INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.

2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

University Microfilms International
300 N. Zeeb Road
Ann Arbor, MI 48106

Myers, Christine Foster

A PERSONAL INQUIRY, THROUGH 'CURRERE,' INTO THE PERSON/EARTH RELATIONSHIP, USING THE HERMENEUTIC SPIRAL AS MODEL

The University of North Carolina at Greensboro ED.D. 1983

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark __√__.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy __✓__
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages __✓__
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine _____
10. Computer printout pages with indistinct print _____
11. Page(s) _____ lacking when material received, and not available from school or author.
12. Page(s) _____ seem to be missing in numbering only as text follows.
13. Two pages numbered _____. Text follows.
14. Curling and wrinkled pages _____
15. Other _____

A PERSONAL INQUIRY, THROUGH CURRERE, INTO THE PERSON/EARTH RELATIONSHIP, USING THE HERMENEUTIC SPIRAL AS MODEL

by

Christine Foster Myers

A Dissertation submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
1983

Approved by

David E Purpel

Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Committee Chairman Ernest W. Lee

Dissertation Adviser David E Purpel

Committee Members James R Sellers

Dale L. Brubaker

March 30, 1983
Date of Acceptance by Committee

March 30, 1983
Date of Final Oral Examination

MYERS, CHRISTINE FOSTER. A Personal Inquiry, Through Currere, into the Person/Earth Relationship, Using the Hermeneutic Spiral as Model. (1983) Directed by: Dr. David E. Purpel. Pp. 138.

This dissertation is an inquiry focused on the development of a curriculum framework for Outdoor/Environmental Education. The method of inquiry is derived from a phenomenological and hermeneutic orientation with a particular emphasis on the concept of currere as a process of self-reflection and free-associative writing.

In Part I the differing concepts of the person/earth relationship which influenced the development of Outdoor/Environmental Education are explored through a review of the works of various nature writers who influenced the movement toward the outdoor experience as a part of the school curriculum. A model for examining the nature of the person/earth relationship through the concepts of currere and the hermeneutic spiral are introduced as a prelude to the experiential model which is presented in Part II.

Part II of this study is an illustration of the use of the method of currere to explore the person/earth relationship. The model which is used as a framework around which to organize the writer's personal experience is that of the hermeneutic spiral. In the model presented in Part II, a seasonal metaphor, based on the natural changes during an annual cycle observed within the out-of-door world, is used to trace the phases of the hermeneutic spiral through prose, poetry and art which are interspersed with traditional forms

of research writing. The intent is to demonstrate the aesthetic quality of the spiral as well as to use it as a model for investigation.

Part III, the Epilogue, offers a review and personal evaluation of the spiral as model for the method of currere and suggests a number of curriculum areas in which such a study might be used as a method of inquiry. The spiral is presented as a transforming image through which curriculum theory may be examined and through which personal meaning may emerge.

ACKNOWLEDGMENTS

This dissertation involves the relating of personal experiences which extend over a lifetime. Accordingly, its writing evoked feelings of gratitude which involve a lifetime of family, friends, teachers, and kindred spirits who care about the earth.

I was fortunate to have parents who chose a rural setting in view of the Blue Ridge Mountains in which to raise a family and who taught Doe and Gayle and Terrye and me to be aware of the natural wonders that surrounded us. This also meant that I had for a playmate Max, who became one of the two best dam builders in the world. I was then fortunate to have a number of sensitive and caring teachers who nurtured the appreciation of beauty which was further encouraged by leaders like Piney and Clate, who took groups of Girl Scouts to the mountains for the sunrise and to the lake at sunset.

More recently, the members of my doctoral committee provided support for the flourishing of the spirit of awareness and self-expression. My committee chairman, Dr. Ernest W. Lee, provided an example not only of sensitive and innovative teaching, but also of uncommon patience and care. Dr. Dale Brubaker unfailingly provided friendship, helpful suggestions, and welcome encouragement. Dr. James Sellers provided genuine concern and helpful advice from his perspective as cognate representative. Dr. David Purpel, who

directed the writing of this dissertation from scrap paper stage, enabled me, through a series of ingenious ploys, to find my own writing voice without once raising his. He has thereby added another grateful graduate to his long list of forever friends. Dr. James Macdonald, who served on my oral committee, provided, by his teaching as well as by his writing, convincing evidence of the importance of models in curriculum theory. Beyond this, however, is his personal modeling of the true meaning of mentor. His friendship is a serendipitous treasure which has enriched my life immeasurably.

Numerous other faculty have provided models of teaching or research or writing which are incorporated here. One especially influential model of inspired teaching was provided by Dr. Hollis Rogers, Professor Emeritus of Botany, who, with Dr. Ernest Lee, directed the summer camping program which provided my entry into outdoor/environmental education as a curriculum concern. Dr. Cheryl Gowie encouraged this interest while providing companionship on outdoor jaunts; Dr. Elizabeth Bowles shared her love of nature and nature poetry.

My friend Margaret McCoy directed me back to school to begin this work and my forever-after friend, Carolyn Toben, found me there and helped make the whole thing into a grand adventure as she provided enthusiasm, ideas, and true sisterhood. These two, along with Sue and Ginger and countless

other women and men who have provided support and encouragement have made me understand a little more clearly the concept of unity which I sought to portray in this work. Undergirding this sense of unity is the practical help and unflagging moral support of Jeannette Dean who did everything except burn the building down to help me finish this undertaking. To her and Betty Mackay for their friendship, as well as to Ibby Hunt for her efficient helpfulness in getting this paper into presentable form, I owe more than I can say.

When all was said that I could say in my writing, I called on my friend, James Caudill, who had promised to illustrate my dissertation back in the days when its completion seemed far away. His gift as an artist is evident in his illustrations here of the seasonal cycles of nature. And his gift to me of this inspired work which says so beautifully and sensitively what I had only dreamed of saying, is deeply appreciated.

Finally, the circle of gratitude returns to my family who have lived this journey with me for many years. Melissa and Sherry have grown into young womanhood during their mother's sojourn as student. I thank them now for their patience and understanding, hoping that they will find something in my work or my example that helps them in their own quests as they have helped me in mine. And to Bob I owe, among other things, a lifetime of gratitude for his generous

support, steadfast faith, and efficient proofreading. Without him, the journey might not have been undertaken, much less finished.

And over all is the genius of the Creator whose gifts are fully evident to the eyes that see.

> Each of us sees
> in a circle
>
> and each of us is in a circle,
> flowers swaying and touching
> in the dark
>
> passing from one to the other
> the same circles, the same life
>
> even the same particles
> of flower
> or flesh.
>
> (Collins, 1975, p. 95)

TABLE OF CONTENTS

LIST OF FIGURES

To the memory of . . .

a grandmother who loved to share flowers and
who knew the enchanted place where pink lady's-
slippers bloomed

and

a grandfather who had time to hunt for muscadines
and hickory nuts and
to help build castles in the bottom land sand.

PART I

INTRODUCTION

CHAPTER I

INTRODUCTION

The process of defining (and refining) a dissertation topic is in itself a challenging and continuous process that involves self-discovery and insight at best and frustration and blind alleys at worst. My initial, and perhaps naive, notion of a topic for research focused on a combination of interests and subject areas which centered on educational issues related to the matter of the person in relation to the natural world--the out-of-doors, and around the importance of this relationship from the wholistic perspective of modern ecological concerns.[1] I chose, after considerable searching and sifting, the interdisciplinary field of Outdoor/Environmental Education as a starting point for the formal research into the history and status of the person/earth relationship.

Until recently, the concept of earth which shaped the individual's attitudes toward the person/earth relationship--the concept traditionally held by religious, educational, and social organizations--was the concept of earth as "other." As the seriousness of the current ecological crises and the evidences of our absolute dependency upon the earth have become increasingly apparent, however, differing concepts of the person/earth relationship have become an

---

[1] "Wholistic" is used as an alternate spelling of "holistic" in order to emphasize the concept of "wholeness."

important topic of consideration and research. Accordingly, numerous formal educational programs and courses have developed in response to interest in the dynamics of the ecological relationships inherent in a wholistic view of man's place in nature. Many of these programs grew out of existing science courses and have been enlarged into interdisciplinary programs concerned with environmental education and ecological awareness.

The Outdoor/Environmental Education Movement

A review of the literature of Outdoor/Environmental Education (O/EE) revealed that the impetus for outdoor education evolved in the late 1800's out of public interest in the value of nature appreciation, nature study, and conservation. The philosophical base of this nature appreciation in America may be traced back at least as far as the visionary poets who wrote of the man/nature relationship. An appreciation for the inspirational beauty of nature is particularly evident in the works of Romanticists such as Blake, Yeats, Shelley, Lord Byron, Keats, and of Wordsworth, who wrote of the value of nature as teacher. In his poem "The Tables Turned," Wordsworth declared:

> One impulse from a vernal wood
> May teach you more of man,
> Of moral evil and of good
> Than all the sages can.
> (Wordsworth, 1904, p. 83)

The romantic poets wrote from a mystical view of the world which is just now, in the twentieth century, coming to

be accepted by a growing number of scientists as being not only a romantic view, but a realistic view as well. For example, Blake's vision in which he was able "To see a world in a grain of sand and a heaven in a wild flower" may have been lost on a world engaged in the exploitation of the earth in deference to the rise of technology in the 19th century. His vision is given scientific credence today, however, by findings such as those discussed by Frijof Capra in The Tao of Physics (1975). Capra reminds us that

> All atoms, and consequently, all forms of matter in our environment, are composed of only three massive particles; the proton, the neutron and the electron. A fourth particle, the photon, is massless and represents the unit of electromagnetic radiation. (p. 211)

Perhaps the romantic poets intuitively understood these principles which modern physics is beginning to discern. And perhaps their intuition was fed by the contemplation of nature--by their immersion in nature. The common theme of their philosophy regarding nature is that of unity--a theme which would become particularly evident in the writings of the transcendentalists like Walton, Muir, Emerson, and Thoreau who wrote of the effects of the natural world on the spirit of man.

The writings of these men had recommended the out-of-door experience as a means of discovery and enlightenment and made convincing arguments for the importance of prolonged contact with untamed nature. Through the journals of John Muir, for example, the wilderness was viewed as facilitator

of self-discovery, of appreciation of beauty, of spiritual growth. Muir, himself greatly influenced by the Romantic poets' views of nature, "made his own American contribution to the ideas of the natural world and to our response to it" (Engberg & Wesling, 1980, p. 15). His glorification of the wilderness is evident in his claim that

> No wilderness in the world is so desolate as to be without divine ministers. God's love covers all the earth as the sky covers it and also fills it in every pore, and this love has voices heard by all who have ears to hear. (Muir, cited in Engberg & Wesling, 1980, p. 160)

Emerson, who might be called the father of the transcendentalist movement in America, described the ecstasy of nature:

> And because ecstasy is the law and cause of nature, you cannot interpret it in too high and deep a sense. Nature represents the best meaning of the wisest man. Does the sunset landscape seem to you the place of Friendship--those purple skies and lovely waters the amphitheatre dressed and garnished only for the exchange of thought and love of the purest souls? It is that. (Emerson, 1971, p. 132)

In the latter part of the 19th century, Henry David Thoreau, who espoused Emerson's transcendentalist views, was advocating immersion in nature as the most valuable of experiences for the person wishing to understand himself and the world. Thoreau's convictions concerning the importance of being in the out-of-doors led him not only to undertake the solitude of the Walden Pond experience, but to forego the conventions of society in general in order to remain free to roam the fields and woods. Thoreau's writings regarding the importance of nature for the well-being of mankind were so powerful that he is credited by Carlos W. Ward (1935) as

being one of the influences which led to the rise of the camping experience as part of the progressive education movement. Concerning Thoreau's aesthetic sense, Loren Eisely writes in the Afterword to The Illustrated World of Thoreau that Thoreau

> possessed the kind of memory which fixes certain scenes in the mind forever . . . a powerful aesthetic response when, in his own words, 'a thousand bare twigs gleam like cobwebs in the sun.' (Thoreau, 1974, p. 166)

Eisely theorizes: "He had been imprinted, as it were, by his home landscape at an early age" (p. 166). Regarding the effect of the out-of-doors on his spirit, Thoreau wrote:

> When I would recreate myself I seek the darkest wood, the thickest and most interminable and, to the citizen, most dismal swamp. I enter a swamp as a sacred place--a sanctum sanctorum. There is the strength, the marrow of Nature. The wild-wood covers the virgin mould,--and the same soil is good for men and for trees. A man's health requires as many acres of meadow to his prospect as his farm does loads of muck. There are the strong meats on which he feeds. (Thoreau, 1934, p. 327)

The writings of these transcendentalists, like that of the poets who preceded them, emphasized the wholistic view of the mankind/nature philosophies. We see, through their views, the composite, or interrelated, view of the philosophies which were to become somewhat fragmented in the century which followed, as differing groups and agencies, with differing aims and interests, undertook to promote the person/earth relationship. The transcendentalist view, however, continued to influence the school camping movement which

came to be a part of the educational approaches which John Kirk (1980) later delineated as the Conservation/Nature Study and the School Camping/Outdoor Education movements. William M. Hammerman (1980) refers to the school planning period prior to the 1930's as "the Period of Transition"--a time when the variety of programs in organized camping paved the way for the acceptance of school camping programs on the part of both the public and the professional educator. Concerning this period of the pre-1930's, Hammerman (1980) refers to Donald Hammerman's summary of this era in outdoor education:

> Early developments in outdoor education were, for the most part, isolated experiences carried on nearly as much in the name of recreation as for the purposes of education. The stage was gradually being set, however, for what would ultimately become a clearly defined movement in education; and, in fact, affect teacher education itself. (p. xviii)

The Hammermans called 1930-1939 the "idea stage of school camping"--a stage in which writing and discussion, but "little direct action" occurred (1980, p. 3). Among the influential writing of this period was that of Lloyd B. Sharp, whose work was instrumental in the development of outdoor education. Sharp advocated the community-centered school as a means of meeting not only the educational needs, but also the recreational needs of the community. Recognizing camping as a part of the educational process, he recommended that camping experiences be a part of the school's program (Hammerman, 1980).

During this same period, Julian Smith, also a leader in the outdoor education movement, was emphasizing the importance

of outdoor experiences as a part of the educational process. He described the out-of-doors as an ideal setting for aesthetic experience as well as for motivation and natural discipline:

> Outdoor education and camping are not frills to be scalloped around the curriculum. In the woods, fields, and streams children can see, feel, hear; they can even smell and taste. Here reality, with all its vividness, becomes both motivation and method for learning. Here too youth may experience the discipline of living results. Here is real life, with its simplicity and wholesomeness, yet with its shroud of mystery and unexplored realms of truth. (Smith, 1970, p. 33)

These words recall those of Rousseau (1966), who, in prescribing an educational program for Emile, advised:

> The body is strengthened by this constant exercise under the guidance of nature herself, and far from brutalising the mind, this exercise develops in it the only kind of reason of which young children are capable, the kind of reason most necessary at every age. It teaches us how to use our strength, to perceive the relations between our own and neighboring bodies, to use the natural tools, which are within our reach and adapted to our senses. Is there anything sillier than a child brought up indoors under his mother's eye, who, in his ignorance of weight and resistance, tries to uproot a tall tree or pick up a rock. (p. 89)

By the 1950's, the Conservation/Nature Study and School Camping/Outdoor Education movements had evolved to a stage which Hammerman describes as the "Period of Standardization" and which John Kirk defined as the "curriculum stage"--a stage in which cognitive learning about the out-of-doors was enhanced through nature study in the vicinity of the school building through school camping, through curricular offerings in the physical and social sciences, and through field trips and outdoor laboratories (Kirk, 1980). During this period there was a gradual move "away from a camping

stereotype toward a program more closely identified with the school's course of study" (Hammerman, 1980, p. 6). A concern for raising standards is evidenced by the increase in curriculum materials and the formation of national organizations and conferences (including the Outdoor Education Association in 1951 and the Association for Outdoor Education in 1954 and the meeting of the first National Conference on Outdoor Education in 1958).

The 1960's brought an increased sense of urgency regarding the need for education about the environment. Public concern had been dramatically aroused by two important books published during this period--Rachel Carson's Silent Spring (1962) and Stewart Udall's The Quiet Crisis (1963). Hammerman (1980) notes that the resurgence of interest in outdoor education and camping education during this period was accompanied by financial support provided by the Federal Government. This increasing support, both financial and professional, reflected a growing public awareness of the global extent of the environmental crisis. A major event in that growing movement was a series of activities and gatherings that culminated in "Earth Day" on April 22, 1970--an event from which environmental awareness would thereafter often be dated and which brought global attention to the ecological crises discussed by Udall and Carson.

The interrelatedness of common concerns led to a merger, in the early 1970's, of the two movements--

Conservation/Nature Study and School Camping/Outdoor Education--into a larger, wholistic concept. The outcome of this merging was a program of studies which became known as environmental education. John Kirk (1980) believes that this new philosophy (environmental education) was the result of "a 'quantum jump' which produced a new product . . . a new approach" (p. 17).

Hammerman (1980) notes that the literature of this period "began to reflect a turn to experience-based learning strategies" (p. 10). He refers to Steve van Matre's teaching philosophies and concepts in Acclimatization (1972), Acclimatizing (1974), and Sunship Earth (1979) as

> Among the most creative applications of these earlier philosophies . . . [stressing] a sensory and conceptual approach to ecological involvement. His approach to understanding relationships in the natural world is very personal and reflective. (p. 10)

An important international influence on environmental education was held in Belgrade, Yugoslavia, in 1975 which produced a new and important conceptualization of the field. This conceptualization was contained within the Belgrade Charter which emerged from this UNESCO conference. Presiding as chairman was one of the foremost leaders in the O/EE movement, William B. Stapp. The Belgrade Conference resulted in a series of goals for environmental education--goals which were described in programs which would involve the entire world community. The aims were to lead not only to awareness and commitment, but also to responsible action to improve the environment.

Since Earth Day, and through such international attention as that evoked by the Belgrade conference, environmental education has evolved into a movement concerned with its relationship to the entire school curriculum and to the community at large. A major tenet of this movement is that education for concern about the environment is a responsibility, not just of the school, but of government (through grants, through information dissemination via mass media, through federal and state parks and recreational systems, and through agricultural and conservation services and health services); of commercial enterprise (through public service programs, grants, outdoor recreational programs, and through support for conservation and beautification efforts); and of private clubs and groups (civic and church groups, nature study clubs, recreational clubs, scouting troops, and numerous other civic organizations).

As a result of this movement, we have witnessed a virtual blizzard of programs in this realm. Many, if not most, schools now offer a variety of programs ranging from short field trips during class time to outdoor camping and wilderness programs lasting several weeks. Adventure programs such as Outward Bound are now national in scope and offer experiences for an increasingly diverse population. Outdoor education opportunities are increasingly available for special populations, including the physically and mentally disabled, delinquent youth, and adult and senior citizens. Many

universities are developing special training programs, sometimes in the context of science educator training, sometimes in the context of recreation education, as well as in other experimental and specialized approaches. Included in the university-level programs are combinations of specialization leading to graduate degrees in O/EE. In discussing outdoor education's impact on higher education, Dr. Russell Bachert refers to the increasing use of field campuses designed for outdoor education, many of them university-owned. These institutions also project an increase in field experience opportunities, increases in course offerings and degree options, extended outreach programs involving the community, and increased interdepartmental cooperation as anticipated developments within outdoor education (Hammerman, 1980).

The current direction of these efforts seems to be toward becoming more comprehensive and more wholistic, thereby avoiding needless fragmentation and division. The aim of "total education for a total environment" is seen as more and more appropriately descriptive of these efforts.

This concern for "total education for the total environment" has led the movement to the problem of developing a theoretical framework that would facilitate appropriate curricular and instructional practices. This is the problem that I had wanted to address in my dissertation--i.e., to find and study conceptual schemata that would provide a curriculum model that reflects the major strands of an O/EE program.

The Search for a Model

The recognition of the wholistic nature of the person/earth relationship and the recognition of the Outdoor/Environmental Education movement as movement (process) posed a challenge for developing a curriculum model. I was looking for a way to combine the common threads from the interdisciplinary areas comprising environmental education into a conceptual framework that would facilitate the development of appropriate educational activities. Such a model of person/earth interrelatedness would, of necessity, recognize the person/earth relationship as organic--as "in process"--and would therefore be a model of progressive growth.

In reviewing the literature pertaining to the field of outdoor education, I found that Maslow's Hierarchy of Needs had been used as a model for a behavioral interpretation of recreation by Driver and Tocher. Using the hierarchy in combination with Gutman's schema of human responses, Driver and Tocher (in Driver, 1974) postulated that:

> In recreational pursuits, we find interesting opportunities to engage in the most complex, and 'highest' forms of human behavior--learning, problem-solving, creativity and self-actualization. (Driver, 1974, p. 14)

Another recreational professional/planner, Alan Jubenville (1976), in his interpretation of Maslow's hierarchy, suggests that the (recreational) "planner may draw some conclusions about the needs of the individual by relating the types of activities (participation patterns, level of skill

development needed, and level of security/risk-taking) to the . . . hierarchy" (p. 62). An example Jubenville uses is that of the guided trail rider for whom the participation activity falls between "safety" and "belongingness," as compared with the hiker who in completing a 200-mile hike in the Brooks Range of Alaska "might fall in the 'self-actualization' or at least in the 'ego-status' category" (p. 63). Thus, Jubenville is, like Driver and Tocher, suggesting the usefulness of Maslow's Hierarchy of Needs for identifying the individual's "motivations to re-create" by locating recreational behaviors in terms of the needs levels to which they correspond on the hierarchy. I decided to experiment with model-building by expanding Driver's and Tocher's and Jubenville's work with Maslow's model by applying it to the progression of the person/earth relationship insofar as I was able to conceptualize this relationship in hierarchical terms. My intention in using this model was to investigate the progressive nature of the growth in responsible attitudes toward the earth as the individual advances from a dependency level to a level of maturity characterized by Maslow as the attainment of self-actualization and, ultimately, transcendence--a stage in which the individual realizes his interconnectedness with the universe. Explaining his model, Maslow (1971) describes the level of self-actualization as the level at which the individual experiences integration, or fusion, or the "healing of the split" within

the psyche. This level of integration is attained through the sequential growth cycle which progresses from the level of basic physiological needs (and their satisfaction), through those of belongingness and self-esteem, to a heightened awareness of the creative potential within the self.

Maslow's hierarchical arrangement of needs implies that each stage or level is reached only by achieving satisfaction of the needs at the preceding level. The two lower or basic levels of needs, labeled the "Physiological" and "Safety and Security" needs, are concerned primarily with the physiological needs of the individual--the needs for air, food, water, shelter, safety from harm, etc.

The needs in levels 3-5 of Maslow's hierarchy may be seen primarily as psychological needs, as opposed to the more physiologically oriented needs of the first two levels. The goals of belongingness, ego-status, and self-actualization may be attained, according to Maslow, only after the basic deficiency needs have been satisfied.

In my adaptation of Maslow's model, the second level of physiological needs outlined by Maslow, that of the safety needs, may be seen in terms of the person/earth relationship as the need of the individual to physically interact with, to react <u>to</u> the earth--the need for physical challenge, physical endurance, adventure, etc. The environment is now viewed as teacher/challenger. As the individual engages in exploration and adventure within the environment, she will,

if the experiences are positive, also gain an increasing feeling of safety within the world.

When earth is seen as home, it also becomes a setting which reflects something of oneself. Now the individual, in satisfying the need for self-esteem, through proper education, begins to show concern for the care and maintenance of his home--to become concerned about the defacing of the planet, the pollution of the rivers, the disappearance of endangered species of plant and animal life.

The "development of aesthetic interests and appreciations" is one of the educational goals listed, in 1971, by the Council on Outdoor Education and Camping. One of the means of fostering this goal is that of "participation in positive experiences in the natural environment which contribute to the creative expression of talents and interests" (Smith, Carlson, Donaldson, & Masters, 1972, p. 31). Regarding the effect of the person/world relationship on creativity, Maslow (1971) writes:

> We wind up with the fusion between the person and his world which has so often been reported as an observable fact in creativeness, and which we may now reasonably consider to be a sine qua non. I think that this spider web of inter-relationships that I have been teasing apart and discussing can help us to understand this fusion better as a natural event, rather than as something mysterious, arcane, esoteric. (pp. 70-71)

The fusion of person/world described by Maslow as the sine qua non of creativeness is the desired outcome of the orderly progression of the individual through the stages of

consciousness of the interdependence of person/earth and of the person's acceptance of the responsibility and privileges evinced by that consciousness. At the same time, the model, as illustrated by the foregoing examples, lends itself to the inclusion of the aims of Outdoor/Environmental Education insofar as physical interaction with earth is seen as an important component of person/earth relationship. Furthermore, the model, as a symbol of growth, provided a framework for my experimentation in working with the dynamic processes of interaction. As I worked with this process, a feeling of the gestalt experience, which is analogous to transcendence, began to emerge in relation to the elements which had been fitted into the pyramid of hierarchies. There was an intuitive recognition of the need to include within the model a picture of the web of interrelatedness which had begun to form (in my mind) as a result of the fitting together of the elements of growth in consciousness within the concepts of the unity of the organic processes of nature. (This recognition resulted in a schematic diagram which topped the hierarchical pyramid by encircling it with a web of interconnectedness.) Thus, the hierarchical model had served as a base upon which to organize, in linear fashion, the concepts of environmental/outdoor/awareness education; but it also had led me to consider a transformation of the model--a model shift in which the linear concept was replaced by a wholistic concept. A new model had come into existence--

a model which was illustrated by fluid, web-like threads of connectedness, rather than by rigid, horizontal lines of demarcation. The model had emerged as a result of having lived through the linear model and having "real-ized" its limitations in portraying the gestalt experience which accompanies the process of fusion or unity.

At the same time, the limitations of the linear hierarchy as a model for the conceptualization of the person/earth relationship had become evident. For example, it was impossible for me to make clear distinctions between the various physiological and psychological needs outlined by Maslow in terms of outdoor activities. This is not a regrettable limitation, since all outdoor activities of the curriculum are ideally planned to meet as many of the needs of the individual as possible. Further, it is not to suggest that we can ever fully assess the extent to which these presumed needs have been satisfied through any combination of outdoor activities. A more serious shortcoming of this model, or any other linear model, for use in illustrating a concept of interaction such as that of the person/earth relationship is that the nature of the linear divisions or steps may tend to encourage a dichotomizing of activities into rigid categories. This kind of polar thinking could result in planning which fails to allow for the wholistic experience of transcendence as it relates to relationship with nature.

On the other hand, Maslow's model had enabled me to conceptualize the nature of the person/earth relationship in terms of the human dimension, which was a central consideration in my search for a model. Furthermore, the model was particularly appropriate in that its dimension labeled "transcendence" is described by Maslow (1971) as containing several various meanings which have to do with the "fusion" experience of the person with the natural world. Maslow describes these experiences as "mystic fusion with either another person or with the whole cosmos or with anything in between" (p. 271). In summarizing his concept of transcendence, Maslow states:

> Transcendence refers to the very highest and most inclusive or holistic levels of human consciousness, behaving and relating, as ends rather than as means, to oneself, to significant others, to human beings in general, to other species, to nature, and to the cosmos. (p. 279)

This description of transcendence as it relates to the person's relationship to nature and to the cosmos is similar to Paul Santmire's modification of Buber's "I-Thou" relationship when the relationship is between the person and nature. Santmire calls this the "I-Ens" relation, a relationship which includes givenness, mysterious activity, and beauty. Santmire describes such an encounter:

> I come to a halt and I contemplate a blossoming apple tree, for example. I do not immediately think about its cells or about the food it may produce for me, nor do I immediately think that the tree may need pruning or spraying. As an <u>Ens</u>, the blossoming apple tree stands before me in its own right, a beautiful

> entity posited there for its own sake. I contemplate it and am captivated by it. I do not penetrate behind its sheer givenness. (Santmire, 1968, p. 268)

It seemed to me that this transcendental, mystical view of the personal quality of our relationship to the earth was an important aspect of curriculum, not only for environmental education, but for curriculum in general.

In searching for ways to understand the meaning of what was, to my thinking, an intensely personal domain of the person/earth relationship, I found myself asking such questions as: How are one's attitudes toward the earth formed? What is the nature of the person/earth relationship, of each person's relationship to earth? How can this relationship be examined? How can it be incorporated into the framework of curriculum?

The Re-search for a Methodology

This new awareness, however, posed a new problem, namely, the difficulty of trying to use traditional linear modes of curriculum theory for a set of ideas informed by a commitment to transcendence. I then had to re-search the field of curriculum theory--a research which led to the contemporary movement called "reconceptualization" which provided me with an appropriate methodology. A recent text (Giroux, Penna, & Pinar, 1981) presents a contrast of traditional curriculum workers with the reconceptualists as follows:

> It is not that reconceptualists do not speak to this constituency (schoolpeople) of the curriculum field. But there is a conscious abandonment of the technician's mentality. There are no prescriptions or traditional rationales. What [the reconceptualist] offers, instead, is heightened awareness of the complexity and historical significance of curriculum issues. Because the difficulties these reconceptualists identify are related to difficulties in the culture at large, they are not "problems" that can be "solved." That concept, created by technological rationality, is itself problematic. Thus, what is necessary in part is fundamental structural change in the culture. Such an aspiration cannot be realized by "plugging into" the extant order. That is why an elective or two on Marx in high school social studies classes or the teaching of autobiographical reflection in English classes bring indifference and often alarm to most reconceptualists. That "plugging into," "co-opting" it was termed in the 1960s during the student protests, accepts the social order as it is. What is necessary is a fundamental reconceptualization of what curriculum is, how it functions, and how it might function in emancipatory ways. It is this commitment to a comprehensive critique and theory development that distinguishes the reconceptualist phenomenon. (p. 94)

Currere as Method

Reading the works of a number of curriculum theorists who addressed the transcendent/personal/relationship components of curriculum I was led again to the concept of currere developed by Pinar, who is himself one of the most prominent of the reconceptualists.

Pinar (1975) writes of the importance of one's inner experience as it relates to the educational journey. Discussing the various meanings attached to the word curriculum, he proposes another meaning, derived from the Latin root, currere. Rather than the current focus on curriculum as it

pertains to "the observable, the external, the public," Pinar's use of currere is intended to emphasize "the nature of the individual experience of the public: of artifacts, actors, operations, of the educational journey or pilgrimage" (p. 400). (Pinar refers here to Heubner's use of "pilgrimage" in a conference address titled "Toward a Remaking of Curricular Language," in Heightened Consciousness, Cultural Revolution, and Curriculum Theory. Pinar, ed., 1974.) The knowledge of currere is the information our investigations bring us

> when we ask the whys concerning our interests, our choices, our attractions to subject matter, or teachers or writers. It is its own knowledge, and while its roots are elsewhere, its plant and flower are its own; it is another species, a discipline of its own. (p. 402)

It is one's own experience of the educational journey.

Currere as lived experience lends itself particularly to the examination of the person/earth relationship because of the early, primal connections we, as humans, have with the earth. The earliest connections are almost certainly lost to our conscious memory. But through a process such as currere, in which free association of thoughts and images serves as stimulus to recollection, these early connections with the organic, natural world may be re-experienced and reinterpreted.

Pinar (1975) also notes Greene's use of the concept of currere in her "emphasis on the individual and his experiencing" (p. 402). These are views consonant with Pinar's

requirement of currere--that the student must

> recreate and regenerate in terms of his own consciousness the materials of a curriculum. . . . What is required is a self-hermeneutical, phenomenological method that will help the investigator gain access to . . . that realm of lebenswelt associated with currere. (p. 403)

It is phenomenological in that it "focuses on that which presents itself in our consciousness" (p. 405). One's personal journey or pilgrimage comprises the experiences which provide the basis for the "possibility of sense," the realization of which is provided by the study of currere.

Exploring one's personal and family history as a way of knowing is also discussed by Purpel and Belanger (1972) in their framework for a humanistic curriculum ("Toward a Humanistic Curriculum Theory"). Their endorsement of more personal and intuitive approaches to knowledge is intended as an enrichment to the dominant view of knowledge "as an abstract product divorced from human activity" (p. 71). Purpel and Belanger emphasize the need to "reintroduce the person as the main agent in the construction of knowledge" (p. 71).

Maxine Greene (1974) suggests "the recovery of one's own biography "as a necessary procedure for one seeking to understand the meanings and traditions that constitute one's life as well as the horizons toward which one occasionally yearns" (p. 76). It is important that the person identify and include in his biography the significant themes

of his life--an important process in the individual's evolvement toward eventual escape from the "givens" of the system. Greene quotes Friere's definition of liberation as "a praxis, the action and reflection of men upon their world in order to transform it" (p. 78).

Macdonald (1981) describes the hermeneutic circle as a model for curriculum theory. In the hermeneutic quest for meaning, individual biography and individual values are the basis for the search for meaning through the process of personal dialogue with theory. New meaning is added through self-reflection which results in reinterpretation of the situation, of one's personal history, of the interrelationships between the person and the environment.

The hermeneutic spiral is not only a model, but it is also a method for assimilating and understanding the experience of the person in relation to earth and the meaning of this experience in terms of the educational process--in terms of <u>currere</u>.

My search for a model had begun with the conventional research methodology which began with a review of the literature pertaining to the various fields considered relevant to my dissertation topic. This research produced a large amount of data, opinion, and wisdom relating to the ways in which the person's relationship to earth has been viewed, how this relationship may be facilitated, and implications for enhancing the meaning of this relationship in ways that

promote both personal wholeness and the ecology, or wholism, of the earth. And in this process, the research topic with which I had begun--an inquiry into education focused on the meaning of the person/earth relationship--had expanded in its scope at the same time that it had become a part of a larger picture of interrelatedness. But it was not a part that could be set apart, or dissected, or examined discretely. It had become, rather, woven into the interrelationships which make up the whole of the human experience--the gestalt of the universal (uni-versal), a process within a spiral of ongoing process. As a part of this spiral, the person/earth relationship is also moving--in process--so that it can never be stopped or captured in a static modular form in order to examine, discuss, or summarize its importance. It can only become assimilated, by various modes of knowledge, through the individual's own experience of its form. Reflection on this personal experience then becomes the process of re-seeing which then blends into new understanding.

As this reflection proved valuable in formulating my own thinking, a natural pattern had begun to emerge in my work. Free associative thought was followed by reflection on the meaning of these experiences. New meanings led to new research into the nature of the meanings and to a search for the shared experience through others who wrote of the process. The search for a model had also become the search for a method, and this wholistic undertaking had gradually

led to a new understanding of the importance of the creation of new images and models for seeing the person in relation to the natural environment and to other persons within an organic universe functioning as a whole. It had become clear that traditional methods of description, analysis, and interpretation were not adequate for conveying the circular, web-like quality of inter-connectedness which had begun to emerge as an outcome of my research as well as through my own experience of connectedness with the natural world. New interpretations necessitated the creation of new forms--forms more appropriate for the expression of the organic processes of knowledge which emerge through, for example, intuition, meditation, and artistic expression. The linear messages which emerged through research and reading had been assimilated into the understanding through the blending of various modes of learning and experience.

I had experienced these various modes of learning while searching for a methodology. The experiential learning had occurred through work with clay which was a part of the educational theory derived from M. C. Richard's work; through movement exercises directed by George Leonard (in workshops he conducted to illustrate his vision of the "ecstasy" of education); through contact with water, earth, and fire in outdoor excursions designed to recreate the metaphoric experience of the Odyssey--excursions led by teachers, for teachers. Words about the earth's fragile strength had

melded with the feeling of clay being molded by the palms of the hands; colors that bled and blended as paintbrushes touched wet paper and were transformed into new blends through assimilation with other colors; spiral patterns evolved in creative dance experiences in an outdoor setting. The wholistic basis of the interconnection of mind/body/earth was experienced (rather than merely conceptualized) through a (self-designed) wholistic research methodology designed to explore these connections.

The lived experience of the search also included research into the meaning of dreams--a search which began with journal-keeping as a means of recording the nighttime images which were beginning to evolve out of the unconscious processing of the daylight experiences of assimilation and expression. The dream research led to experiential workshops in which Jungian theories were explored and in which the processes of meditation and visualization were practiced as a means of understanding. The processes of currere had become a part of my personal journey.

Another example of currere as it relates to personal journey is provided by the choreographer Pearl Primus's recounting of her meandering toward a doctorate in anthropology as she traveled the river of her life. Writing in the New York Times, Primus relates:

> My life has been like traveling up a river. Every now and then I would hear singing around the bend, and so around the bend I would go and become

> occupied with living. Maybe years would go by and I'd realize, 'Oh my God, I've got to get this Ph.D. I've lived many rivers and many peoples. Anthropology has become part of me instead of something superimposed. (March 21, 1981, p. 31)

Just as anthropology had become a part of Primus, rather than "something superimposed," so the person/earth relationship had been assimilated into my consciousness so that it had become a focus of my personal journey as well as of my experience of currere. The methodology had evolved out of the lived experience.

The Hermeneutic Spiral as Model

The currere which I had experienced is akin to the general mode of research known as hermeneutics. This term, used basically to refer to theories of interpretation, gained original prominence as a term used in reference to nineteenth-century biblical textual analysis. Cox (1973) explains that the term was derived from the name of the Greek god, Hermes, who was a messenger for the gods. "Hermeneutics," he explains, "is the study of messages or, more exactly how one interprets the meaning of texts. It is generally used in relation to documents stemming from a different historical period" (p. 146). Cox talks of the importance of the meaning of hermeneutics for today's interpretations of people rather than of texts. It is a method which takes into consideration the unique personal history of the individual interpreter of the events as well as of the large setting in which events

take place. Cox admits that, as methodology, hermeneutics is "only in the earliest stages of its evolution" (p. 141).

The term hermeneutics is used broadly, but for present purposes, I shall use it as applied in the fields of phenomenology and ethnomethodology--fields concerned with determining how people make meaning out of their experiences. It is traditional among writers in phenomenology to use the basic distinction made by Heidegger between understanding and interpretation. In a broad sense, understanding refers to the most basic, primordial ways in which people make meaning of the world. It is that combination of explicit and implicit knowledge, ideas, and insight that adds up to how one sees the world as making sense. Interpretation, on the other hand, refers to the process by which people respond to events and phenomena based upon prior understanding.

The nexus between understanding and interpretation lies in two other processes--indexicality and reflexivity. Indexicality refers to the activity of applying basic understandings to specific events, whereas reflexivity refers to the process of considering the implication of prior events.

This process is often referred to as the "hermeneutic spiral." Mehan and Wood (1975) have adapted the concept of hermeneutics within their visual metaphor of the spiral so as to present the concepts of interpretation and understanding as two halves of the circular form, with night representing understanding and day representing interpretation (see Figure 1).

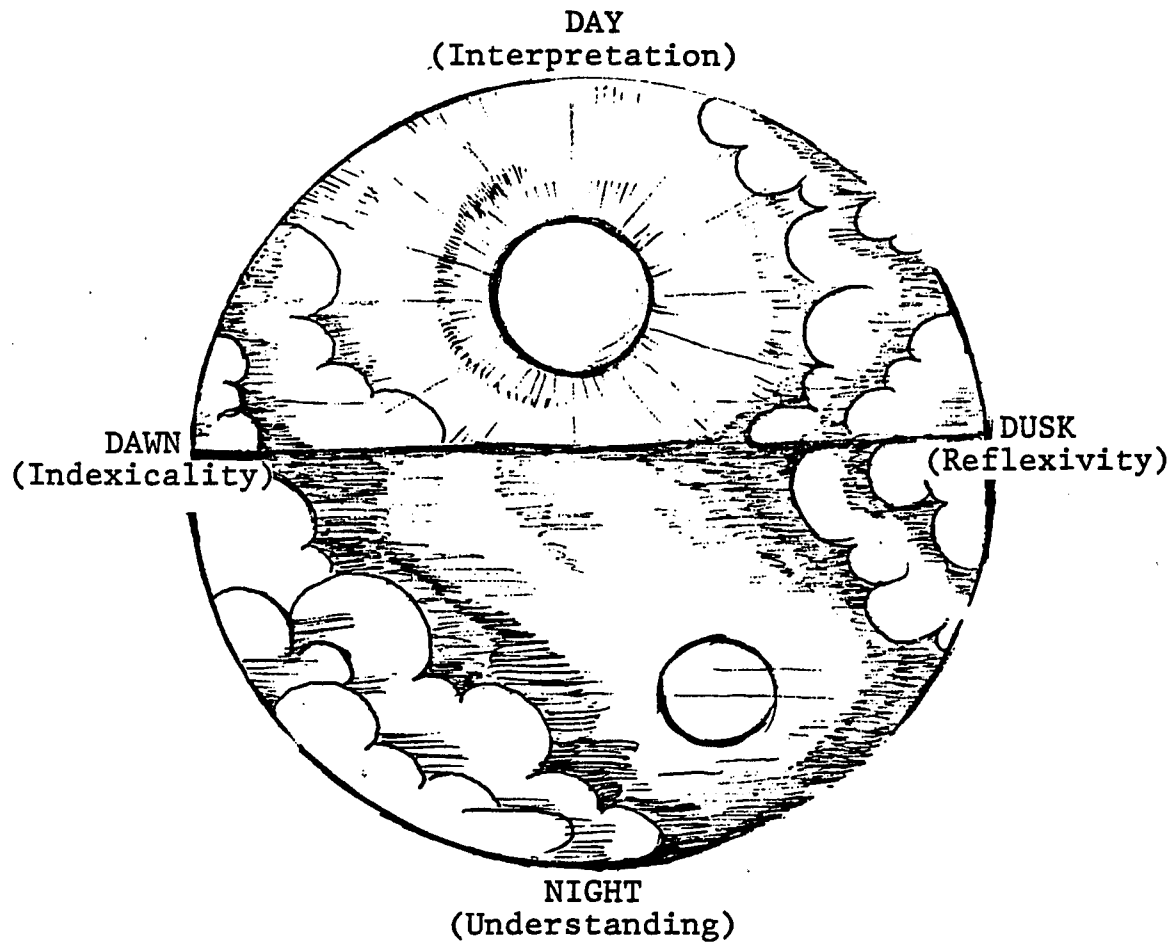


Figure 1. The Hermeneutic Spiral
(Day/Night Representation)

Mehan and Wood explain the day/night metaphor:

> People's meaningful lives spiral toward the unknown like the cycle of nights and days. Any particular day has an existence independent of the previous night. But at once it is dependent upon the substance of that previous night, and upon the totality of nights and days before the most recent night. (p. 193)

Likewise,

> interpretation has its independent meaning. It is an activity and stands apart from the stillness that preceded it. Simultaneously, however, it is dependent upon the understood horizon that provided it with the here and now upon which the activity arose. (p. 193)

Interpretation is symbolic activity, and it "includes the reality work, practices, methods, and procedures discussed throughout ethnomethodology" (p. 193). It is concerned with the direct--the here and now. Understanding is, on the other hand, like the night--a "given," as a mood "which comes to us from beyond . . . not a concrete interpretive act" (p. 193). Understanding, then, includes intuitions, inner knowledge, and wisdom. As each day is dependent upon the night which preceded it, and vice versa, so are understanding and interpretation each dependent upon the complementary process which came before and blended into the present phase of the cycle.

Where day and night blend, the two penumbras are called dawn (night into day) and dusk (day into night). The dawn experience has been labeled by ethnomethodologists as "indexicality" and the dusk as "reflexivity" (Mehan & Wood, 1975, p. 193). Indexicality refers to the process in which prior understandings are brought to the process of interpretation. Each revolution of the spiral brings a new phase of

understanding so that a new indexing is always in the making. New conceptualizations are constantly being offered to the light of daytime consciousness. "Dusk," on the other hand, refers to the process in which interpreted events are submitted to the process of reflection as a preparation for the understanding process.

These two penumbras of dawn and dusk are the "places of mystery for ethnomethodology . . . [the places where] people make their quantum leaps to meaningfulness" (p. 193). The dawn experience is studied in order to incorporate the effects of the cumulative unconscious into the process of interpretation. In like manner, the dusk experience is studied in order to determine how cumulative interpretation is assimilated into the nighttime of understanding, consequently emerging as new possibilities to be reintegrated within the next phase of interpretation.

> People act and their actions alter the world. This altered world then appears before them as an autonomous reality. It is external and constraining. Past experiences enter understanding and engender new possibilities. The next interpretation must contend with that previous interpretation, now integrated within understanding. (Mehan & Wood, 1975, p. 194)

The hermeneutic spiral represents the organic cycle involved in the ongoing processes of understanding through one's personal interpretation of the world. Mehan and Wood believe that the imagery evoked by the hermeneutic spiral

> places people within a spiral of meaningfulness. . . . We need not fear to cease wresting meaning from nothingness. We can gaze upon the earth's wonders. We are in a spiral of our own making, but it is at once beyond our making. (p. 194)

They contrast the hermeneutic spiral with a number of other metaphysical models, declaring that it is the "more concrete image." It is also the more desirable, they believe, in that it "makes everyone an artist, every act creative, every moment mysterious" (p. 203).

Macdonald described the hermeneutic circle as a model for curriculum theory. In the hermeneutic quest for meaning, individual biography and individual values are the basis for the search for meaning through the process of personal dialogue with theory. New meaning is added through self-reflection which results in reinterpretation of the situation, of one's personal history, of the interrelationships between the person and the environment.

My re-search, therefore, for a way to reexamine my relationship to education in the realm of nature had brought me to hermeneutics. The major portion of my dissertation represents a hermeneutic approach to the examination of my views in this field in that I have attempted to interpret my experiences and my understandings in this area in order to reexamine and reconstruct them into a new understanding. I have found it more useful, however, to replace Mehan and Wood's day/night metaphor with a seasonal one in which summer and winter represent interpretation and understanding, and spring and autumn represent the penumbras where indexicality and interpretation occur (see Figure 2).

Because of its circular form, the hermeneutic spiral is particularly useful as a metaphor for the seasonal cycles of

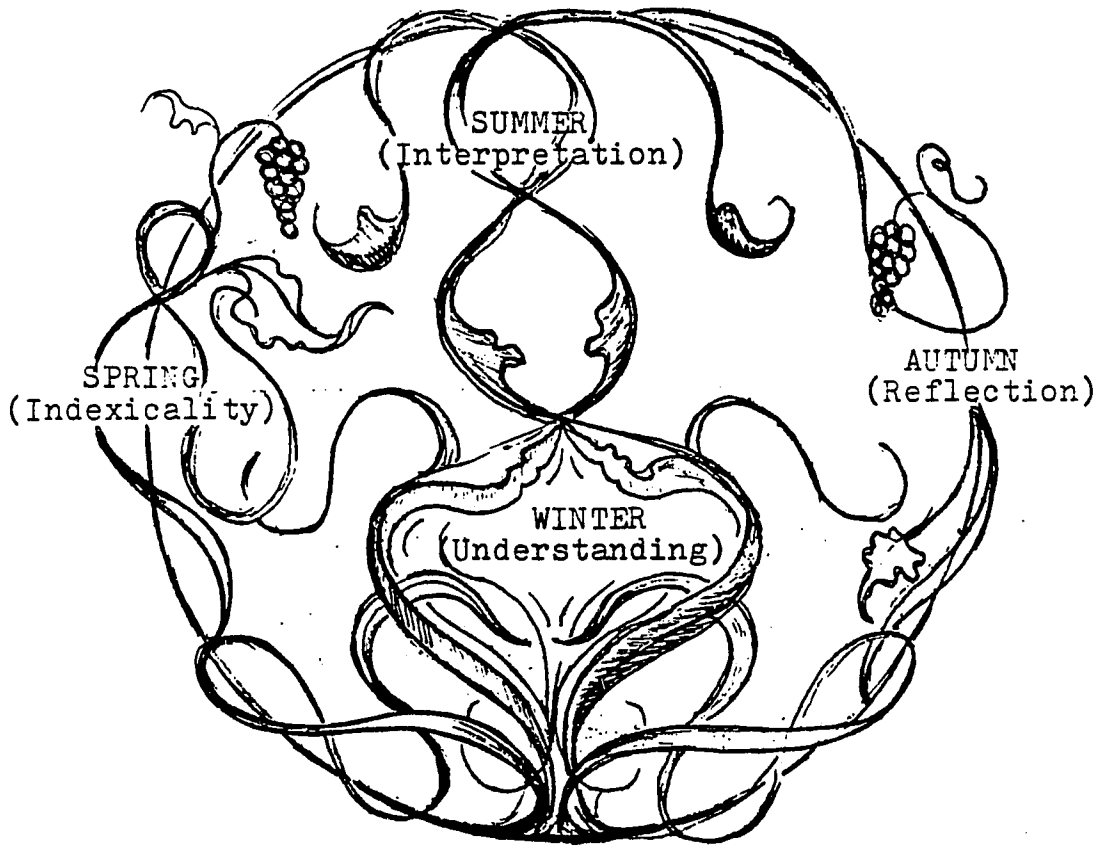


Figure 2. The Hermeneutic Spiral
(A Seasonal Representation)

nature. In this metaphor, the daylight consciousness is seen as summer; the nighttime of understanding is the "going down" process of winter. Spring and fall, accordingly, form the penumbras of indexicality and reflection which are also contained within the concepts of dawn and dusk.

As metaphor, the spiral implies an implicit, rather than a literal interpretation--an interpretation which recognizes the variations within the predictability of seasonal cycles.

The following chapters are a metaphor for the personally lived experience of the nature of the person/earth relationship as it relates to currere. The chapters are intended, as a whole, to illustrate the hermeneutic spiral as a method for currere.

This model succeeds in its intent only if it is experienced by the reader as well as by the writer. It may be best experienced by the reader who holds in abeyance certain expectations that are common to more linear models; that there be a definite beginning or point of departure and a definite end or conclusion; that events and experiences will be recounted in a chronological, or other sequential order, that one tense and one voice will prevail throughout the work; and that separate topics will be delineated, introduced, and explored in discrete units or sections. For the nature of the hermeneutic spiral allows for entry into the narrative during any of the phases of the cycle; events and experiences within the phenomenological reflection may appear, submerge,

and reappear in different forms with different meanings; different voices and tenses may add new dimensions and perspective to the experience of the spiral; and the continuous form which characterizes the spiral encourages other spiraling rather than a concluding.[2]

Ideally, because of the movement inherent in the spiral, the following chapters would have been choreographed and danced, rather than written. But since convention demands the printed lines, and since the printed lines cannot leave their places, the reader is invited to let his mind dance within their ideas, between the lines, and through the lines or even off the page.

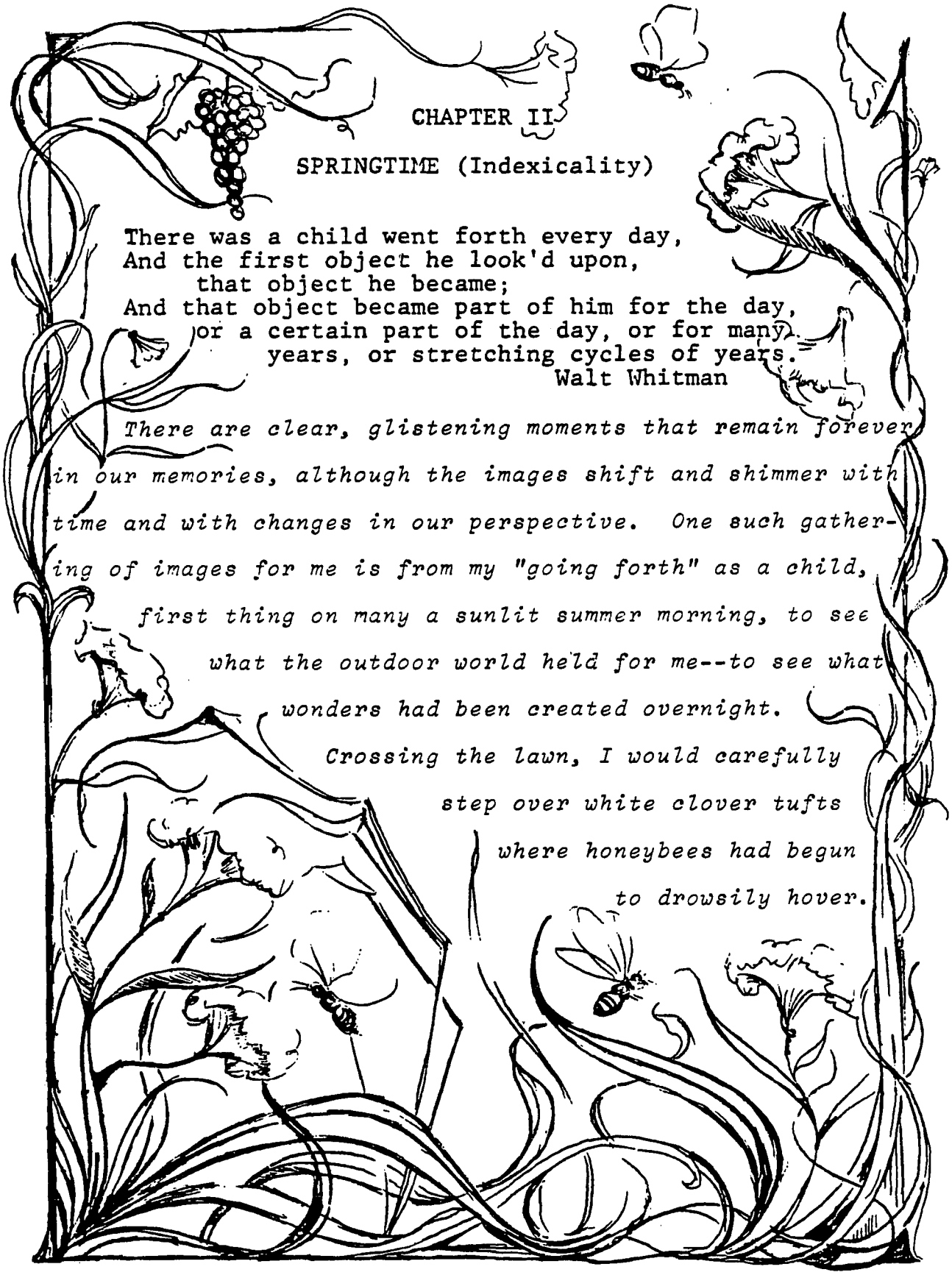
The spiral, like the dissertation, began, not with the research or the writing, but with the first remembered experience of the self in relation to the earth.

---

[2]Italic type is used in the following chapters in passages written in the free associative style which characterizes the method of currere.

PART II

THE SPIRAL



CHAPTER II

SPRINGTIME (Indexicality)

There was a child went forth every day,
And the first object he look'd upon,
that object he became;
And that object became part of him for the day,
or a certain part of the day, or for many
years, or stretching cycles of years.
Walt Whitman

There are clear, glistening moments that remain forever in our memories, although the images shift and shimmer with time and with changes in our perspective. One such gathering of images for me is from my "going forth" as a child, first thing on many a sunlit summer morning, to see what the outdoor world held for me--to see what wonders had been created overnight. Crossing the lawn, I would carefully step over white clover tufts where honeybees had begun to drowsily hover.

I walked expectantly, for I had learned that in so common a place as my family's vegetable garden a kingdom of dew-drenched morning glories awaited my inspection while the loose garden soil was still cool and damp to my bare feet. In the garden, woven among the plants, were dewy spider webs which had been magically spun overnight, glistening in the sun. For me, as a child, their message was one of the connectedness of the organic living world. Here among garden vegetables, ragweed, and morning glories was a quiet majesty; a holiness in the early-morning mist of color, of birdsong, of shafts of sunlight through pine boughs. In the meadow, among the apple trees, these early morning excursions might lead to the discovery of that miraculous mandala of design, growing close to the ground--the "passion flower," which would ripen into the fruit we called "molly-pops." It was many years later that I learned of the legend of the "Passion Flower," or even of its true name; then, I simply stood in awe of the mandala force of the exquisitely-formed petals and fragile circular network which I would learn much later consisted of parts such as stamen, stigma, pistil, etc. Appreciation and awe preceded identification and delineation. A sense of oneness prevailed. All was in its proper place; all was "right with the world."

Then, alas, came the banishment from the garden. I was assigned to spend the next 12 years of my life (except for the glorious, barefoot summers) inside buildings--in

school. So insidious was this formal education that I then elected to spend a large portion of my life thereafter in buildings of one kind or another--schools of "higher learning," office buildings, houses, and, once again, schools of still higher learning.

> What tortured me in my school days was the fact that the school had not the completeness of the world. It was a special arrangement for giving lessons. It could only be suitable for grownup people who were conscious of the special need of such places and therefore ready to accept their teaching at the cost of dissociation from life. But children are in love with life, and it is their first love. All its color and movement attract their eager attention. Are we quite sure of our wisdom in stifling this love?
>
> Rabindranath Tagore
> (Cullum, 1967, p. 72)

Pearce (1977) writes of the earth as "matrix" (mother/womb) and of the importance of earth/matrix to human development:

> After an infant is born from the womb, the mother becomes the source of energy, the possibility, and the safe place on which to stand, so mother rightly means matrix Later in development, the earth itself should become the matrix, and we have always referred to mother earth. Nature was always considered the general spirit of the earth's life and was called mother nature or matrix. (p. 16)

Pearce traces the various stages of the child's development, beginning with the newborn's relationship to the mother as matrix and growing toward autonomy--which Pearce equates with becoming one's "own matrix." Pearce maintains, however, that for one's lifetime (or one's mother's lifetime) the mother continues to be the primary matrix and that "Throughout our lives, the earth remains the matrix of all matrices" (p. 22).

Pearce also points to a sufficient interaction with the living earth as a necessary prerequisite for the development of abstract creative thought. Further, he recommends that, when this development is lacking, the biological plan for the child should be nurtured to the extent that provisions should be made for "full-dimensional interaction with the living earth." The proper relationship with the earth as matrix must be achieved through direct interaction with the earth which then becomes "the source of power and possibility" (p. 21). In contact with the earth, with the soil, the fertility of the earth becomes metaphor for the fertility of the imagination.

Even as a young student, I sensed that the school experience was not connected with the experience of the natural world. Although I did not know then that the school system was based on a model of production which fragmented elements of instruction, I somehow saw and felt the alienation from the earth toward which schooling was leading. We were gathered into (school) buildings in order, they said, to learn about the "world out there." We learned about trees and other plants by looking at drawings of them (and even I knew that we weren't learning about real plants this way). We learned about animals by looking at pictures of live ones or at the remains of dead ones. I knew even then that we were missing the essence of the animal. It was only when I had graduated to "higher learning" that I found that some

rather knowledgeable people were saying the same thing. The feeling of dealing with a nonliving world in those days in school remained in my memory, to be recollected when I would one day visit schools as a supervisor of student teachers and find that the separation from the living world was even more distinct. Window shades were pulled so that the view of the out-of-doors would not distract students from the important work of preparing for the outside world. Everyone knew that all the important work of the world would be done in buildings with no windows so that people would not be distracted from machines.

Now that I have a more sophisticated view of our educational system, I know that I was one of the products of the age of technology and that even the models of the human body which we studied in science classes were based on the technological model of man as machine. This model has shaped the educational practices which prevail today in methods which put a high premium on predictable outcomes, efficiency, and production. In this control model, very little emphasis is given to creative thinking, imagination, artistic ability--qualities which many modern educators are now advocating as imperative for the development of the whole person. The students schooled under the control model are products of what Ellul (1964) calls the "process of massification"--a process which "takes place not because the man of today is by nature a mass man, but for technical reasons . . . in the new

framework imposed upon him because he is unable to remain for very long at variance with his milieu" (pp. 332-333). Although Ellul believes that "the adaptation of men to a mass society is not yet an accomplished fact," he maintains that a gap "still exists between man and the collective society," and that this gap is the cause of man's "dis-equaliberation" (p. 333). Ellul maintains that the dis-equaliberation is manifested in the individual as neurosis. I suggest that the neurosis often takes the form of paralysis--especially of a paralysis of the senses and of the emotions. Spontaneity, creativity, and the free flow of movement have been converted into stilted forms. Life becomes mechanical, routine, and sterile, both in the workplace and at home.

As a child, I spent many happy hours with a playmate by the banks of, and standing or kneeling in, a small creek which bordered our parents' land. Near the water level, the banks of the creek were formed of smooth gray clay--not of a fine enough quality to be sought by a professional potter, but of perfect texture for building the numerous (and, alas, temporary) dams with which we dreamed of refashioning the character of the shallow and narrow trickle of water into a pond large enough to contain the small minnows we seined, with a burlap sack tied between two poles, from a neighbor's larger stream (all this unknown to the neighbor). A few times our newly engineered dam caused a rise in the depth of

our small creek to as much as 8 or 10 inches--whereupon we would hurry to transplant a dozen or so hapless minnows who survived being carried across several hilly meadows in a small bucket of water, only to be dumped into our muddy, newly constructed pool. Invariably, the next rainfall would dissolve our fragile dam, whereupon the fish would escape, never to be seen again. And always, we rebuilt.

The cohesiveness of the clay, with its appeal for use as "container," was an ever-present lure. Our efforts to fashion the smooth gray hunks into primitive shapes, such as coils and bowls and animals, met with more lasting (although in the long run, also temporary) success. Laid out on a board or a spot of bare earth near the creek to bake in the summer sun, they sometimes survived several rainfalls. The sturdier ones were carried to our playhouses under the trees where they were used for serving the dandelion greens and sassafrass tea concocted from a combination of herbs and imagination. The joy from these containers, like the joy from the construction of the dam, was in the making--in the process. Did we, as children, know at some deep, inner level that we were transforming earth; that the clay was being formed according to patterns of silent, inner consciousness that were also shaped thousands of years ago by ancestors who fashioned bowls and pots and other containers for food and water and for decoration? Handling the clay was not for us a conscious artistic experience; it was a participation

in an elemental form of creation. How incredulous we would have been to have understood that it also arose out of our inner connections with the collective unconscious.

Is there also in our collective unconscious a yearning to establish direct contact with the earth--with the soil, the water, the plants? The native Americans revered the soil in a way which industrial man has never grasped--they understood the need for direct connection of their bodies with the earth. Thus, they walked in thin-bottomed moccasins and lived in homes with dirt floors. They also knew of the healing power of the earth itself. A Lacota Indian Chief wrote of the practice of his people in their maintaining a close physical contact with the earth:

> The old people came literally to love the soil and they sat or reclined on the ground with a feeling of being close to a mothering power. It was good for the skin to touch the earth, and the old people liked to remove their mocassins and walk with bare feet on the sacred earth. (McCluhan, 1971, p. 6)

The earth, to the American Indian, was more than provider, it was spiritual mother--one to be honored and revered. Another American Indian wrote of his horror at seeing the desecration of the earth by the white settlers:

> You ask me to plow the ground. Shall I take a knife and tear my mother's breast? You ask me to dig for stone. Shall I dig under her skin for her bones? You ask me to cut grass. . . . How dare I cut off my mother's hair? (McCluhan, 1971, p. 56)

The closeness to the earth; the reverence for the life in the soil; the care with which the potter works the clay in

an effort to become one with the material--all are indicative of an inner sense of the sacredness of the earth.

Mary Caroline Richards, potter/poet, speaks of those who "have been hearing the footfall"--seeing the shadows cast ahead as we have groped for reconnection of ourselves with the world of the senses, with others, with the universe. As we reestablish our interconnectedness with the plants, the animals, the soil, the rivers and oceans, we reestablish a sense of awe for the mystery of life of which we are a part.

Another modern writer, Thomas Berry, theologian and president of the Teilhard Association, also sees the sacredness--an "abiding numinous presence" in the earth--as revealed in nature. Man's failure to see earth's fragility as well as its sacredness is due, according to Berry, to his failure to understand that, since he is a <u>dimension</u> of the earth, his spirituality is "earth-derived." Berry describes the earth as the source of our spiritual, intellectual, and aesthetic development: "It is not only the food for the body that comes from the earth but our powers of thinking, the great images in our imagination; our arts and our education all proceed from the earth" (Berry, 1971, p. 7).

Berry also sees the earth in terms of the maternal principle out of which man is born. Earth is seen as origin, support, nourishment, guide. Man's loss of reverence for the earth linked, according to Berry, with the loss of the

Virgin Mary's influence as a feminine principle in religious heritage. Corresponding with the loss of this feminine influence was the loss of the power of woman to influence the collective attitudes toward the earth, with the result that a disregard for the earth prevails in modern-day attitudes.

Berry attributes a large measure of this disregard for the earth to the fact that the religions of the West have tended to ignore the importance of the earth process in man's development. Although liturgy and the scriptures contain numerous tributes to the majesty and beauty of the earth as God's handiwork, there has been a tendency for the church to see the earth as a "seductive reality." Thus earth as seductress was blamed for man's condition of alienation from God, and earth worship was seen as the ultimate idolatry--the cause of the fall and thereby the cause of sacrificial redemption. This fear of earth's powers has led to attitudes which quite easily dispose of the importance of the earth except as an undeniable support for life.

It was man's attempts to deal with the terrors of life, according to Berry, which led to the exploitation of the earth. Man's search for answers led him to inquire into the "functional dynamics" of earth and of the entire universe. This search and subsequent discoveries led to the secular/scientific/technological society which now establishes even the disciplines of education. The exploitation of earth was

assured; the terror of life was to be answered by domesticating the earth and by a domination of the creative function of earth by man.

Writing on the effects of aggressive competition on the person/earth relationship, Wendell Berry (1977) observes the evidences of division:

> no matter the distinctions we draw between body and soul, body and earth, ourselves and others--the connections, the dependences, the identities remain. And so we fail to contain or control our violence. . . . To damage the earth is to damage your children. To despise the ground is to despise its fruit; to despise the fruit is to despise its eaters. . . . It is not necessary to have recourse to statistics to see that the human estate is declining with the estate of nature, and that the corruption of the body is the corruption of the soul. (pp. 106-107)

But, today's educational system, with its heavy stress on science and technological skill, almost entirely removes the student from contact with the natural world at the same time that it neglects the faculties of introspection and reflection which are necessary for "re-membering" what has become a dis-membered world.

Freida Fordham (1968), biographer of Jung, writes on the effects of the growth of organizations and of "progress" on the person/earth/person relationship:

> Since the development of applied science in the last hundred years, man's material progress has been rapid, but he has moved dangerously far from his roots in the soil. The taller the tree the deeper its roots should go, but modern man has little relationship with nature, and so has become dangerously unstable and a victim of any storms that blow. In addition, our social organization with its laws--written and unwritten--and its system of education, repress his unconscious instinctive nature and civilizes him outwardly, while leaving what is primitive in him untamed and chafing under the restraint. (p. 119)

What does it mean to have "roots in the soil"? Richards (1979) writes of the way Rudolf Steiner directs us to "look upon" the plant in such a way as to "participate in all its processes," sinking "into the plant to feel how gravity goes down the root into the earth, how formative forces unfold above ground; we are to feel from the inside the blooming and fruiting." The purpose of this attention-giving is to enable the student to participate in the growth processes so that his "thinking joins in the life of the external world" (p. 97).

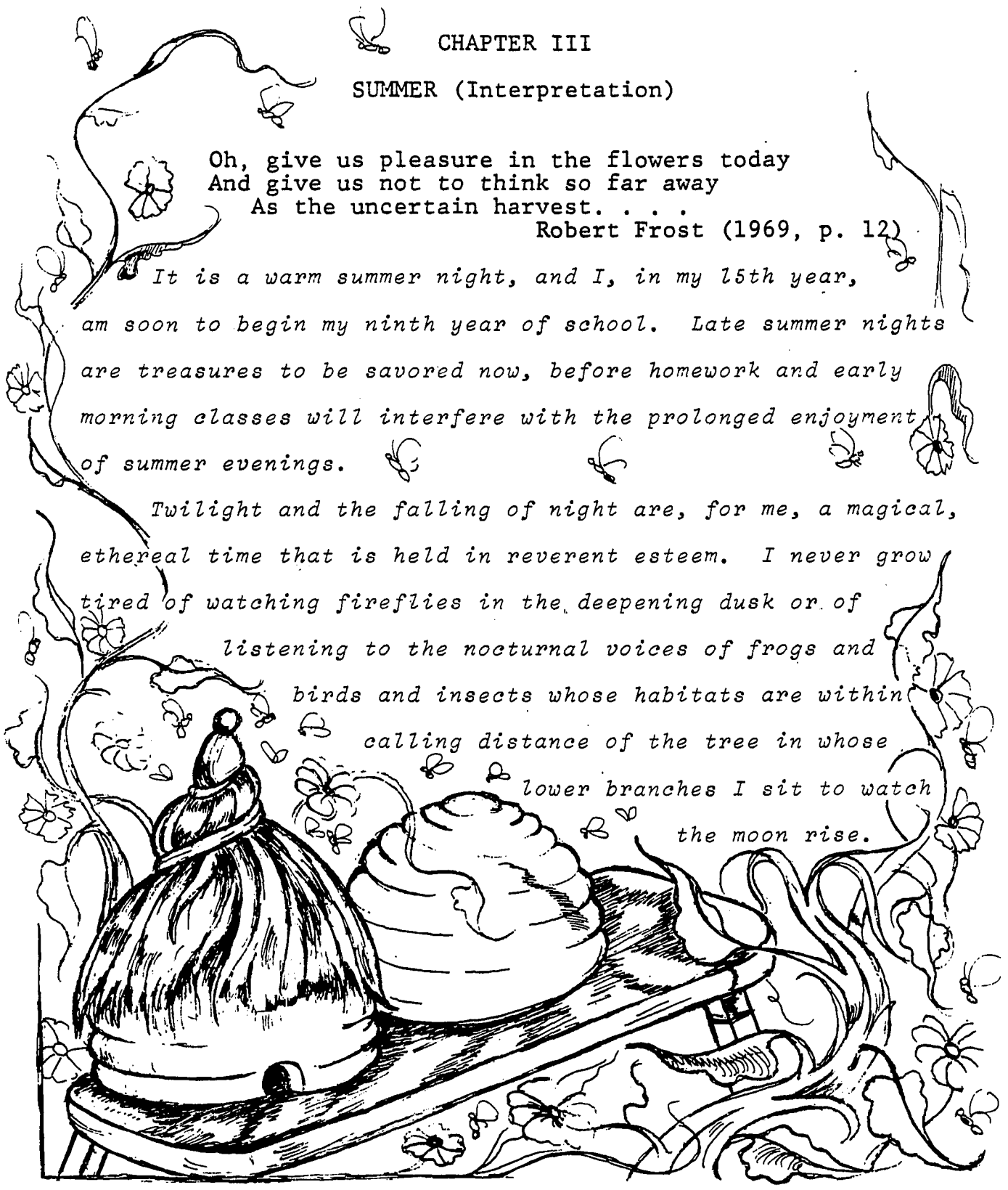
CHAPTER III

SUMMER (Interpretation)

Oh, give us pleasure in the flowers today
And give us not to think so far away
As the uncertain harvest. . . .
Robert Frost (1969, p. 12)

It is a warm summer night, and I, in my 15th year, am soon to begin my ninth year of school. Late summer nights are treasures to be savored now, before homework and early morning classes will interfere with the prolonged enjoyment of summer evenings.

Twilight and the falling of night are, for me, a magical, ethereal time that is held in reverent esteem. I never grow tired of watching fireflies in the deepening dusk or of listening to the nocturnal voices of frogs and birds and insects whose habitats are within calling distance of the tree in whose lower branches I sit to watch the moon rise.



In school, the acquaintance with nature and animal life will take a different direction. The stiff, inert remains of frogs preserved in formaldehyde will be dissected and examined; the parts will be labeled, the names of parts memorized. The emphasis will be on facts.

We will study the history of the state of North Carolina and will conclude that the most important tree in the state is the pine and that this tree has been designated "state tree." We will study pine trees in terms of board feet of lumber and the byproducts obtained from them. Charts of figures showing production and sale of timber in North Carolina will be memorized in preparation for tests. From the eighth-grade classroom in the country school which sits on a grassy hilltop, students whose eyes roam toward the window can see the woods beyond the school year. There is where the white oak and maple and other hardwoods make up the forest canopy towering over the dogwood trees which will flower in spectacular clusters in the spring. The class will learn that the dogwood blossom is the state flower and that the cardinal is the state bird. But bird calls which might otherwise be heard through the open windows are drowned out on most school days by the incessant noise of the power saws in the lumber yard next to the school.

The facts about pine trees and the dollars earned from the pitch and tar extracted from them does not seem important to me for purposes other than "schoolwork." My knowledge

of trees goes much deeper, is much more intimate, is connected with another reality.

My favorite tree stands just out of sight from the vantage point of my classroom desk, across a highway and over the crest of a slope within the rolling foothills of the Blue Ridge Mountains. This favorite tree is a giant poplar which stands side by side, like a twin, to a mammoth oak in my neighbor's yard. This poplar tree is revered by my childhood playmate and me, not only because it is the tallest landmark in sight but also because it has limbs low enough to be reached by one of us standing on the shoulders of the other. From the lofty height of the topmost branches on a summer day, one may catch a transforming glimpse, through leafy foliage, of a small community which is surrounded by rolling hills which lead enticingly toward a distant horizon. Among the tree's branches, one may make the sudden discovery of a bird's nest mysteriously laid with tiny eggs. The tree's strong lower limbs provide support for swings made from rubber tires hung from a rope. But the most impressive feature of the tree is its trunk. So huge in circumference that we two cannot encircle it with our hands joined, the trunk is friendly and inviting. It provides support for backs reclining in summer dreaminess and serves as a base for games of tag in the daytime and "kick the can" in the evening. The tree's intricate patterns of crisscrossed bark invite endless finger tracings of its design. Its strength can be felt by merely standing against

it or pressing a cheek to its surface; it is impervious to pressure or pushing or blows. It is indeed a wondrous tree.

In her book Woman and Nature, Susan Griffin (1978) contrasts the patriarchial "(objective, detached and bodiless)" (p. xv) attitude toward nature with that of the feminine attitude which embraces nature as a part of the self. The contrast is made especially effective through the use of the dialectic between the contrasting masculine and feminine voices:

> He is like a man in a dream who has discovered a treasure. He has come upon a forest untrod by human beings for hundreds of years. A dream. Transformation. In a trance, he makes figures. The numbers of the trees. Their size. Three to four million board feet for every forty acres, he whispers to himself. . . . By autumn, trees falling, moving upstream. . . . Two thousand board feet a day, three million, six hundred and seventy-three thousand, seven hundred and ninety-seven board feet a year. Sixty-four thousand shingles, forty-two thousand, one hundred and three feet of piling, two hundred and twenty-three masts and spars. (They see $70,999). And each year increasing. (pp. 56-57)

Griffin enlarges upon this production model of nature, showing how this philosophy translates into woman seen (as part of nature) in terms of her ability to produce goods on the assembly line; in terms of her dexterity, her will power, her efficiency, her concentration on the job.

Meanwhile, the feminine voice, although largely unheard, is also speaking of the value of nature, of trees:

> The way we stand, you can see we have grown up this way together, out of the same soil, with the same rains, leaning in the same way toward the sun. See how we lean together in the same direction. . . . And if you look, you can see the different ways we have taken this place into us. Magnolia, loblolly bay, sweet gum, Southern bayberry, Pacific bayberry; wherever we grow there are many of us . . . and we are various and amazing in our variety, and our differences multiply,

> so that edge after edge of the endlessness of possibility is exposed. You know we have grown this way for years . . . we are shaped the way we are, not all straight to your purpose, but to ours. And how we are each purpose, how each cell, how light and soil are in us, how we are the soil, how we are in the air, how we are both infinitesimal and great and how we are infinitely without any purpose you can see, in the way we stand, each alone, yet none of us separable, none of us beautiful when separate but all exquisite as we stand, each moment heeded in this cycle, no detail unlovely. (Griffin, 1978, pp. 220-221)

This feminine voice could just as well have been describing the composition of this eighth-grade class of young girls and boys, "both infinitesimal and great and . . . without any purpose you can see . . . all exquisite as we stand . . . no detail unlovely" (Griffin, 1978, p. 221).

The connections between ourselves as individuals, ourselves as a class, and ourselves in relation to nature were not discussed. But implicit possibility could be seized upon. Fortunately, there was the study of the poetry of Robert Frost who shared his reverence for the spectacle of snow falling into the woods at evening; of Wordsworth who reveled in the dance of daffodils; and of Tennyson who exulted in the "Flower in the Crannied Wall," whose essence provided a glimpse of all of life. And there were the songs the chorus learned for the springtime pageants--songs which extolled the awakening of nature, the appearance of the flowers, the greening of the trees. The mind, long-drilled in facts and figures, production and profits, hungered for the mental images embedded in the poetic and the aesthetic.

Sitting in the school's large, austere auditorium for the seventh- and eighth-graders' chapel, I welcome the principal's voice as he begins to read: "And he shall be like a tree planted by the rivers of water" (Psalms 1:3).

Behind the tall and kindly principal is the auditorium's stage whose velvet curtains have been opened for the morning's activities. The one backdrop for the stage is a mural depicting a brook flowing gently near the edge of a grove of trees. One large tree by the bank of the stream overhangs the water, its leafy boughs providing dappled shady areas to the surface of the water. The scene is an other-worldly contrast to the starkness of the auditorium's bare walls and the high windows which look out on other brick buildings to each side. I drink in the scenery as the principal continues to read from his favorite Psalm: "His leaf also shall not wither; and whatsoever he doeth shall prosper" (Psalms 1:3).

The tree by the water--sending its roots forth toward nourishment and refreshment. The poplar tree, still standing in the neighbor's yard--a silent, aging giant. Our roots reach down, down into the clay soil of childhood, into underground caverns of schooldays in which we tentatively groped for meaning within the books, the experiences, the drill, the play. Our souls reach out expectantly, sending tender shoots to gather impressions from among the many images and symbols which appear.

Are there symbols which inspire personal transformation? Jung (1967) discusses the tree as archetypal image:

> the commonest associations of its meanings (being) growth, life, unfolding of form in a physical and spiritual sense, development, growth from below upwards and from above downwards, the maternal aspect (protection, shade, shelter, nourishing fruits, source of life, solidity, permanence, firm-rootedness, but also being "rooted to the spot"), old age, personality and finally death and rebirth. (p. 272)

The tree becomes metaphor for life's cycles; for its seasons; for its contrasts. It contains the polar opposites of "above" and "below" while blending them into the one organism. It serves as illustration of the cyclic nature of regeneration through inner transformation of the organism's own fruitful processes.

In The Feminine, Spacious as the Sky, Miriam and Jose Arguelles (197) write of the tree of life as symbol of the journey based on bridging the sense of separation that one feels between self and other. The journey is toward more skillful ways of seeing, relating, and communicating with others and with the world. The tree of life as symbol of the journey is also seen as symbol of continuous regeneration.

Like the tree in the mural, we are drawn into earth, rooted--grounded--nourished from within; subject to variables of wind, weather, as we are, as human beings, to emotional variables. Changing, growing according to one's inner nature, as the tree grows into its treeness--withstanding the vicissitudes, the rough weather. Outside, the bark is weathered; but inside growth is taking place. There is a sense of having taken up one's place; of becoming an integral part of one's surroundings. And yet, like the moss which .

creeps along the ground, covering some of the exposed roots of the oak tree, there is vulnerability to this life--a fragile strength, an enduring quality. In its variety of design the moss exhibits an innocence, a freshness; with the intricacy is a certain tenacity--an insistence on its right to claim its territory, to exist, to multiply and grow.

The stream flows placidly within reach of the roots of the tree. It issues forth as from a fountain of life, fed from within, bringing cleansing, purification, rebirth. And yet it also contains death, dissolution, change. It is constant, nonresisting, yielding to the flow; it is a blending of the primal energies of the earth.

Interaction with nature may be an effective means not only of awakening one's senses, but also of stimulating the capacities for creative thinking. Samples (1976) recounts, in The Metaphoric Mind, a longitudinal study of incoming students at Harvard University. The study was designed to identify, through administration of a series of tests, the students' creative potential, based on their facility in the processes of metaphoric thinking. The study revealed that the rural students' facility in metaphoric thinking greatly exceeded that of the students from urban backgrounds. The "surprising" explanation, concludes Samples, is that:

> Urban environments are at least one generation removed from their natural counterparts . . . the richest source of metaphor is nature . . . the metaphors that were used by urban students were far less complex than those

> drawn upon by rural students . . . the rural or nature-close students tend to utilize metaphors that have inherently more generalizability. (pp. 108-111)

By day, my world, in my 15th year, seen from the summit of the rolling hills I live in and travel over, stretches as far as the mountain ranges in the distance and, by means of my imagination, infinitely beyond. Daytime is the time of reaching out, of building plans and schemes that propel one beyond the lived-in world toward infinite possibilities. One feels the pioneer spirit which crossed the mountains stretching westward as far as the eye can see. But night-time is the time for looking inward; for reflecting on the meaning of one's journey, of one's place in the world; for making connections which form the web of one's experience.

The moon rises above the ridges of the hills to the south; a moon that is crescent-shaped, and, for a crescent, complete. Its light is not the brilliant yellow of the sun, but the softened mellow light that has been reflected from the mysterious surface of the moon and sent earthward through the ageless darkness of space. It is because of its reflections of the light that I am able to ascertain its shape--a shape that will gradually change over the next few nights, until the features of the "man" in the moon will be clearly revealed.

But I regard the "man in the moon" as incongrous; the "pictures" in its face are, for me, best left undelineated, unnamed. For the moon itself is a stimulus for our imagining,

as a crystal ball for gazing. I see it as receptive, changing, ameliorative; faceless--and yet of many possible faces.

No one has told me of the "woman" in the moon; of the moon as female. I have not encountered the mythology to explain the attraction which keeps me a moon-watcher. I have not yet linked the whisperings within my imagination with the mythical life-giving powers of the goddess Ishtar, who wore a crescent-shaped crown and whose name meant "Lady of Heaven."

> The moon swells and tides wash over the rock; granite and shell become sand; the roots of trees are polished and the cell divides every day. Every day we move closer to the sun. Each day she is closer to herself. And to this child within her, growing inside her. She remembers, what she might have been . . . and she puts these pieces together. . . . So we say, finally, we know what happens in this darkness, what happens to us while we sleep, if we allow the night, if we allow what she is in the darkness to be, this knowledge, this that we have not yet named; what we are. Oh, this knowledge of what we are is becoming clear. (Griffin, 1978, p. 168)

For this "knowledge of what we are" to emerge into our consciousness, we must take a departure from the traditional, accepted ways of knowing as admitted into school curriculum. Pinar (Pinar & Grumet, 1976) suggests that we must refashion or reconceptualize a number of disciplines (including phenomenology, psychology, educational theory) into "a science of educational experience, a field to have its own method and content" (p. 21). The emphasis must shift from the teacher to "the individual and his educational experience." The placing of the individual at the center is an effort to

restore the self-estranged who have "literally and metaphorically" become lost in the "destructive labyrinthine cities" which they have created (p. 21).

Labyrinthine cities of the mind may be constructed by facts which are stacked haphazardly, randomly, meaninglessly into constructs which have no relation to the perceived world of the student. Or they may be methodically arranged, figures piled upon formulas; products multiplied; profits analyzed. Dates are remembered; battles are discussed in terms of territories lost and gained. We learn to recognize the boundary lines of states and countries, the names of their governors, the size of their populace. In science, the number of known elements is listed (in that year) at 102. (Now some scientists are beginning to think that the number is "one"). The world that awaits the aspiring graduate is the world of commerce, of production, of postwar growth, of consumerism. It is a world that will be characterized by the "corporation man" in the "grey flannel suit"; by the pursuit of the suburban dream; and ultimately by the search for meaning by the alienated whom Herbert Read described as the "robot" in need of redemption (Read, 1966). We have learned the facts, passed the tests, used our heads, and forgotten that we have bodies and souls which are connected to the earth. The time of success will also be a time of disillusion; of professional security amidst deep unrest. A time of searching through the labyrinth whose walls were, like the

skyscrapers of the metal cities, impenetrable and cold. We will teach the facts which we have learned. We will teach them well, and convincingly, and sometimes creatively. We will live our professional and suburban lives correctly and admirably and, often, emptily.

*Suburbia**

The streets are lined with boxes white;
The lawns are square and green.
The trees are planted out in rows;
The days are stiff; the nights are clean.

The husbands come; the husbands go;
They work and sleep and eat.
The wives, they keep the children straight
And make the boxes neat.

They straighten up the cornered rooms
And lay the silver out in rows.
They pick the children up at three
To shop in squares with rows of clothes.

At night the box with bluish haze
Shows brittle pictures 'til the dawn.
They have not seen the stars in years;
They do no know there is a moon.

Its roundness cannot salvage them;
No fullness can they take from space.
Their final box, the lid closed tight,
Will be a safe, familiar place.

c. myers

Sykes (1964) discusses the personal alienation and sense of estrangement experienced by modern man as a result of the proliferation of the industrial process:

> Nature is violated, folkways forgotten, human beings reduced to holes in computer cards, while poets seek a new kind of language to do justice to their sense of betrayal. We see the other side of the Harvest Moon--the obverse of affluence. (p. 4)

---

*perhaps a suburb of Cummings' "pretty how town."

The problem is how to get the estranged person back in touch with the creative self; how to quicken one's deadened senses. One way to begin is to put the self back in touch with earth; in touch with one's natural origins; in touch with nature.

Ultimately, my search led again back to "school," to graduate courses in various areas of study. At first the search was among the familiar paths of facts and figures and formulas, along the paths which were predictable and safe, if monotonous and routine. But persons who are at home in the out-of-doors are sometimes rehabilitated, like Br'er Rabbit to his briar patch, in unexpected ways and in unlikely times, as though they are looking for a short-cut to something they are pursuing intuitively; to a reconnection with remembered territory or a reunion with an old friend.

My conscious efforts to reestablish my relationship with earth began, ironically enough, with a university course of study chosen as an elective to satisfy requirements for course credits in education and in a cognate area (botany). The course title of the field experience which offered credit in both areas of study hardly conveyed the subjective content which would evolve for me, much less the personal meaning which the experience would have for my further studies.

I met with a group of 25 other students of assorted ages--all strangers to me--to hear the two professors explain the requirements and expectations for what was to be a

three-week trek across the state, traveling in vans and cars from campsite to campsite where we would pitch tents, cook out-of-doors and study by kerosene lanterns while we prepared for each coming day's arduous hike over hot sands or swampy bog or mountain trail. As I listened with considerable trepidation, I tried to recall some of the sense of adventure and daring that I hoped I still retained from my childhood days when an all-day hike over gorge or mountain was viewed as a "picnic." I could see that I would need all the energy and stamina I could muster for the coming three weeks. We would be putting up and taking down tents that would sometimes be wet and soggy and always dirty and exasperating to dismantle. By no stretch of the imagination could I have foreseen myself struggling to put up a tent on the top of Roan Mountain in cold darkness in a driving storm of sleet which pelted my hands and arms while lightning flashes punctuated the darkness with sufficient light to show the bare rock which was not receptive to tent pegs. All this in the same three-week period during which we would brave the midday sun to slog across snake-infested bogs that lay near the coastal waters. We would camp on a deserted island, bedding down in sleeping bags strewn across the beach, going to sleep beneath stars we had studied from the textbook 's star charts. And just as I was not prepared for the strenuous challenges for the body, neither was I prepared for the sense of awe and celebration that would be inspired in a group of mostly

young university students as they watched each awaited constellation appear in the evening's "parade of stars" narrated by the imaginative professor of education.

Moving westward from the coast, we camped near pocosins, the upland swampy areas, where we walked cautiously over layers of peat moss, following paths through swamp forests where large-kneed trees hung with the mystery of Spanish moss and thick shadow.

As we reached the foothills of the mountains of North Carolina, one could almost feel a rise of spirit with the rise of terrain, as the bluish mountain heights came into view. There were cool moist mornings walking among dew-dripping ferns and under shaded canopies of the tulip poplar and white oak while the wood thrush's clear melody seemed to come from deep within the forest's early morning veil. And along with the group's youthful enthusiasm, there was a prevailing sense of quiet awe and appreciation--a sense seemingly kindled by a combination of shared appreciations of the out-of-door environment and of the sensitive leadership provided by the professors. A startled frog or terrapin or other creature who happened across the path ahead of the botany professor would become an extemporaneous "show and tell" example of the ecological connections between the surrounding plant and animal life. The hapless creature who would have been gently plucked up to make acquaintance with the professor would just as gently be set down to go on

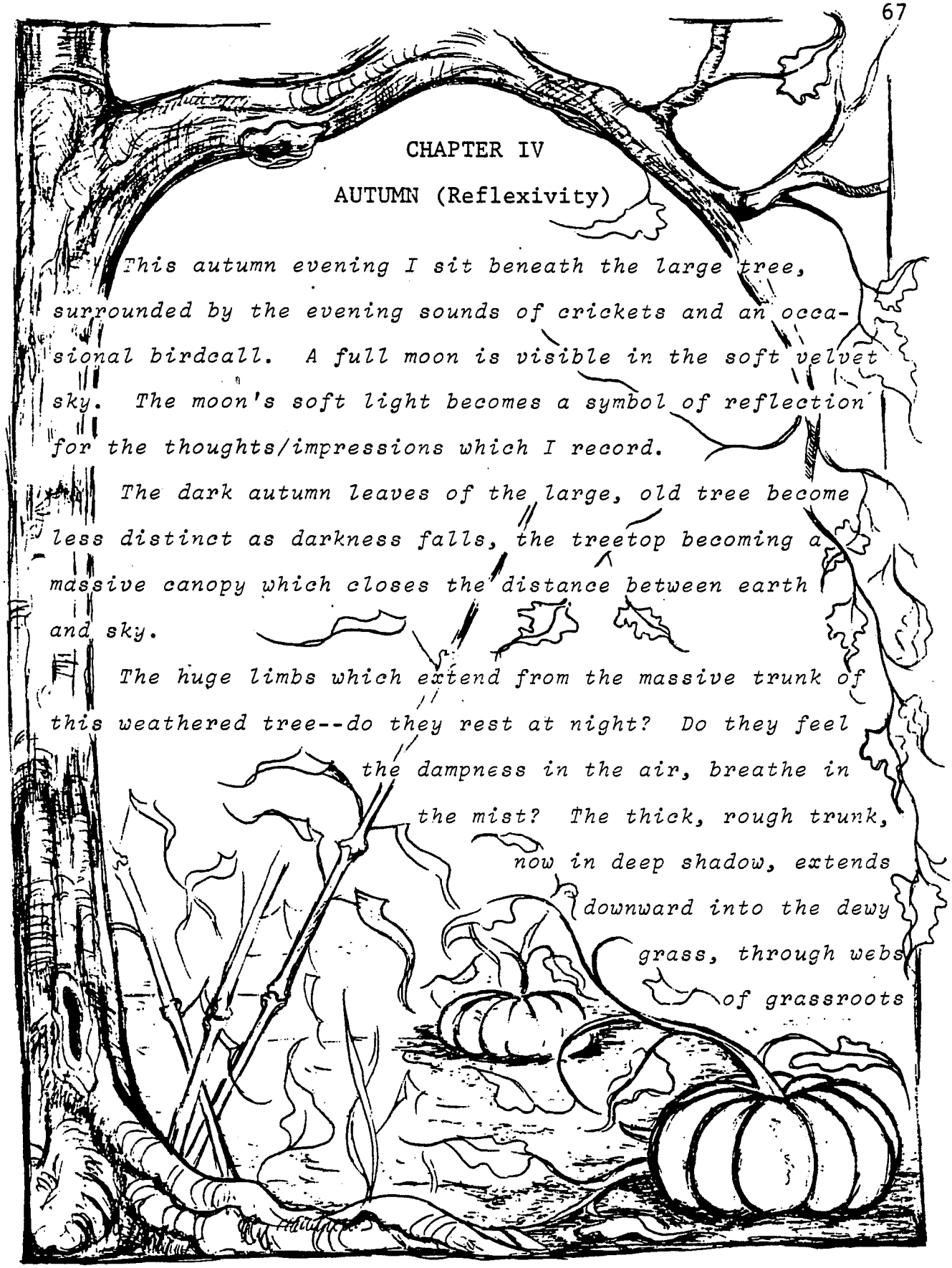
its way with the good wishes of the group as the "mini-lesson" was concluded.

Teaching/observing/learning here became blended into one, as along the way the students with particular expertise in a certain area of wildlife or plant lore or identification would stop to examine an interesting specimen--of moss or fern or bird nest--and to quietly share the find with the group. There was little reference to grades, but a prevailing sense of peer respect for the students who had learned what species of plant or animal to expect at certain ecological areas and who could make positive identification confirming their familiarity with the life around them.

I learned--we learned--to observe the types of soil needed to support unique types of vegetation. We learned a respect for the variability of temperature in a state whose variations in elevation made it necessary to bring along winter clothing in order to sleep comfortably in July in the higher mountains. We were learning about ourselves in relation to the out-of-doors and to each other as camping families. We were learning to gauge our own physical stamina and to respect the sense of oneness which often prevailed within the group when the going became rough or the scenic view particularly rewarding.

This outdoor experience was a reexperiencing of the heroic journey, on an inward as well as on an outward level. It was also a journey toward meaning--the kind of meaning,

for example, which manifested in a sense of awe when the trail through the forest led to a secluded inner forest of beech trees whose majestic trunks formed the columns of the cathedral of leafy branches overhead. Trees and poetry came together in the Joyce Kilmer National Forest where Kilmer's poem "Trees" marks the entrance. The Sunday morning quiet among the ancient oaks and poplars was observed by the group with a reverence which seemed the only appropriate response to the sense of peace and unity within the forest. It was here in a climax forest where dead trees were allowed to lie where they had fallen that the transformation process active within nature could be observed firsthand. The unity within the ecological chain of being was evident in the process of the transmutation of the "dead" material of the tree into colorful mosses, lichens, and mushrooms. No dead or living thing here in the forest was either superfluous or without meaning for the whole. The personal meaning implicit in this experience was that of the ongoing process of integration--a weaving of the strands of one's existence into a pattern of wholeness in which each experience and each relationship is symbiotic, as is that of the tree and the mosses or the tree and the soil, the flower and the bee.



CHAPTER IV

AUTUMN (Reflexivity)

This autumn evening I sit beneath the large tree, surrounded by the evening sounds of crickets and an occasional birdcall. A full moon is visible in the soft velvet sky. The moon's soft light becomes a symbol of reflection for the thoughts/impressions which I record.

The dark autumn leaves of the large, old tree become less distinct as darkness falls, the treetop becoming a massive canopy which closes the distance between earth and sky.

The huge limbs which extend from the massive trunk of this weathered tree--do they rest at night? Do they feel the dampness in the air, breathe in the mist? The thick, rough trunk, now in deep shadow, extends downward into the dewy grass, through webs of grassroots

and soil and stone, where it is always dark. Underneath the ground where I am sitting, and beyond, the roots extend beneath the grassroots, as they pulse with life, seeking through underground roots for food to feed an organism far removed from themselves and yet part of themselves.

It is autumn, and the productive processes within the tree's leaves will soon end. The shades of green will recede, giving way to the true colors which reveal the uniqueness of each species of tree. As their colors are displayed, the leaves' tenuous hold on the tree will be gradually released, and they will fall to the ground where they will become food for the roots of the tree from which they grew. From above--through metamorphosis--they will be received again into the darkness and ultimately assimilated in new form. They will become food for a life-giving, life-seeking tree--a tree whose being extends underground in a circumference equal to that above. And even now, underneath the grass and sod, the leaves from decades ago continue to feed the roots of this aging oak, as images from youth feed old age. It is a circular, cyclical process of being, maturing, nourishing; of metamorphosis through seasonal changes and through the maturational process-a process akin to my own life process in relation to that of ancestors and progeny, as well as in relation to the intellectual processes of cognition, intuition, understanding.

In Jung's discussions of the tree as archetypal image, he often uses the terms tree and vine interchangeably, as when he describes the tree as symbol of the Great Mother:

> As the seat of transformation and renewal, the tree has a feminine and maternal significance. The tree of knowledge in Genesis is in the Book of Enoch the tree of wisdom, whose fruit resembles the grape. (Jung, 1967, p. 317)

Engrossed in these symbols, I dream at night of a vine which comes into the dark house of plain, unpainted walls and dirty windows; the vine is green and leafy, with ample bunches of plump green/white grapes--a feeling of life being brought unto an otherwise dark and drab, but somehow receptive interior.

Von Franz elaborates on Jung's concept of psychic growth as a process of individuation:

> Since this psychic growth cannot be brought about by a conscious effort of will power, but happens involuntarily and naturally, it is in dreams frequently symbolized by the tree, whose slow, powerful, involuntary growth fulfills a definite pattern. (Jung, 1964, p. 15)

The tree becomes metaphor for life's cycles; for its seasons; for its contrasts. It contains the polar opposites of above and below, while blending them into the one organism. It serves as illustration of the cyclic nature of regeneration through inner transformation of the organism's own fruitful processes.

In the Foreword to <u>The Soul of a Tree: A Woodworker's Reflections</u>, George Wald writes:

> through the ages, humankind has looked to the trees to feed not only the flesh, but the spirit. It was beneath a tree, said to have been a fig, that Gautama Budda had his Night of Illumination. . . . It was to Jonah that God sent a tree, first to give him shade and then to teach him compassion. And closer to our own time, though perhaps still in the realm of myth, we are told that Isaac Newton, driven from Cambridge into the countryside by the Plague, was inspired by the fall of an apple to formulate the law of universal gravitation. (Nakashima, 1981, p. xv).

In the encounter with the tree, the intent is to establish an empathy with the tree and its life processes as a means of stimulating a flow of free-associative images and concepts--a means of allowing the intuition to emerge. That part of the tree above ground becomes metaphor for the daylight consciousness; that portion below is equated with darkness and the unconscious, out of which intuition arises.

The encounter with the tree also provides a setting for reflection upon the meaning of autumn--a meaning which is explored through the intuitive process involved in poetic imagery.

Autumnsong

Diana stalks in golden glades;
Artemis walks the amber fields.
Ariadne trails her ancient threads
Through valleys ripening with their yields.

They will gather in the glade tonight
Where devas dance in autumnal dress
To the violin's harvestsong/eveningsong/partingsong
Their farewells to summer, to daytime, to light.

The stream's cooling waters run clear and fast;
Cold shadows fall on galax and moss.
Rhododendron shivers in advance,
Anticipating winter's blast.

The tree hangs pregnant with persimmon flesh
Waiting for frost's icy bite;
Yellow-gold leaves of the walnut tree
Are skeletons against clear blue sky.

Earth receives her fruit unto herself
While leaves fall as teardrops from the tree,
Replenishing earth's waiting soil,
Restoring herself through her own toil.

This autumn I set aside time for a two-day journey back into the countryside of my childhood. Intending to spend much time in solitude, I find myself instead inviting family members to join me as I retrace familiar paths and explore unfamiliar ones. My mother and I travel to the vicinity of Stone Mountain which has recently been designated a state park. Now appreciated by hordes of visitors as a picturesque outcropping of native granite, it is admired, photographed, climbed, and explored by increasing numbers of people. When my mother was a girl, living within ten miles of the "stone," she knew it primarily as the landmark near her own mother's birthplace. Today we headed for the mountain, but now we decide to detour to visit her mother's childhood home. It occurs to me that I have never seen this home, nor have I ever before realized its location in relation to the mountain to which I came in later years to feel so closely akin. To get to the old house, we must get permission from new neighbors to walk through a quarter mile of woods, over a path which was once a wagon road. The path is now almost overgrown with tall weeds, grasses, and small bushes--sassafras, which was widely used by native women for making teas;

huckleberry bushes whose location children always knew, sourwood shoots whose leaves are turning crimson. Now we cross a rusty barbed-wire fence into a pasture where closely-cropped grassy hills slope downward to the lowland where my mother's memory recalls a creek. At the foot of the hill, so far away that only its rustic beauty is apparent, sits the abandoned, unpainted house with tin roof. It is a beautiful fall day, and the sun reflects from the weathered window panes. Framing the house are two trees laden with ripe persimmons, their soft russet colors perfectly punctuating the clear blue sky and softening the setting of the old house. And a walnut tree has lavished its year's production in a circle on the ground beneath its yellowing leaves. We photograph the moment, the setting, the season--mother and daughter, each with separate impressions of the youth a mother/grandmother spent here, yet each with tacit understanding of the shared impressions of the perfect beauty in the setting.

Inside the house, whose rotting interior is explored tenaciously, is more evidence of the autumnal harvest; squirrels have used the front room where the carved mantelboard still stands as a repository for their winter supply of walnuts; birds have chosen a bedroom as sanctuary, one family's having built its unobtrusive nest in the back of a corner shelf; another has built in an open handbag which hangs from a nail in the opposite wall. The nests are long

deserted; the bird families' history, like that of the former human occupants, has become embedded in time. The spiral is spinning out its evolution; there is the light/dark; the growth/culmination; the evolving of a new spiral, a new day, a new season, a new family. My mother and I swap impressions, theories, wonderings. "I wonder," she says, "if we could find the two rocks Mom talked about." They are the boulders that lean against each other, so large one can walk under them. We walk beyond the house, along the creek, crossing more fences, searching for the stones which should be apparent, and which my mother remembers seeing years ago. Along the creek grow the elder bushes, the sycamores, and the low shrubs and ferns. "Well, that's spicewood!" exclaims my Mother to herself as she breaks off a twig of a low shrub and chews it. "I haven't seen any of that since I was a child--but you never forget the spicey taste!" I'm wondering if my grandmother knew the forerunners of this same plant--if she may have been sent to the creek to gather leaves or branches for tea or flavor. I'm wondering whether she played in this creek; sat on these rocks; knew these trees when they were young.

The stones should be on this hillside, above the creek; my mother doesn't remember their being this far from the house. We will keep looking; neither of us has ever been willing to forego a chance to explore the out-of-doors, and we each know we will not give up until we have found the

stones. (Stones as images have become too important for me to overlook; my mother's memories of these are too powerful for us to believe they are apparitions; and no one moves boulders of this size.) Their grey mass is almost hidden, as one would wish, among the muted colors of the wooded hillside, which we scale together, pushing past brambles and branches of trees. (We are princesses, returning to the castle walls where Beauty once slept.) We creep excitedly under the 15-foot high slab of granite tilted at an angle so that its top rests against a sister-slab against which it has fallen in some landslide unknown ages ago. We joke about not nudging it too hard as we explore its density and solidarity. It is a fragment of the hillside which has become shelter, which has formed a cave. We crouch to enter the opening to the closet-sized interior. At the base of the supporting rock is the spring which my mother remembers, with water her mother had told her was always "cold as ice." It still is. To the right is a rock shelf, large enough for a child to curl up on or for two children to sit on--the perfect furniture for a young girl's playhouse. Moss is growing from the edges of the shelf which receive sunlight through the east "door"--moss which is an ever softening agent as it slowly digests the crust of the rock/soil from which it grows. There is life in this cold interior of seemingly inert stone; no doubt the voices and laughter of many years have been absorbed into the granite. And perhaps

the muted whisperings have been absorbed also. My mother recounts the stories of the relatives who hid in nearby caves during the civil war--men who had no interest in fighting an enemy with whom they had no quarrel. Stories of their being fed by wives who ventured daily, with trepidation, carrying concealed "rations" were told in hushed voices a generation later. What secrets do the stones carry, what remembrances of fear, of determination/deprivation/nurturance? We think of caves as fearful and dark; and yet they can provide shelter, protection, escape. The dark of coming winter is like a cave from which one emerges in the spring with new ideas, new insight.

We retrace the path back to the old house, stopping to gather walnuts and to taste the persimmons before leaving. "Persimmons aren't fit to eat until the first frost bites them," say the old folks. Anyone who doubts this is made a believer by the trial and error method. It seems that some adversity is required to sweeten the persimmon's fruits--as if shriveling its skin against the cold causes a concentration of the sweetness which was only bitterness before. And there has been much adversity in these lives.

Back on the main road, we stop at a white frame church set in the trees behind a cemetery. I have never been here before; my mother points out the names of distant relatives as we walk among mossy gravestones. She remembers incidents in the lives of some of the cousins, aunts, uncles; some of

the circumstances of their deaths. There are graves of youngsters who died of epidemics of diseases which are now almost nonexistent in this country. "Technology" has been the savior. And yet, there are few victims here of automobile accidents. In the spiral of change, one malady has been traded for another. Brown/red leaves blow across the neatly-kept graves; the air is becoming chilly; there is the hint of the dying of the year, even in the sunshine here. We become thoughtful, quiet; for me, tears are near the surface. Perhaps the adversity of life is softening me; perhaps a little moss has taken root. It's a perfect place to be buried, we agree as we leave, noting the rise of blue hills toward Stone Mountain.

Driving toward the mountain, we stop for a brief visit with my mother's cousins, aged 92 and "only 88" (my mother's namesake), whom she hasn't seen in years. They are delighted to see us, to hear of our adventures at the "old place," and that we found the stones. They remember much that others never knew, but they don't recall hearing of the "hiding out" from military conscription. "Of course it wouldn't have been talked about," they agree. They fill in missing links regarding the names on the gravestones we saw. They are not "names" to them, but people they loved; relatives/friends. Of the beloved cousin Metta's death, at 15, of appendicitis, 88-year-old Vergie recalls, "I was only 8 years old and no one thought I was old enough to understand, but I

was so sad walking to the graveyard that day, I thought I would choke to death." They told how the father had been so grief-stricken that, after her death, he had covered his daughter's footprints in the garden, smoothing the soil with his hands. They were people of the soil, as we all are, although most have forgotten, perhaps realizing more fully than others the meaning of the spiral from "dust to dust."

North Carolina's beloved poet-laureate James Larkin Pearson (1971) wrote of the sacredness of the dust of this same Wilkes County, which was also his home for 101 years:

> Dust is made of fallen trees
> Stones and blades of grass
> Seasons take their toll of these
> Daily as they pass
> . . . . . .
> Dust is made of mighty men
> And their mighty works
> All unmindful where and when
> Dissolution lurks
>
> Dust is made when beauty dies
> All her lovely parts
> Women's lips and children's eyes
> Brides and bleeding hearts
>
> I have loved so many things
> . . . Oh, but they are dust!
> (Pearson, pp. 7-8)

Leaving the elderly women, with promises to return soon, we head for the final (and original) destination, Stone Mountain, deciding we won't undertake the customary hike to its upper areas but will instead walk to a picturesque waterfall near its base. We carry our small picnic along a short path leading to the edge of the pools formed by the falls. My mother wonders at the identity of an unfamiliar plant; she

knows most of these here also, as one would know one's relatives' names. We climb a boulder with rounded sides that rise 3 or 4 feet above the water. Sitting on the rock, we share our sandwiches and our views of the falls above us where a small stream cascades down the sheer face of granite two stories high. There are large holes in the rock wall over which the water falls--mysterious holes--miniature caves. Worn by the water? By this water more gentle than moss? Worn over how long a time? Seen by how many people? (A person could hide in the large one at the bottom; has anyone tested that?) As we sit and talk, our heads are brushed by the branches of mountain laurel (called "mountain ivy" by the local residents). It is a beautiful, hardy shrub with thick evergreen leaves. Above the laurel, the towering trunks of spruce are scattered among the hardwood growing on the side of the mountain. We are surrounded by the green/blues of trees/granite/water and overhead sky seen through the small opening of trees.

It is said that the atmosphere around a waterfall is charged with energy; that one may become energized, refreshed, by spending time there. That one may gain springs of inspiration, creativity, new insights resulting from a renewal of spirit which the cleansing water brings. I renew a pact with myself to spend more time near waterfalls; more time letting the water wash through the dredged up, dammed-up debris that gets in the way of clear thinking, that blocks

the flow. Meanwhile, when my mind needs clearing, refreshment, I will recall the image of this secluded place with its crisp bubbling water, the strong boulders, the hardy conifers which tower over the water. My thoughts will follow the stream by day, linger here at evening; I will dream of this place by night. Its waters will refresh and renew my mind; I will invite into my vision the subconscious images and intuition which lie beneath the surface of my awareness, and I will capture their essence, ever so subtly, with word or drawing or dream.

As we leave, my mother calls my attention to an evergreen tree (a spruce) which appears to be growing from the top of a flat rock above us. Closer inspection confirms that the roots are spread over the top of the rock, with no visible connection with the soil. "You can't tell which is tree and which is rock." (I suspect they are the same.)

If the rock becomes part of the tree, perhaps it also becomes part of the people. Griffin (1978) writes of the relation of body to matter:

> Because we know ourselves to be earth, with roots deep in the earth, worn by time . . . we know ourselves to be made from this earth, and shaped like the earth, by what has gone before. (p. 223)

Griffin advises:

> Let go that which aches within you. . . . That which is stone within you. Which was once green in you. That has become hard within you, let go the years within you. (p. 207)

Griffin describes the woman's body which has become fortress:

> How she has fought becomes clear, how she has known when to hold back becomes clear . . . how she has stayed on her feet, learned to keep secrets, learned to keep going, to preserve what was possible, learned every code, lived underground, lived on the barest means possible . . . how she was proud of her strength, of her indestructibleness. (p. 207)

People of the mountains are known to be tenacious; tough and wiry as the trees which cling to the sides of snow-covered peaks; sometimes wily as the mountain animals who survive the extremes of cold and austerity. The shape of the land is rumored to affect the shape of the psyche; to influence the character, the disposition.

We are person, in relationship with the earth, and yet, we are, says Griffin, "nature seeing nature . . . nature with a concept of nature. Nature weeping. Nature speaking of nature to nature." We are also persons in relationship with persons through nature. "I know," continues Griffin, "I am made from this earth. As my mother's hands were made from this earth, as her dreams came from this earth and . . . all that I know speaks to me through this earth and I long to tell you, you who are earth too. . ." (p. 227)

Womanheart

Woman rises out of earth;
With her fingers she has stirred the soil
Which nourished the family's food.

Womanhands bring up the plants from
the ground
Womanheart reaches into the graves
of her children
Womanarms longing to take them home again.

Woman coaxes earth to give,
give back again.
She works for the harvest, longs for resurrection,
While in the earth, she buries her dreams
. . . and waits
While nations clamor and smoke stacks fume
Amid metal cities' clash and roar.
She and nature wait
In silence
Broken by leaf-fall.

CHAPTER V

WINTER (Understanding)

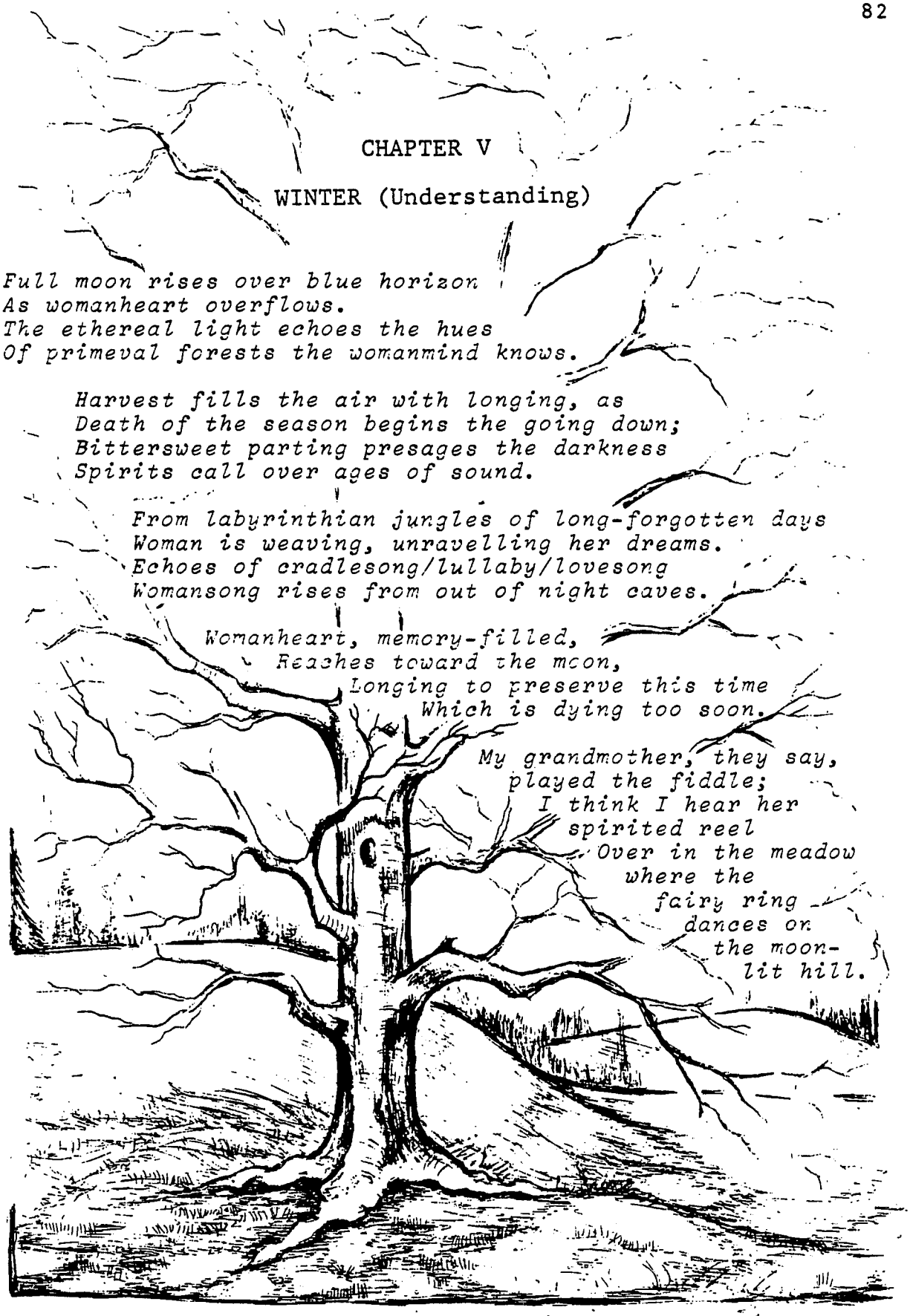
Full moon rises over blue horizon
As womanheart overflows.
The ethereal light echoes the hues
Of primeval forests the womanmind knows.

Harvest fills the air with longing, as
Death of the season begins the going down;
Bittersweet parting presages the darkness
Spirits call over ages of sound.

From labyrinthian jungles of long-forgotten days
Woman is weaving, unravelling her dreams.
Echoes of cradlesong/lullaby/lovesong
Womansong rises from out of night caves.

Womanheart, memory-filled,
Reaches toward the moon,
Longing to preserve this time
Which is dying too soon.

My grandmother, they say,
played the fiddle;
I think I hear her
spirited reel
Over in the meadow
where the
fairy ring
dances on
the moon-
lit hill.



The end of harvest time is, for our family, celebration time--the time of Thanksgiving, birthdays, anniversaries, and festivity. This year the family gathers again in the kitchen where the turkey, fresh out of the oven, is surrounded by a smorgasbord of accompaniments prepared by the women who also successfully and lovingly tend their children and their gardens while they also teach and nurture other young adults. The men bring in paper bags containing vegetables from the farm. One bag is filled with potatoes which have been dug and carried from the garden in a day's harvest event which involved three generations.

The family is participating in a symbolic ritual as old as the history of the harvesting of food. This is the time when one especially appreciates the rural heritage in which the centuries-old customs are especially visible. To have engaged, as a child, in the family activity and cooperation required for such events as molasses-making, hay-stacking, or corn-shucking is to have been initiated into a connectedness with earth. Regarding this connectedness, Wendell Berry (1977) writes:

> no matter how urban our life, our bodies live by farming; we come from the earth and return to it, and so we live in agriculture as we live in flesh. While we live our bodies are moving particles of the earth, joined inextricably both to the soil and to the bodies of other living creatures. (p. 97)

Something within my being always resonated with the images of the bountifulness and beauty of the earth in autumn. I drank in the intoxication of the rural landscape as I

walked the half mile home from school along a country road bordered by the regal wands of goldenrod beyond which were fields of ripening apples. Autumn held a stillness within its golden fullness, a stillness which hinted at holiness. It was a time of reflection; of the maturing of thoughts; of a feeling of culmination. And intermingled with these feelings was always that of melancholy; of a keen sense of the swift passing of the golden days of summer and autumn, a portent of a time of darkness and bleakness. It was much later that I began to appreciate the winter as a time for incubation and growth, a time for the process of assimilation, a "going down" into the dark side of the hermeneutic spiral.

We may see the hermeneutic spiral not only in terms of day/night or light/darkness, but also in terms of annual cycles--seasons of incubation/growth/maturation/harvest. We may feel the effects of the seasons of the year upon our bodies and our psyches; in our own lives we may feel corresponding seasonal changes which seem to delineate the various stages of the life cycle. Woman seems to be particularly sensitive to the cyclical variations within nature, perhaps because she has been traditionally more in touch than has the male with the cycles which govern gestation and birth, with the cyclic patterns of plant growth, and with the phases of the moon. This connection of the organic processes affected by the moon's cycles has been largely overlooked and

devalued by a society bent on technological expertise which grew out of mechanized, rather than organic, concepts of time and patterning. Nor Hall (1980) describes the masculinization of the western world, forged by the

> tools of the masculine commanding spirit which is . . . concerned with laws and order as opposed to nature, reasonable and reliable like the regular sunrise and sunset, instead of capricious and changeable like the moon. Moonlight hardly matters anymore in a world so brilliantly lit by artificial means. Some people do not even know it is there. (pp. 5-6)

In looking at the 16th and 17th centuries, Hall sees a regard (by the alchemists, scientists, and artists) for the wisdom of Sophia--for the feminine principle of knowing:

> These early surveyors of matter shared a fundamental connection to the feminine principle as it was expressed in the idea of the lumen naturale, the light of nature. This light, like the moon's light, was called the "lesser light" in relation to the incomparable brilliance of the sun, which was likened to God. Yet the "lesser light" of nature was essential for understanding how the material world cohered. The less revealing light showed the connections between things; it revealed the "inwardness" of God's creation. (p. 8)

Ours is a system which has devalued the lesser light, the reflective function of the "dusk" experience and the incubation period which is necessary to the intuitive processes of the intellect. The wisdom of Sophia, which grows out of the organic processes of experience in relationship has not been valued as a form of knowledge. The nurturing principle of the mother has been aborted and the effect on the feminine, within the male psyche as well as within the female, has been a deprivation, a "wounding" portrayed in poignant imagery in Sylvia Perera's (1981) description of the plight of modern woman, who has

> grown up in the difficult home of abstract, collective authority--"cut off at the ankles from earth," as one woman put it--full of superego shoulds and oughts. Or they have identified with the father and their patriarchial culture, thus alienating themselves from their own feminine ground and the personal mother, whom they have often seen as weak or irrelevant. (p. 7)

This devaluation of the feminine is intensified by the educational system in which the emphasis is upon learning/memorizing the factual, the exact, the historical, the rational. The intuitive, imaginative, creative powers which reside within the feminine are seldom tapped, much less cultivated. The nurturing, giving, care-taking functions of the maternal are repressed in favor of individual competition in academic studies and group aggression and competitiveness in school athletics and "sports." Female students may choose to develop according to this masculine model in order to succeed, or may instead choose an antithetical development of the inner feminine world of the psyche, with reliance on the intuition, the artistic, the "lesser light" of the imagination. This latter choice will almost certainly place her in the position of failure within the system. Thus she is in a double bind in having to choose between loyalty to a patriarchal system and loyalty to her inner nature. The damage to the self often takes a form similar to that described by Perera:

> The problem is that we who are badly wounded in our relation to the feminine usually have a fairly successful persona, a good public image. We have grown up as docile, often intellectual, daughters of the patriarchy, with what I call "animus-egos." We strive to uphold the virtues and aesthetic ideals which the

> patriarchal superego has presented to us. But we are filled with self-loathing and a deep sense of personal ugliness and failure when we can neither meet nor mitigate the superego's standards of perfection. (p. 11)

Perera maintains that the collective model of the feminine--that which defines her "only in relation to the masculine: the good, nurturant mother and wife; the sweet, docile, agreeable daughter; the gently supportive or bright, achieving partner . . . is inadequate for life" (p. 12).

Perera emphasizes the need for images to serve as models for woman in her search for Self, for identity. She suggests the need for the recovery of the goddess whose return was "presaged at the beginning of the patriarchy" (p. 15).

M. C. Richards (1980) writes of Sophia as the feminine aspect of knowledge--knowledge in the form of wisdom. Wisdom, which involves receptivity--receptivity to the gifts from the earth, from one's own stories and from the stories of others--"exists already in nature" (p. 64).

The myth through which the recovery of the goddess is realized is

> a description of a pattern of psychological health for the feminine, both in women and in men. It promotes a model of the incarnation-ascension rhythm of the healthy soul, and also of a process to promote healing. (Perera, 1981, p. 14)

The goal is toward an "integral consciousness" in which the newly-born "resonant awareness" is added to "mental-cerebral, ordinary Western consciousness" (p. 14). It is a journey into the dark of the underground; an exploration into the

labyrinthine caverns of the night of the hermeneutic spiral. It is a search for the origins of the feminine experience.

In the circular pattern, the feminine self

> must go down to meet her own instinctual beginnings, to find the face of the Great Goddess, and of herself before she was born to consciousness, into the matrix of transpersonal energies before they have been sorted and rendered acceptable. It is a sacrifice of what is above--to and for what is below. (Perera, 1981, p. 45)

The search for what is below begins anywhere within the hermeneutic spiral, for the spiral itself implies a continuity of purpose, a unity of pattern. Therefore, the search may begin within the daylight of consciousness when, for example, one encounters ideas or concepts which stimulate the intellect to search for more <u>facts</u>, more <u>data</u>. Or the search may begin with the dusk period of reflexivity--the twilight period called by Hall (1980) the "time of changing worlds." It is the time when one is engaged in weaving the remnants of the daylight experience into a meaningful pattern for the quilts of the darkness which will follow. Some thread, resistant to the familiar pattern, may seem to lead one to an underground passage, to a subterranean world which has been lost to daylight vision. Following this thread requires an encounter with the darkness; an invitation to the dream world, to the realm of imagery and imagination. It is at the same time an attitude of receptivity and a sense of blind searching--a groping for the origins of one's experience, for the hidden roots which connect the individual with the archetypal patterns. Hall writes of Toni Wolff,

> close colleague and companion of Jung, [who] noted in 1934 that women were brought to the task of self-reflection by archetypal disorientation resulting from centuries of adapting to a predominantly patriarchal world. The world at large, not just woman, is "caught in a sort of hell," estranged from femininity, and waiting for a boon from the goddess. (p. 34)

The goddess-guide for the underground search is Artemis--source of the drawing-down and rising-up energy of plants, planets, and people that is expressed in the rhythm of ritual dance" (Hall, 1980, pp. 109-110). Hall writes of this

> goddess who has no fear of the dark, or of wild animals, or of places uninhabited by men, [as] the force that sustains our attraction to the primitive and unknown. She can teach us how to make contact with the "unconscious and survive." (p. 112)

As goddess, Artemis provides a model of energy, bravery, strength.

> Like any divine being . . . she is formidable. But, when she lives through a person we can touch, her essence is approachable and may even suggest a way of restructuring our sense of reality to include access to hers. (p. 112)

Through whom has the Artemis influence been active in my life? Who taught me to dance to the rhythms of the plants, the planets, the seasons?

Artemis came through the women and men who were in touch with the earth, with the cyclical, with the inner rhythms of themselves. Those who measured the year not only by the calendar, but also by the phases of growth and harvest; who measured time according to the rituals of planting, preserving, cooking, and feeding. It was "blackberry-picking time," "potato-digging time," or "dinner

time." They knew when it was time to prune the tree; time to plant the corn. They understood growing things. They placed the tender plants in the soil, spreading the thin roots with their fingers, covering them with handfuls of soil. They tended the young growth through frost and sun; they gathered the fruits with their hands and peeled them, cooked them, placed them on the table in bowls or in the cupboard in sealed jars. They knew the way of the cultivated plant, and furthermore, they knew the secrets of the wild ones.

"Take some of the catnip tea home with you for when the baby may have the colic," my grandmother told her children. "I used to give it to you." She also gave them cherry bark tea for coughs and sassafras tea as a spring tonic. The practice of home remedies had become less common when I began to come of age, but the knowledge, from untold centuries of "woman's wisdom," remained. A walk in the woods with my mother was an education in the habits of plants, the uses of various barks and berries, the legends of an independent, resourceful people. It is as if the vestiges of initiatory rites for girls remain in the ceremonial passing down of feminine wisdom regarding the plant.

The feminine knowledge of the plant is in relation to its nurturing, healing quality and also in its aesthetic contribution to the landscape and the garden; in its necessity as an image for the soul. The initiation continues in more urban form in the recipes for food passed from woman to daughter, in the advice regarding the preparation of

meals, the care of children, pets, houseplants, and other growing things. It also lives in the father/son traditions regarding the tending of the soil, the respect for the land.

Neumann (1963) writes of the "vessel character" of the female; of her "natural nourishing principle." Sophia is the archetypal (goddess) vessel of spiritual transformation whose

> spiritual power . . . is living and saving; her overflowing heart is wisdom and food at once. The nourishing life that she communicates is a life of the spirit and of transformation . . . from the elementary to the spiritual level. (p. 331)

The spirit of Sophia has been repressed, says Neumann, by "the patriarchal development of the Judaeo-Christian West, with its masculine, monotheistic trend toward abstraction." Sophia, however, represents the "feminine maternal wisdom . . . of loving participation," rather than "abstract, disinterested knowledge" (p. 331).

Richards (1980) talks of Sophia as the feminine aspect of knowledge--knowledge in the form of wisdom. Richards reiterates Stiner's belief that, because education is an art, like artists we may "rediscover spirit" through the physical world--

> through every flower, every animal, every person. . . . We are to sink into the plant to feel how gravity goes down the root into the earth, how formative forces unfold above ground; we are to feel from the inside the blooming and fruiting. (p. 79)

Who is the Sophia influence in my life? Who is she who aids the spiritual transformation through knowledge as well

as nourishment? Sophia is present in the men and women who provided nurture for the growing self within; those who through loving participation in my life, my interests, my growth provided guidance through various stages and seasons of life.

The first teacher is the mother--the "mother-principle"--those who provide care and comfort and nurturance--the mother/aunt/grandmother. These were followed by the teachers, mostly female ones in the early years, who gave both nurture and wise strength as a part of instruction. There was the scout leader who mothered a den of adolescent girls while making each feel like an "only child" and whose store of folk wisdom is sought until this day. There were the men and women in upper-level education who provided models for strength in the world at large as they gave attention to the young adult's needs for affiliation and encouragement. And there are today the women and men who are sought as counselors in time of change and growth-confusion and whose participation in one's life is such that their role as "counselor" becomes enmeshed in that of "friend." And there are the sisters (blood sisters, sister-in-law who is also a sister of the heart, and special sisters of the spirit) with whom the dark places and the visions are shared through words, through gestures, through tears and laughter--over the tea, with the wine, preparing the food, walking in the sun, sharing the thoughts, the way.

There are the men within whom the Sophia spirit flourishes and overflows; the men who share the journey, who share the experience of their own growth, who give support as naturally as they receive it. The spirit of Sophia is especially evident in those men who remain near the soil--in the father-in-law who plants "by the moon" and harvests by her signs; in the memory of the grandfather who tended the "bottom lands" along the river with horse-drawn plow; in the father who valued the meaning of land as heritage and as special place and who worked to maintain it.

My remembrances of the river recall my father and grandfather who taught me to respect its presence and to marvel at its changeable nature. Growing up within sight of the Yadkin, my father had learned as a youth how to traverse the river, to swim with its currents, and to maneuver small boats and rafts. He had learned of the treachery of its thin ice in winter and of the relentlessness of its floodwaters in late summer. But best of all, he had learned how to fish its depths. He knew where the largest fish in the river might be hiding in a murky pool near the riverbank and he knew what kind of bait to concoct from cornmeal dough to lure the catfish which swam near the bottom of the river.

For me, to be included in the family fishing experience at twilight, sitting on the damp sandy bank of the river with a newly-cut cane fishing pole, was to be a part of a magical orchestration which occurs at nightfall along all such rivers.

The symphony began with quiet splashes of water providing the background for the intermittent hum of mosquitoes and the occasional murmurs of a nesting bird. There followed a gradual rise of voices from the night creatures who joined the symphony until a crescendo of calls and croaks and basso profundos began to receive answering echoes from the other side of the river. Later in the evening would come the melancholy call of the whippoorwill to which my grandfather never failed to call my attention and which he delighted in explaining as a part of the story of a boy named Will who had stayed away from home after hours.

As we listened to the sounds of the night while we waited for the predicted tugs on the fishing lines, I often wondered that the entire population of the world was not lined up on the banks of the river to join in the enchantment of such an evening's production.

Maxine Greene (1974) writes of the educational importance of encouraging people to understand their personal experiences in the world. In discussing the ways women perceive themselves within the world, she argues for "an intensified awareness of women's own realities, the shape of their own lived worlds" (p. 291). She writes of the importance of each person's regaining touch with the lived world through literature, which leads to examination of one's own life, and through self-expression: "Without articulation, without expression, the perceived world is in some way nullified;

until given significant form, it holds no significance except in the prereflective domain" (p. 223). Greene is writing from the perspective of woman's need to validate her unique experience of the world--a collective experience which must be brought to her own awareness before it can be incorporated into the public and political awareness which has tended to see the female as "other." Perhaps there is a similar need, in the newly-emerging consciousness of the importance of the person/earth relationship, to recover the personal histories of all persons, both female and male, in order to understand not only our common dependency upon the earth but also to understand the ways in which we can undertake to heal the split that has caused us to view the earth as "other" than ourselves. Furthermore, it may be that the concepts of female as "other" and of earth as "other" have sufficient common ground in their origins to encourage the supposition that understanding the causes of the one may enable us to understand the causes of both. Further, incorporating either the feminine experience or the person/earth experience into our personal histories may enable us to incorporate qualities of both.

Helen M. Luke (1981), Jungian analyst and counselor, writes of the unfortunate effects upon her female clients of their alienation from their own femininity. She emphasizes the importance of woman's connections with the earth, of the analogies between the quiet fertility of the earth and the creative spirit within the female which is too often

driven by the negative animus in the "pursuit of prestige or the shocking and spuriously original" (p. 26). Luke sees these pursuits as resulting from the "terrible pressure of the will to do" and she sees them as antithetical to woman's true inner creativity which may be expressed in the "values of the small, the secret, the hidden feminine muse" (p. 26). The task, according to Luke, is self-knowledge which leads to the freedom to do when "we have learned the nature of love" (p. 27). This creative feminine spirit is also valued by Luke as a necessary creative force for the male. "No one, either man or woman, creates anything without the cooperation of the contra-sexual element" (p. 15). She cites the case of a male client whose resistance to the instinctive feminine wisdom of his unconscious had caused a neurotic conflict in reaction to the sense of pressure he felt to produce a dissertation which would ensure success in an academic field--a success which was not in keeping with his true nature. Honoring the creative feminine spirit may mean, according to Luke, a withdrawal from the world rather than a striving toward it; it involves a recognition of one's feeling responses, not as opposed to, but as basic to, one's thinking responses. Woman may, according to Luke, rediscover the feminine and man may "realize the values of the heart without losing the bright sword of his spirit" by means of transforming images. "Each of us has a well of images within, which are the saving reality, and whence may be born the individual myth carrying the meaning of a life" (p. 4).

The hermeneutic spiral, used as model for this dissertation, has served as a transforming image through which meaning emerges. In Mehan and Wood's interpretation of the hermeneutic spiral, nighttime is the unconscious experience which provides the conditions necessary for understanding. The day's interpretation is sifted through the dusk of reflexivity, to be implanted into the fertile ground of the night. There, in darkness and in silence, the unconscious processes have time and space to incubate, to multiply, and to begin to grow toward the promising light of dawn.

In my adaptation of the hermeneutic spiral, nighttime is represented by winter, which marks "going down" into the earth of the fruits, the leaves, and the very sap of the trees, along with the burrowing animals and, symbolically, man himself. It is a time for the gathering in, the holing up, the slowing down into, if not deep sleep, at least quiet contemplation and, with the advent of the newborn year, resolution and forward-dreaming. It is a time for feeding the imagination through dreams and images; for meditation which gives rise to intuition and symbol. It is a state of mind which is both below and within, resting and growing in the ongoing spiral of growth and change.

By means of this experiential journey through the four seasons of the spiral, I have offered an example of the process of an individual's experience "as a participatory phenomenon." In it I have engaged in dialogue with theory, particularly with theory concerning the person/earth/person

relationship and its role in the personal life and in the educative process. I have found, as Macdonald (1981) suggests, that its chief value is for reinterpretation "in order to provide greater ground for understanding" (p. 132). And because this is the natural outcome of the spiral, the fruits from the winter of understanding are already beginning to emerge toward a new cycle of spring. There is no standing still; no "closure," but a longing to spiral outward into a new direction, toward new growth, new gropings toward truth.

Toward a New Spring

The vine comes in
To the dark interior
of the winter soul,
Bringing its fruits insistently, naturally,
Surprising the inhabitants of the plain, dark rooms.

Of course this is how it is,
That, without striving, searching,
To the waiting, receptive ones come

the fruits of harvest,
Even as the new shoots
are reaching
t o w a r d
another
spring.

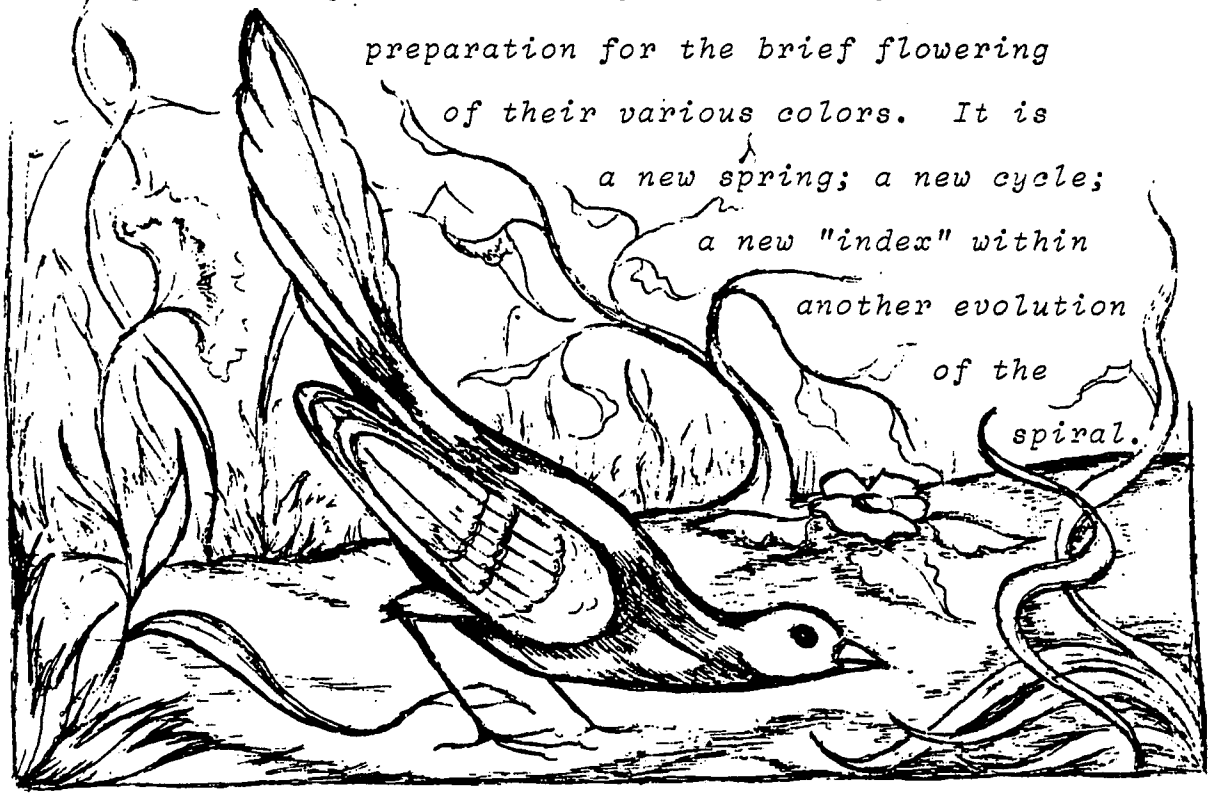
CHAPTER VI

NEW SPRING (New Indexicality)

> Rebirth, although perennial, always comes as a surprise and a gift. As the sun gathers strength and impregnates the earth with the promise of green, the anxiety of winter is replaced by hope and the cosmos is reborn out of chaos. (Sam Keen, 1970, p. 89)

Signs of spring are arriving early this year. Brave daffodils have already begun to trumpet the return of the sun. Red-tinged buds are softening the starkness of the gray-limbed forests where songbirds are gathering as if in excited anticipation.

Soon the green-white tips of the spring ephemerals will push through the leaves of the forest floor in preparation for the brief flowering of their various colors. It is a new spring; a new cycle; a new "index" within another evolution of the spiral.



As a new spring has evolved through the seasonal cycles of the shared spiral journey, so has a new age evolved through the collective journey of mankind. All about us are the evidences of change, of cultural shift, of new discoveries in science which radically alter the way we view the world. Every age has, of course, been an age of change and transition; what makes the present trends unique in importance is that they are promoted by an unprecedented accumulation of knowledge from all disciplines--knowledge based on scientific discovery as well as on experience and the search for meaning--an "implosion of information."

Marilyn Ferguson, in The Aquarian Conspiracy (1980), chronicles the new age which is also called the "Age of Aquarius." In her worldwide travels as author of The Brain Revolution (1973) and editor of the Brain/Mind Bulletin, she has had the stimulating experience of being among the pioneers who are working to prepare their fellow travelers on the earth for the coming of an envisioned new dawning of consciousness and unity. Ferguson points out that the publishing of the book The Brain Revolution made her the "unofficial clearinghouse" for those interested in comparing and sharing research and experiences in the movement she later titled "The Movement That Has No Name." She recalls that she had described, in a 1976 editorial, the spirit of the age as being "at the same time pragmatic and transcendental," valuing both "enlightenment and mystery . . . power and humility

interdependence and individuality" (p. 18). She believes that the secret of its success will be in its integration of "magic and science, art and technology" (p. 18).

Essentially, Ferguson maintains that there is a (leaderless) conspiracy working to bring about radical change within the United States--if not within the world. The conspirators, whether consciously or unconsciously a part of the network, are involved in experiences that are a part of an increasingly visible social transformation. They are a part of a movement which has evolved from a series of events which, according to Ferguson, were predestined to lead to the present stage--a stage which would lead into the unknown. This was brought about, says Ferguson, because of the failure of the known. The journey into the unknown involves a "turnabout in consciousness," a "new perspective," a "paradigm shift." Ferguson discusses the historical resistances to new paradigms, which are always seen as threats to the established order but which must inevitably give way to an increasing recognition (usually by a new generation) of its power. The power of the emerging paradigm shift of the Aquarian Age is seen as no less inevitable. It will involve our reclaiming "the power we long ago surrendered to custom and authority" (p.

Since the new paradigm involves the way we see, and since it is predicated on an implosion of knowledge, it follows that reform of our educational institutions is

critical to the success of the movement. It is not piecemeal reform, however, that the conspirators advocate, for they have seen the failure of many so-called reform movements. An educational consultant described the new idea of reform: "The psychology of becoming has to be smuggled back into the schools." Accordingly, the subtle forces at work to transform education are the countless educators who are described by Ferguson as engaged in their own personal transformation. The new paradigm for education is toward transpersonal education and away from traditional emphasis on competition. Transpersonal education, writes Ferguson, "celebrates the individual and society, freedom and responsibility, uniqueness and interdependence, mystery and clarity, tradition and innovation." Learning is seen as process--"the transformation that occurs . . . whenever new information is integrated" (p. 288).

Concerning the new paradigm for education, Ferguson maintains that it "reflects both the discoveries of modern science and the discoveries of personal transformation" (p. 288). As we learn to connect information, says Ferguson, we are also learning to connect with each other and to appreciate other cultures and other historical periods. This transcendence of culture is seen as especially important as the world changes, in accordance with our view, becoming "smaller, richer, more human." In order for us to understand ourselves, each other, nature, it is necessary for us to see "whole

systems: the tissue of events, the web of circumstances, multiple perspectives" (p. 308). This calls for a new curriculum--a curriculum for transformation.

Concerning transformation, Macdonald (1978) suggests that we are "facing the opening of the 'doors of perception' in human experience, not as a minor phenomenon by a few mystics throughout history but as a large-scaled movement of consciousness on the part of our young" (p. 102). Macdonald sees the human race now taking "another major step into the unknown source of its imagination, that same source which has created technology" (p. 102).

Macdonald posits a transcendental ideology of education which recognizes the importance of the process of "personalizing the outer world through the inner potential of human being as it interacts with outer reality" (p. 109). This process makes use of the tacit dimension of knowledge developed by the work of Polanyi--a process which exists in "both practical and formal knowledge structures, and in the aesthetic and scientific realms" (p. 110). Like Ferguson, Macdonald insists on the importance, in education, of the recognition of the tacit components of knowledge.

An important requirement of Macdonald's transcendental developmental ideology of education is that not only the learner, but also the teacher, is "in process"--in this case, in the process of "centering" which is expressed as the aim of a transcendental ideology. "Centering" here refers to

the spiritual dimension of being in which the "completion of the person . . . utilizes all the potential given to each human being" (p. 113). The teacher, rather than having "already arrived to a static maturity" is called upon to facilitate the kind of understanding between student and teacher which "demands a sort of indwelling of the other, a touching of the sources of the other" (p. 121). In this process the teacher is "engaged in the art of living" (p. 123).

In a paper titled "Curriculum Planning: Visions and Metaphors," Macdonald and Purpel (1981) stress the importance of the cultivation of imagination and intuition as important in the process toward liberation and cosmic unity. Citing liberation as the goal for education, they emphasize the place of paradox, uncertainty and dilemma as inherent in the mystery as we "seek deeper and broader understanding of the meaning of life." They maintain that "man and woman possess the esthetic and intellectual sensibilities to re-create themselves and the world in unity with the divine, the wholeness of body, mind and spirit, earth and cosmos, and humanity and nature" (p. 19). Like Marilyn Ferguson, Macdonald and Purpel deliberately choose an optimistic view of human potential and of its ultimate development through new paradigms of education and of curriculum planning. Like Ferguson, they envision the transcendent curriculum not as <u>opposed</u> to, but in conjunction with, the pragmatic. Here again the importance of the <u>process</u> is emphasized, the process itself

being described as an important opportunity for the education of the participants.

Also speaking to the need for a new paradigm in education, Maxine Greene (1974) emphasizes the need for awareness as a prerequisite for change. In her article "Cognition, Consciousness, and Curriculum," Greene describes the coming to awareness as an awakening which can begin with teachers who "no longer lead mechanical lives." They are then charged with the task of awakening others to "the clarity needed for self-consciousness." By defining consciousness as a "thrusting toward the things of the world . . . the multiple in which the individual comes in touch with objects, events, and other human beings," Greene imparts the idea of the communal nature of the consciousness revolution. Consciousness is inextricably linked to curriculum, to teacher/student interactions, to society, and to the earth itself.

Samples (1981) sees this planetary consciousness as a spiritual issue and as a part of the "evolutionary transformation." Samples is an example of a growing number of scientists who "love logic, analytic thought, and the tidiness of an equation that gracefully says some tiny thing about the way the world works" (p. xi), but who also have seen beyond the limitations of the scientist's traditionally rational and analytic view of the world which distances the person from the earth and removes his sense of personal responsibility for its welfare. Recounting his own journey

toward planetary consciousness, Samples writes of his transition from childhood wonder to that of educated geologist:

> When I was a child on the plains edging the Colorado front range, I used to climb up into elm trees on hot summer nights when thunderstorms boiled up out of the sugar beet fields to the east. The wind whipped the trees into a passionate dance, and I would rock back and forth to rhythms I loved but could not explain. . . . I loved the earth even though I didn't know it was there. Later I learned it was a planet, the third planet from the sun. . . . I learned of igneous, sedimentary, and metamorphic (rock). I learned two college degrees worth of earth--so much did I learn that my childhood love had faded into an adult kind of purpose. It had become more important to gather knowledge than to wander in mysteries. (1981, p. x)

Samples' career as geologist lasted only 10 weeks because his deep feelings for the earth prevented his willingness to exploit it through the geologist's methods of drilling, blasting, tearing the earth apart. "I realized," he writes, "that I had studied geology, geophysics, and astronomy because I had been in love with the earth" (p. xi). This knowledge, and training, however, had prepared him, he now saw, "to tear the earth apart" (p. xi). Upon this realization, Samples spent the next 25 years exploring "how to celebrate what I knew, how I knew, and how all related to the earth . . . my true first-love" (p. xi). His book Mind of Our Mother (1981) was one of the results of this exploration.

We have witnessed an age of conquest, of competition, of technological domination, and of violence. We have seen the effects on the human psyche as well as on the human body. And we have before us the evidence of their effects on the body of the earth.

And yet a new vision of earth has been given man, ironically by means of the ultimate in territorial conquest--by his having conquered the space between earth and moon. For from the vantage point of the moon, man gained a new perspective of the earth. The photographs of earth which were made by the astronauts who stood on the surface of the moon show an earth which has been likened to a "jewel in space." It is colorful, shimmering, perhaps even breathing--surrounded by swirling masses of clouds as it revolves through lonely space. There are no lines to be seen across its ocean to delineate measurement; no boundary markers showing divisions of its continents. The perspective from the moon has clearly transcended the perspective we had gained from atlases and globes designed according to man's conquest of territories and claims of space.

It is very fitting, symbolically, that this ultimate technological feat of conquest of space should have taken man to the moon for a new view of earth. For in ancient mythology and folklore from many nations the moon represents the feminine qualities of reflection, of meditation, or inwardness. One might enlarge the metaphor of earth/man and moon/woman to illustrate that the extreme course of the aggressive urge toward exploration had inadvertently led him to a unique vantage point from which an encounter with the feminine aspect of his psyche would give him a new perspective on his origins and his destiny. For if moon represents the

feminine qualities, it is from the perspective of the feminine that the moonwalkers gained a new vision of the earth.

In The Moon and the Virgin, Nor Hall (1980) addresses the irony of the timing of the moon landing in a way that emphasizes the blending of the masculine and the feminine:

> The Eagle Ship, under the auspices of the Apollo [or Sun] mission, landed on the moon on the very eve of her movement out of Virgo--the celestial sign of the Virgin. (p. 6)

Berry (1971) recounts Teilhard's vision concerning the healing of the split between the earth (creation) process and religious (redemption) process, predicting that "the long motherless period is over" and that a renewed regard and respect for the importance of the feminine principle will result in man's adoption of the role of caretaker of the earth. Eventually, man will assume responsibility as co-creator of earth's destiny, according to Berry.

It is possible that a renewed respect for the value of the feminine principle will hasten the transcendence which Macdonald sees as the ultimate outcome of the current emphasis on technology:

> The transcendence of technology will result from the very turning inward that it [technological domination of man] makes possible as the only viable alternative for human beings to continue to experience oneself in the world as a creative and vital human being. Out of this will come the rediscovery of our own potential. (p. 101)

Macdonald's (1978) belief that we will transcend technology gives credence to the metaphor of earth/man's reach toward moon/woman as a symbol of the "withinness" of his own

psyche which has lain dormant, waiting for his exploration. "It is as if we are coming to know that what we have imagined and conceptualized lie within us as potential" (p. 102). Macdonald expresses the belief that the next journey for exploration will be an inner journey--manifested "by the discovery through perception and imagery of human potentials only slightly known up to now" (p. 103) Having gone to the moon, man may now begin to turn inward in search of his own inner field for reflection from which to gain a new perspective.

The journey inward may represent a homecoming for alienated modern man--a product of the age of technology who is often likened to the machines which have come to dominate his life and his mind.

Victor Ferkiss (1969), concerned with providing guides for modern man's dilemma, emphasizes the importance of respect for nature rather than for dominance of it. He offers Albert Schweitzer's views on the moral necessity of dealing with the relationship of man to nature, maintaining that "Human self-knowledge is impossible in a world in which nature has been destroyed or so altered that it cannot speak to men" (p. 209).

Samples (1976) writes:

> Nature is no longer looked upon as mere ornament. It is now being considered primal . . . as a universal womb that all can understand and benefit from to the limits born of their own cultural conditioning. . . . Metaphor is born in the natural processes and humans, despite their cultural setting, are first and foremost, a product of nature. (p. 112)

In discussing the value of metaphor in education, Heubner (1981) states:

> The use of metaphor is a way of shedding new light on an already existing phenomena, by looking at and speaking about that phenomena from a totally different perspective. In this way we obtain a transfer of meaning and thus an opening up of awareness. (p. 4)

I have used the hermeneutic spiral as model and the seasonal cycles of nature as metaphor for telling the story of my perspective of the person/earth relationship. It was in telling stories, according to Sam Keen (1970), that "traditional man was affirming the unity of reality." The story, writes Keen,

> affirmed that the reality of the individual was not reducible to the present moment of experience but belonged to a continuity of meaning that the flow of time could not erode. With this faith the individual could act with a sense of continuity and perspective; his spontaneity was tempered by memory and hope. (p. 97)

Keen also points to the metaphor of the story in the Greek mind and of the seasonal cycles of nature which served as structure for the drama. The drama began with a spring which represented "innocence, vitality, and promise," and, after embracing the other seasons, ended with a spring which represented resurrection and return. The spiral was complete, but open; a new season would always return.

This spring in my story also represents newness and return--a return to new perspectives, to new ways of seeing oneself in the world. It also contains the concepts of harvest and of contemplation, concepts that need not be relegated to any one season or stage of life.

The starting point of our search, maintains Keen, is that of "individual biography and history . . . something I touch, feel, and experience. Our starting point must be radical" (p. 99).

The choice of the word "radical" here is fortunate for the purposes of this dissertation. Radical pertains to the roots, to the origins, to the underground, underlying beginnings from which the being or object or idea springs. This radical point of beginning is a most appropriate one with which to enter the spiral model for recollecting or re-experiencing or re-examining one's personal history. And as the beginning of our personal histories evolves from an underlying structure whose roots are lost to us in time, so does the lived experience examined through the spiral model evolve into new forms which create new spirals which provide new possibilities for interpretation. In this sense, the ending point, like Keen's starting point, must also be radical--radical in the sense of maintaining connection with the roots of beginning and of continuation into new spiraling. The spiral as model cannot be "ended"--it can only be abandoned.

> whatever you have to say, leave
> the roots on, let them
> dangle
>
> And the dirt
>
> just to make clear
> where they came from
> --Charles Olson (Hall, 1980)

PART III

EPILOGUE

CHAPTER VII

EPILOGUE

Part II of this dissertation represents the personal re-experiencing of my relationship with earth. I began by entering the spiral, through the process of currere, in the springtime of my preschool days. This autobiographical journey toward a new understanding of the person/earth relationship continued through the seasonal cycles of the spiral. As the seasons in my recollections from past experiences evolved into new phases of the cycle, so did the lived seasons during the writing of this dissertation evolve from spring to spring.

During each season, I found myself exploring the woods and streams in the vicinity of my home in the country, searching for new glimpses of the natural world and for new approaches for perceiving it. I sat for hours in spring and summer by a small stream which meanders through a stand of beeches whose papery leaves in winter had provided the only sound above the gurgling of the water. In the autumn, I watched the leaves fall from the oaks and sycamores which lined the stream. Notebook in hand, I followed my free-associative approach to writing as the colorful leaves floated lazily on the surface of the water. My models for writing were often Thoreau or Whitman or Dillard or another nature

writer whose volume was carried along for reflection and inspiration.

During my hours of formal research and writing, my window carrel on the ninth floor of the library towers gave me an advantageous perspective from which to observe the seasonal changes in the face of the earth. I often allowed the appearance of the landscape below to set the mood for the kind of writing I would undertake on a particular day. As I reflected on the landscape from my vantage point, a huge, spreading oak tree was the focal point within my view. Its seasonal changes provided the sort of aesthetic setting which enabled me to capture the spirits of different phases of the cycles within the hermeneutic spiral which comprised my model for interpretation of my experiences of the outdoor world.

The application of the hermeneutic spiral enabled me to reinterpret some of my experiences of the world of nature and some of my basic notions of education. From that reformulated winter of basic understanding, I reexamined my original intent concerning model-building for O/EE. I had begun the process of writing this dissertation with the intention of developing a model for a curriculum in outdoor education. Some of the questions which I had considered were: What sort of curriculum model is appropriate for incorporating the major strands of an O/EE program? What sort of model most readily lends itself to the interdisciplinary nature

of O/EE? How does one begin with model-building in a field such as O/EE which is not only relatively new and diverse, but which is also recognized as a process, rather than a body of knowledge alone?

The original search led me to investigate, through the customary research methodologies (including a search through the facilities of the ERIC system) any existing schema which had been used as a basis for model-building within O/EE. Among the efforts at model-building which this search uncovered, the ones that had seemed to offer most promise were those which I described in the first part of this paper--those based on Maslow's model. The search had also uncovered a number of studies in which various scales had been devised to measure attitudes, participation, maturity, and other personal traits in terms of environmental awareness. But the further I read and the more I lived the process of currere, the more I realized that model-building begins first of all with the builder--that the model itself will be an outcome of her particular perspective and that it will reflect the builder's own world view, based on past experiences, personal and cultural awareness, and so forth. It was this realization that led me to my re-search.

O/EE involves not only factual learning of objective content areas, but is also vitally concerned with persons' attitudes and with relationships between person/earth and between person/person. A number of disciplines, particularly

psychology and sociology, and often literature, history, and philosophy enable the person to examine interpersonal relationships as well as attitudes toward the disciplines themselves. A critically important step in developing educational ideas is that of reflecting on our individual histories in order to reach clarity on how we individually understand the work. O/EE, newly adapted within the curricular setting, is in a stage of formation as an interdisciplinary area of research and experimentation. In this formative stage of O/EE as curriculum component, theoretical models which are adaptable to the various disciplinary fields are particularly useful. It seems to me, then, that model-building for O/EE educators needs to involve, first of all, a model for examining one's own experience of the person/earth relationship. This seems necessary as a basic first approach to examining one's own foundations from which further construction of models can proceed. The educator approaches O/EE with a particular world view and with a personal perspective of her place in that world. Whatever form subsequent model-building takes, it will reflect this perspective. I believe that an examination of this perspective is essential as a prerequisite to model-building--at least to personal model-building. We need to know where we came from in order to assess where we are going and to plan for the journey. This model-building, it seems to me, is essential for each environmental educator who takes a position as

teacher or guide or leader. It seems important, for example, that the teacher/guide for the wilderness excursion will have examined her own understanding toward the wilderness experience by asking such questions as: How do I see the earth in relation to the person? What kinds of concepts regarding the person/earth relationship are connected with the survival skills I endeavor to teach? What changes may take place in my students' attitudes toward earth as a result of my own attitudes? Of my own methods of teaching?

Brubaker (1979) encourages environmental educators to examine their own attitudes as a prerequisite to teaching environmental issues. He contrasts attitudes which prevailed prior to the environmental awareness movements--attitudes which endorsed unlimited technological progress, conquest of nature, independence and separation--with more recent attitudes which value sharing, interdependency, connection, harmony, and responsibility. Brubaker points out that these changes in attitudes precipitate new dilemmas and new conflicts as personal values and concerns are weighed against public interest, political considerations, legal codes, and other collective values. Environmental educators must deal with these complexities, which "provide the grist for the mill of active learning in elementary schools" (p. 149), and in doing so must necessarily involve their own attitudes, values, and experiences. Brubaker provides an example of a kind of self-inventory for educators to use in uncovering

and understanding their own values. In responding to these questions through reflection and writing, the educator is encouraged to see the influence of his own beliefs in terms of his own teaching.

It is important that these beliefs and attitudes be examined. It is also important that the origins of these attitudes be investigated, insofar as we are able to trace our own beliefs and attitude formation.

Sale and Lee (1972) also address the importance of the teacher's values as they pertain to the environment. Discussing the importance of protective attitudes, they ask: "How sensitive are we to the problems of solid waste, air pollution, automobiles as major polluters, the 'spaceship philosophy' of dumping waste materials, and population control?" (p. 169). Sale and Lee caution that teachers must not enforce their value systems on their students but should instead encourage students to develop their own systems of value analysis. They also point out that teachers cannot escape the fact that they do affect value development by "their own everyday behavior. . . . As this incidental, or accidental, influence occurs in all educational settings, there is no question that value education already exists" (p. 170). Sale and Lee emphasize the importance of developing a system which may be used to analyze value orientations.

The spiral model I have described is one which may enable the O/EE educator to explore the questions of personal

values and attitudes. It may be that the teacher will wish to share some of the experiences of the process in a way similar to that of Frances Krall (1979), who writes of her experiences as participant in an extended backpacking trip into the wilderness. She records the visual images, the physical challenges, the frustrations and the rewards she experiences along the way. Then, she shares with fellow faculty the "essence" of her environmental education curriculum. She explains:

> I teach through metaphors. Living, not literary. What are they? Encounters. Encounters with nature, purely sentient and personal in their conception. Vivid, intense, clear, they grow and go on living in my heart and mind, tapes, replayed over and over telling me more and more about my Earth niche. Tools of pedagogy? Perhaps. Sometimes. But shared with students with great care and humility only when a common ground is sensed. (p. 184)

The kinds of experiences and questions which Krall, Brubaker, Sale, and Lee offer can be incorporated into the hermeneutic spiral. In fact, these are the kinds of experiences which comprised the examples used in my model and the kinds of questions which are implicit in my reflections. Other educators may add other methods of examining attitudes and other ways of interpreting experiences. The spiral form of my model not only allows for the inclusion of these various approaches; it invites the sorts of diversity which they add, and it is enriched by them. We need to understand ourselves in order to provide our students with "wise companionship," writes Pinar (1975) in his reconceptualization

through currere. "And this means that we teachers . . . must become students, students of currere, which is to say students of ourselves, before we can truthfully say we understand teaching in this sense" (p. 412).

In the same way that the hermeneutic spiral is useful for the educator as a model for self-understanding, it also has potential as a model for student learning. Through the use of the model, the student may, for example, better understand the personal history he brings to the study of the environment and may then, through practicing the spiral's stages of assimilating and understanding of educational experiences, gain a broader perspective on his own ecological position within the world. Purpel and Belanger (1972) discuss the importance of the

> person as the main agent in the construction of knowledge. Not only should the student understand the ways of knowing of others . . . the student should come to view himself as a constructor of knowledge. (p. 71)

The potential uses of the hermeneutic model should make it a valuable model for self-understanding in general, and particularly in areas of study in which personal experiences, attitudes, and interests are considered an important part of the learning process. It would be interesting to develop the hermeneutic spiral as a model for student learning in a number of other areas of study, such as psychology, civics, literature and the arts.

It would also be extremely valuable to do further investigation into an educational framework that allows for the

simultaneous reflection and self-understanding of both teacher and student. Such a framework could also provide mechanics whereby what has been called "intersubjectivity" might serve as the focal point of an instructional model through which student and teacher might inter-relate their individual inquiries.

The hermeneutic spiral also has application as a model for learning when used within instructional units. In this case, the seasonal concepts of indexicality, interpretation, reflection, and understanding may be contracted, or shortened, into instructional steps used to enhance the learning experience, the instructional unit, or the day's lesson in the classroom. The spiral's circumference in <u>time</u> may depend upon the particular experience to which it is applied. For instance, applying the spiral's principles of light/dark (consciousness/unconsciousness) to an exercise in expanding one's awareness proved useful for this writing. Having indexed (dawn) the concepts we wished to explore, a partner and I discussed the common understandings (daylight) about the concepts and the steps we would take to seek further expansion of their meanings. Using relaxation and meditation to prepare our conscious and unconscious processes for reflection (dusk), we submitted the concepts, through visualization, to the subterranean drakness of the unconscious. Explored in this manner, the concepts of such a common term as "the out-of-doors" became embedded with new meaning. Not

only did similar visualization arise to each of our conscious minds, but a number of the same descriptive terms occurred to both of us simultaneously. And for us both, "the out-of-doors" came to mean, in addition to a place, "freedom," "limitlessness," "expansion," "oneness," "without limits," "non-enclosed," "opening of the doors of the mind." These definitions were not necessarily surprising or innovative. What was surprising to us was the ease of their appearing to the conscious mind without conscious effort and the fact that so many of the same definitions occurred to both of us. Other definitions having to do with the out-of-doors and with natural symbols were similarly free-flowing and simultaneous. This type of active drawing from the intuitive faculties of the mind could have very fruitful application to nature study as well as to creative activities such as artwork, poetry and creative writing, dance, and other art forms.

In another exercise which might be called the "Zen of Outdoor Education," my partner and I used techniques similar to those described above to visualize together the attributes of an oak tree. The free-flow of intuited responses was again surprising for its ease of emergence as well as for simultaneously-received impressions. The concepts included terms such as: "drawn into earth," "rooted," "grounded," "nourished from within," "subject to variables of weather (as we are to emotional variables)," "changing, growing according to inner nature," "growth inside a rough

exterior," "sense of 'right' place," "integral part of surroundings."

Exercises such as these can have value for persons who seek to re-establish contact with the earth. But they may also have value for any learning experience in which expansion of concepts or "creative" thinking is sought.

In applying the hermeneutic circle to curriculum theory-practice, Macdonald (1981) points out that understanding is not a totally rational process which is achieved by logical reasoning or problem solving and that our mistake in thinking it so has led to today's dualisms and divisions within the person and between person and world. Macdonald urges a return to "contemplative curriculum theory," embracing Heidegger's "meditative thinking on an equal footing with calculative thinking" (p. 131). Macdonald maintains that "the fundamental human quest is the search for meaning and the basic human capacity for this search is experienced in the hermeneutic process of interpretation . . ." (p. 132).

Applied to curriculum theory, the spiral's process of understanding through meditative thinking "is an attempt to deal with unity rather than bits and parts additively" (p. 132). Furthermore, the (hermeneutic) theory applied to the individual "is experienced as a participatory phenomena, where the person engages in dialogue with the theory, bringing each person's biography and values to the interpretation" (p. 132). Most important, perhaps, is Macdonald's explanation

of the intention of the process which is not "for control purposes, but to reinterpret in order to provide greater grounding for understanding" (p. 132)

The curriculum can provide a setting for the healing of the person/earth relationship--a healing which will help restore a sense of wholeness (unity) to the person in relationship not only with the earth but with other persons. M. C. Richards (1980) talks of the importance of feeling "primal connection" between the universe "out there" and the universe repeated, in microcosm, within the person. Pearce (1977) suggests that the brain may be a hologram for earth and that in using this model, "we can consider our brains pieces of the earth hologram, just as any and all parts of the earth are pieces of a greater hologram" (p. 6) Macdonald and Purpel state their choice "to view the world as being part of a larger transcendent reality, and our task as humans to be that of being in harmony with it" (1981, p. 19). They discuss the importance of the curriculum planners' sharing of individual meanings in the process of planning, indicating the importance of their sharing "part of their own biographies--their own values, assumptions, backgrounds, orientations, life-views and the like" (p. 25).

We are at that point in curriculum theory and development which is described by M. C. Richards as the "crossing point." In using the plant as metaphor, Richards describes the crossing point as the meristem layer, the layer of cells

above the ground level and below the stem level. It is here that the directions of growth cross--everything below this layer will send its energy into the rootedness; everything above will strive for upward growth toward the light, exploring new structures and taking new form. In the use of the plant as metaphor, we see the rootedness of the plant in the soil; likewise we see the rootedness of the school system in the fabric of our society--it is implanted there, the history of its rootedness stretching backward through tradition more suited to an earlier scientific view of man and the earth. The same roots can, however, provide nourishment for new growth. The importance of the meristem layer is that it is the place of both connection and separation--through it passes the nourishment for the growth of the structure, but it also marks the point of diversification of function; above it, the structure takes on a drastic change from the roots by which it is nourished. Grafting of new forms and new structures can take place above the meristem, the crossing point, without disturbing the underlying structure of the root system which is designed for support, rather than for metamorphosis through budding, flowering, seeding. Through union, or grafting, the new plant--the new form of the archetypal tree of life which Richards discusses--can be nurtured. The new tree--formed out of our coming into consciousness--a new tree that Richards calls the tree of Truth and Life, is contrasted to the two Genesis trees--the

tree of knowledge and the tree of life. Because she recognizes that knowledge without a commitment to life (i.e., the development of aptitudes alone) is dangerous, Richards sees the possibility of the emergence of the new tree of Truth and Life as a healing symbol.

Using Richards' "crossing point" as framework for the curriculum for transformation (through consciousness) we may see the growth toward the light (above the meristem) as a growth in consciousness. Richards writes of a new birth of consciousness in which

> we wake to take on truth in inner freedom . . . each treading a ray of that inner Sun, tracing our own orbit through it. The human being is waking up in a new day of our journey toward a creative humanity we do not yet fully possess. We go to school as part of that quest. (1973, p. 93)

We are always growing in opposite directions simultaneously. The roots probe downward into the darkness of the fertile soil as the stem grows upward toward the sun. At the "crux," the meristem "holds the act together," feeling the expansion, the stretch and pull. Forever in the middle of transition--holding the tension of the two poles--the upward and the downward.

We feel the downward pull, as toward gravity; a desire to "settle into" the earth. To nurture growth we put roots down; we settle into our milieu. But to grow, we must also rise above our milieu, evolving upward as a tender shoot, vulnerable, searching, rising above the mother/matrix earth while remaining a part of her organic being. The vine clings

for support as it grows upward, endlessly seeking to go beyond its familiar hold. To grow, we, like the plant, must transcend the crossing point, maintaining our connection with the earth as we reach toward the light.

The success of educational programs designed to increase awareness of the person/earth relationship depends upon the system's ability and willingness to deal with so elusive and fragile a concept as a world view of unity. Inherent in this holistic view are the ideas of sacredness of the person and the sacredness of the earth--concepts which are especially important in an age of technological acceleration. The optimistic view of education is that the transformation of our concepts toward earth/matter/person which are forcing us to generate new models for understanding matter, time, and space will eventually lead the school to reconstruct a curriculum for a holistic view of the world and of our relationship to it.

This curriculum will require a reconstruction--a reconstruction of our view of the world and a reconstruction of the way we teach. We will need to consider new approaches and new methods. But "new" does not necessarily mean "most recent." An example of one such new method of teaching the concept of unity was demonstrated on a nature hike I took in the autumn with a group from a Waldorf school. I accompanied the dozen third graders and their teacher on their crossing of a mountaintop in southern Virginia. Along the path, the

teacher stopped, picked up a twig, and asked the students: "How many twigs am I holding in my hand?" "One," they replied. Breaking the twig in two places, she held up three pieces. "Now, how many twigs are there?" she asked. "One," the students replied. "Good," the teacher nodded as the group resumed their leisurely walk. It occurred to me that "new math" has many meanings. Everything equals one.

In Only a Little Planet (Brower, ed., 1975), Lawrence Collins presents a poetic description of the planet earth. This description was handed to me as I finished the writing of this dissertation. His writing of a few concise, beautiful pages together with the photographs by Martin Schweitzer could, if taken seriously by educators, have saved me a lot of work. But perhaps I needed to realize my own vision too. This dissertation is my effort to discover and express that vision. It is a vision that is common to the many of us who, like Blake, have seen "the world in a grain of sand" and who seek to share this vision with the world in order that the envisioned may become reality. Collins shares his view:

BIBLIOGRAPHY

Argüelles, M., & Argüelles, J. The feminine, spacious as the sky. Boulder, Col.: Shambhala, 1977.

Berry, T. The third mediation: The Christian task of our time. In Riverdale Papers. Riverdale, N.Y.: Riverdale Center for Religious Research, 1971.

Berry, W. The unsettling of America: Culture and agriculture. San Francisco: Sierra Club Books, 1977.

Brubaker, D. L. Who's teaching--who's learning? Santa Monica, Calif.: Goodyear, 1979.

Bruner, J. S. The process of education. Cambridge, Mass.: Harvard Univ. Press, 1960.

Bruner, J. S. On knowing: Essays for the left hand. Cambridge, Mass.: Harvard Univ. Press, 1969.

Buber, M. [I and thou] (W. Kaufman, trans.). New York: Charles Scribner's Sons, 1970.

Capra, F. The tao of physics. Boulder, Col.: Shambhala Publications, Inc., 1975.

Capra, F. The turning point. New York: Simon and Schuster, 1982.

Carson, R. Silent spring. Boston: Houghton-Mifflin, 1962.

Cobb, E. The ecology of imagination in childhood. New York: Columbia Univ. Press, 1977.

Collins, L. Only a little planet (D. R. Brower, Ed.). San Francisco: Friends of the Earth, 1975.

Cox, H. The seduction of the spirit. New York: Simon and Schuster, 1973.

Crisp, W. Development and use of the outdoor classroom: An annotated bibliography. Metuchen, N.J.: The Scarecrow Press, 1975.

Cullum, A. Push back the desks. New York: Citation Press, 1967.

Davis, M. William Blake: A new kind of man. Berkeley: Univ. of California Press, 1977.

Dillard, A. Pilgrim at Tinker Creek. New York: Harper's Magazine Press, 1974.

Donaldson, G. W., & Geering, O. Perspectives on outdoor education: Readings. Dubuque, Iowa: William C. Brown Co., 1972.

Driver, B. L. (Ed.). Elements of outdoor recreation planning. Ann Arbor: Univ. of Michigan Press, 1974.

Dubor, R. A God within. New York: Scribner's Sons, 1972.

Ellul, J. The technological society. New York: Vintage Books, 1964.

Emerson, R. W. The method of nature. In R. E. Spiller & A. R. Ferguson (Eds.), The collected works of Ralph Waldo Emerson. Cambridge, Mass.: Harvard Univ. Press, 1971.

Engberg, R., & Wesling, D. (Eds.). John Muir: To Yosemite and beyond. Madison: The Univ. of Wisconsin Press, 1980.

Ferguson, M. The brain revolution. New York: Taplinger, 1973.

Ferguson, M. The aquarian conspiracy. Los Angeles: J. P. Tarcher, Inc., 1980.

Ferkiss, V. Technological man: The myth and the reality. New York: Braziller, 1969.

Fitzpatrick, C. N. Philosophy and goals for outdoor education (Thesis, Colorado State College, 1968)., Ann Arbor, Mich.: University Microfilms International, 1978.

Forbes, R. J. The conquest of nature: Technology and its consequences. New York: Frederick A. Praeger, Publishers, 1968.

Fordham, F. An introduction to Jung's psychology. Harmondsworth: Penguin, 1968.

Frost, R. The poetry of Robert Frost (E. C. Latham, Ed.). New York: Holt, Rinehart and Winston, 1969.

Giroux, H. A., Penna, A. N., & Pinar, W. F. (Eds.). Curriculum and instruction: Alternatives in education. Berkeley, Calif.: McCutchan, 1981.

Graber, L. H. Wilderness as sacred space. Washington, D.C.: The Association of American Geographers, 1976.

Greene, M. Cognition, consciousness and curriculum. In W. Pinar (Ed.), Heightened consciousness, cultural revolution, and curriculum theory. Berkeley, Calif.: McCutchan, 1974.

Griffin, S. Woman and nature. New York: Harper and Row, 1978.

Hall, N. The moon and the virgin. New York: Harper and Row, 1980.

Hammerman, D. R. A historical analysis of the socio-cultural factors that influenced the development of camping education. Unpublished doctoral dissertation, Pennsylvania State University, 1961.

Hammerman, D. R., & Hammerman, W. M. Teaching in the outdoors. Minneapolis, Minn.: Burgess , 1973.

Hammerman, W. M. (Ed.). Fifty years of resident outdoor education: 1930-1980. Martinsville, Ind.: American Camping Association, 1980.

Heubner, D. The search for religious metaphors in the language of education. Paper presented at the University of North Carolina at Greensboro, May 1982.

Jensen, C. R., & Thorstenson, C.T. Issues in outdoor recreation. Minneapolis, Minn.: Burgess , 1977.

Jubenville, A. Outdoor recreation planning. Philadelphia: W. B. Saunders Co., 1976.

Jung, C. G. (Ed.). Man and his symbols. New York: Dell , 1964.

Jung, C. G. [Alchemical studies] (R. F. C. Hull, trans.). Princeton: Princeton University Press, 1967.

Keen, S. Apology for wonder. New York: Harper & Row, 1969.

Keen, S. To a dancing god. New York: Harper and Row, 1970.

Kirk, J. The quantum theory of environmental education. Nature Study, 1980, 33(4), 2-3, 16-18.

Lee, E. W., & Myers, C. F. The field trip as aesthetic experience. The Science Teacher, 1980, 47(4), 24-25.

Leonard, G. The transformation. New York: Dell, 1972.

Leonard, G. The silent pulse. New York: E. P. Dutton, 1978.

Leopold, A. A sand county almanac. New York: Oxford Univ. Press, 1966.

Luke, H. M. Woman, earth and spirit: The feminine in symbol and myth. New York: Crossroad, 1981.

Macdonald, J. B. A transcendental developmental ideology of education. In J. Gross & D. Purpel (Eds.), Curriculum: An introduction to the field. Berkeley, Calif.: McCutchan, 1978.

Macdonald, J. B. Theory, practice and the hermeneutic circle. The Journal of Curriculum Theorizing, 1981, 3(2), 130-138. (a)

Macdonald, J. B. Curriculum, consciousness and social change. The Journal of Curriculum Theorizing, 1981, 3(1), 143-153. (b)

Macdonald, J. B., & Purpel, D. E. Curriculum planning: Visions and metaphors. Unpublished paper, UNC-Greensboro, 1981.

Maslow, A. H. Toward a psychology of being. New York: Van Nostrand Reinhold Co., 1968.

Maslow, A. H. The farther reaches of human nature. New York: The Viking Press, 1971.

McLuhan, T. C. (Compiler). Touch the earth. New York: Simon and Schuster, 1971.

Mehan, H., & Wood, H. The reality of ethnomethodology. New York: John Wiley & Sons, 1975.

Nakashima, G. The soul of a tree: A woodworker's reflections. Tokyo; New York: Kodansha International, 1981.

Neumann, E. The great mother. Princeton, N.J.: Princeton University Press, 1963.

Ornstein, R. E. The psychology of consciousness. San Francisco: W. H. Freeman, 1972.

Ouspensky, P. D. [Tertium organum] (N. Bessaraboff and C. Bragdon, trans.). New York: Vintage Books, 1970.

Pearce, J. C. Magical child: Rediscovering nature's plan for our children. New York: Dutton, 1977.

Pearson, J. L. My fingers and my toes. Nashville, Tenn.: Ingram Book Co., 1971.

Perera, S. Descent to the goddess. Toronto: Inner City Books, 1981.

Pinar, W. Currere: Toward reconceptualization. In W. Pinar (Ed.), Curriculum theorizing. Berkeley, Calif.: McCutchan, 1975.

Pinar, W., & Grumet, M. Toward a poor curriculum. Dubuque, Iowa: Kendall/Hunt, 1976.

Polanyi, M. The tacit dimension. Garden City, N.Y.: Doubleday and Co., 1966.

Primus, P. The New York Times, March 21, 1981, p. 31.

Purpel, D. E., & Belanger, M. (Eds.). Curriculum and cultural revolution: A book of essays and readings. Berkeley, Calif.: McCutchan, 1972.

Read, H. The redemption of the robot (my encounter with education through art). New York: Trident Press, 1966.

Richards, M. C. Centering in pottery, poetry, and the person. Middletown, Conn.: Wesleyan Univ. Press, 1964.

Richards, M. C. The crossing point. Middletown, Conn.: Wesleyan Univ. Press, 1973.

Richards, M. C. The public school and the education of the whole person. New York: The Pilgrim Press, 1980. (a)

Richards, M. C. Toward wholeness: Rudolf Steiner education in America. Middletown, Conn.: Wesleyan Univ. Press, 1980. (b)

Rogers, M. H. Principles and functions of outdoor education. Unpublished doctoral dissertation, Syracuse University, 1956.

Rousseau, J. J. [Emile] (B. Foxley, trans.). New York: Dutton, 1966.

Sale, L. L., & Lee, E. W. Environmental education in the elementary school. New York: Holt, Rinehart and Winston, Inc., 1972.

Samples, B. The metaphoric mind. Reading, Mass.: Addison-Wesley, 1976.

Samples, B. Mind of our mother. Reading, Mass.: Addison-Wesley, 1981.

Santmire, P. H. I-thou, I-it, and I-ens. Journal of Religion, 1968, 48(3), 260-273.

Sharp, L. B. Administrators, teachers, and the out-of-doors in Outdoor Teacher Education. Dekalb, Ill.: Northern Illinois University, 1961.

Smith, J. W. Outdoor education (Rev. ed.). Washington, D.C.: American Association for Health, Physical Education, and Recreation, 1970.

Smith, J. W. A decade of progress in outdoor education. In G. W. Donaldson & O. Geering (Eds.), Perspectives on outdoor education . . . readings. Dubuque, Iowa: William C. Brown Co., 1972.

Smith, J. W., Carlson, R. E., Donaldson, G. W., & Masters, H. B. Outdoor education (2nd ed.). Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Staley, F. A. Hemispheric brain research: A breakthrough for outdoor education. Journal of Physical Education and Recreation, April 1980, pp. 28-30, 64.

Swan, M. D. (Comp.). Research in outdoor education: Summaries of doctoral studies. Washington, D.C.: American Association for Health, Physical Education, and Recreation, 1978.

Sykes, G. (Ed.). Alienation: The cultural climate of our time. New York: G. Braziller, 1964.

Thoreau, H. D. Walking. In B. V. Crawford (Ed.), Henry David Thoreau. New York: American Book Company, 1934.

Thoreau, H. D. The illustrated world of Thoreau. (H. Chapnick, Ed.). New York: Grosset and Dunlap, 1974.

Toben, C. Toward an ecology of man curriculum. Unpublished paper, Greensboro, N.C., 1975.

Udall, S. The quiet crisis (Intro. by John F. Kennedy). New York: Holt, Rinehart and Winston, 1963.

Ulanov, A. B. Receiving woman. Philadelphia: The Westminster Press, 1981.

Van Doren, C., Priddle, G. B., & Lewis, J. E. (Eds.). Land and leisure. Chicago: Maaroufa Press, Inc., 1979.

van Matre, S. Acclimitization: A sensory and conceptual approach to ecological involvement. Martinsville, Ind.: American Camping Association, 1972.

van Matre, S. Acclimitizing: A personal and reflective approach to a natural relationship. Martinsville, Ind.: American Camping Association, 1974.

van Matre, S. Sunship earth: An acclimitization program for outdoor learning. Martinsville, Ind.: American Camping Association, 1979.

Ward, C. W. Organized camping and progressive education. Nashville, Tenn.: Cullum and Ghertner, 1935.

Watts, A. W. Nature, man and woman. New York: Vintage Books, 1970.

Weiner, M. Developing a rationale for outdoor education. Unpublished doctoral dissertation, Michigan State University, 1965.

Whitman, W. The illustrated leaves of grass (H. Chapnick, Ed.). New York: Grossett and Dunlap, 1971.

Wordsworth, W. The complete poetical works of William Wordsworth. (Cambridge ed.). Boston: Houghton-Mifflin, 1904.