancipation and/or understanding is not adequately addressed by either of these metaphors and both remain tied to control.

Regarding "school is a family," the following excerpts represent the essence of this metaphor. The first was created by a teacher and the second by a student:

I see the school as a home or family like parents who see each child as an individual. . . and encourage children and nurture them to grow. The purpose of school is to educate all skills, not just learning skills but social adjustment skill, preparing to get along in the world -- be successful. Channel the students into careers based on what teachers see as strengths. Encourage and introduce things to them.

The purposes of education are to make children like to learn; to help children prepare for life; to teach children what they need to know to continue educationally. The role model of the teacher is a mother, a friend, a guidance counselor, leader, and an instructor. . . . School is like a home. For a

student to feel successful in school, he/she must feel comfortable in school. The people the children come in contact with must be understanding and helpful -- like family.

As previously noted, the growth metaphor typically characterizes each student as a plant to be nurtured by the gardener/ teacher. Nan, a second-grade teacher commented:

School is a garden. The teacher is the gardener. The principal is the dirt (laughs). No, the teacher plants the seeds and cultivates them seeing that they have what they need. The sunlight is like new ideas beaming on the plants which are the students.

In explaining the role of the teacher, Nan adds:

The teacher should be facilitator -- more than an instructor, but I can't get there because of the sheer numbers of kids. It's a management problem. I don't leave out the textbooks either because I'm scared I'm going to miss something so I supplement with stuff like phonics books.

In a later interview Nan reflected on her previous comments and asserted:

As the years go by, I get more courage to escape from textbooks. I feel freer to get away from teachers' guides. . . . Overall, I think the teacher guides the students. It's exciting to watch the little plants grow! Now some need extra fertilizer like two years

in the same grade. I had to hold back three and all have blossomed beautifully.

Two other teachers continued the growth-oriented theme as follows:

It is the teacher's responsibility to provide a learning situation. . . . Students are like a plant that needs watering. . . . The student must come and present himself ready to learn, accept the class and think of it in terms of future goals. That's the hardest part.

The teacher should be facilitator rather than dictator. Students grow in the right environments. It's up to a teacher to provide the optimal learning environment through things like individualized instruction. . . . Schools should be like gardens. Students are like plants to grow and develop. A plant that's comfortable secure, protected from the outside elements. . . ideal condition.

The "ideal conditions" for a student were characterized as a greenhouse by others:

Ideally, a better metaphor for schooling than a factory would be that of a greenhouse. Students should be given ideal growing conditions and nurtured according to individual potential.

In her description of the practices of schooling, the

same teacher illustrates how the growth metaphor typically remains tied to the interest of control.

The teacher should be the role model and something of an expert -- as a gardener is. The student should come to school with a willingness to learn and a willingness to discipline himself to do the work required.

Another reference to schools as greenhouses was made by Ramona:

The purpose for education is to show students their thinking potential -- exercise minds as if it's an athlete's body. . . . The teacher must be role model of an educated person. Students must come with an open mind. . . I get them interested by dangling bait, maybe reading part of an interesting book. . . .

Schools should be like greenhouses. Trying to provide as much as you can in the right kind of atmosphere.

Finally, a student wrote:

School should be a garden. . . a place where there's a wide variety of plants -- plants that all grow and bloom, but at their own speed. They grow taller, their branches expand and they sometimes need pruning in order to be redirected.

As illustrated by the comments of the teachers and students, metaphors of control take various forms and levels of intensity. Once again, all interests present themselves but with these metaphors, an interest in

control dominates. All are unified by an interest in directing the growth of students, usually to a predetermined state. Furthermore, curriculum is most often viewed as content to be transmitted to students.

Metaphors of Emancipation and Understanding

A second area of fundamental human interests is the interest in emancipation. Curriculum theory based in this interest is translated to contemporary critical theory which is committed to the emancipation of humans from constraints of society such as society's economic structure as well as constraints on human consciousness. Such constraints are maintained by both covert and overt control (Franklin, 1974).

Freire's (1972) concept of praxis, action with reflection is an integral dimension of the emancipatory interest. "Praxis assumes a process of meaning-making, but it is recognized that meaning is socially constructed, not absolute" (Grundy, 1987, p. 105). Through praxis is the discovery of consciousness. Freire (1987) contends, "A liberating educator challenges people to know their actual freedom, their real power" (p. 173). It is through dialogue that a curricular focus emerges from emancipatory interests. Macdonald (1975) clarifies this point:

General curriculum themes or topics would be prepared by leaders who would engage students in dialogue, and the worth and direction of this material would be

validated and verified by each student in his own reflection. (p. 293)

A definitive characterization of the interest in consensual understanding is precarious due to varying conceptions of hermeneutics. For the purposes of this analysis, hermeneutics within the Habermasian framework is presented in an epistemological sense, that is, as a knowledge-constitutive interest from which the desire for mutual understanding emerges. It is a "constant creative search for conceptual frameworks that will reveal through interpretations a different perspective of the conditions we are concerned about" (Macdonald, 1977, p. 5).

The interest is manifested as humans interact in meaning-making of the world. As Grundy (1987) explains, "Interaction is not action upon an environment which has been objectified . . . , it is action with the environment (organic or human), which is regarded as a subject in the interaction" (p. 14). It is through an interpretative process with another entity that meaning-making (understanding) occurs. Although often relegated to a nonaction category (Macdonald, 1988), the hermeneutic process entails action in the form of a shift in awareness. "Action may easily be confused with activism rather than a change in consciousness" (Carson, 1986, p. 73). A shift in consciousness may in turn serve the emancipatory interest. It is through the enlightenment of critical reflection, individuals may desire to participate

in personal and/or social transformation. Due to the complexity of interconnections between emancipatory and hermeneutical interest, differentiations among metaphorical expression reflecting those interests would prove ambiguous. Metaphors depicting these interests reveal their interrelatedness and will now be presented.

During the initial conversation with Glenda, she provided this metaphor:

I like to think of school as a workshop where people enjoy their work. The people are there to create things. The children are in school to create and form their own opinions and attitudes.

When queried further regarding her view, Glenda could not elaborate on her metaphor other than to describe the roles of the teachers and students as working together. In a later conversation, Glenda was asked to reflect on her earlier statements and she clarified her position:

A workshop describes the way students and faculty work together so that it's a community thing. For example, I and other teachers are working with the students on an American colonies unit. The teachers are excited. Even the parents are excited. The teachers end up learning as much as the students. . . . We are all working together toward something.

When asked to elaborate on her example of the teaching unit, Glenda continued:

All I told the students was that we're going to study

the time around the Constitution. It wasn't part of the (state department's suggested) learner outcomes. Whatever the students did, it had to be authentic. They could work in groups or individually. . . . Some chose music. Others chose to make a playground depicting the toys of that era. Others made a bedroom, kitchen, and a colonial Christmas display. I even had children not involved in my class wanting to work on it. I was as much of a learner the as students. All of us were in there working as equals. It's when I go into a mode of teaching, that I go into a mode of preaching. That is what I try to avoid.

What's interesting about the colonial projects and others like them is the leaders depend on the project. Some students know eons more that I do on some things. . . .

In a way, my idea of a workshop is like a laboratory in the sense that they experiment. I never do the same thing twice. Every year is different. It's not a cookbook thing. It's how I keep my own motivation, my own enthusiasm.

Similarly, Sue approached the same idea although she admittedly could not create a specific metaphorical expression to further explicate her position:

Schooling should be a freeing experience. . . an ongoing experience of people, places, doing things,

learning from each other and from those experiences. The purpose of education is to help every kid be the best they can be. . . I'm not sure what I would do to do this. . . . We need to facilitate. . . . Don't put rubber stamps on kids. We're doing that now. We need to stop ability grouping. And, instead of standardized tests, we need to go by personal evaluation. Personal evaluation is having the teacher and the parents and the child getting together to see what they think needs to be done.

Finally, the laboratory metaphor specifically addresses autonomy as an integral part of the learning process:

The school is not like a factory but more like a laboratory. The children are like scientists and are allowed to explore and create for themselves. Like scientists who work without being told all the facts, children shouldn't be told either. They should be allowed to explore and grow at their own reasonable pace. . . . The student should be a questioner, an experimenter. The teacher is the helper in learning.

The comments of these teachers reflect the importance of meaning-making by students through personalized approaches to the teaching/learning process. Another overarching theme is school as a "freeing" experience which was neglected by the previous metaphors of control.

In sum, the metaphoric language expressed in this study characterized a pervasive interest in control. The next

chapter will explore the implications of this interpretation of the language within the context of the nature and significance of metaphor in creating reality, specifically the reality of curriculum, and in guiding actions of school life. In this manner, a reflective process ensues to create hermeneutic meaning.

CHAPTER VI
THE REALITY OF CURRICULUM
Metaphor: Use or Abuse?

To know is to work with one's favorite metaphors.

-- Nietzsche

Underpinning the quote is the notion that we do not always know when we are working with our favorite metaphors as possibly illustrated by the language used by the teachers and students in this study. Metaphoric expression representing the interest in control was almost universal not only when generating a metaphor but throughout the conversations and essays. Examples include: train; guide; untrained; program; redirect; push; prod; absorb; channel; condition; manage; form; shape; mold; fertilize; make; plug in; and (the) system. Interpretations rendered in this study illuminate a unifying theme among previously identified metaphors, that is, a pervasive interest in control to the virtual exclusion of other interests.

Examining types of metaphor yields some understanding as to how the control metaphors are linguistically structured. Ontological metaphors typically regarded education, schooling, curriculum, learning, knowledge, and

the mind as entities. Examples include:

Schools' hands are tied.

Curriculum is not integrated.

Curriculum is being put on a computer.

The direction of curriculum . . .

The school system . . .

Education is lowering standards (also orientational).

Education has gotten away from its basic philosophy.

The basics . . .

. . . take students' minds . . .

. . . a body of knowledge or skills.

More importantly, the framing of these ideas as entities substantiated that there is "something" to be transmitted. This point is well illustrated by the characterization of teacher and student roles:

Teacher's role is --

to transmit information

(act) as an information center of the classroom

to get all this information across in a way

that is straightforward and clear

to teach skills

to feed (students) knowledge

Student's role is --

to acquire information

(to) learn what the teacher is teaching

the receiver of the presented information

(to) try and comprehend all of this knowledge. . .

As noted in chapter two, the conduit metaphor is particularly deceptive:

. . . (I)t is far more difficult to see that there is anything hidden by the metaphor or even to see that there is a metaphor here at all. This is so much the conventional way of thinking about language that it is sometimes hard to imagine that it might not fit reality. (Lakoff & Johnson, 1980, p. 11)

Perhaps, the language reflected both a conscious and more importantly an unconscious use of control metaphor. The unconscious use of metaphor is stressed due to the possibility of one's victimization by metaphor as conceptualized by Turbayne. I suggest the metaphors of control (collectively) have become moribund at least for many educators. In fact, the possibility exists that metaphors of control as expressed in this study represent a broader conceptualization of metaphor, that is, as educational mythos. Myths, in this sense, are extended cultural metaphors used to explain that which transcends literalness. Breggren (1962) considers this the most serious danger of metaphor:

Myth, . . ., is a believed absurdity, believed because the absurdity goes unrecognized. . . . The metaphor is turned into, not only a literal truth, but the literal truth about the subject in question. (p. 244 - 245)

Due to the long association between control and

schooling, unrecognized metaphors for control have become reduced to reality of what school is. For example, the molding process is indicative of the long-standing association between control and schooling. Shaping persons through a process of schooling can be traced to Plato (Kliebard, 1986).

Various problematic aspects of a control orientation were indicated by this study. In one sense, teachers viewed themselves as experts reflecting an Essentialist posture:

(The teacher) know(s) what they (the students) need to know.

The teacher should be leader . . . (the students) should be open to what the teacher presents.

I (the teacher) tell them what they need to know.
Teachers set standards.

On the other hand, teachers revealed an extreme distrust of themselves to evaluate the learning of the children. For example, the teacher who regarded the molding metaphor as most appropriate insisted on objective measures to validate learning. She was afraid to "go by the heart." Similarly, another teacher asserted, "Tests tell us if we're doing a good job."

Related to a bifurcated view of teachers (powerful/powerless) is the expressed feelings of frustration regarding the ability to initiate change. For example, Nan framed her situation in terms of confinement:

As the years go by, I get more courage to escape

from textbooks. I feel freer to get away from teacher's guides.

Furthermore, the views of students' roles in the learning process are confounded. Many teachers stressed the importance of students bearing personal responsibility for learning. At the same time, allowing students the opportunity to assume such responsibility is denied. The following paraphrases juxtapose various teachers' views of their role with that of students.

teachers sets standards/ students bear responsibility
 teachers program in information/ students meet me half
 way

teachers train, guide, direct/ students should feel
 more responsibility

teachers throw content at students/ the opportunity is
 there if students want to take it

To further explore the problematic dimensions of curriculum in the interest of control, a discussion of the technocratic rationale, the modus operandi of control interests (Macdonald, 1977), provides necessary insight to address this issue. Furthermore, the critique of the domination of control interests will:

1. Establish a context in which to understand the difficulty in unlocking our linguistic prisons based in control, and
2. Substantiate the crucial need for the generation of new metaphor expressing interests in

emancipation and understanding.

The Technocratic Rationale

Providing a recent philosophical basis for the technocratic rationale is the work of Auguste Comte (1798 - 1857). Comte attempted to describe humanity's search to understand phenomena by proposing three phases of intellectual evolution. First, in the supernatural phase, one associates the causes of events with the existence of deities. The second, metaphysical phase, is characterized by assuming inherent abstract forces in phenomena cause events. Habermas (1971) notes, "Comte removed metaphysical issues from discussion referring to them as 'undiscussable'" (p. 79). The third phase, the positive stage, demands an objective examination of phenomena whereby one is positive of the existence of the elements within the phenomena.

. . .(A)ccording to Comte, individuals and societies recognize the futility of inquiry into causes and essences and come to understand that both the theological and metaphysical thinking only produce 'useless digressions.' Inquiry into the positive stage limits itself to phenomena about which facts of sense data can be gathered in order to classify phenomena and to discover laws.

(Culbertson, 1981, p. 30)

Comte's positivism reflects not only the interest in control but the concomitant mechanistic world view initiated by Bacon, Descartes, and Newton. Bacon attempted to

discover methodology to control the world by objective means and to allow for power over the natural by removing the human self from nature (Rifkin, 1981). "Comte adopts the old principle formulated by Bacon for future natural sciences and extends its validity to future social sciences" (Habermas, 1971, p. 77). Thus, the importance of objective means, especially through mathematics, to study the essences of humanity was established.

Influenced by the writings of Comte, a brotherhood of intellectuals in Europe formed the Vienna Circle in the 1920s. The group combined the positivist orientation of Comte with symbolic logic developed by Russell and Whitehead to create logical positivism (Culbertson, 1981). A major principle devised by the logical positivists was:

- 1) A proposition is meaningful if it is testable through experience, and 2) The meaning of a proposition is knowable only in terms of the method required to test it. (Wingo, 1974, p. 13)

In addition, the use of symbolic logic with its mathematically precise representation of concepts afforded an innovative means of communicating scientific problems objectively. Victor Kraft, member of the Vienna Circle, noted symbolic logic's importance, "This leads to a degree of clarity and rigor which is unattainable within ordinary language" (in Culbertson, 1981, p. 32).

The American social climate was quick to embrace the outgrowth of logical positivism. Contributing factors were

society's respect for science and the lack of a strong metaphysical base to counteract the positivist movement (Culbertson, 1981). Synchronous factors were increasing support for social control and for the efficiency movement (Kliebard, 1986).

American sociologist, Edward A. Ross was an influential advocate of overt social control. His writings strongly affected curriculum development of American educational sociologists (Kliebard, 1986). Ross considered schools the perfect vehicle to establish a moral society by extreme massive social intervention. Providing the impetus for interest in social control was the influx of immigrants to the United States. Prior to 1875, no federal immigration restrictions existed except to bar "coolies, convicts, and prostitutes" (Kamin, 1977). Most immigrants had arrived from northern and western European countries with little, if any, public opposition. The turn of the century brought a new wave of immigrants from Russia, Italy, and Poland. The public demanded "quality control" by means of a literacy test and later by intelligence tests (Kamin, 1977).

Intelligence testing and its subsequent evolution to other forms of standardized assessment were developed in the United States primarily by Louis Terman and other psychologists concerned with eugenics. The potential use of intelligence tests was far reaching as boasted by Terman in 1916:

. . . in the near future intelligence tests will

bring tens of thousands of these high-grade defectives under the surveillance and protection of society. This will ultimately result in curtailing the reproduction of feeblemindedness and in the elimination of an enormous amount of crime, pauperism, and industrial inefficiency.

(p. 6 - 7)

Knowledge of differentiated levels of intelligence prompted some educators to design congruously differentiated levels of curriculum. Various objectives for each level were developed. In fact, Snedden predicted the formulation of a thousand discrete educational objectives would be completed by 1925 (Kliebard, 1986).

The use of objectives to organize knowledge was compatible with a second important aspect of the American social climate of the early 1900's. This aspect was the increasing fascination of the efficiency movement being applied not only to industry but to schools as well. The managerial efficiency movement was introduced by Frederick W. Taylor in 1895 during a presentation to the American Society of Mechanical Engineers (Kliebard, 1986). Grounded in positivist thought of technical interests, scientific management was promoted as a true science based on delineated principles. Taylor's (1911) principles are summarized as follows:

- 1) A standard time for accomplishing a task should be developed.

- 2) Wages should be proportional to work accomplished.
- 3) It is the management's responsibility to formulate work plans and for making the performance physically possible.
- 4) The scientifically best methods for performing a task should be identified and utilized.
- 5) Managers should be trained in the implementation of scientific management principles.
- 6) The organization should function to optimally coordinate activities among specialists.

As discussed in chapter one, principles of industrial management were immediately applied to school management by Bobbitt giving rise to the powerful factory metaphor of schooling. Scientific management with its tyrannical emphasis on standardization, particularization, and predictability became firmly rooted into education as others including Charters and Snedden followed Bobbitt's lead (Kliebard, 1986).

A closely related movement in psychology was behaviorism. Within a behaviorist orientation, humans assume passive roles while manipulated by external forces. Thus, behaviorism was consistent with the interests in control and efficiency. To a behaviorist, teaching is simply the arrangement of contingencies which bring about changes in behavior (Evans, 1968).

Social control and social efficiency, complemented by the development of the mental measurement movement and

behaviorism, form a historical basis for many of our contemporary schooling practices which manifest the interest in control and constitute the reality of American curriculum.

We must return to a philosophical discussion of the technocratic rationale to explore its influence on the meaningfulness (or meaninglessness) of school experiences. The control-oriented, positivistic characterization of schools in a value-free, fragmented yet generalizable mode of inquiry denies the complexity of schools as collections of highly unique individuals. In this manner, a technocratic rationale ignores the wholeness and intrinsic qualities of educational experiences. A byproduct is the attempted separation of means from the end when studying humans in order to rationalize outcomes. Wise (1979) contends these efforts are a "hyperrationalization" of facts, that is, rationalizing beyond the limits of one's knowledge since the relationship between the means and the end is unknown. With regard to the means-end strategy, Macdonald (1966) states that it "violates the integrity of the person by segmenting his behavior and manipulating him for an end beyond his immediate experiencing in the curriculum" (p. 41).

The reductionistic thinking of the technocratic-rationale is further exemplified by the process of dividing experiences into minute behavioral, observable objectives.

Reductionism is subhumanism, . . . Confining itself to subhuman dimensions, biased by a narrow concept of scientific truth, it forces phenomena into a Procrustean bed, a preconceived pattern of interpretation. (Frankl, 1979, p. 17)

There are additional concomitant alienating and dehumanizing aspects of technocratic thought. These are characterized by Pinar (1975, pp. 359 - 383) as twelve interrelated effects of schooling which are based in the interest of control and can be summarized as:

- 1) Hypertrophy or atrophy of fantasy life
- 2) Division of loss of self to others via modeling
- 3) Dependence and arrested development of autonomy
- 4) Criticism by others and loss of self-love
- 5) Thwarting of affiliative needs
- 6) Estrangement from self
- 7) Self-direction becomes other direction
- 8) Loss of self and internalization of externalized self
- 9) Internalization of the oppressor; development of a false-belief system
- 10) Alienation from personal reality
- 11) Desiccation by disconfirmation
- 12) Atrophy of capacity to perceive esthetically and sensuously

Yet another area of critique concerning the technocratic rationale involves the social and political

consequences of the interest in control. One consequence, Apple (1979) suggests, is the hidden curriculum:

. . . the tacit teaching to students of norms, values, and dispositions that goes on simply by their living in and coping with the institutional expectations and routines of schools day in and day out for a number of years. (p. 14)

Ingrained in these tacit teachings are ideological influences. Whether consciously or subconsciously guided, every person has a personal belief theory and these beliefs compose our behavior (Combs, 1982). Subsequently, the values of teachers are filtered covertly (or overtly) through the curriculum. One example is the use of "cloning tools" which values extreme conformity among students, characterized by Dobson, Dobson, and Koetting (1985). Among these tools are: 1) diagnosis in the form of standardized tests; 2) ability grouping; 3) the use of positive reinforcement; and 4) labeling.

Another facet of the hidden curriculum incorporating significant social and political value is the concept of knowledge as capital. Current school curriculum is based on middle class values, that is, middle class cultural capital, to which many children do not have access.

The preceding critique of the technocratic rationale based in control interests and reflected by the comments of most of the teachers and students in this study provides understanding as to the nature and to some extent the

perpetuation of control interests. Through the critique, justification of the need for new metaphor has been presented. The generation of new metaphor is difficult when one adheres consciously or unconsciously to the control of technocratic thought. Regarding the process of generating new language to describe curriculum thereby creating new realities will now be addressed.

Creating New Curriculum Realities

Control theories and subsequent models of control have emerged from the experiences (knowledge) humans have encountered. Therefore, our concrete-conceptions of curriculum are represented by a control model. It persists as the basis for humans (teachers) to draw abstract-conceptions (theories/ metaphors). Simply stated, metaphors -- new conceptions of reality -- are built on metaphors; thus, current conceptions are based on past conceptions (Edie, 1963). We constantly struggle to organize thinking by proposing an interaction between the familiar and the thing to be explained (Kliebard, 1982). Efforts in curriculum theorizing as reflected by the people in this study are limited to what we have experienced, that is, knowledge of school as a control-oriented institution. Perhaps, the generation of new metaphors eludes us in much the same way that the workings of the heart were not understood until the concrete-conception of a pump was invented. We have failed to generate language to describe and ultimately to create the reality of a humane experience

in education reflecting interests in understanding and liberation.

The question persists, "How may new metaphors be generated?" The control theorist is trapped in a "literal prison" unable to go beyond everyday reality; this continually perpetuates control interests and subsequently control-oriented metaphors since those are her/his concrete-conceptions of objectified, everyday reality. The control theorist is restricted and unable to generate new visions and perspectives to address the intangible aspects of the emancipatory and hermeneutic interests. The answer lies in the potential of transcendental awareness -- going beyond everyday reality; not being limited to the external world of the positive. As addressed by the preceding critique, a technocratic rationale denies such transcendence. Returning to an original assumption of this study, humans as "open systems" actively construct reality based on the interplay of language, knowledge, and perception. "Seeing" beyond everyday reality --perceptual transcendence -- serves as a vision or horizon. Macdonald and Purpel (1987) write, "Each situation represents a standpoint that limits the possibility of vision. Thus, the concept of horizon is an essential part of each situation." Enabling us to view the horizon (seeing beyond everyday reality) is what these authors refer to as a platform, a base of values reflecting one's reality from which he/she proceeds.

It is this platform that allows us see beyond what is nearest to us. Without such a platform we are limited to and overvalue what seems to have a sense of immediacy to us. We must be concerned with both the limiting and liberating power of the metaphors that shape our ideas on what education is to be. (Macdonald & Purpel, 1987, p. 184)

The control theorists overvalue what is nearest to them -- verifiable, concrete experiences. The sense of immediacy persists and transcendence (going beyond immediate reality) is unattainable. Their commitment to literalness allows the powerful potential of metaphor to limit rather than liberate their consciousness. "The unexamined metaphor, like the unexamined life, may have limited value" (Eckstein, 1983, p. 311). Here lies the dilemma separating use from abuse of metaphor. On one hand, metaphor offers potential perceptions of reality, ultimately the vital means to communicate beyond the literalness of experiences, thus the process of reality creation. Yet, we can not be deceived by the unexamined metaphor. Wheelwright (1962) attempts to reconcile this dilemma:

If reality is intrinsically latent and unwilling to give up its innermost secrets even to the most enterprising explorer, then the best we can hope to do is catch partisan glimpses, reasonably diversified all of them imperfect, but some more suited to one occasion and need, others to another. If we cannot

hope ever to be perfectly right, we can perhaps find both enlightenment and refreshment by changing, from time to time, our ways of being wrong. . . . The truest explanation of anything is not necessarily the one that is most efficient or that is most free from incidental error. Perhaps truth, like certain precious metal, is best presented in alloys. (p. 172 - 173)

If as Wheelwright contends, some metaphors are more suited to one occasion than others, the point can be made that metaphors of control which ultimately remove self from nature (often in a "mechanomorphized" state) have created an ill-suited, inhumane approach to educational endeavors. A new reality of curriculum is needed which celebrates rather than condemns the essence of humanity. According to Purpel (1989), we need to develop:

. . .an overarching mythos of meaning, purpose, and ultimately that can guide us in the creation of a vision of the good, true, and beautiful life and in the work that this vision creates for us.
(p. 60)

Finally, the way in which we may develop alternate visions of curriculum reality will be addressed. The liberation of the mind can only be accomplished through the emergence of critical awareness. Praxis -- the discovery of consciousness through the process of action with reflection -- is an emancipatory act through which one develops critical awareness. It involves the hermeneutic

process, as characterized in this study, of interpretative meaning-making and the reduction of illusion. As Greene (1973) states, "Consciousness throws itself outward, toward the world. It is intentional; it is always of something; a phenomenon, another person, an object or event in the world" (p. 162). Grundy (1987) cogently summarizes the concept of praxis:

1. The constitutive elements of praxis are action and reflection. . . . Praxis does not entail a linear relationship between theory and practice in that the former determines the latter; rather it is a reflexive relationship in which each builds upon the other. (p. 104)
2. Praxis takes place in the real, not an imaginary or hypothetical world. (p. 105)
3. This reality in which praxis takes place is the world of interaction: the social or cultural world. Thus praxis, like practical action, is a form of interaction. . . . (p. 105)
4. It is the act of reflectively constructing or recognizing the social world. (p. 105)
5. Praxis assumes a process of meaning-making, but it is recognized that meaning is socially constructed, not absolute. (p. 105)

The definitive nature of reflection is determined by the persons involved in the process. Among the areas to be explored leading to greater awareness of language and

curriculum reality include aspects of one's personal belief theory: What are the nature and possibilities of humans? What are one's beliefs about human behavior? What are one's beliefs about learning? What are the goals of society? What are appropriate teaching methods? What is the perception of oneself? (Combs, 1982). In addition, Berman (1986) provides areas of curricular practice that reflection may explore: 1) The quality of classroom life -- Do activities invite a search for truth by students?; 2) The language of the classroom -- How do teachers pick up and build upon the meaning students bring to a situation?; and 3) Environments -- How can dialogue be encouraged?.

In sum, it is only through increased awareness that critical inquiry may emerge and in the process forge a new curriculum reality; thus, a transformation in understanding and in experiencing reality.

Implications of this Study

Curriculum reality has been portrayed as embedded in technical interests in control. The dominant metaphors of this reality both consciously and unconsciously adhere to the inexpressible world view valuing the interest in control to the exclusion of other fundamental human interests of understanding and emancipation. If accepted as a valid representation, it implies the field as in significant crisis -- a crisis in meaning. The reification of human phenomena continues by current school practices including the scoring, sorting, labeling, grouping, and other attempts

to homogenize children who lack the opportunity to discover personal meaning. To deny personal meaning is to deny the essence of being a human who is capable of an authentic self-definition only through autonomous actions. Further clarifying and lending support to an alternative vision of curriculum is the work of Maxine Greene (1973) who stresses that the learning process becomes meaningful only when an individual acts on his/her world. Mazza (1982) succinctly characterizes this position:

. . . instead of curriculum being a set of given facts, rules, or structures to be learned, it should be a set of possibilities and perspectives that a student interprets and orders to develop his/her own set of meanings. In this way the learner becomes a conscious subject, aware of his/her possibilities for choices, self direction, action and ultimately transcendence. (p. 40)

Implications for change may be discussed within the context of a growing body of literature regarding transformational theory. Schopen (1989) claims a new mythos is emerging to replace the stagnant metaphors of the mechanistic world view:

Our world view has changed, and continues to change as a result of the philosophical and scientific advances around us. As we come to a clearer understanding of these dimensions, we will be able to play an even larger role in the movement toward a

more wholistic and humanistic mythos for our time.

(p. 13)

The realization of the potential of transformational theory in the educational milieu is yet to be seen at least when viewed in terms of the comments of persons in this study and the studies discussed in the review of literature. The comments may reflect the stabilizing forces of tradition which resist change as noted by Sawada and Caley (1985). Purpel (1989) considers the resistance to change in education as "the phenomenon of homeostasis, the tendency for people and institutions to seek and maintain continuity and stability" (p. 138). Nevertheless, the very nature of social revolution in thought is brought about by the existent structure's unwillingness and inflexibility to entertain change:

(Social) change involves crises. . . . The very tendency of social behavior to persist, to hold fast to values and convenience, makes a degree of crisis inevitable in all but the most minor of changes. . . . The crisis, with all its social and psychological accompaniments of conflict and tension (is) occasioned by the shattering of old ways. . . .

(Nisbet, 1969, p. 282)

In sum, one must consider the implications of continued adherence to a largely unrecognized world view dominated by control interests. Among possibilities is that we may approach a hollow society devoid of meaningful existence.

The possibility also exists that a crisis point may bring about a dramatic shift in consciousness to an organic, holistic paradigm of thought. The creation of a new vision of curriculum reality relies on the uniquely human ability of perceptual transcendence, that is, going beyond the current conceptions of curriculum based in a control paradigm. Moreover, the communication of transcendent thought is through metaphor. If as Eisner (1985) contends, "(m)etaphoric precision is the central vehicle for revealing the qualitative aspects of life," ineffable constructs such as those proposed by Macdonald (1968) to view curriculum -- dialogue, promise, forgiveness, service, justice, beauty, and vitality -- can be communicated (translated) through metaphor. Perhaps, the dictum, "The medium is metaphor," may better serve the interest of curriculum if restated as "The hope is metaphor."

CHAPTER VII

SUMMARY

By examining metaphorical language of teachers, this study sought understanding regarding the nature of curriculum realities. Metaphor was presented as a means to achieve some understanding of this issue. The study was guided by three overarching questions which will provide the organization for this summary.

What is the significance of metaphoric language in the creation of reality, specifically the reality of curriculum?

The significance of metaphor in the creation of reality is its role in organizing and communicating thoughts about one's reality. Metaphor is most valuable when expressing that which transcends literal experiences. Due to the interactional nature of the metaphorical juxtaposition of concepts, new meanings are created; thus, new realities.

In all aspects of life, . . . , we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experiences, consciously and unconsciously by means of metaphor.

(Lakoff & Johnson, 1980, p. 158)

For example, curriculum as characterized in this study is fundamentally an ontological metaphor expressing the lived experiences of schooling. With regard to the previous quotation, it is a way of structuring an experience and proceeding to act on it or in the case of this investigation, research "it."

Metaphors which provide significantly new ways of viewing reality are referred to as generative metaphors. Fundamental generative metaphors, root metaphors, function to express our paradigmatic thought which is ultimately inexpressible and, for the most part, unquestioned. A philosophical analysis of root metaphor was cited whereby Pepper (1942) proposes the world hypotheses of four fundamental metaphors from which knowledge emerges: formism, mechanism (analytic metaphors), contextualism, and organicism (synthetic metaphors). In addition, a historical analysis of shifts in root metaphors provided a context in which to consider the ways world views are structured and expressed by generative metaphor. The analysis revealed a transition in western culture from organic to largely synthetic metaphors.

Indeed, metaphors are necessary but also dangerous. When metaphors are interpreted as a (or the) literal interpretation of reality, abuse of metaphor ensues:

Language becomes closed and static by habit when the imagination fails, so that the same words are repeated without examination or critical integrity.

Such language has lost its vitality

Wheelwright, 1962, p. 37)

Thus, the ultimate power of metaphor is in expression of new ideas as well as the ability to constrict thought. Nisbet (1969) proposes the additional element of its potential longevity:

Metaphors can be lasting as well as powerful.

Generations, even centuries and millennia, may be required to liberate the mind from ways of thinking which began in analogy and metaphor.

(p. 6)

With regard to curriculum, the search was to understand the role of metaphor in structuring and ultimately directing thoughts as well as actions regarding life in schools. This concern is addressed by the second guiding question of the study:

What metaphoric language do teachers use to describe perceptions of curriculum reality?

Through a conversational mode of research, elementary and high school teachers were interviewed in an unstructured format from which four themes emerged --the purposes of education; the role of teachers; the role of students; and a metaphoric conception of school (curriculum). In addition, twenty-six surveys of undergraduate teacher education students, addressing the four thematic clusters, were reviewed. Numerous conceptions of curriculum were presented including:

A workshop describes the way students and faculty work together. . .

It's sort of a molding process that starts in first grade.

Schools should be like greenhouses. Trying to provide as much as you can in the right kind of atmosphere.

We have to train our students to adjust to society.

Schooling should be a freeing experience.

Ultimately, the metaphoric language of teachers reflected underlying values based predominantly in control. The creation of language expressing interests in emancipation and understanding was virtually ignored. The use of a Habermasian framework conceptualizing these three interests facilitated the interpretation of metaphor.

The last question is the most difficult since it requires the greatest leap in imagination to make meanings, an integral part of the hermeneutic process. It was stated as follows:

What implications, if any, does the language of teachers yield?

Careful distinction must be made between implications and generalizations. Generalizations typically present

lawlike statements derived from particular facts. Implications provide suggestions, possible connections (meanings) among phenomena. In this sense, it is the process of meaning making. The implications for curriculum rendered in this study are made in this spirit, that is, as possibilities (implications) rather than actualities (generalizations).

Not only was the overwhelming majority of metaphoric language situated in the interest of control, it was further suggested that these metaphors have become moribund, frozen in literalness thereby reducing the reality of curriculum to an entity of control. A discussion of the technocratic rationale, based in control interests, substantiated the need for new language to define a new curriculum reality. It also provided insight into the pervasiveness of control interests as well as why the interest in control goes unrecognized.

To gain perspective and distance from the interest in control, the concept of perceptual transcendence was developed as a means to go beyond literalness by means of praxis, action, and reflection. As Schubert, Willis, and Short (1984) note:

Theorizing is thoughtfulness that gives meaning and direction to experience. Because of the guiding value that theorizing offers human life, it follows that those who are most intimately involved in practical educative situations should engage in it

more fully. (p. 70)

If accepted, the theorizing of teachers as "those who are most intimately involved in practical educative situations," should be given great attention and certainly the focus of continued study. Language, specifically metaphor, as an integral part of the theorizing process represents a vital dimension for exploration since it is only through language that the reality of transformation occurs.

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VITA

Pamela G. Fry

Candidate for the Degree of
Doctor of Education

Thesis: THE CREATION OF CURRICULUM REALITY: METAPHORS
IN EDUCATION

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born in Hobart, Oklahoma, October 30,
1957, the daughter of Mr. and Mrs. Joe E. Martin.

Education: Graduated from Shawnee High School,
Shawnee, Oklahoma, in May 1975; received Bachelor
of Science Degree in Elementary Education from
University of Oklahoma in May, 1979; received
Master of Science Degree in Applied Behavioral
Studies from Oklahoma State University in July
1986; completed requirements for the Doctor of
Education degree at Oklahoma State University in
December, 1989.

Professional Experience: First-grade Teacher, Mid-Del
Public Schools, Del City, Oklahoma, 1979-1981;
First-grade Teacher, Monte Cassino Elementary
School, Tulsa, Oklahoma, 1981-1984; Graduate
Assistant, Department of Curriculum and
Instruction, Oklahoma State University,
Stillwater, Oklahoma, 1986-1989.