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THE WRITING PROCESS:
EFFECTS OF LIFE-SPAN DEVELOPMENT ON IMAGING

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By
Diane Hahn Shock, B.S., M.A.

* * * * *

The Ohio State University
1984

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Robert R. Bargar, Adviser
College of Education
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1984
DEDICATION

To my dear father,
Norbert Elliot Hahn

You always believed in me.
ACKNOWLEDGMENTS

I am grateful for

My husband
Richard
who has given a lifetime
of love and caring,
whose pride in my goals
provided constant inspiration,
and whose selfless giving
allowed my dream to become a reality.

My daughters
Cynthia and Laura,
constant reminders of love and loyalty,
who have made my life a joy.

My academic advisers
Dr. Robert Bargar, Dr. Donald Bateman, Dr. Charles Galloway
and brother
Dr. David E. Hahn
who have stood with me while I learned.
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CHAPTER I
INTRODUCTION

Nature and Background of the Study

The teaching of writing is currently caught up in a paradigm shift. Over the past few years, the focus has begun to shift from a product-oriented, content-conscious point of view to a process-oriented, holistic point of view. Increasingly, articles are being written on why it is necessary to change the methods of teaching writing from exclusively correcting finished products to guiding the development of a total writing process.

The principal features of the paradigm that have been the basis of composition instruction for the past several decades are characterized by the emphasis on the composed product rather than the composing process; the concern for structuring writing into description, narration, exposition, and argument; the strong concern for correct usage and precise style; and the preoccupation with patterns of paragraph construction, essays, and formal research papers. Proponents of this traditional paradigm believe that most writers know what they want to say before they begin to write. If this were universally true, then, of course, the most important task in preparation for
writing is finding a form which most appropriately organizes content. Adherents of this conventional paradigm further believe that the composing process is a linear function proceeding in a systematic pattern of prewriting to writing to rewriting. This traditional paradigm, often referred to as a stage model, features major units of analysis as stages of completion which reflect the growth and linear progression of a written product. Finally, they rely upon teaching editing as a substitute for teaching writing with the belief that refined editing techniques breed mature, competent writers.

Recent textbook analyses (Berlin & Inkster, 1979; Stewart, 1979) have revealed that within the better known, frequently used composition texts expository writing is stressed to almost total exclusion of other forms. Their investigation showed further that style is regarded as the most important element and that invention and contextual situations are neglected almost entirely. Because textbooks represent accepted authority (Kuhn, 1979), they have retarded the paradigm shift which is being experienced by more and more composition theorists and writing teachers.

Even though this change in focus is just now gaining momentum, the paradigm shift has been forming slowly over the past two decades. That the shift is occurring so gradually should not be surprising since the current
traditional paradigm focusing on expository writing did not replace the Greek and Roman theories of rhetoric until the early nineteenth century. At this time a much less systematic approach to rhetoric was developed emphasizing language rather than content. Such concern as clarity of statement, coherence, and correct usage typify the expository style, still being taught in most American schools today. Slowly, rhetoricians and composition theorists are responding to the need to develop a rhetoric that has as its goal not skillful verbal coercion but discussion and exchange of ideas.

Creative expression, too, is receiving a renewed emphasis in the English curriculum. The personal growth model, a product of the Dartmouth Conference of 1966, stressing imaginative uses of language and invention of new concepts has influenced the philosophy of English educators as has James Moffett's student-centered curriculum. These approaches stress affective response and appeal to subjective experience.

The Composing Processes of Twelfth Graders (Emig, 1971) is often labeled a benchmark study in this field since it serves as a pioneer study probing the writing process in context-based situations. Current research suggests a continuing trend to explore contextual situations seeking to find an appropriate fit between writer and environment.
Some of the most recent significant research has been conducted by Flower & Hayes (1979, 1980, 1981) with their thinking-aloud protocol analysis to define a writing model. The cognitive process model, instead of emphasizing stages as units of analysis, emphasizes mental processes as major units of analysis. One process, for example, is the generation of ideas. Proponents of the process model contend that these mental processes have a hierarchical structure, but that each may occur and, indeed, recur at any time in the composing process. To what degree the act of writing should be viewed as a linear sequence of events or as a non-linear series of processes will continue to be debated until there are more penetrating and definitive studies of thinking processes in writing.

Regardless of how they are categorized, certain mental activities guide the act of writing. As early as 1926 Graham Wallas in The Art of Thought defined progression of creative thought in the following manner:

1. preparation - formulation and exploration of a subject (may be likened to prewriting)
2. incubation - unconscious thought
3. illumination - possible solution (may be likened to writing)
4. verification - test of hypothesis (may be likened to rewriting).
These divisions of thought continue to serve educators as they explore inquiry and expression. The interfacing of mental activities involved in preparation (prewriting), illumination (writing), and verification (rewriting) have been examined by a number of researchers (Blau, 1983; Bridwell, 1980; Emig, 1971; Flower & Hayes, 1981; Graves, 1975; Matsumashi, 1981; Perl, 1979; Pianko, 1979; Shaughnessy, 1977; Sommers, 1980; Stallard, 1974). These researchers devised various methods of observing behaviors and written products in their examinations of basic processes involved in producing written discourse.

While these studies have focused on the actual behavior of writers throughout the composing process, descriptive detail of the process of moving from incubation to illumination is almost totally ignored. Perhaps because of its dimly understood complex qualities, many researchers and textbook authors tend to ignore its importance, placing undue emphasis on the conscious analytical procedures as if these alone were sufficient for the creative, complex process of writing.

One reason that mental imagery has not received more attention is that from about 1920 to the mid 1960s, formal inquiry in this area was avoided. Mental imagery as a subject of research was thought of as too mentalistic to deserve serious consideration. This view, a reflection of the Skinnerian behavioral and operational orientations,
began to change as more theoretical and practical problems revived interest in mental processes. Holt (1964) in "Imagery: The Return of the Ostracized" outlines the resurgence of interest in imagery by psychologists of various persuasions.

Jerome Singer's (1966) *Daydreaming* followed by Alan Richardson's (1969) *Mental Imagery* offered the first systematic studies of imagery. Richardson referred to imagination imagery as the spontaneously occurring imagination-images which have been explored in much of the anecdotal literature on creativity (Ghiselin, 1952; Gordon, 1961; Prince, 1970; Rosner & Abt, 1970). More recently, there has been additional evidence that image production is related to creativity (Arieti, 1976; Gordon & Poze, 1981; Gowan, 1978; Khatena, 1978, 1982; Paivio, 1971, 1975; Torrance & Hall, 1980). Even with this emphasis there remains a paucity of definitive literature on the interrelationship of these two mental processes.

The focus of this study is the exploration of the activity of the collective unconscious (Jung, 1964) as it leads to imagery, based upon the theory that humans are symbol-making animals (Campbell, 1972; Langer, 1942; Neumann, 1954; Polanyi, 1958). The process will be further traced as image turns into thought/language. Following imaging is inner speech "... a dynamic, shifting, unstable thing, fluttering between word and thought..."
(Vygotsky, 1962). Completing the illumination stage is the transcription, the act of placing words on paper.

This movement through incubation and illumination is most certainly affected by the individual's life experiences which help distinguish or identify every perception and relationship. Each person's reaction is shaped by an internal ordering referred to as "implicit" knowledge by Polanyi (1958, 1966) and the "implicate order" by Bohm (1978). These internal orderings are further influenced by stages of development during the human life-span. While some theorists describe developmental stages that follow an ascending or hierarchical order (Erikson, 1963, Havinghurst, 1972; Kohlberg, 1973; Loevinger, 1976; Piaget, 1976), some posit a sequence whereby one period is not necessarily more advanced or better than another, except in the general sense that each stage builds upon the experience of earlier ones and represents a later phase in the life cycle (Gould, 1978; Levinson, 1978; Neugarten, 1976; Sheehy, 1976).

The fact that the life cycle is an organic whole with each period or stage containing all the others is plausible. Less obvious is how life-span development impacts on imaging during the creative stage of the writing process. This study will work toward that end of discovery.
Approach to the Study

The purpose of the study was to examine incubation and illumination within the act of writing and to determine if individual stages of development affect image production during these creative cognitive processes. The major approach involved focusing on writing as a process-oriented activity with particular attention directed to imaging, a phenomenon which occurs during incubation and illumination, two distinct and recurring phases of the writing process.

The approach further involved observing, analyzing, and comparing responses during selected writing activities of 16 subjects representing four distinct developmental stages as outlined by stage theorists (Gould, 1978; Levinson, 1978; Sheehy, 1976, 1981). Through these multiple comparative analyses, psychological and developmental aspects of a person's life were examined to see how they affected the composing process.

Research questions addressed through this approach include the following:

1. How do writers write? What cognitive processes do they go through? Can observation of patterns and processes aid in establishing a universal "model" of writing?
2. What are some identifiable characteristics of incubation? How does this stage lead to illumination in the creative phases of writing?

3. What is the nature of images? How do they reflect past experiences and layers of consciousness?

4. How does life-span development affect the processes of writing and the nature and content of images?

Focusing on the nature of creative thought through exploring processes of four disparate age groups may be an effective avenue for educators and writers to understand and explain the act of writing, itself a developmental process.

**Justification for the Study**

The chief justification for the study lies in its potential contribution of scholarly knowledge toward a deeper understanding and controlling of the processes of writing. In addition, the study may well contribute to our understanding of creativity -- both to the nature of creative thought and to its application to the active processes of writing. Processes of psychological and linguistic growth have not been sufficiently explored, and thus remain elusive and mysterious. Any positive observations would lend explanatory power to conscious and unconscious activity during the composing process.
Only sparse information exists regarding developmental aspects of creativity and imagery. By examining the writing process as practiced by the four disparate age groups in this study, perhaps more can be revealed about how linguistic imagination is revealed at various stages of growth. Findings may contribute to the articulation of a developmental theory of writing.

Another compelling justification for this study is the researcher's own intrigue with the incubation and illumination aspects of the writing process and the extent that life-span development impacts on the imaging process. Because "the researcher lives what he studies" (Taylor, 1976), it seems important that personal interest and curiosity undergird this examination process.

Ross Mooney (1957) expresses this idea beautifully when he says, "Research is a personal venture which, quite aside from its social benefits, is worth doing for its direct contribution to one's self-realization. It can be taken as a way of meeting life with the maximum of stops open to get out of experience its most poignant significance, its most full-throated song" (p.155). Because of the researcher's own dedication to further understanding and improving writing skills and a curiosity concerning a possible linkage of life-span development with the imaging process, this study made her directly a part of the inquiry by making new maps of meaning for
her. This study, then, contributed both to self-realization as well as possible innovation in the instructional process.

In discussing the cultivation of insight in scientific thought, Bargar and Duncan (1982) argue for the decided value of the researcher's own personal investment in the study.

To isolate one psychological function, in this case the rational, from all others is to limit the effectiveness of that function, diminish the quality of its products, and introduce imbalance into the psyche that is potentially disabling. Scientific activity is inevitably an expression of a comprehensive living system, that is, of a total individual influenced by his values, attitudes, and perspectives as human being. (p. 12)

Still another justification for this study lies in the fact that a broader application of curriculum and program planning could emanate from the findings of the inquiry. Examining the human development cycle as it impacts on certain stages of the writing process could likely guide the planning of both K-12 and adult continuing education programs.

Finally, heuristic power exists in this study through the application of other scholars' theories to this particular study. Through this exploratory inquiry, the researcher examined a problematic situation presenting an anomaly and moved to some discovery or solution of the problem. Other researchers may be inspired to build on this piece of research, whether further exploring
processes of writing, creative thought, human development, or hemispheric structure of the brain. Definitely, the study of creative growth in language represents a fertile field for cultivation by researchers in the teaching of English.

Methodology

Qualitative research techniques were employed in this investigative study. Because the purpose of the study was one of exploration and discovery, this research paradigm was especially well suited since it emphasizes inductive analysis, description, and the study of people's perceptions. Implicit in this inquiry was a sense of discovery process, of addressing a variety of questions regarding what was being studied, and proposing possible answers, even alternative explanations as the study proceeded. As described by Guba and Lincoln (1981), this naturalistic paradigm permits the inquirer "to focus upon multiple realities that, like layers of an onion, nest within or complement one another" (p. 57).

In their textbook Bogdan and Biklen (1982) list five characteristics of qualitative research:

1. Qualitative research has the natural setting as the direct source of data and the researcher is the key instrument.
2. Qualitative research is descriptive.
3. Qualitative researchers are concerned with process rather than simply with outcomes or products.
4. Qualitative researchers tend to analyze their data inductively.
5. "Meaning" is of essential concern to the qualitative approach. (pp. 27-29)
The authors point out that most studies do not exhibit all characteristics with equal strength and that participant observation and indepth interviews tend to be exemplary. Indepth interview constituted a substantial portion of this study since a detailed examination and comparison of 16 subjects, their stages in life-span development, and imaging activity while writing was the central aim of this design.

A pilot study was designed to test the methodology outlined in the research proposal. One subject from each of the four age groups participated in all scheduled activities. The quality and volume of data gathered from this pilot study determined no changes were necessary in the method of data-gathering.

Limitations of the Study

Efficiently designing and reliably reporting this study were plagued by certain problems. The whole idea of incubation/illumination, which involves a movement from unconscious stimulation to image production to thought/language conceptualization to written transcription, is a phenomenon which defies empirical observations. Even though brain research is making some inroads, there is no precise method of observing how what goes on inside the brain is related to imaging or to words that suddenly appear outside, whether we write or speak.
To address this issue there is now a widespread recognition of the need for research projects which, rather than undertake large experimental inquiry, instead reflect a more modest, probing nature in an attempt to elucidate basic processes. Reliability in these studies is viewed as a fit between what is recorded as data and what actually occurs in a setting under study (Bogdan & Biklen, 1982).

Because of the somewhat limited sample in this study, the researcher cannot imply that all members of the age groups studied will move through the writing process in the exact manner of subjects under investigation. Instead, the assumption is that human behavior is not random or idiosyncratic; thus generalizability may be achieved by "drawing universal statements of general social process" (Bogdan & Biklen, 1982). Through thick description (Geertz, 1973) and triangulation of data, the activities of the subjects in this inquiry were carefully documented, and the study becomes generalizable through the reader (Guba & Lincoln, 1981).

This study does not claim to be a definitive, exhaustive account of how all writers experience imaging in the incubation and illumination stages of writing. Yet, the researcher's ambition for this study is that it may contribute to understanding of relationship of language to personal growth and inner ordering of experience.
Plan of the Study

The study is presented in this form:

In Chapter II: Review of Related Literature a presentation of theory and recent studies of writing, imagery, creativity, Jung's theory of the psyche, and life-span developmental psychology is provided.

In Chapter III: Procedures of the Study the research design, the selection of subjects, a discussion of the qualitative approach, and the research strategies are presented.

In Chapter IV: Presentation and Analysis of the Findings data are reported and interpreted. Findings are organized according to four major age groupings sampled in the study.

In Chapter V: Summary, Conclusions, Implications, and Recommendations research findings are linked with a discussion of implications for educational practices and for writers in general.
CHAPTER II
REVIEW OF RELATED LITERATURE

When conducting holistic research, a researcher encounters complexity and rich diversity in the phenomenon under investigation. The range of related literature reflects that diversity and requires acknowledgement and awareness of research conducted from the perspectives of many disciplines.

The review follows a natural progression of inquiry touching on several disciplines which interface in the study of writing as a creative, process-oriented act. The first section presents a discussion of research and literature related to writing as a cognitive, process-oriented activity. An examination of the theories and research dealing with the interrelationship of creativity and imagery follows in the next section. An overview of Jung's theory of the psyche is followed by a review of literature focusing on psychological life-span developmental theory. The inclusion of these particular disciplines stemmed from the criteria of theoretical and practical relevance to the framing of the research problem.
Writing

Writing research as an interdisciplinary field of inquiry is a somewhat recent development in educational and social science research. Exemplary studies of this approach combine the intuitive knowledge gathered from the study of literature with the social science knowledge about language from linguistics, anthropology, psychology, and education. Actually, scholars have been writing about writing since the time of Aristotle, focusing on a close, interpretive analysis of text.

Rhetoricians, too, have written extensively about writing, among other things defining modes of discourse (Kinneavy, 1971). In the past, emphasis has focused on the traditional paradigm which proposes a linear approach to writing. D. Gordon Rohman's (1965) discrete and successive stages of prewriting, writing, and rewriting have been analyzed largely through the examination of finished products.

Only in the last decade or so has writing research begun to address such issues as how people learn to write, what composing processes they use, if there are natural stages of development, and how learning of writing might be best facilitated. Mina Shaughnessy (1977) in Errors and Expectations: A Guide for the Teacher of Basic Writing, an impressive study of basic writers at the City University of New York, analyzed the placement essays
of 4,000 students over a period of five years. Her goal was to discover the origins of the problems common to basic writers and devise a way to overcome them. In time she realized

. . . that basic writers write the way they do, not because they are slow or non-verbal, indifferent to or incapable of academic excellence, but because they are beginners and must, like all beginners, learn by making mistakes. . . . And the keys to their development as writers often lie in the very features of their writing that English teachers have been trained to brush aside with a marginal code letter or a scribbled injunction to "Proofread!" Such strategies ram at the doors of their incompetence while the keys that would open them lie in view . . . The work of teachers teaching these students to write must be informed by an understanding not only of what is missing or awry, but of why this is so. (p.5)

Her discovery points out the simple but important fact that we cannot teach students to write by looking only at what they have written. How the product evolved and why it assumed the form it did become crucial for researchers and writing teachers to consider.

Janet Emig's (1971) *The Composing Processes of Twelfth Graders* was another early significant study of student composing processes. This study of how eight seniors approached writing offered a new approach to writing research by focusing on the consciousness of writing as process — a focus that continues to gain stature in today's composition theory and pedagogy.

Emig's study in addition to establishing a consciousness of process has inspired increased use of the case
study methodology along with a "composing aloud" approach. For her study she chose eight above average students from six different schools. Her research design provided four meetings with each student. These sessions included informal conversations and writing activities during which the students composed aloud by verbalizing their thoughts during the actual act of writing. These sessions were tape recorded and later analyzed along with a number of written products and notes taken during the sessions. In assessing her success in probing mental activities during writing she claims that composing aloud was "one of the most important contributions of the study" (p.4).

Another study which has significantly influenced research on writing development is The Development of Writing Abilities (11-18) conducted by a team of researchers led by James Britton in 1975. The major thrust of this study was to identify qualitative changes in writing ability. The research conducted in England was based on a national collection of routine samples of writing from all curriculum areas by students aged 11-18. The development they discovered was reflected in age grading and ranged from "expressive" (relatively undisciplined) writing to "transactional" and "poetic" writing. This study was groundbreaking in that it looked at function in student writing rather than at superficial aspects
of form.

Britton (1980) claims that word-generating is not a conscious act, but rather that words are shaped "at the point of utterance", on the tongue, the pen, or in the voice we hear in the mind. Instead of being pre­planned, the words seem to come simultaneously with thought patterns, a concept Britton refers to in his writings as "spontaneous inventiveness." He states, "Once a writer's words appear on the page, I believe they act primarily as a stimulus to continuing -- to further writing, that is -- and not primarily as a stimulus to rewriting" (p.62).

Only recently has work begun on developing models of composing processes. Notable efforts have been made by Flower & Hayes (1981) with their use of protocol analysis. This thinking aloud approach to composing is similar to Emig's composing aloud method in an effort to "capture a detailed record of what is going on in the writer's mind during the act of composing itself"(p.368). In their attempt to define problem solving procedures writers use during writing, they are currently looking at the sequence and organization of processes.

Flower and Hayes' most recent structure of the writing model (See Figure 1) includes three major elements: the task environment, the writer's long-term memory, and the writing processes. The task environment includes
Figure 1. Structure of the writing model. (Flower & Hayes, 1981).
all of those things outside the writer's skin, starting with the rhetorical problem or assignment and eventually including the growing text itself. The second element is the writer's long-term memory in which the writer has stored knowledge, not only of the topic, but of the audience and of various writing plans. The third element in the model contains writing processes themselves, specifically the basic processes of Planning, Translating, and Reviewing, which are under the control of a Monitor.

In the schematic representation of this model the arrows indicate that information flows from one box or process to another. What the arrows do not mean is that information flows in a predictable left to right circuit. One of the central premises of their cognitive process theory is that writers are constantly "orchestrating a battery of cognitive processes as they integrate planning, remembering, writing, and rereading" (p.387).

According to this model the writing act is indeed complex. Any of the cognitive processes may be embedded within any other; all of them interact with guidance from goals which themselves develop and change during the process. These cognitive processes are also under the overall control of a "monitor", a highly individual "writing strategist which determines when the writer moves from one process to the next" (p. 374). This model, without a doubt, assumes flexibility and variability in
how the writing processes operate for any given writer or writing task.

Other significant studies of the internal, cognitive act of writing have gained recognition. Sharon Pianko (1979) has done a study in which she examined the writing habits of 17 college freshmen (10 remedial and 7 traditional). Crucial variables in the composing process consisted of the prewriting time, the number of pauses during the writing, and number of times rescanning occurred. Prewriting time for both groups was brief, but the traditional group paused twice as often and rescanned their writing three times as often as the remedial writers. These pauses indicated brief planning periods — what Donald Murray calls "rehearsing" and Janet Emig calls a "filled pause."

Pianko contends that this act of reflection (pauses and rescannings) stimulates growth of consciousness in students in that it strengthens their command of mental and linguistic strategies and clarifies the many lexical (i.e., spelling, word choice, and the context of words); syntactical (i.e., grammar, punctuation, and sentence structure), and organizational choices they make. "The ability to reflect on what is being written seems to be the essence of the difference between able and not so able writers from their initial writing experience onward" (p.277).
Using a case study method, Sondra Perl (1979) conducted a study of the writing habits of five unskilled college writers. Composing aloud and open-ended interview techniques were employed along with a tool she developed for coding 16 various composing behaviors. Her findings were detailed and presented in the three sections which correspond to the major aspects of composing: prewriting, writing, and editing. Prewriting time was brief for all writers, but careful study of writing revealed that writers engage in what Perl calls "retrospective structuring", looking back over what they have written in order to gain a sense of how to move ahead. She observed that inexperienced writers' revisions often had a negative effect on quality in that their error-hunting intruded prematurely and broke down rhythms generated by thinking and writing.

In a similar vein, Donald Murray (1978, 1980), a noted researcher and teacher of writing, suggests that writers discover meanings in the process of writing, particularly as they revise. He states his idea most eloquently, yet simply, when he opens one of his articles with, "Writing is rewriting" (1978. p. 85).

Nancy Sommers (1980) has done a study comparing the revising practices of college freshmen and experienced professional writers. She found that mature writers revise constantly so that their ideas grow and change
through successive drafts. Writers are engaged in a con-
stant process of re-seeing while they are composing. 
Like many other researchers of writing, she asserts that 
revision is a recursive rather than linear process in 
which prewriting, writing, and rewriting are interwoven 
rather than separate and distinct stages of composition. 
Sommers further demonstrated that writers of different 
abilities make different kinds of revisions. She drew 
distinctions between the revisions of skilled and unskilled 
writers according to the length of their changes and the 
type of operation, such as deletion, addition, substitu-
tion, and rearrangement.

Further reports of findings related to revision 
processes are provided by Lester Faigley and Stephen 
Witte (1981). They offer a text analysis approach to 
studying the changes a writer makes in a text. Their 
findings add to mounting evidence that expert writers 
revise in ways different from inexperienced writers. 
"Successful revision results not from the number of 
changes a writer makes but from the degree to which 
revision changes bring a text closer to fitting the 
demand of the situation" (p. 411).

Sommers (1980), Perl (1979), and Faigley and Witte 
(1981) all suggest that revision of inexperienced 
writers do not improve their texts. Rather, these 
writers tend to revise locally, ignoring the situational
constraints. These researchers all agree that revision cannot be separated from other aspects of composing. Like Pianko (1979), they suggest that effective revision is tied to a writer's planning and reviewing skills.

Nold (1981) has identified different levels of processing that go on in revising. She contrasts the highly conscious and intentional level with the unconscious and automatic and suggests writers can work toward making subtasks so automatic that they open up processing space. This effort then increases the writer's capacity to deal with the more difficult tasks that require conscious attention.

Researchers and educators alike acknowledge the complexities involved in studying and teaching writing.

Too many interdependent skills are involved, and all seem to be prerequisite to one another. To pay conscious attention to handwriting, spelling, punctuation, word choice, syntax, textual connections, purpose, organization, clarity, rhythm, euphony, and reader characteristics would seemingly overload the information processing capacity of the best intellects. (Scardamalia, 1981, p.81)

As researchers and educators probe the cognitive processes of writers, they continue to refine a developmental theory of writing. Many agree with Shaughnessy (1977) who believes all humans have an internal sense of the language. Chomsky (1965) called it an inborn skill; Donaldson (1978) referred to it as human sense. Building upon this concept the unfolding theory suggests
writers need opportunities to write from their own context instead of those situations promoting "dummy writing" (Britton) which only serves to fill pages with meaningless words.

Peter Elbow (1973) in *Writing Without Teachers* advocates writing at least three times a week for ten minutes nonstop. The important focus of this activity he calls freewriting is to avoid editing and prewriting since both can sabotage attempts at writing. After a number of these freewriting activities a center of gravity begins to appear. This assertion may be either explicit or implicit in the writing, but either way, ideas are emerging.

Activities such as this permit writing to lead to personal discovery -- a major tenet of a developmental theory of writing. Invisibility of the cognitive processes involved in writing coupled with a tendency to rely heavily on analysis of finished products are hindrances to viewing writing in a developmental light. Shuy (1981) maintains a developmental theory of writing must create "utterance-building strategies" designed in a manner to facilitate the natural discourse of written language.
Imagery and Creativity

Imagery and creativity have been strongly linked in theoretical literature and in subjective accounts; yet because both involve complex internal processes rather than single measurable observable behaviors, research has yielded inconclusive results. To date there has been relatively little significant inquiry in the interaction of the creative thinking and imaging processes. Forisha (1978) claims the paucity of research in this area rests upon the tendency of researchers to ignore the variability and complexity of these mental processes; studies "have only skirted the complexities and multiplicities of their interrelationship" (p.209).

Imagery is most generally defined as a representation of schematic sensory impressions which operates across all sense modalities (Forisha, 1978). Imagery is similar to perception in that an image is constructed in the same way a percept is constructed, but its stimuli are at least partially absent (Neisser, 1972). Creativity has been defined with varying standards. The word "creativity" has sometimes referred to the potential of the individual for creative achievement; yet it is just as frequently applied to the process directing a creative product, as well as the finished product itself. Gilchrist (1972) points out, however, that all definitions of creativity share one essential aspect: the ability
to make products, tangible or intangible, that are both new and valuable.

Numerous psychologists have come to the conclusion that imaging and creativity are interrelated. Richardson (1969) in his studies of mental imagery states that visual imagery in adults is linked with creativity. Paivio (1971, 1972), too, suggests the discovery phase of the creative process is facilitated by concrete imagery. In regard to language production he maintains, "... imagery plays an important role in the comprehension, retention, and production of concrete (descriptive) language" (1979, p. 476). Koestler (1964) in his monumental study, The Act of Creation, concludes that the scientist predominantly thinks in pictures. Even psychoanalysts who historically mistrusted images are now paying more attention to images as avenues of meaning and awareness of unconscious processes (Shorr, 1974).

Literature on creativity is sprinkled liberally with subjective accounts from artists and scientists on the presence and importance of images in creative breakthroughs. Brewster Ghiselin, himself a poet, has edited the reports of 38 gifted men and women in a volume with an appropriate title, The Creative Process (1952). Rosner and Abt (1970) provide accounts of insight from scientists and artists in all fields. Numerous examples of the effective use of metaphor and analogy in solving problems and creating
product designs are offered by Gordon (1961) and Prince (1970).

Generally these reports suggest several major characteristics of insight. This flash of creative imagery usually occurs in its own timing, often without warning when a person may be engaged in a task completely unrelated to the creative idea. Quite often when conscious attention is least directed to the creative endeavor, images or insightful realizations will occur. "Too often, creative illumination seems to arrive in a rush as the subconscious unloads in one gushing gestalt" (Gordon, 1981). Whether this conscious attention occurs minutes, hours, or days (sometimes even years according to Robert Penn Warren and William Faulkner) before the insight is not as important as the fact that some prior conscious focus has taken place.

One of the most classic examples of these processes is offered by the French mathematician Poincare in his description of the development of Fuchsian functions. He had worked for 15 days analyzing equations and formulas with no results.

One evening, contrary to my custom, I drank black coffee and could not sleep. Ideas rose in crowds; I felt them collide until pairs interlocked, so to speak, making a stable combination. By the next morning I had established the existence of a class of Fuchsian functions, those which come from the hypergeometric series; I had only to write out the results, which took but a few hours. (Ghiselin, 1952, p. 36)
The next day Poincare experienced a similar occurrence after he had been pondering some solution. Without conscious thought of this problem, he had a sudden insight just as he was stepping into a bus.

At the moment when I put my foot on the step the idea came to me, without anything in my former thoughts seeming to have paved the way for it, that the transformations I had used to define Fuchsian functions were identical with those of non-Euclidean geometry. I did not verify the idea; I should not have had time, as, upon taking my seat in the omnibus, I went on with a conversation already commenced, but I felt a perfect certainty. (Ghiselin, 1952, p.37)

The Dutch chemist Kekule provides a similar example of vivid visual imagery in creativity. He recounts the following experience connected with the discovery of the benzene ring:

I turned my chair toward the fireplace and sank into a doze. Again the atoms were flitting before my eyes. Small groups now kept modestly in the background. My mind's eye sharpened by repeated visions of a similar sort, now distinguished larger structures of varying forms. Long rows frequently rose together, all in one movement, winding and turning like serpents; and see! What was that? One of the serpents seized its own tail and the form whirled mockingly before my eyes. I came awake like a flash of lightning. This time also I spent the remainder of the night working out the consequences of the hypothesis. (Libby, 1922, p. 269)

Contrasting experiences of insight can be cited. The philosopher Singer reports auditory imagery as important components of his thought processes saying it is as if "a little imp or devil is standing behind you and dictating to you"(Rosner & Abt, 1970); and the poet Lowell claims, "I do hear words"(Ghiselin, 1952). Wolfe experienced strong
kinesthetic imagery; he reports that he is amazed at the "power of memory to evoke and bring back the odors, sounds, colors, shapes and feel of things with concrete vividness" (Ghiselin, 1952).

Others' inspirations are triggered by combined modes of imagery, rather than one primary mode. Nietzsche reports that his ideas became visible and audible, and Einstein describes his reliance on the visual and motor modalities:

The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The physical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be voluntarily reproduced and combined. (Ghiselin, 1952, p.43)

Many agree with Schaefer's (1975) comment "anecdotal reports . . . indicate that there is at least a partially controlled lowering of ego controls so that fantastic imagery and primitive associations arise to the consciousness" (p.140).

Relatively little research has been done on the interrelationship of creativity and imagery. Only since the 1950s have psychological studies of imaging become serious research topics. Popularity of the behaviorism movement in the 1920s is generally recognized as the cause of this void. The study of behavior with objective operational methods completely replaced the introspective exploration of states of consciousness and cognitive processes. Such
topics were labeled too vague and "mentalistic" to warrant serious consideration (Holt, 1953). Even with this renewed interest the first systematic study of mental imagery did not appear until 1966. In Daydreaming Jerome Singer applied imagery to psychotherapy but not specifically to creativity. Soon thereafter Richardson (1969) published a major synthesis of imagery research entitled Mental Imagery.

The systematic study of creativity began only several decades before that of imagery. J.P. Guilford, who has often been credited with awakening interest in this area, reported in 1970 that creativity research had increased sevenfold between the years 1950-1969. Continued research indicates creativity is deeply entrenched in the educational process.

Studies of creativity have most often been designed with a focus on process, product, and/or persons. That the creative process involves a number of stages is generally accepted by most theorists. Graham Wallas (1926) proposed one of the earliest and most emulated models of creative thought. His paradigm includes four basic stages or steps: preparation, incubation, illumination, and verification. Preparation permits a free thinking, gathering of thoughts, defining a problem and building a base of information. Incubation refers to the unconscious activity of the mind sorting, integrating, and
clarifying. Illumination is a flash of insight, an image, or perspective that helps focus or resolve the problem. Verification involves implementing the implications of insight. A number of models have been patterned after Wallas; McPherson (1968) reviews 18 problem-solving models all displaying more commonalities than differences among these process prototypes.

Just as the writing process involves a doubling back within the forward progression of stages, so does scientific discovery demand this complicated mental involvement. Bargar and Duncan (1982) state

The development of a major important concept usually requires a complex recycling of the process described by Wallas. The stages are not necessarily distinct and certainly not always linear, at least to conscious observation. (p.5)

Research reflects varied approaches to the relationship of imagery and creativity. Picking up on Richardson's (1969) identification of creative imagination imagery, Khatena, Torrance, and Cunnington (1973) have developed two measures of verbal originality entitled "Onomatopeia and Images" and "Sounds and Images" which are components of a test battery called "Thinking Creatively with Sounds and Words." These auditory-visual stimuli are designed to require the intellect to interact with emotion in evoking an imaginative response. Using this battery, Khatena (1975) investigated the relationship between vividness of imagery production and creative perceptions
and found the two were significantly related, especially to the senses of seeing, hearing, and touching. In addition, vivid imagers tended to perceive themselves as highly creative.

Rhodes (1981) investigated the relationship between vividness of mental imagery and creative thinking. Findings revealed that the only imagery vividness components correlating significantly with creativity components were the components of auditory imagery and visual imagery.

Looking deeper into the cognitive processes, Gordon and Poze (1981) observed analogy formation to probe the interaction between conscious and unconscious mental activity in the course of a creative act. Their subjects, after being shown a picture and asked to make a mental comparison, produced creative analogies while describing their process. They reported the stimulus image became "fuzzy" while unconsciousness served the creative task; when consciousness could assign a name to the new image, like "lightning" a transforming image appeared. Gordon and Poze conclude

You can't evoke creative subconscious activity unless conscious, verbal thinking is converted into an image which is allowed to be blurred, fuzzied-up, by subconscious activity. (p.6)

They further conclude

When people are trained purposefully to make their images fuzzy in order to evoke their subconscious, they increase the probability of creative success. (p.9)
In the study of creative individuals, the presence of personality traits surface with a high degree of regularity and consistency. Forisha (1978) discovered "throughout the literature of creativity, personality variables emerge as factors significantly affecting the utilization of imagery and the development of creativity" (p.225). Barron (1963) and others have found that creative individuals exhibit a heightened sensitivity along with the capacity for ego strength, discipline, and dedication.

MacKinnon (1965) analyzed a sample of highly creative architects chosen by authorities in the field and rated again by the group itself. His findings reveal the subjects are high in self-esteem, yet also frank and critical in their own self-evaluation. He learned further that they are also inventive, determined, independent, individualistic, enthusiastic, and industrious -- adjectives which tend to encompass many polarities. He concluded the "creative person has the capacity to tolerate the tension that strong opposing values create in him, and in his creative striving he effects some reconciliation of them" (p.490). Schachtel (1959), too, found "creative individuals transcend polarities rather than being limited by an either/or view of the world." Helson's (1967) study of creative college women also yields findings that many characteristics of these women are similar to those
in MacKinnon's study of architects.

Barron (1963) and MacKinnon (1965) along with other researchers have referred to the combination of masculine and feminine characteristics in the creative individual; they further emphasized the influence of the parent of the opposite sex thus suggesting a lesser degree of conformity to sex-role stereotypes.

In general the interests, attitudes, and drives of creative individuals are distinguishing trademarks more than intellectual ability. More and more researchers are finding in their studies of imagery and creativity that these mental acts cannot be isolated from the functioning of the total personality. Creativity appears to be a synthesis of polarities, a blend of sensitivity and intuition with purposive action and determination, and is in fact a joining of feminine and masculine polarities within the individual (Dellas & Gaier, 1970, p. 68).

Just as there is no one writing process and no one creative process, there is no one imaging process or function. In an attempt to relate the many and varied imaging processes to varieties of creativity, Ainsworth-Land (1982) has formulated a developmental framework (See Figure 2). Her model accounts for a variety of definitions and manifestations of the interrelationship of creativity and imaging.
<table>
<thead>
<tr>
<th>Imaging</th>
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<th>Processes</th>
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<td>Orders</td>
<td>Self-Involvement</td>
<td>Product</td>
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<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; order</td>
<td>non-awareness of &quot;self&quot; creating out of need, survival motivation, &quot;self-creating&quot;</td>
<td>realistic, concrete representation, discovery learning, memory building, invention</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; order</td>
<td>belonging, self-extension, ego directing, ego building and verifying, self consciousness</td>
<td>improvements and modifications, impressions, strengthening and enhancing, analogical</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; order</td>
<td>sharing differences, selves integration and reformation, giving up rigid control, opening to &quot;flow&quot;</td>
<td>innovation, integrated synthesis of old and new abstractions, symbols</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; order</td>
<td>self as part of larger reality, meta-consciousness, disintegration of barriers, continuous &quot;monastic&quot;</td>
<td>inventing new order, new paradigm, philosophical shifts, new pattern formation, &quot;mystical&quot; creations</td>
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Figure 2 Developmental Integration of Creativity and Imaging (Ainsworth-Land, 1982)
This model outlines four hierarchical orders of imaging as they relate to three aspects of the creative process: self-involvement, product, and processes. Since the design of this study draws more on the second and third order of imaging, they warrant closer examination. In the second order the person uses the power of the conscious mind to control, manipulate, and modify situations. Subjects in this study will be participating in the goal-directed imaging process when they consciously evoke memory images of all modalities.

The third order of imaging outlined in Figure 2 represents the degree of involvement most subjects will be expected to experience in an incubation activity. This level requires a change of perception in that one must push against the limits of normal perception, creating dynamic tension. When involved in third order imaging a person has an intent and need to find a solution. Characteristic of this order is open receptiveness since there is no preconceived notion of the form or shape this solution will take. The person imaging strives for "deliberate spontaneity", consciously opening oneself to the flow of ideas. A dialectic operates in this third order where there is an interplay of opposites -- self and nonself, conscious and unconscious, subject and object, known and unknown. By inducing a state of receptivity, the ego becomes less involved and permits unconscious
workings to interact with conscious efforts. With the resolution there is great likelihood of emergence of suppressed material.

The fourth order probably has fewer parallels with this study since it involves an ultimate form of relatedness. "One's whole being comes into play with the consciousness and unconscious minds, reason and intuition, inner and outer, subsumed into a kind of meta-consciousness" (Ainsworth-Land, 1982, p.17). The person imaging in this order may have the sense of illuminating or mystic vision. While the design in this study may possibly evoke this higher order of imaging, it is regarded as a rarer experience because of its dealing with deeper layers of the unconscious. The psychoanalytic writings of Carl Jung offer significant insight into the mysterious complexities of the layers of consciousness.

**Jung's Theory of the Psyche**

"Image is psyche" (Jung, 1959).

According to Jung

The inner image is a complex factor, compounded of the most varied material from the most varied sources. It is no conglomerate, however, but an integral product, with its own autonomous purpose. The image is a concentrated expression of the total psychic situation. (Psychological Types)

In speaking of mind and mental activity Jung has selected the terms psyche and psychic to refer to the totality of the psychologic structure of the human being.
The psyche embracing both consciousness and the unconscious is a kind of non-physical space that is within the personality. Jung believes that the psyche is no less real than the physical with its own structure and operating by its own laws.

All that I experience is psychic. Even physical pain is a psychic image which I experience; my sense-impressions -- for all that they force upon me a world of impenetrable objects occupying space -- are psychic images, and these alone constitute my immediate experience, for they alone are the immediate object of my consciousness. My own psyche even transforms and falsifies reality, and it does this to such a degree that I must resort to artificial means to determine what things are like apart from myself. Then I discover that a sound is a vibration of air of such and such a frequency, or that a color is a wave of light of such and such a length. We are in truth so wrapped about by psychic images that we cannot penetrate at all to the essence of things eternal to ourselves. All our knowledge consists of the stuff of the psyche which, because it alone is immediate, is superlatively real. Here, then is a reality to which the psychologist can appeal -- namely psychic reality. (Collected Works, Vol.8)

The psyche, then, serves as a guide which regulates and adapts the individual to his social and physical environment. Jung describes psychic activity as similar to but not literally the same as movements in the physical world. This general psychic energy which Jung calls "libido" and defines as "the energy of the processes of life" moves up or down, forward or backward, inward and outward in the psyche. Beyond referring to the psyche as a reality in its own right, Jung clearly describes it as functioning in terms of its own principles of
of operation and declares that it can be understood only within its own terms.

Another important aspect of the psyche is the fact that the psychic energy flows between two opposing poles. Jung's analysis is based on the idea that all forms of life may be understood as a struggle of contending forces, a moving, dynamic tension. . . The principle of opposites is intended not as a literal description of reality, but as a "way of thinking" about the phenomena of the world as they appear from the point of view of psyche. It is therefore not a principle of logic, but an approach to the world, growing out of the fact that the psyche draws its experiences of the world in terms of contrasts and opposites. (Progoff, 1973, pp. 50-51)

Jung definitely believes some principle of the psyche is evidenced through the fact that the principle of opposites is found throughout mankind. "Jung's point ultimately comes to the assertion that the cosmological views of mythology describe not the outer universe, but the inner cosmos of the psyche" (Progoff, 1973, p.52).

The psyche is composed of several diverse but interacting systems and levels. Jung conceives the psyche as having three layers. At the surface is consciousness; below it is the personal unconscious; and at the base is the collective unconscious. The first layer, consciousness, is the only level that is known directly by the individual. It appears early in life, probably before birth, and continues to develop from the time the infant first distinguishes some dimension beyond the self (Neumann, 1954). This level orients the individual to society and gives
him the starting point for logical thought processes.

Further conscious awareness is developed through exercising the four mental functions Jung called thinking, feeling, sensing, and intuiting. Because all four functions are not used in equal proportions, the predominant one used more than others differentiates one person's personality from that of another person. The attitudes of extraversion (orientation to the outer, objective world) and introversion (orientation to the inner, subjective world) also shape the conscious mind. As the consciousness matures with experiences of daily living, it undergoes the process of individuation, a process whereby one grows in wholeness, becomes differentiated from other people, and knows oneself as completely as possible.

The ego is at the center of consciousness processing conscious perceptions, memories, thoughts, and feelings. In its organizing process, the ego is selective in what is permitted to reach a level of awareness. In order to protect the conscious from becoming overwhelmed by the mass of material from the vast number of daily experiences, the ego selects and eliminates psychic material. Intensity of experience, dominant personality function, level of individuation all affect what the ego will allow to become conscious.

The experiences that fail to gain recognition are stored in what Jung called the personal unconscious.
This second level of the mind serves as a receptacle that accumulates those psychic activities rejected by the ego as being ill-fitting with the conscious individuation or function. The personal unconscious also contains experiences which were once conscious but have been repressed or disregarded (e.g. an unpleasant thought, an unresolved conflict, or a moral issue). Frequently they are forgotten because they seemed irrelevant or unimportant when they were first experienced.

The contents of the personal unconscious are ordinarily readily accessible to consciousness when the need for them arises. Some examples may make this two-way traffic between the personal unconscious and the ego clearer. A person knows the names of a number of friends and acquaintances. Naturally, they do not remain in consciousness all of the time, but they are available when needed. Where are they when they are not in consciousness? They are in the personal unconscious, which is like an elaborate filing system or memory bank. (Hall & Nordby, 1973, p. 36).

At this level the contents are peculiar to the particular individual in whom it is found.

Just as the largest and deepest area of the psyche is the focus of most of Jung's studies of the psyche, so it inspires one focus of this particular study.

Jung looks to it as the source of the materials that come into consciousness and as the point of contact between the individual and the greater-than-individual forces in life. The fundamental hypothesis on which Jung works is the idea that the potentialities within the individual personality are not left unaffected by the development of history, and that what happens in time leaves its mark not only on the psyche of the individual, but also on the continuity of the human race. (Progooff, 1973, p. 57)
This layer of consciousness is not individual but universal in nature. It is not derived from personal experience; it is not acquired from the culture; it is inborn. This level of unconsciousness is a reservoir of instinctual, biologically inherited material common to all human beings, simply by virtue of the fact that they are human beings.

Jung often referred to these latent images as primordial images when he spoke of the earliest development of the psyche.

Man inherits these images from his ancestral past, a past that includes all of his human ancestors as well as his prehuman or animal ancestor. These images are not inherited in the sense that a person consciously remembers or has images that his ancestors had. Rather they are predispositions to potentialities for experiencing and responding to the world in the same ways that his ancestors did. (Hall & Nordby, 1973, p.39)

The development and expression of these predispositions for thinking, feeling, perceiving, and acting depend entirely upon an individual's experiences. The contents of the collective unconscious exercise a preformed pattern for personal behavior permitting a person to easily perceive some things and react to them in certain ways.

As Jung discusses the functioning of the collective unconscious, he reveals a sense of the relation between the structure of the psyche and the development of man in time. When he speaks of the primordial images having been expressed in the earliest days of the life-history
of the human species, he is stressing that not only are they old, but more important, that they were present in ancient times because they grow out of the nature of the psyche in the most primitive, pre-conscious form.

Jung has also used the term "archetype" in the same regard. Many scholars along with Jungian students, and indeed, Jung, himself, have used the terms "primordial image" and "archetype" interchangeably. An archetype, according to Jung, is a "core of meaning", "a living disposition", an idea "in the Platonic sense." Jung and his students note that the exact nature of the archetype is difficult to define since it does not exist in a concrete observable form, but rather as a symbol in the unconscious. Instead of an archetype appearing as a picture or memory in one's mind, an archetype is more like a negative that has to be developed by experience. "A primordial image is determined as to its content only when it becomes conscious and is therefore filled out with the material of conscious experience" (Jung, 1959, p. 79).

Among the numerous archetypes Jung includes in his writings are those of birth, rebirth, death, power, magic, the hero, the child, the wise old man, the earth mother and many objects of nature like trees, the sun, the moon, wind, rivers, fire and animals.
There are as many archetypes as there are typical situations in life. Endless repetition has engraved these experiences into our psychic constitution, not in the form of images filled with content, but at first only as forms without content, representing merely the possibility of a certain type of perception and action. (Jung, 1959, p. 48)

These primordial images, or inherited patterns of thought, correspond closely to universal symbolisms. Joseph Shorr (1974), who has studied and written extensively on psychotherapy, supports Jung when he claims that these universal images "are identical or similar among all people and are easily found in the unconscious of the present day human being" (p.4). Further support comes from Pope (1977):

There is research that suggests that the flow of our subjective experience may in fact often have greater recourse to distant memories, fleeting images, irrelevant imaginings, and fanciful anticipations than to the more structured, rational processes of attention to the situation at hand. (p. 6)

Creativity researchers Gordon and Poze (1981) acknowledge the contributions of the unconscious to creative insight but contend that "access to the subconscious is at worst unpredictable and at best indirect"(p.2). To observe this activity between conscious and unconscious levels of awareness they recently conducted research in which the design provided analogy formation as the activity under observation. Their findings support Jung's notion of the autonomous nature of the psyche in this creative act.
In their final conclusions Gordon and Poze echo with impressive similarity the words of Jung quoted in the opening of this section. These researchers state:

The research evidence leads to the conclusion that the subconscious is a powerful analyzer, matching and sorting images and feelings. It analyzes on the basis of imagery because it is dealing with so many potential bits of useful information that it can organize only by forming images. That explains why image is the key to the subconscious... (p. 6)

It is with increasingly greater understanding that scholars are quoting Jung's eloquence: Image is psyche.

**Life-Span Development**

"Human life-span developmental psychology is concerned with the description and explication of ontogenetic (age-related) behavioral changes from birth to death" (Goulet & Baltes, 1970, p. 12). The period from 1930 to 1970 was one of pioneer work in this field with the following significant contributions: Erikson's (1963) description of eight stages of ego development in the life cycle; Havinghurst's (1972) set of developmental tasks; Maslow's (1954) hierarchy of needs; and Buehler's (1962) work in identifying five basic life tendencies gleaned from the life histories of elderly people.

Erikson's developmental stage theory continues to influence researchers in their study of ego development. His theory represents a systematic formulation of the
effects of maturation, experience, and social institutions on the growing individual, thus affecting personality organization. Growth is seen as a continuous process, neither stabilized nor completed when the individual reaches physical maturity. Erikson's eight stages of ego development are (1) in early infancy, the development of a sense of basic trust versus a sense of distrust; (2) in later infancy, a growing sense of autonomy versus a sense of shame and doubt; (3) in early childhood, the period of greatest locomotor development, a developing sense of initiative versus a sense of guilt; (4) in the middle years of childhood, a sense of industry versus a sense of inferiority; (5) in adolescence, a sense of ego identity versus role diffusion; (6) in early adulthood, the development of intimacy versus a sense of ego isolation; (7) in middle adulthood, the development of generativity versus a sense of ego stagnation; and (8) in late adulthood, a sense of ego identity versus a sense of despair.

The youngest age group sampled in this study represents a stage referred to in developmental theory as preadolescence. Erikson suggests this age group might be choosing between industry versus a sense of inferiority. In terms of chronological age, the preadolescent period includes children between nine and twelve years of age, an age when a child is in the process of rapid physical
and sexual maturation. The most essential growth needs of this age are in the area of personal identity and social relations.

The comfortable family relationships often begin to break up, and the child is thrown into a personal identity quest. Thornburg (1974) describes six areas of developmental concerns of the preadolescent: intellectual, body image, social sex roles, friendship with peers, independence, and moral values. Mental processes move from concrete thinking into a more abstract reflective style of thinking. Preoccupation with appearance, attempts at clarification of acceptable sex roles, and choices of new friends all begin to foster a new independence and formulation of moral values.

Preadolescence is a time of rising self-consciousness. Elkind and Bowen (1979) attribute it, in part to the mental creation of an imaginary audience that monitors every action. One of the complexities that develop in this period has been identified by Goffman (1969) as strategic interactions. "Strategic interactions are interpersonal encounters that have as their aim the acquisition, concealment, or revelation of information through indirect means" (Karmel & Karmel, 1984, p. 405). Elkind (1980) has identified the following strategic interactions: friendship, phoning and being phoned, cutting and being cut (ignored), relations with the opposite sex,
and forbidden acts. Karmel & Karmel (1984) claim in order to become comfortable with these psychological, social demands, the preadolescent needs freedom to explore but with protection and support.

A second age group sampled in this study are members of the adolescent stage, generally categorized from 13 to 20 years old. At this age formal thought operations expand to include any and all the problems and philosophical speculations in the human intellectual repertoire. Inhelder and Piaget (1958) devised several strategies to test formal operations.

Adolescent experience is marked by an internal and external quest for self and the life-choices that must be made. This period is a time of transition from a secure but dependent life in the parental home to an independent life that is filled with choice and change. Erikson (1963) convincingly posits that the stage of adolescence is primarily concerned with the individual's search for an answer to the question "Who am I?" For many in this group the search becomes a crisis as they move toward physical and psychological independence.

Finding a separate identity involves at least three commitments: a sexual orientation, a commitment to an ideology, and a vocational choice. Identity is formulated through affirmation of what one believes and negation of what one does not; both require choices on the part of
the adolescent. In making the choices adolescents continue to be influenced by parents. Brittain (1969) found adolescents use peers and parents as competent guides in different areas. Parents are the preferred counselors when decisions involve choices for the future, whereas peers may be more influential when decisions involve current status and identity.

Changes in friendships during early, middle, and late adolescence have been studied by Douvan and Adelson (1966) who learned that in early adolescence (11-13) friendships tend to focus on the activity that friends can perform together. In middle adolescence (14-16), a time when most anxiety is shown concerning friends, friendships are formed for the security they provide. They found in later adolescence (beyond 17) friendship becomes more casual, a relaxed, shared experience with more emphasis on the relationship's interpersonal quality.

Adolescence, then, is a time of risk and separation from the familiar. Young people, sensitive to this transfer, constantly face the challenge of new responsibilities as they make their own place in society by contributing to the community.

This sense of uncertainty as one ventures into the unknown is not unique to adolescents alone. The mid-life group sampled in this study also represents a stage characterized by complex challenges. Perry (1968), Kohlberg
Perry's work explores students' intellectual and ethical development as it moves from a beginning stage typified by dualistic, right-or-wrong responses to a recognition of acceptable multiple responses and finally to a relativistic approach to knowledge that is qualitative and dependent on contexts.

Kohlberg's (1969) theory of moral development outlines a similar progression in the capacity to internalize and synthesize greater complexity in the realm of ethical and moral decisions. Loevinger (1976) regards ego development as "the master trait" that includes character development, interpersonal style, conscious preoccupations, and cognitive mastering. All patterns and reactions in these areas move toward greater complexity and inclusiveness in dealing with one's self and the world.

The adult life cycle, its patterns, characteristic stages, and transitions have been researched by Vaillant (1977), Levinson (1978), Gould (1978), Havinghurst (1972), and Lowenthal (1975). Neugarten (1975) has placed special emphasis on the timing of events in adult development suggesting that major events in life can be met in a satisfactory way if they are "on time" with our social and biological clocks. Havinghurst (1972) has identified the development tasks that arise not only as a result of
physical maturation but also from social roles and new
dimensions of emerging personality.

Extensive life cycle studies conducted by Levinson
(1978), Gould (1978), and Sheehy (1976) have described
the kinds of tasks, marker events, and characteristic
responses associated with specific adult age groups.
Levinson in his book, The Seasons in a Man's Life, has
outlined the following stages: (1) The beginning stage of
adulthood is from 22 to 28. This is a time when the
adult tends to establish occupational interests, values,
and self-concept along with life plans. (2) The next
stage is a transition stage from 28 to 33. This is a time
of reexamining choices made so far and making decisions
about desired changes. (3) The second half of the trans­
ition stage, "settling down", from age 33 to 40, is
characterized by a renewed commitment to the family and
greater stability in life and career. (4) In the "late
settling down" stage, from 36 to 40, individuals are be­
coming their own persons. Some of the life goals set
down in the early 30s have been achieved, and individuals
are assuming more mature status in their world. (5) The
mid-life stage, from 40 to 45, is a time of questioning
what persons have done with their goals and how they
might revise them. (6) Middle adulthood, from 45 to 60,
is a more stable period when a person focuses on intrinsic
goals and individual development. (7) The late adult
stage, from 60 to 65, is a time for individuals to seek a new balance between society and themselves and an acceptance of their failures and successes.

The mid-life subjects sampled in this study typically ask themselves: What have I done with my life; what have I given to my wife or husband, my children, my friends, my community? What do I really want from life and how close am I to getting this? Levinson looks upon this effort to reappraise one's life as a process of reducing some assumptions and beliefs about oneself and the world that are not true. Referred to commonly as the mid-life crisis, Levinson calls it a transition period, while Sheehy (1976) acknowledges "old wars with the inner custodian" (p. 436).

The older adult finds incentive for continued growth, Erikson says, by moving into the final stage of integrity. By this he means that final stage of adult development in which one can give a blessing to one's own life. This same ideal final stage of development is reflected in Maslow's (1954) discussion of self-actualization, a term referring to man's desire for self-fulfillment, namely, to the tendency for him to become actualized in what he is potentially. This tendency might be phrased as the desire to become more and more what one is, to becoming everything that one is capable of becoming. (p. 91-92)
Jung expresses a similar ideal final stage of development in his concept of individuation, a process whereby one grows in wholeness, becomes differentiated from other people, and knows oneself as completely as possible. "I use the term 'individuation' to denote the process by which a person becomes a psychological 'in-dividual', that is, a separate indivisible unity or 'whole'." (Jung, 1959, p. 275)

The literature reviewed in this section provides a number of concepts relevant to the questions being examined in this study. Material pertaining to writing as a cognitive, process-oriented activity indicates a number of complex patterns have already been noted, and work has begun on model formulation. Another important dimension of this study is reflected in the interrelationship of creativity and imagery. Goal-directed imagery, deliberate spontaneity imagery, and collective unconscious imagery are better understood through knowledge of Jung's theory of the psyche. Finally, life-span developmental theory offers explanatory power to response patterns from the four age groups under investigation in this research inquiry. Each of these major components (a) the process of writing, (b) the interrelationship of creativity and imagery, (c) Jung's theory of the psyche, and (d) life-span developmental theory contributes significantly to the formulation of the research questions that led to this study.
CHAPTER III
PROCEDURES OF THE STUDY

This study focused on the writing process, specifically the effects of life-span development on the creative process of imaging. The purpose of the study was to examine the incubation and illumination stages of writing and to determine if individual stages of development affect image production during these creative stages. Objectives of the study included gaining further insight regarding writing as a process-oriented activity, investigating the incubation and illumination stages, learning more about imaging during these phases; and comparing different and distinct life-span stages in this process.

Research Methodology

The research methodology employed in this study evolved as a natural consequence of the nature of the questions being asked, the phenomenon being studied, and the declared objectives of the research. In order to expand and develop theory about the mental activities involved in the writing process, the researcher needed
ways to obtain useful and rich descriptive data and to generate conclusions based upon and developed as a logical extension of that data. Qualitative research methods were needed to satisfy these intended goals.

Qualitative research methodology refers to those research strategies which allow the researcher to obtain first hand knowledge about the empirical social world in question. Qualitative methodology allows the researcher to 'get close to the data', thereby developing the analytical, conceptual, and categorical components of explanation from the data--rather than from the preconceived, rigidly structured, and highly quantified techniques that pigeonholed the empirical social world into the operational definitions that the researcher has constructed. (Filstead, 1970, p. 6)

Qualitative methodologies are becoming more popular in the research of language learning and teaching. A growing number of researchers in English education are being drawn to qualitative approaches because of a failure of much of the conventional quantitative methods to affect teaching and classroom practice. English professionals are becoming increasingly insistent that educational inquiry engage researchers and consumers in dialogue rather than isolate them from each other. Both researchers and practicing professionals see an importance in making the findings understandable and relevant to fellow English educators and administrators of schools.
The findings of descriptive, qualitative, naturalistic and holistic approaches are often readily interpretable and couched in the language of English professionals. Such research strategies tend to work more with wholes than parts, with describable phenomena rather than inferential quantification, to use the language of the classroom teacher rather than the discourse of the laboratory researcher. (Kantor, Kirby, & Goetz, 1981, p. 294)

Five general features of the qualitative research approach are identified by Bogdan and Biklen (1982). Not all studies exhibit the following characteristics with equal strength; rather qualitative studies tend to exhibit these traits to varying degrees.

1. Qualitative research has the natural setting as the source of data, and the researcher is the key instrument of inquiry. Data are generally collected in the setting where the activity occurs because qualitative researchers are concerned with the context of the history and surroundings of the setting under investigation.

2. Qualitative research is descriptive. Typically, the researcher gathers all minute details that have any promise of enhancing description. The written results of the extensive volume of data, collected in the form of words or pictures rather than numbers, contain quotations from the data to illustrate and clarify the findings.

3. Qualitative researchers are concerned with process rather than simply with outcomes or products. How people make meaning of their lives and surroundings is
central to the qualitative researchers' concerns.

4. Qualitative researchers tend to analyze their data inductively. Instead of seeking evidence to prove or disprove hypotheses held before the study, researchers build theory from particular details that are interconnected and grouped together. This pattern of theory building "from the bottom up" is called "grounded theory" (Glaser & Strauss, 1967). The process of data analysis can be likened to a funnel; issues and ideas are open at the beginning (top), and more directed and explicit at the bottom. Part of the study is actually used to discover or modify what the important questions are.

5. "Meaning" is of essential concern to the qualitative approach. Qualitative researchers are concerned with "participant perspectives", the ways different people make sense out of their lives. By discovering the participant perspectives, the researcher is better able to explain the inner dynamics of a situation that are frequently invisible to the outsider.

Many researchers have used the term "ethnography" to refer to any qualitative study since this term involves the attempt to describe aspects of culture -- what people do, what people know, and things that people make and use (Spradley, 1979). This method of data collection permits researchers to discover "how members of a particular group understand, use, and order aspects of their
environment" (Bogdan & Biklen, 1982, p. 37).

Ethnographic inquiry, then, has traits which make it uniquely suitable to investigation of language learning and teaching. Specifically, these traits include: (a) its concerns with hypothesis-generation and the discovery process; (b) specific features of language contexts; (c) thick description (Geertz, 1973) of these phenomena; (d) the roles of participant observer; (e) the making of meaning.

Subjects

The population for this study consisted of 16 writers: four subjects were in the preadolescence (9-12) age group; four subjects were in the adolescence-to-early 20s (13-21) age group; four subjects were in the mid-life (40-45) age group; four subjects were in the late adult (65 and older) age group. Both sexes were represented in each age group.

Even though most life stage theorists, including Levinson (1978) and Sheehy (1976), propose more than four stages that describe specific dimensions of development, the researcher selected these four particular stages because each represents major turning points or developmental steps in the life cycle. They also present a fairly evenly spaced distribution of the entire life cycle. A breakdown of subjects by life stage, sex, and age appears in Table 1.
Table 1
Distribution of subjects by life stage, sex, and age.

<table>
<thead>
<tr>
<th>Life Stage</th>
<th>Sex</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preadolescence (9-12 years)</td>
<td>F</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>11</td>
</tr>
<tr>
<td>Adolescence (13-20 years)</td>
<td>F</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>16</td>
</tr>
<tr>
<td>Mid-Life (40-45 years)</td>
<td>F</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>40</td>
</tr>
<tr>
<td>Late Adult (65 years &amp; above)</td>
<td>F</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>77</td>
</tr>
</tbody>
</table>
The researcher gave careful attention to sample size. It was important to select enough participants to provide a valid and reliable account of the cognitive processes under investigation; yet, at the same time, she wanted to limit the number to a manageable size allowing the researcher to deeply probe all dynamics and nuances interfacing in the complex mental activities involved in creativity, imagery, and writing. Four subjects per age group (16 subjects total) were deemed a sufficient number to yield a representative response and permit an indepth inquiry.

The purposeful sampling technique was employed since the researcher went to where the phenomenon exists. To assure a degree of uniformity in subject selection, all writers were required to meet certain criteria to qualify for participation. Criteria for selection included:

1. Indicate a decided pleasure in writing.

2. Satisfy a list of standards of typical high creatives as set forth by Guilford (1975) and Torrance (1974, 1980):
   a. Intuitive quality of imagination
   b. Originality - clever
   c. Fluency - ready flow of ideas
   d. Flexibility - adaptive
   e. Elaboration - fill our ideas with details
The subjects' qualification for this list was determined by the researcher and individual educators who worked closely with each subject.

3. Reflect Khatena & Torrance's (1973) definition of creativity: The power of the imagination to break away from a perceptual set to restructure anew ideas, thoughts, feelings into novel and meaningful associative bonds.

4. Typify a distinct age and stage in life-span as determined by developmental stage theorists. Actually, the writers in the two adult stages were all published writers. While this accomplishment was not originally a criterion for selection, it was one more qualification common to all adult subjects. All subjects in all categories enjoyed writing as a hobby and as a creative outlet.

No widespread recruitment of subjects was necessary since participants either volunteered or were recommended by colleagues and instructors. As the data collection began, the researcher faced the pleasant task of needing to select the most qualified subjects from a host of willing volunteers.

In compliance with stipulations from the Human Subjects Review Committee, The Ohio State University, subjects were informed of the activities planned. They
were assured that their identity would be withheld and their responses would remain confidential. Should they, at any time, become uncomfortable with any activity, they could omit it or withdraw from the study with the assurance all tapes and data would be destroyed. Consent forms were obtained from each subject at the first meeting.

**Research Design**

A telephone interview preceded the first meeting to further verify subjects' qualifications and to provide adequate explanation of the study. In an effort to maximize the possibilities of a natural, comfortable setting for the writers, they were permitted to select the location for the interview and writing sessions. Writers were encouraged to consider their preferences in regard to all aspects of environmental surroundings. Times and locations were then established.

The research design (See Figure 3) provided two 90-minute sessions scheduled approximately four days apart. Writing activities and taped interviews occurred during both sessions in the attempt to determine how each subject experienced imaging in the incubation and illumination stages of the writing process.
<table>
<thead>
<tr>
<th>SESSION I</th>
<th>Writer Engages in Incubation Activity</th>
<th>SESSION II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taped interview to gather retrospective data.</td>
<td>At end of Session I subject receives instructions for an incubation activity to be completed before Session II.</td>
<td>Taped interview to explore products and processes involved in the incubation activity.</td>
</tr>
</tbody>
</table>

Short writing activities:
1. Three verbal stimuli to evoke images.
2. Subject records flood of images.
4. Taped interview of reconstruction of mental processes

Subject completes questionnaire.

Figure 3. Research Design
During Session I and Session II data were gathered in three basic stages:

**Session I**

**Stage 1**
Taped interview to gather the following retrospective data:

1. Subject's perception of his or her own writing process from past performance.
2. Subject's identification of some vivid experiences of imaging which have guided writing.
3. Subject's exploration of past experiences of incubation and illumination and how these might have influenced the revision process.

**Session I**

**Stage 2**
The researcher explained that she would be asking about thought as it progresses through the writing process. Subjects were told they could elect to think aloud (talk out their thoughts), or they could instead choose to explore this mental activity as a follow-up activity through introspection.

The researcher then offered verbal stimuli designed to evoke images.
1. Subject was given two or three minutes to record images for each of the following verbal stimuli.
   a. A gentle summer rain.
   b. The county fair.
   c. An evening winter walk.

2. Subject was allowed approximately 15 minutes to develop a short poem inspired by one of these stimuli.

3. Follow-up interview was conducted in an effort to reconstruct the mental processes that accompanied the creative writing.

Sample questions:

1. Describe the images evoked by these three stimuli.

2. Why did you select the image you did for the poem?

3. Was your poem completely outlined in your mind when you began, or did it develop as you wrote?

4. How does the initial image compare with the final image? What brought about the change?

5. Can you retrace the revision processes in some of the lines? How do you become aware that the words sometimes do not say what you
want them to?

6. Close your eyes and listen while I read the poem to you. Upon hearing this read, did any new images occur to you?

At the close of the first session the subject was informed that Session II would consist of an interview designed to explore imaging and writing activities emanating from an incubation exercise. The following instructions were presented to the subject:

**Incubation Activity**

Do not consciously try to form any images when you first read the topic for your next poem. Rather, let the idea rest in your unconscious and let images come spontaneously at any time.

As you go about your daily routine between now and the next meeting, be alert to any mental images that come to mind on their own accord. When mental images and resulting creative word passages crowd into your thoughts, immediately record them.

As soon as a few ideas, insights, or images have occurred (this could take two or three days), you may begin writing. Either prose or poetry is acceptable, although generally the essence is in the poetic kernel. Expand and develop any ideas as you wish. There is no prescribed length.

Please bring this material (everything at all stages) with you for the next session.

**TOPIC:**

Imagine three gates in a row, one behind the other. Open each in turn and then report what you see, hear, and feel.

The gates image was inspired by Joseph Shorr (1974), who reports in *Psychotherapy Through Imagery* using this image in some of his classes to evoke vivid, often symbolic imagery. Four to five days at minimum lapsed between
sessions for the subject to engage in this activity.

Session II  Taped interview to explore writing and imaging that occurred during this sustained writing activity.

Sample questions:

1. When did first images occur?
2. Did those images change? develop?
3. How much incubation time elapsed before writing began?
4. Since this assignment was given, what has been the proportion of incubation time and writing time?
5. Does incubation continue while you write? What evidence do you have?
6. How did life's experiences affect your images?
7. Can you see any relationship between your current stage in life and your images?
8. Would you have imaged differently 10 years ago? Might you image differently 10 years hence?
9. Do the images in this poem represent anything symbolic to you?
10. Were you surprised by any of your images or the line of development?
All subjects were asked to complete a questionnaire measuring the vividness of mental images. The instrument used for this purpose was the Shortened Form of Betts' Questionnaire Upon Mental Imagery. The shortened form was developed and reported by Sheehan (1967) to fill the need for an adequate measure of mental imagery. Sheehan conducted cross-validation studies using the original Betts and the shortened form. He reported correlations ranging from .92 to .98 and concluded that the shortened form predicted imagery vividness essentially as well as the complete questionnaire.

The Shortened Form of Betts' Questionnaire Upon Mental Imagery (Sheehan, 1967) is a paper and pencil test consisting of 35 items which the subject is asked to imagine individually and then rate the vividness of the image. The items are categorized into groups of five items and each group is associated with one of seven sensory modalities: visual, auditory, tactile, kinesthetic, gustatory, olfactory, and organic.

Rating is done based on a seven-degree scale. Scale responses range from, "No image present at all, you only 'knowing' that you are thinking of the object," to "Perfectly clear and as vivid as the actual experience" (Sheehan, 1967). Responses are averaged for each modality and for the total instrument. This yields a vividness of imagery rating for each of the seven sensory modalities.
as well as a total vividness of imagery rating.

The researcher reviewed the instructions with each subject to preclude any misinterpretations. They were encouraged to approach the instrument with an unhurried, open mind-set. All were given the option of completing the questionnaire during one of the sessions or taking it with them to complete at their leisure between sessions.

Data Collection

Implementing multiple data collection techniques enables qualitative research designs to generate materials that enhance the researcher's "ability to provide an orderly presentation of rich descriptive detail" (Lofland, 1971, p. 59). Others endorsing multiple methods of data collection include Webb, Campbell, Schwartz, and Sechrest (1966). They claim operational implications call for "multiple measures which are hypothesized to share in the theoretically relevant components but have different irrelevant components" (p. 3).

In order to acquire ample data about the imaging activities of writers of various ages, this researcher chose the following methods of data collection as appropriate and useful: conducting intensive interviews, conducting writing activities, and administering a questionnaire inventory to assess vividness of imagery.
Intensive Interviewing

A method of intensive interviewing was selected as "a flexible strategy of discovery whose object is to elicit from the interviewee what he considers to be important questions relative to a given topic" (Lofland, 1971, p. 76). The interview was structured to encourage the subjects to offer their own reports of the imaging and writing processes, thus allowing the interviewer to participate as observer-discoverer (Dexter, 1970). For the most part, semi-structured questions directed the responses since this approach limits the universe of questions but allows the respondent considerable freedom of reply. Always the questions were formulated to elicit depth, range, specificity, and personal context in responses (Merton, 1955).

Writing Activities

Writing activities were designed for the purpose of evoking imagery and providing an avenue to report cognitive processes during the act of composing. All subjects were given a choice of (1) thinking aloud (verbalizing their thoughts) while they wrote or (2) reconstructing the mental processes through introspective restructuring. Following Janet Emig's (1971) "composing aloud" protocol, a number of researchers have incorporated this data collection technique. They agree with Flower and Hayes (1981) that protocols provide direct access
to writers' cognitive processes. "Thinking aloud protocols capture a detailed record of what is going on in the writer's mind during the act of composing itself" (p. 368).

Recently, however, a growing number of researchers have been more vocal about the limitations of this protocol. Paigley and Witte (1981) remark, "What we learn from protocol analysis . . . is uncertain . . . the writing situation is artificial" (. 412). A more stinging criticism comes from Cooper and Holzman (1983): "Protocols, far from being 'extraordinarily rich in data', are exceedingly impoverished sources of information on what writers are thinking about" (p. 286). In the same article they go on to comment

It is, after all, rather an odd thing to talk about what you are thinking about while you are doing something. Only those particularly trained to perform this trick, or those with special talents in this direction, can be sources for the data. (p. 289)

Even Janet Emig (1971), herself, realized some limitations of this procedure: "Composing aloud, the chief means employed for externalizing behavior, an understandably difficult, artificial, and at times distracting procedure" (p. 5).

Because of these contradictory views the researcher decided to permit the subjects to share their accounts of these processes in a style least inhibiting to them. The recounting of the processes must not be thwarted


or curtailed by the data collection procedures.

Products resulting from the writing activities also became a part of the data collection. Looking at these pieces of writing can help researchers learn more about the processes that produced them. Robert Gorrell (1983) underscores the importance of written products:

That is, so long as we distinguish process and product, the product can give us the most tangible information we can get about at least part of the process. Analysis of the product reveals the goal or end of the process, and directs us to specific parts of the process that we can investigate. (p. 274)

Data Analysis

The analysis of data was accomplished through the constant comparative methodology proposed by Glaser and Strauss (1967). This approach permits the researcher to arrive at certain findings by assembling data, searching for linkages, and developing conceptual categories. Theory emerging from these procedures is "grounded" in the data.

Bogdan and Biklen (1982) detail the procedure in the following manner:

1. Begin collecting data.

2. Look for key issues, recurrent events, or activities in the data that become categories of focus.

3. Collect data that provide many incidences of the categories of focus with an eye to seeing the diversity of the dimensions under the categories.
4. Write about the categories you are exploring, attempting to describe and account for all the incidents you have in your data while continually searching for new incidents.

5. Work with the data and emerging model to discover basic social processes and relationships.

6. Engage in sampling, coding, and writing as the analysis focuses on the core categories. (Glaser & Strauss, 1967)

The researcher engaged in preliminary analysis of each interview by taking extensive field notes between activities and following each session. Careful listening to each tape was followed by more field notations. These early steps in the analysis were valuable, not only for capturing fresh, immediate observer response, but for the helpful hunches about key linkages that might emerge in the study. This first tentative set of organizing schemes was carried into the later, more formal stages of data analysis when the researcher continued to weave back and forth between checking evidence in the data and identifying components to further clarify a developmental theory of writing.

Pilot Trial

Because of the complex, unobservable nature of imaging in the incubation and illumination stages of the writing process, a pilot study was set up to aid in assessing the appropriateness of the particular research design.
Key objectives of the pilot study included:

1. To discover how mental processes during the act of creative writing can be most usefully analyzed.

2. To discover what parts of the design are useful and what parts need alteration.

3. To establish what structure to follow.

In order to try out this particular design, four subjects, one from each of the four established categories, were selected to participate in the activities. All phases of the design were administered first to a 16-year-old boy from the adolescence-to-early-20s category, next to a 90-year-old woman from the late adult category, next to a 10-year-old girl from the preadolescence category, and last to a 41-year-old woman from the mid-life category. This particular order of subject selection was based upon willingness and availability at the time of the pilot investigation.

Since the interviews and written pieces yielded even more data than the design intended, the researcher and her advisory committee agreed the design could be implemented in its original form. Prior to this preliminary study, the advisory committee had also suggested that the data collected from the pilot study could be incorporated into the findings of the study if no significant alterations or dramatic departures from the
original design were necessary.

All subjects wanted to share other materials they had written at an earlier time. All four writers either offered to bring or actually did bring poems which had some significance to them; generally, these pieces represented an achievement of skills of expression along with the account of some key emotion or pivotal event in their lives. Because this material added dimension to the study, writers were encouraged to share these earlier writings with the researcher; however, the design of the study was not altered to accommodate them. Instead, the outside pieces served as enrichment for background knowledge about the writers.
CHAPTER IV
PRESENTATION AND ANALYSIS OF THE FINDINGS

This chapter examines the data that were gathered during the course of the study and identifies recurring themes, patterns, and interpretations. The writing process with a focus on imaging which occurs during the incubation and illumination stages of writing is examined along with the influences of life-span development on this creative process. Complex and circuitous thought processes which eventually evolve into finished pieces of prose and poetry are traced to show some of the workings of the imagination.

In all the assigned activities the subject's task was to transform simultaneously occurring emotional, sensory, and cognitive events into language capable of being made comprehensible to the reader. Ultimately, the researcher's task was to sift through the maze of mental vagaries underlying this unobservable, complex act in the attempt to reconstruct and analyze the role of mental imagery woven throughout the progression of unconscious prethought to final written expression.
Some findings of other researchers of the writing process are replicated; some fresh, key concepts, their interplay and evolvement are discovered through systematic inquiry of the subjects' mental activities during the act of writing. The use of quotations from taped interviews and field notes reflecting both the writers' and researcher's insights and perceptions present descriptive and analytic excursions into the mental workings of subjects involved in this study.

Thinking-Aloud Protocol Versus Retrospective Reporting

In the section dealing with data collection in Chapter III, the design permitted subjects to choose between the thinking-aloud protocol and retrospective reporting of processes involved in the composing process. Both strengths and weaknesses of these methods have been discussed in the two preceding chapters. As stated earlier, the researcher decided to permit the subjects to select whichever method of reporting seemed most natural and least intrusive to the task at hand.

Only two subjects chose the thinking-aloud protocol. Neither mid-life adult had participated in such an activity before, and both were intrigued by the idea and what their response might be. One subject was pleased with
the outcome. She considered the processes "merely saying aloud what I would be silently thinking anyway." She believed composing aloud more accurately captured her mental activities and did not impede her creativity or slow the thought processes.

The second writer, on the other hand, found the thinking-aloud protocol not so much a hindrance to the writing process, but incapable of obtaining all complex mental activities. After writing her poem and realizing what had been transmitted aloud and on paper, she then elaborated on several turns of thought that seemed to be forming simultaneously; yet, only one at a time could be voiced. If they had it to do over again, the first subject would choose the thinking-aloud protocol; the second would not. The 14 subjects who selected the retrospective reporting offered a wide variety of reasons (many quoted in the text) for their choice, and none wavered from this choice of composing style.

Even though both methods of data gathering provide significant insight into the process and patterns of mental activity, they both reflect the key limitation of the writer's inability to consciously and simultaneously attend to writing and critically analyzing the ongoing process behind it. The researcher hoped to diminish this limitation by permitting the subjects to choose a reporting method most comfortable to them.
Limitations of the Questionnaire

The questionnaire (see Appendix A) administered in this study presented decidedly severe limitations of usefulness in drawing conclusions. The Shortened Form of Betts' Questionnaire Upon Mental Imagery (Sheehan, 1967) was included in the research design to measure individual subject's vividness of imagery. Largely because of its brevity (35 items) and the scope of its modality coverage (measuring imagery in seven sensory modalities), Betts' QMI is currently the most widely used measure of imagery vividness. Literature about this inventory reveals promising correlations with other subjective measures of imagery vividness (Tower & Singer, 1980; Hiscock, 1978).

Yet, for this study, the instrument failed to yield meaningful data. The subject was requested to image specified experiences, such as the feel of sand, the taste of oranges, or the sound of applause, and then to rate the vividness of his or her construction on a seven-point scale ranging from no image at all to an experience as vivid as the real thing. Selecting a rating from this seven-point scale was an extremely troublesome decision for most subjects. Almost all reported uncertainty in marking responses for one or more of the following reasons:

(1) The description of slight differences in degree created doubt about the "right" choice.
(2) An inclination to mark all l's made them question their responses.

(3) A need to pencil in qualifying conditions accompanied numerous responses.

(4) A distinct feeling of compromise accompanied the respondents' attempts to report accurately.

(5) Mixed responses for the same image created indecision. Said one perplexed subject, "In my glossary of memory, I have six or seven references to the smell of cabbage."

One subject whose responses on the paper showed little variation in ratings actually described experiences of distinctly differing degrees of vividness. The researcher had to question the validity of these responses. But even more disconcerting than inconsistencies such as these were general dissatisfactions voiced by the majority of subjects. Indeed, it appeared as though the subjective experiences of images evoked by this test bore little relationship to any measurable capacity. For this reason, the researcher decided to exclude the questionnaire scores in formulating conclusions for this study.

Collection and Analysis Methods

According to the data collection and analysis procedures set forth in Chapter III, data were reviewed, coded,
and recoded many times over to arrive at some synthesis of thought and expansion of theory grounded in the subjects' experiences during the process of writing.

During the taping of the interviews no notes were taken. The researcher preferred to give individual attention to the subject and the processes under investigation. Extensive field notes were taken during the time blocks between the writing activities within Session I and immediately following both major sessions. These notes consisted of highlights from the tapes (some paraphrased, some quoted), factors which could be observed but not tape recorded, and the researcher's own hunches and intuitive sensing of factors impinging on the imaging and writing processes. Typescripts were made of those tapes filled with rich, descriptive data -- those with eloquence and revelation which defied paraphrasing or summarizing.

Field notes were then entered in marginal areas of the typescripts. Marginal codings for all notes included categories dealing with writing patterns, organizational processes, revision techniques, imagery patterns, and age/stage influences.

**Organization of the Case Studies**

The findings are presented in major divisions which correspond with the subjects' age/stage categories.
Presentation and analysis of data are provided for each of the four age groups. Upon reading and analyzing the material, the researcher realized very early that simply stating the outcomes would deny the reader much of the rich detail of the exploration processes which made the study vital and mentally invigorating to all the participants. She therefore decided to include one representative case study per age group to better convey the unique dynamics involved in the writing sessions.

For all pieces of writing the researcher attempted to trace the mental activity beginning with the experimenter stimulus through incubation to illumination (image production), revision, further incubation, and possibly changed or clarified image as the writer advanced to the final finished piece of writing. Through this process she also considered how life's experiences -- the writer's stage in life-span development -- influenced the writer's perceptions and responses.

While all subjects participated in two writing activities, the researcher has chosen for the case study presentations to include an indepth examination of the short poem written during Session I or the incubation activity from Session II. The second activity was generally preferred for analysis because it not only provides a stimulus for writer response in imaging along
with an avenue for analysis of all subsequent stages of composing, but it provides an extended incubation period during which the writer explored, wrote, and revised in a setting more natural to the writer. Location, time devoted to mental explorations, number of drafts, and other revising methods were controlled by the writer rather than the researcher, thereby yielding a more representative sample of the writer at work. Since the writer kept a log of dates and changing ideas, the mental processes, revision tactics, and poem formation could be examined by both writer and researcher upon completion of this second writing activity.

Each case study provides a progression through the writing process, capturing the writer's images, feeling, and movement (however halted or free flowing, however forward bound or doubled back). Presentation of each case study is organized in the following manner:
(1) profile of the writer, (2) sources of inspiration, (3) writing patterns, (4) indepth examination of one writing activity from one of the sessions, (5) implications from images as related to life stage, (6) common and unique patterns of other subjects in the same age group. Analysis and discussion of the findings are interfaced with these case study presentations.
CASE STUDY OF A PREADOLESCENT WRITER

Profile of the Writer

Penny (a pseudonym) is a bright, imaginative 11-year-old who has just completed the fifth grade in school. Writing, for her, provides an extension of her everyday world into the world of make-believe. She likes to write space stories and create "people who are different, strange in some way from others. They can do things that nobody else can do." Permitting her imagination to create the unreal, she then spins adventures in this new realm.

Sources of Inspiration

Motivators include reading books with intriguing characters and story lines which inspire her to create her own. "The Magic Unicorn," one of her favorite stories inspired in this manner, told of a boy's memory erased by earphones.

Without even being asked about a particular incident of imagery that guided some piece of writing in the past, Penny enthusiastically volunteered such a description when she told about how her dog inspired a story one summer afternoon:

One day my dog, Buffy, and I were sitting in the yard by the house on a wonderful day. I was feeling especially happy that day. I looked at the dog and saw in her eyes a reflection of the sky, grass, and trees. The image was so clear and strong it made me jump up and go right in the house and start writing about a girl in the forest.
This image inspired a most fanciful story about a girl with wings who spoke with her dog in a language they alone could understand. She reported that the image carried with it "a definite peacefulness" as she contrasted how she has been longing to be back on the farm where she lived before her parents' separation.

Penny and her brother mentally sectioned off a portion of this farm and named it "the secret land" where they could indulge in their make-believe world. She described a large rock, "Almost too big to roll over." When the rock was moved, it left a hollow space large enough for Penny to hide in. "It was really neat and I thought, gee whiz, I could write a story about this!"

Her story has a boy playing hide-and-seek, opening and entering the rock, and finally going under it. Before he realizes there is no ground beneath it, he falls through the whole planet and encounters new adventures in space.

**Writing Patterns**

Penny's ideas develop as she writes. "It seems like my hand is always ahead of my mind. I don't know that I'm writing until I see the words as I'm writing. I write, and I read after I write, but I'm still writing at the same time."

Even though she preplans, rereads, and ponders parts
of her longer, on-going stories, her shorter, more whimsical pieces often seem to flow directly from the pen -- almost as if hand and mind function simultaneously. She offered this uncertain attempt to describe the process:

It was almost like I was thinking without thinking (giggle here) and then I wrote it down but didn't even know I wrote it down (giggle again) but did know I wrote it down."

As with most writers, she found it impossible to isolate and identify precise and ordered sequences in this process. Rather, she says she finds out what she thinks when she writes, suggesting that none of her word-generating is conscious. Her words are shaped, as James Britton (1970) says, "at the point of utterance," on the tongue, the pen, or in the voice she hears in her mind if she rehearses them mentally. Yet, surely her word-generating is a conscious endeavor at the point of formulating intentions for the words she produces and again at the point of rejecting or revising words after them come.

Penny's writing patterns exhibit rich, fanciful imagery from the onset of initial thought to the final written product. Judging from the writer's own assessment and the researcher's observations, this young writer gives little attention to internal editing and revising. While many subjects required several drafts to achieve satisfactory expression, Penny's copy is
unusually clean. Some spelling errors exist, but deletions and alterations are almost nonexistent in her work. This pattern may have evolved from her flashes of insight sparked by highly creative instincts.

When engaged in a creative outpouring, Penny's own identity seems to fuse with the act of writing and its resulting product. The phenomenon occurred during Session I when she chose to develop the gentle summer rain image. After stating a preference for the silent writing method over the thinking-aloud protocol, she bent intently over the empty page. Her mannerisms took on a push of urgency as her pencil scratched quick phrases across the page.

After what seemed sufficient time for her to have completed the activity, I interrupted her to ask how close she was to ending. With an agitated expression, she drew in an uneven breath saying, "I don't know when I'll end, but right now I'm shaking and I'm too scared to go on." Her fear stemmed from the episode she herself was creating on paper.

Initially this image of the gentle summer rain was comforting and fragrant as she entered a forest and luxuriated in the pine scented haven. She doesn't know what made her see a snake, but the intense horror of this image caused physical reactions. The anxiety
she displayed was absolutely genuine.

Another example of the urgency which accompanies her writing impulses is the need to immediately set down her ideas as they occur. "Sometimes I write them in the dirt, on leaves, and on scratch paper -- just to get it written."

Incubation Activity (see Figure 4)

Penny's imagination, anchored in a mythological type of development, took a hero journey through the three gates. Drawn irresistibly through the first gate, she became a unicorn (love of horses affected this symbol) to fight the Thing. A second transformation resulted in an eagle permitting her to fly through the second gate. Flying through the third gate, a wall of fire, resulted in a transformation back to the human form. The adversity endured throughout this journey made the reward at the end especially victorious.
I was breathing heavily; it had taken a long time to crawl up that hill. I saw the gate that I had seen through my binoculars at home. Only now they were more awesome. They were dark red, just like you would imagine the gates to a palace. On either side of the gate were red horses, each without a flaw, each seemed alive, but each were made of stone. In the middle there were lots of bars, and even though it was beautiful, it was somehow telling me not to go in the gate, not to even touch it. And it didn't, not for awhile at least.

There was a funny thing about this gate; it was only a gate, there wasn't any fence! I reached out to touch it and felt a strange tingling sensation. I put both hands on the right horse's left front leg. The tingling feeling grew, and soon I couldn't feel anything. It was like I was being pushed against the gate. Everything was black and white. It

Figure 4. Story developed from Penny's incubation activity.
It seemed like I was there against the gate for hours, and then it seemed like I was being pushed through a wall of diamonds, where everything is bright, not only seeing it, but by the way that it seemed to press my body against its solid mass, and the way it burned. Then I passed through, and with a great shiver, I was pushed through, and landed, lying down, on some grass. Right away I tried to move, but couldn't. I wasn't breathing, I couldn't hear my heartbeat. I must be dead. I couldn't open my eyes, I couldn't feel. It was as if I was in a cloud, which I couldn't feel, in the sky. All the sudden I could feel a warm glow all over my body, and a voice seemed to say in my head:

"Do not be afraid of what will happen. It will happen because it needs to happen."

Figure 4 (continued)
Just then my body seemed numb, and I felt something pushing, not hurting, just pushing at different places. When finally everything stopped pushing, I had gone into a difficult position. Then I gasped loudly and struggled to regain my breath. When I had, I looked at myself. I stared, shook my head, and stared again. I had been transformed into a Unicorn! I looked around. I was taller, definitely more beautiful, and after I practiced running for a bit more gracefully, I took smooth strides at a canter, and headed in the direction that I could smell water. All of the sudden it grew dark. Then I realized that my horn glowed. It cast some scary shadows. It was still walking, when I heard a rustling noise. Then I saw big amber eyes looking straight at me.

Figure 4 (continued)
From deep inside me welled up and overflown the instinct to fight, and it quickly took over. All I could do was let it. As soon as it took charge, the Unicorn screamed its horse-like challenge, daring the enemy to make itself known. In response the Thing sprang with greased-lightning speed toward the neck of the Unicorn, but the Unicorn side-stepped lightly and grazed the Thing's side with its teeth. Before the Thing could pull up to a full stop, the Unicorn screamed its shrill challenge again and raced toward the Thing, threatening to pound its head into the earth, smashing its scull into billions of pieces. The Thing went to the side and jumped astray at Unicorn's head, teeth bared, ready to eat Unicorn flesh. But Unicorn ducked her head and Thing sailed over her head, strafit into a tree.

Figure 4 (continued)
Unicorn's anger died as I did, and once more I was in control. I had been amazed at the agility and gracefulness of my new body. I glanced sorrowfully at Thing; I couldn't tell what it was except a dark blot. Then ahead I saw another gate. I turned toward it, but for each step I went forward, it seemed that it was going away from me, not toward me! I stopped and closed my eyes. Then I opened them. Instead of the gate there now stood a tree. It was as big as a building! I went toward it and then around it. As I went around it, all the sounds that I had ever thought scary came to me, and I saw everything that was real or imagined that was scary... I smelled the most revolting things, and it seemed there was a goiter all over my body. I ran with all my speed, bumping into things I couldn't see. I screamed

Figure 4 (continued)
and it came out sounding like a witch's cackle of mirth. As I ran, faster and faster still, I felt a tug on my legs. Then they got entwined in long grass and tangled, so I couldn't move. Then, without hardly knowing, what I was doing, I lowered my horn and shot a beam of yellow towards the tangle, and it was free! I was still running and I still couldn't see for the bad things were taking up all my vision. I was leaping now, higher and higher. As I took the fifth leap, in midair, I could suddenly see again! But what did I saw was the next gate, right in front of my eyes! I closed them and braced for the crash, but it didn't come. Instead, when I opened my eyes, I was in another place, but it was cold. When I looked down, I discovered that I wasn't a unicorn anymore, but an eagle. I practiced flying for a while, then I flew to a...
High branch and settled down to sleep for awhile. It had been a rough day, and the sun was setting behind some mountains. Quickly I fell asleep.

I was awakened suddenly by a noise from far off. I raised my head and saw animals coming from every direction toward me. I rose swiftly in the air and raced toward where the rest were going away from. Then I saw it. It was a fire, but bigger than I had ever seen. It took on a shape that looked like a dinosaur, and raised one of its hands. It came at me, and singed some of my tail feathers, but I escaped. Then I heard a shot, like from a shotgun, and something brushed my side. A farmer was shooting at me! No, a whole bunch of farmers were shooting straight up continually, and I had flown almost right into a bullet! Now, with the fire in back, and the barricade of bullets in front, and suffocating smoke on either...

Figure 4 (continued)
side, I was trapped! I couldn't fly up any more, or the air would be too thin for me to breathe. The fire was closing in, and I was beginning to choke from so much smoke. The only way out was to go through the fire, or through the grill. I closed my eyes, took a deep breath, and summoned my greatest speed, and flew headlong into the fire.

There was an enormous Whoooshhh! sound, and a crack, then what sounded like glass shattering. When I opened my eyes I was sitting on the ground, once again a human. Next I heard a voice say:

"Good work. You did exactly what you should've done, and I think you earned every penny you get. Especially going through that fire, even when you didn't know it was a grade. Come back some time, and spend your money wisely. And the voice faded. I wondered what he was talking about, then I saw a sign. It said: "Do I to Next Tree."

Figure 4 (continued)
So I did. It was hollow. I tapped it lightly, and a little door flew open. Out of it spilled what looked like billions of quarters, but when I looked closer, I saw that they were all silver dollars! "Maybe I will come back some time," I thought aloud. "Maybe I just will."

The End

Figure 4 (continued)
Development of Story

Penny reported that vague thoughts stayed in her mind before she jotted down these ideas she might use in her story:

1. Gates without fences
2. Bad things first; good things last
3. Animals without shapes
4. Gates getting farther away from you as you go near it
5. Scary things of imagination

Her concentrated thought for this story did not begin until the second day. True to her writing habits, she plunged into this imaginative narrative with vigor. To pace her work, she promised herself a reading break at the end of three finished pages of writing. "Sometimes too much concentration can make you sick from writing a story. Your mind goes black; you can't think clearly; and it burns. It's in your brain. You wear out, kind of." This statement reflects the intense urgency of her creative endeavor evidence in the previous session when she encountered the snake in the forest.

With the self-imposed breaks to help rest her mind she continued with the story and finished it on the third day. By breaking her writing up, she allowed some ideas to incubate and believes that her mind (more than her hand) controlled the story line.
Implications from Images as Related to Life Stage

When Penny was asked how she believed her life experiences affected her images, she definitely believed her love of horses and farm life influenced her response. "I like to put the magic of the countryside in my stories." Even though she does not write there, her thoughts go back to the farm where she spent her earlier years. She said she made up the entire story, but one part did reflect her own life -- the aspect of the unicorn fighting. "Sometimes I want to fight as a horse against another horse." She was fighting an enemy she knew nothing about, and claimed to take out her own frustrations on other characters in the story. "Also frustration on my brothers!"

A conflict heightened by the transition period of this age is manifested in her writings stemming from her dislike of city life as compared to country life. The usual demands for adjusting to a new socialization of this life stage call for individuals to attempt to confirm or validate earlier social learnings. Penny's challenges include readjusting to her parents' recent separation, the reason for the abrupt move into the city. Being away from her old peer group and best friend saddens her. Thornburg (1983) claims, "Today, these groups seems to have more solidity and the impact on an individual who is severed from a group is greater at
this early age than used to be the case" (p. 82).

Penny uses writing as a mode of circumventing or sometimes responding to the pull exerted by the social changes in her life now. The image she perceived in her dog's eyes took her from the loneliness and confinement she felt in her new city home to the forest and her world make-believe. She became the girl in the story living in a fantasy world with her own rules. Actually becoming the central character in her story permits her to experience, for example, "the beautiful, black horse that I would like to be -- to run, canter and fight."

All of Penny's writings contain strikingly vivid images expressed in several sensory modalities. Note these examples from her story, Figure 4: (a) forbidding, dark red, palace gates flanked by red flawless horses made of stone; (b) wall of diamonds, their brightness sensed by pressing her body against their mass and by the burning sensation; (c) transformation into a unicorn made her taller, more beautiful, more graceful; (d) smooth strides at a canter; (e) glowing horn which cast scary shadows; (f) screamed its shrill, horse-like challenge; (g) witch's cackle of mirth; (h) forest fire taking on dinosaur shape; (i) fiery hand singed the eagle's tail feathers; (j) trapped by a barricade of bullets in front and fire in back; (k) enormous whooooshhh, click, followed by sound of shattering glass.
Much of her writing parallels mythology; yet she has only limited knowledge of classic myths and shows no inclination to copy these legends. The myth images are depicted with dramatic force and color in a plot involving confrontations with super human beings. The story Penny wrote for the incubation activity was typical of the hero journey in which the central character endures hardship, conquers great adversity, and emerges victorious at the end.

Clearly, Jung viewed the images of mythologies as serving positive, life-furthering ends. The demands of daily life can dominate one's outward-oriented consciousness causing one to lose touch with inner forces; and the myths, claim Jung, when correctly read, are the means to bring us back in touch.

The same opinion is expressed by Joseph Campbell, a leading authority on myth, who has written and edited over twenty books on mythology. "The fundamental theses of mythological thought have remained constant and universal, not only throughout history, but also over the whole extent of mankind's occupation on earth" (1972, p. 21). He maintains further that mankind shares common denominators because of the myth-making process. Man's basic need to create myths serves as a creative force behind much of both ancient and contemporary literature.
This myth-making instinct is not relegated to any particular age group, but rather applies to mankind in general in the attempt to explain certain universal needs and primitive behavior patterns. Yet, in this study the inclination to write creatively about supernatural beings did occur most often in the preadolescent stage, followed by the late adolescent-to-early 20s stage.

**Common and Unique Patterns of the Preadolescent Stage**

As compared with other age groups, the preadolescent subjects respond with more images in the world of the supernatural and make-believe. Although not exactly like the mythological tale of beasts and birds facing hardships, another story featured a medieval castle setting with the ten-year-old writer identifying with the main character throughout the adventure. This young male writer lived the role in a contest by singing an original ballad and by jousting in the Grand Tourney. The hero after claiming first prize, a golden harp, returned home to compose ballads and sing for his king. Rich, descriptive images were sprinkled throughout this arthurian romance.

In all instances, the three gates stimulus evoked images which led the writers through some kind of
personal adventure or exploration. One young writer who interpreted the gates as spring, summer, and fall filled her story with images of nature as she portrayed, through several sensory modalities, this "walk" through the seasons. Another writer saw the gates representing her different worlds -- three decidedly different surroundings and corresponding attitudes.

All subjects reported their sense of development was strong and sure, although varying strategies were used to achieve final expression. No one completed the incubation activity at one sitting; all let thoughts incubate for varying periods before "playing with some ideas on paper;" and all expressed a sense of satisfaction with the final product.

Other common general writing patterns include the preference to write silently rather than engage in the thinking-aloud protocol; an inclination to write about people and some problem they face; and a preference for prose over poetry. This last preference was strongest in this age group and seemed to stem from the subjects being more exposed to prose techniques than to poetry. Most have worked with only the simplest form of poetry at this point and therefore lack skills in following prescribed form.

Along with enjoying the freedom they sense from the prose form, they enjoy the freedom of writing when
they don't have to do it for a school assignment. One writer indicated if she has to follow specific rules in her writing, she then needs to revise more. On the other hand, when given free rein, her thoughts and writing flow more naturally. "Maybe it's because I don't have to stop and think about what I'm supposed to write. I can just write whatever I need to write, whatever is natural and wants to come."

Some differences in their writing patterns appear in their preparation and revision stages. In contrast to the three young female writers in this group who plunged animatedly into the writing upon the first flash of insight, the young male writer worked with a plodding determination to have ideas well ordered before beginning to write.

An actual list of carefully sequenced ideas was drawn up only after a trip to the library to find source material to supplement his own understanding. After a rough draft, numerous changes were made in the recopying effort and always he does more mental editing than correcting on paper. Unlike Penny, he never feels his hand gets ahead of his mind in recording words on the page. Ideas continue to come to him when he is finished; therefore, he feels he could never rely upon a first writing to capture his intent to produce a
What a sharp contrast this is to one subject who generally revises very little. She insists, "Usually the first thought is the best. And sometimes I do go back and add a word to make it more descriptive or take a word out, but usually I just leave it as is."

Taken as a whole, the subjects in this category performed most singularly with their delightfully open, active imaginations. They exhibited totally free abandon to discover and create. Still somewhat unfettered by society's constraints, they escape many of the conventions that impede other age groups. Their fresh, uncluttered, unreserved imaginations permit them to explore with charming innocence their worlds of make-believe.
CASE STUDY OF A LATE ADOLESCENT WRITER

Profile of the Writer

Eighteen-year-old Michelle (a pseudonym) is now entering her first year of college. For her, writing has always been a way of exploring her reaction to her world. "It's just the best way to communicate with myself." Having written for as long as she can remember, she recalls writing in younger years about objects, followed in later years by events, and eventually graduating to ideas often laced with complexities and emotional overtones. Of her poetry she says, "It often has a dreamy tone. The poems are little glimpses of life expressing feelings."

Sources of Inspiration

A compelling need to develop and sort out her thoughts is Michelle's greatest source of inspiration for her writing. Although with some pieces on some occasions she considers audience, most often she writes for herself as she responds to stirrings within.

While auditory stimuli tend to distract her thought flow, visual stimuli frequently trigger mental connections which inspire her creative writing.

I can find more inspiration from visual things than from hearing things. A lot of times if I hear something, it tends to be more distracting to me, to my thought processes. Maybe it's because you can look at something and then you can go back and reorder it in your mind.
One image that stands out in her mind as a particularly strong inspiration for a poem was a ballet performance. She described the magnificent fluid movement of two dancers performing with an unbelievable precision as if controlled by one mind and performed as one body. So moved by this performance of "Midsummer Night's Dream" ballet at the Paris Opera, she wrote her own poem with the hope of capturing the delicate beauty of this dance form. She believes her affinity to both music and ballet helped foster this image.

Writing Patterns

With some idea of direction and intent, Michelle lets her ideas evolve as she writes. When she begins writing, she notes:

I kind of warm up when I write. When I start off, it's not that good, or at least I don't think so. And then ideas start flowing. Soon I might have two segments up here that I decided I like, but by the time I get to the third segment, I need to go back and see where I've been.

Always, she tries to complete an entire thought unit or stanza before stopping to reread. Specifically, she sharpens her internal ear for "flow of words, repetition of words and meter — whether the feeling suits the rhythm."

She believes she has cultivated an awareness of whether the words are in sync with the meter, although she admits there are times when a prescribed meter and rhyme scheme affect the outcome adversely:
Sometimes I've had an idea for a poem and I'd start to make it rhyme. Then something didn't rhyme, so I changed that next line to make it rhyme. But that changed the whole poem. I end up with a completely different poem than I thought I had started out with.

Before any editing can take place however, she realizes she must write it down or risk forgetting it. When asked how her mental editing differs from editing on paper, she replied:

Your flow is different than when you're thinking. When you're thinking, you're just kind of toying with ideas. But you don't remember the exact order you want them in. You know, you just go jumping from spaces to spaces. But then when you write it down, you're looking at your pencil and paper and you start to get more of a structure of ideas.

Although she prefers revising in her head, it occasionally interferes with her thought pattern, so she tries to write down what she's thinking at the time. "And sometimes it's really abstract, and I'll just think, now that has nothing to do with this. Then when I reread it later, it usually fits perfectly." Her comment testifies to the fact that reading is a part of writing and revising.
I walk alone
in the crunch, crunch, crisp winter snow
stepping on someone's fallen angel,
following the magic trail of footprints
in this fairy land of fallen snow
as the diamonds of the sky above
are matched by the wonder glistening below.

Brutal vigor of life is felt
like a windswept desert
or a stormy sea.
And yet all seems still
and quiet as a mummy's tomb.
All life on earth is locked within her womb.

Figure 5. Draft and Final Version of Poem from Michelle's Image Stimulus.
Poem from Image Stimulus -- Session 1

The image, evening winter walk, was selected for further development in this activity. The content of this poem, the images and symbolism, and the strategies involved in the composing process are all justifications for closely analyzing this piece of writing (see Figure 5).

Michelle's first image was that of sparkling snow reflecting a sparkling sky. She then envisioned herself in the midst of this setting and immediately responded to the visual, auditory, and kinesthetic sensations. The second line in her poem depicts an intensely cold winter scene. She explains, "Because the snow has been there a while, it has formed a thin crust of ice. When you walk on it, for a moment you're in the air; you're not on earth; and then, 'thunk', you sink." The reader hears the rasping, grating sound of feet crunching in crisp snow.

Symbolism and complexity of thought begin to surface in line three with the image, fallen angel. Her most obvious reference was the imprint made by children lying on their backs in the snow. The thought of the fallen angel, Lucifer, crossed her mind, but, "the idea I really wanted to get across was, well, for me, it's magic. But it's a little more untamed, brutal, than life really is." At this point she was searching for a way to set
up a contrast, a way to unleash this untamed brutality she sensed amid this tranquil glittering winter night.

In the next line grouping she wanted to portray a peacefulness, but decided to cross out the lines which read:

The kind snow gives and awakens as does the cool breeze.

Even though that sentence conveyed a peacefulness, it lacked the allusion to magic. To the poet this aura of magical beauty and serenity was absolutely essential for a decided conflict she wished to introduce next. "I like magical things thinking that there is some secret, some sparkle, some mystery."

The contrast she wanted to make with peacefulness was one of inner conflict -- "there was peace, but beneath it was struggle and strength banging against it. It was hidden -- this conflict of something itself conflicting against itself."

Carl Jung, Rollo May, Alfred North Whitehead, and Paul Tillich all believe reality has the ontological character of negative-positive polarity. They see reality not as consisting of substances in fixed states but as a process of dynamic movement between polarities. These opposing forces can be seen readily within an individual, between relationships with one another, and universally at a more global level.
More specifically, May (1969) suggests, "The symbolic is that which draws together, ties, integrates the individual in himself and with his group; the diabolic, in contrast, is that which disintegrates and tears apart" (p. 138). Repeatedly, he speaks of the opposing forces, the push and pull, in life. Eros, he suggests, is the force which "draws us from ahead," the power which produces the pull. The negative complement is the daimonic, the blind push, the nonrational assertion of ourselves.

As Michelle describes this contrast in her poem, she confides that frequently in her poetic musings she confronts similar polarities. Because her poetry is often the product of her introspective explorations, she exemplifies another of May's (1969) observations: "Poets often have a conscious awareness that they are struggling with the daimonic, and that the issue is there working something through from the depths which push the self to a new plane" (p. 127).

She succeeds in establishing a contrast to peacefulness with her next three lines:

Brutal vigor of life is felt
like a windswept desert
or a stormy sea.

Her tranquil image is transformed by ravages of nature, only to return once again to the eerie silence
suggested in the next two lines:

And yet all seems still
and quiet as a mummy's tomb.

She presents striking opposites when she contrasts
"brutal vigor of life" with "tomb." Clean, vivid
images add a definite strength to the similies woven in
this portion of the poem.

This final line alludes to several significant
dimensions:

All life on earth is locked within her womb.

When asked what inspired the womb image, she responded,
"In all my poetry earth and nature are female. I
consider them to be female because others may say that
earth can be brutal, savage, and vengeful and that it
should be male, but it's still loving." To her, the
feminine was embodied in the earth's nurturing, holding,
and loving. She wasn't aware of how completely her
statement echoes the philosophy of many psychologists.
Jung (1933), for example, states:

The mother symbol is archetypal and refers
to place of origin, to nature, that which
passively creates, hence to substance and
matter, to material nature, the lower body
(womb) and the vegetative functions. It
connotes also the unconscious, natural
instinctive life, the physiological realm,
the body in which we dwell or are contained,
for the "mother" is also a vessel, the
hollow form (uterus) that carries and nourishes,
and it thus stands for the foundations of
consciousness. Being within something suggests
darkness, the nocturnal -- a state of anxiety
(p. 24).
This statement directly parallels Michelle's own philosophy when she refers to life on earth locked within the womb. She depicts the active, opposing dynamics of life forced to remain stilled within the confines of a darkened womb. The ensuing contention, then, directly explains Michelle's sense of hidden struggle, "this conflict of something itself conflicting against itself."

Her active interest in magic and myth is supported by Joseph Campbell (1972) who, having studied the mythological transformations of the female, sees many of the figures as earth goddesses who govern fertility; they represent "mother earth." Erich Neumann (1954) writes of the Great Mother capable of behaving as the wicked, devouring mother as well as the good mother lavishing affection during her reign over the early psychic stage of ego development.

These concepts about the mother earth archetype also reflect an important part of the yin concept of Chinese philosophy. Of the two complementary forces (yin-yang) that makes up all aspects and phenomena of life, yin is conceived of as earth, female, dark, passive, and absorbing.

One of the most impressively insightful comments this 18-year-old young lady made concerning the nature of her images as they reflect the dialectical forces of life
came with:

One of the best images I have in mind is from a play by Eugene O'Neil entitled "Strange Interlude" that discusses pain in birth. And that's what all the forces in life are. There is pain in creating. That's part of it, but there's also joy that's intrinsic.

Here again, Michelle was indicating her intuitive awareness of the dialectical forces she senses in her own life as well as the world at large. Her sensitivity is heightened beyond awareness of normal vicissitudes of everyday life; she responds with keen intensity to the various levels of her psyche.

**Some Implications from Images as Related to Life Stage**

Images in Michelle's incubation activity (see Figure 6) reflect some of her philosophy about her own life. She uses a country pasture as a metaphor for life and divides it into three enclosed areas, which she refers to as locks. "I guess life is all these places in one spot, but you go to different levels."

To assist her in portraying the sense of on-going opportunities and progression of stages, she decided to employ images from seasons. Her first lock personifies spring and youthfulness with vivid images of sound and color: white daisies; soft, green grass; rainbow colored children sparkling laughter; chains of butterflies yellow, gold, white; lemon drop sun. She levels some
IN THE PASTURE

**Lock I**

at first there is spring
with rows of daisies white
sprinkled on soft, green grass,
sugar sweet.
rainbow colored children
make magic with their sparkling laughter;
that turns into chains of butterflies yellow, gold, white,
dancing under the lemon drop sun.

**Lock II**

then I stumble through,

but I am

enough

to stand on My own two feet

alone

lazy-wading through a new ice cool stream

under mellow shaded tree.

**Lock III**

Suddenly blinding blaring light
it's a new world
it's My world
but not a Magic world.

they all rush about
somewhere else to go,
not here
Yet Here Is Beautiful.

---

*Figure 6. Poem developed from Michelle's incubation activity*
criticism of these images by accusing herself of idealizing childhood too much. She believes the images create a carefree, frolicsome attitude that misrepresents her true belief. As people mature, they tend to idealize childhood forgetting how painful parts of childhood can be, she contends. Yet, in reevaluating her poem, she decided to retain these images since they aptly depict spring and establish a contrast for later stages in the poem.

Her images, though spontaneous, underwent some scrutiny and alterations as they were recorded on paper. Michelle shares some interesting thought progression as she traces the formation of:

rainbow colored children
make magic with their sparkling laughter
that turns into chains of butterflies
    yellow, gold, white
dancing under the lemon drop sun.

Originally, her choice was: chains of laughter, not chains of butterflies. "I thought of silver chains of laughter, almost like they were animated. But I like the butterflies better. And especially, I like laughter turning into chains of butterflies."

In Lock II her style of writing changes to reflect needs, moods, and growth in that period in her life; spacing of lines suggests extra psychological space demanded in this adolescent stage. Capitalization,
nonexistant in Lock I, now emphasizes words reflecting the self throughout the remainder of the poem. "The phrase: but I am, says that I exist -- alone. When I was thinking of this next area, there wasn't anybody else there. That's what I was feeling in adolescence -- a kind of aloneness -- that you think other people don't understand what you're going through."

This decided mood shift in Lock II comes with a sense of groping, confusion, and "almost a finding of self. It's like if you ponder something but you don't know what it means; you're just philosophizing or whatever and you don't have the answer." She permits this exploration of needs by permitting herself to be alone; by providing psychic space for discovery. She suggested that these new electric, vibrant experiences are introduced with the image: a new ice cool stream. Summer is only hinted at in this stanza: lazy, mellow shaded tree. But at this point she realized the image of seasons didn't serve her as well, so she dismissed the season cycle for Lock III.

Images in Lock III represent what Michelle perceives as her current stage in life, young adulthood. She clarifies her values, assesses her past achievements, and begins to define career paths; she calls this the real world. The blinding, blaring light suggests stark
reality; no more magic and chains of butterflies. "My adjectives and images suggest an action-oriented world." The sense of haste pressing on society is reflected in this stanza. Michelle feels society dictates, "C'mon, hurry up; get on to the next stage; grow up fast; let's do everything." But she wishes to point out in her last line that each stage has advantages and aspects to enjoy. "You don't necessarily have to jump on to the next stage. There's something beautiful about each one."

Through the images in this incubation activity Michelle evidences a definite sense of progressing through rather clearly defined life stages. For her, the enclosed areas, locks, are ages and stages in an entire life span, the pasture. An early inclination to let seasons of the year help define the various stages worked well for youth and spring, but failed to serve her for the last two stages which she identified as adolescence and early adulthood. She preferred avoiding winter images altogether, believing that winter is synonymous with death; even autumn seemed to suggest more maturity than she wished to portray in her current young adulthood stage.
Common and Unique Patterns of the Late Adolescent

All subjects in this late adolescent stage stated a preference for writing as an outlet of expression of private feelings. They experience intense and often confusing emotions which they find difficult to verbalize but are able to release through written expression. "I like to get it out, regardless of whether I'm happy or sad." Because writing is a release, it is also a comfort.

Differing themes of images run through their writing. One writes about the ocean, the shore, sand, and waves; one writes about ballet; one writes about nature in general; and one focuses heavily on religion, currently a big part of her life.

All writers preferred the silent traditional mode of writing for a number of reasons: "I'm sure I think faster than I could possibly talk." "My thoughts would change through the act of hearing myself say them." "Verbali­zation might distort my thoughts." "Images might be destroyed."

Although generally these writers do not show their work to others in the various stages of composing, they do frequently share with others when they are finished. Two write with immediate inspiration, steady word flow, and little revision. The other two get ideas down on paper, then analyze and revise as they try to achieve a satisfactory finished product.
Patterns of incubation activity varied somewhat for writers in this age group. Before completing the assigned exercise for Session II two subjects began recording ideas soon after reading the instructions and developed their ideas gradually over the four day period. One writer let ideas incubate for one day, then wrote the entire selection in one-half hour at a single sitting. At the other extreme, one writer let thoughts incubate for three days. At 3:45 on the day of the second scheduled interview, the subject was awakened with sudden illumination -- a creative idea that had to be expressed.

His experience parallels the creative illumination reported by Poincare (Ghiselin, 1952). After working on the incubation activity with very little progress, he went to bed feeling anxious about the approaching deadline and sensing the ideas were "complex in my head." When he awakened suddenly in the early morning hours, the idea of developing the gates as stages in life came to him with stunning clarity. The burst of energy coming from the creative outpouring forced him to get up and write the poem in its entirety at one sitting. The writing came with ease and sureness. Yet, when he was finished, he was unable to quiet his mind; "I wanted to do so many other things because the energy was so intense." After practicing his saxophone for a while, he eventually returned to bed in a more relaxed state.
At the time of this study, one writer mentioned a poem he had begun thinking about two summers ago, but wrote only last month. His mind still plays with it, yet he explains that his objective, critical view comes after it is on paper because in the earlier stage, he is simply working toward getting something down. The incubation process continues to function by allowing the writer to mull over his thoughts in the "deep well of unconscious cerebration" (James, 1934; cited in Miller, 1972).

Of the incubation process another writer commented:

Sometimes I ponder something for a week before I could really get the right stuff down. Other times, it just comes. I'll hit some hidden trigger or switch that gets things moving in the right direction.

Each writer expressed a satisfaction of writing with symbolic expression. Sometimes the symbol is readily interpreted by another reader; then again, "the symbol means something else to me that on paper would look a lot more simple." For one writer, the pain he is expressing in his growth and development since his father's recent death finds articulation through symbolism that is meaningful only to him. For another, the symbols reflect mythology, as when a rose tells the story of the crucifixion to a unicorn. In this complex tale, the writer is trying to decide how love can conquer as she wrestles with whether to follow Biblical teachings of a
nonviolent love, to permit the unicorn to fight, or to let the unicorn die in an honorable way without fighting. Again in this mythological tale a heroic epic evolves as the main character (unicorn) conquers the foe.

Whether or not images were symbolic, three of the four writers immediately imaged discernible objects upon hearing the stimulus. One writer, however, instead of forming distinct pictures, responded with a "felt-meaning," a response a number of social phenomenologists refer to as Verstehen. Bernstein (1976) quotes Alfred Schutz saying, "Verstehen is first of all the name of a complex process by which all of us in our everyday life interpret the meaning of our own actions and those with whom we interact" (p. 139).

This young man permits his emotional response to guide his reactions in his writing. He then tries to incorporate images to express these feelings as evidenced in his first stanza developing the county fair image:

Signs say, "Come to the Fair."
As sadness wells inside.
For me who does not care,
For feelings he must hide.

To complete this five stanza poem with a first/third, second/fourth line rhyme scheme (see Appendix B) images of horse races, midway games, and the Ferris wheel are chosen to highlight the contrast of empty loneliness
he feels internally but is forbidden to reveal externally.

Each writer in this age group produced exceptionally creative poems from the three gates image. Already discussed in an earlier section was the writer who interpreted the three gates as stages of life (see Appendix B). Sensitive perception and vivid description accompanied each stage. Especially poignant is the image of the wilted flower slipping through the fingers used to symbolize life fading into death.

Even more complex is a lengthy and insightfully developed piece the writer entitles "Fences of the Mind." In this poetic narrative the writer chronicles the stages the mind goes through in the decision making process. While she doesn't address levels of awareness or layers of consciousness, she does trace decision making through a hierarchical schema when she compares the germination of an idea to a factory worker. She discovers certain constraints serve as fences of the mind by creating limiting world views. Typical of other adolescents who rely upon reflective writing to clarify values, the poem permitted her to explore the parameters culture imposes on an individual's freedom of decisions.

Uniformly in this age group, the subjects let their imaging serve as a vehicle for exploring their transition stage of seeking to clarify sense of self and
goals in life. Without exception, the writers discussed the conflict and struggle in their own lives along with an absolute drive toward resolution of their uncertainties.

They cry out with naked vulnerability: "So many things just don't make sense."

They reach out: "Why? What sense is there to many of the standards imposed by society?"

Yet, they want to make their own decisions: "I want to try new things -- be abstract, unconventional."

The bulk of their poetry deals with struggle, "maybe because it's the hardest thing to deal with, it's the easiest thing to write about. At least writing about it is a diversion and works toward a solution."
CASE STUDY OF A MID-LIFE WRITER

Profile of the Writer

Sarah (a pseudonym) at 40 is indeed entering a transition period in her life. A mother of three teenagers, she returned to the work force a year ago and is now outlining new career goals. With plans for remarriage within the year, she regards her own mid-life period as one which offers new opportunities for her to accept with an outlook of heightened appreciation and wisdom.

Writing helped sustain her during the trying times of her transition period. "I always liked to write, but it wasn't as important to me as it has been in the past few years as something that belongs to me. It was something I used to communicate with; now it's beyond that." When she was around 30, she tried to find an outlet of her own. She tried drawing, painting, pottery lessons; nothing fit. Writing serves to gratify this need.

Sources of Inspiration

Sarah's motivation to write comes from life itself. She is constantly alert to people and situations yielding potential vignettes for her writing -- even when a situation would not normally lend itself to this kind of analysis. An example of such a situation can be cited when she waited with her critically ill mother in an emergency room. Sarah wrote in an attempt to quiet her concerns; the situation seemed to demand that she write
then and there. "Sometimes I can be a participant in a situation and think about writing. I wonder, how can I be thinking about writing when this is happening?"

She describes writing from observations as creating "a little snapshot of a moment."

It may be with two people or just something that I witnessed. Maybe I'd get an idea of how that person might approach life in general. I don't seem to create situations I wasn't involved in to some degree.

Depiction of characters usually incorporates possible irony or paradox; colloquialisms of the area add local flavor to her pieces and evidence her interest in how people use language. She considers herself more of a reporter than a creative writer in her attempts through precise word choice and innuendo to vividly portray specific characters in a specific situation. "I don't think of it as creative but rather as getting it exactly. Maybe it's more recreating."

Writing Patterns

Always, she is inspired by the whole scene and responds to an intuitive sensing of her "snapshot in the making." In her effort to recreate the episode, she uses quotes and spells words like they sound to capture authenticity. She believes her poetry has a combination of auditory and visual sensory impressions, but usually conveys an impact of feeling -- sometimes an irony or misunderstood meaning.
Rarely are ideas preformed in her writing since she relies on everyday situations to inspire her "slices of life." Thoughts toward a finished piece begin by:

I am impressed by a situation and I know right then I'm going to write about it. I really pay attention and notice everything. Sometimes I feel like an intruder, I pay such close attention. Often when someone starts talking, I get the feeling, this is going to be one!

She then begins planning her writing, deciding how best to present the episode so the reader can share an identical experience. However, the actual act of writing is frequently delayed; a month or two period of incubation is not unusual. Once she has begun the writing process, she usually stops frequently to mull over word groupings.

I find myself going over emotion -- someone picking up a tea cup. I find myself thinking of that scene again and again until I decided that she "plucked" it off the saucer.

It can be a long time before I write it down; then often when I do, it's there and it comes down in a few minutes, but maybe I've thought about it for two months. Not constantly, mind you, but I keep coming back to it.

Typically, her poetry takes on the sound of prose, yet there is an economy of words. Without any attempt to adhere to a prescribed form she is better able to render a down-to-earth slice of life without artificiality. This free verse approach permits the message to be the writer's central concern.

Sarah almost never writes with an intended meter or rhyme scheme. "I don't like rhymes. They're contrived."
If they accidentally happen, I'm not unhappy with them, but I find they usually don't happen."

In discussing the revision process, she explained that her customary approach is to get her major ideas down immediately, leaving spaces between these initial jottings to permit coming back and filling in. "I left spaces to go back to because I had a 'scratch', a little snatch of something that I knew I wanted to say more about, but I needed to think about it."

Because she begins her writing with a sensing of the whole situation, she wants to capture that essence immediately. "I often get most of it down first or have an idea of the whole picture. And I might skip around almost in an outline form of what I'm going to hit."

Once major ideas are penned, she then fills in details or makes word substitutions for greater clarity. She confesses that sometimes she can't think of the improved wording she seeks. The passage may not get altered at all, or the change may come weeks or months after the original writing.

Verifying the findings of a number of researchers of the revision process (Pianko, 1979; Perl, 1979; Sommers, 1980; Faigley & Witte, 1981), Sarah indicates the decision to actually cross out and change words came after rereading what had already been written. After developing the image of the evening winter walk, she gives this
account of arriving at the decision to delete a line:

I kept rereading. I went back several times and reread. I crossed out, for example, the line about the sweaters: "to wear on autumn and winter walks." I thought, it's obvious that these are autumn and winter walks, and that isn't important. I like things fairly trim, and if you were wearing sweaters you sent to Ireland for, they're very heavy. And most people know you wouldn't wear those in July. And so I thought it was excess baggage. And we already knew "winter walk" was the theme, so I decided I didn't want that line in there.

Instead of working with a number of drafts, she takes the first copy and keeps "messing it up."

**Incubation Activity**

This poem began immediately for Sarah during an evening interview when she read the instructions for the incubation activity. As she read about the three gates, she immediately envisioned a white picket fence; however, this particular image did not develop further — neither at the time of the initial exposure to the stimulus nor during subsequent stages of incubation and illumination.

The first day following exposure to the stimulus, the writer's mind became active with images. Even though she couldn't explain this "early knowing", she knew with absolute certainty that she was beginning her journey in the second gate area. She would later explore gates 1 and 2, but her first mental explorations and jottings were of gate 2. The personal notations made in the
morning of the first day are:

light -- spiritual
herb garden -- centuries old
curved bench
slender stalks
pastels
sachet fragrances -- lace and ribbons
eternity on the other side of the third gate
stone wall -- rounded stones
been there before
dreaming
tall pines

By afternoon of the same day mental images were expanding. Thoughts now became directed toward a broader, more encompassing scope to include the writer's relationship with these three different worlds. Sarah envisioned the three gates as "three places to be." The first gate represented people and activity. "If I go to the gate I can hear." The second gate (the one she saw first) was a quiet place, a garden. Even though the third gate was closed, she realized it was filled with a peculiar light radiating a sense of promise and safety.

Along with recognizing these gates as physical areas, she believed they represented levels of awareness. Gate 1 is her everyday life -- what she knows consciously; gate 2 is a remote garden -- an area inside her own mind; gate 3, an area she knows less well, goes deeper than the other areas and at the same time surrounds the other two.

As she examined these different places and levels of awareness, she became aware of easy passage (both back and forth) between gates 1 and 2. The third gate remained
more elusive. Of it she commented in her notes, "I'm not ready for the third gate, but I feel good about it."

Not only was she aware of her ability to physically move between gates 1 and 2, she was also aware of a mental capability permitting her to see (as through a scrim) from one place to another. Only she had these special powers of seeing; others could be escorted back and forth, however.

In the process of moving toward written expression, her thoughts next turned to how she might operate in these worlds. Once again, she first turned to the second gate:

I think it's inside my own mind -- particularly when I'm not communicating with someone, but rather being more reflective. It's a quiet place. I pay attention to what's in the garden; then when I come out, I'll have those things to think about in the wider world.

Instinctively she realized if sounds existed in her garden, they would be unlike those in her everyday world. They might include "something like trills of a piccolo, I think." Only a few people can come, one at a time, to her private garden world. She later identified these four people with whom she already has an uncommonly close bond because of their intuitive dimensions of communication. Her sister, her fiance, her niece, and her daughter may enter her garden at the second gate where there is no utterance; yet communication is complete.
Her final thoughts on this first day are coined in these jottings:

forest surrounds the garden
shafts of light through pines

garden — serenity to regenerate

full of many unknown flowers, plants

Finally, her thoughts begin to turn curiously to gate 3:

"Maybe sometime after I've identified everything in the garden, I'll open the third gate. Maybe it opens automatically."

At this point in the discussion of the act of creating this poem, a careful reading of the finished poem will be helpful to the reader.

In My Three-Gates Dream
I find myself first
in the middle part—
an English herb and flower garden
centuries old

it seems
the thick grass underfoot
glisten with early-morning dew still as
shafts of sunlight filter through

the pines that surround the garden

A wall of rounded stones
and a solid heavy gate—

a catenary curve, I learn, at the top—

perfectly hinged, though, and

I can open it with just my index finger

Leads to the first part
light clear

alive and full

of everyone and thing I know and know about

primary colors of

music laughing crying

holding parting

the first part's

white picked fence

low and easy enough

for children to open
A scrim between
the first and middle parts
lets me freely see either place at the same time

In the middle part
I wear a flowing long dress
and serenely know all of this
is mine and
I am this garden

Slender stalks of pastels
lavender and lemon verbena
can be tied with lace and ribbons
and taken back to the first part
to savor

I can sit on the curved bench
near the tiger lilies
by myself
or with one of the four people
I sometimes bring here
we never speak
our thoughts
ease back and forth
to each other
like coupled pendulums

The third gate has two leaves
that only open outward
at the appointed time
I see a light
rainbow yellow
filling the area
on the other side

The light totally surrounds
the first and second parts
and a person can enter the first gate
from the light
but can only return to the light
through the third gate

When the moon is in my fifth cycle
the hour on the sundial
in the middle of the garden
will reflect a moonbeam to
the third gate and
it will open for me
The title of the poem flows directly into the first stanza and indicates the poem will be written as if the events had occurred in a dream. Sarah chose to report her gates journey in this manner since her experience is removed from reality. "After all, I'm thinking all this. I haven't observed it." The dream treatment gives the writer greater poetic license to consider the areas surrounding the three gates from two different points of reference. Simultaneously she weaves a journey through various levels of awareness as she takes the reader to the different areas of her physical world.

Because her thoughts originally took her directly to gate 2, she begins her poem in this area. After describing her surroundings she examines gate 1 and describes her conscious, everyday world with vivid auditory and visual images: "primary colors of music, laughing, crying."

A short, three line stanza places a scrim between her layers of consciousness; then in the next three stanzas she further describes her private garden -- "the place inside my own mind." She openly admits taking pleasure in exploring this private world, "a place to regenerate." The extent of her contentment in this area is stated eloquently in the lines:

In the middle part
I wear a flowing long dress
and serenely know all of this
is mine and
I am this garden.
Here her level of awareness fuses with her private garden to produce a sensation of wholeness -- a "knowing."

As her thoughts turn to gate 3, she continues to sense the safety radiating from the light. She specifically chose the words "light" and "rainbow" to connote this positive aura. Even though she senses safety behind the third gate, she knows she cannot move back and forth from this area. "When I go there, I will stay there. Then I, too, will surround all the rest." As she wrote the poem, she briefly considered the possibility of coming back again through gate 1 from the surrounding area of light.

As she pondered over how to treat gate 3 in her writing, she was hindered by an inability to describe the area with any degree of precision. "I knew what I felt about it, but everything I jotted down I thought was abstract." More incubation time will probably bring more changes to this final part she believes, but for now she feels comfortable with having worked through a formula which indicates when the third gate will open for her. Upon researching solar patterns, she learned that every 18 years the moon is aligned exactly with the sun and permits a reflection strong enough to read the sundial in her garden. She has already lived through two cycles and believes she has three cycles remaining in her lifetime. Thus, in her fifth cycle the sundial
will reflect a moonbeam with the magical effect of opening the gate. "Then all the rainbow light would merge with the reflected light to become one."

Graphically depicted, her gate system may appear:

Even though the writer is unfamiliar with the writings of Carl Jung, she creates striking parallels with his theory of the psyche (sometimes referred to as structure of the personality). He, too, divides consciousness into three levels: conscious, personal unconscious, and collective unconscious. Sarah's concept of consciousness is a direct parallel to Jung's with episodes of everyday life constituting this level. Her second level of awareness, like Jung's, is a more remote area inaccessible to others. Sarah is able to enter her middle area at her will; however, Jung's theory suggests this layer is not known directly by the individual but may be tapped for disregarded or repressed material.
Sarah's scrim, a thin, almost invisible curtain, divides gates 1 and 2 and permits her to see both at the same time. Jung, too, suggests a kind of filtering system between these two areas which he calls the ego. As the ego processes perceptions, memories, thoughts, and feelings, it serves as a kind of "gatekeeper" as to what is permitted to reach a level of awareness. The experiences failing to gain recognition are stored in the personal unconscious.

Just as Sarah's gate 3 is the deepest and all-inclusive area, so is Jung's third level a point of contact between the individual and the greater-than-individual forces in life. Here, their philosophies still converge to the degree that this layer of unconsciousness is not individual but universal in nature. Sarah puts it simply: "It always is."

Implications from Images as Related to Life Stage

Sarah's most dominant images were strikingly appropriate for this life stage since they mirrored her introspection. The very fact that she envisioned the three gates as a mental journey through her own levels of awareness supports stage theorists' suggestions that the mid-life individual becomes more attuned to internal orderings.

Levinson (1978) might explain the private garden image as evidence of a person's need to take stock of life and to find a place to listen to internal voices
which were once silent but now clamor to be heard. Buehler (1962) refers to the process as the drive for establishment of inner order. Jung (1933), too, suggests the first half of life is devoted to educating the will and cultivating social adaptation, whereas during the second half of life a person "to understand the meaning of his individual life, must learn to experience his own inner being" (p. 71). Since Sarah devoted five of the total 10 stanzas to exploring this private garden, her concerns at this point in life seem to be focused upon learning more about this deeper level of awareness.

The garden image introduced through a dream has soft, delicate overtones. The writer saw it as "silent and misty with soft colors." Specific images conveying the ethereal quality include:

- flowing long dress
- serenely
- slender stalks of pastels
- lavender and lemon verbena
- lace and ribbons

The images exude feminine qualities characteristic of the writer. The writer's image of her private world has been projected in detail to clearly reflect her personality traits and stages in life.

**Common and Unique Patterns of the Mid-Life Adult**

All subjects in this age group use writing as a tool for self-discovery. During this stage in life when they are prioritizing goals and analyzing perspectives, they
rely upon written expression for feedback and clarification. All subjects in this group think of writing as a friend, a supportive outlet for expression of the many moods and levels of awareness under scrutiny. One subject records her observations in a journal; another in a little black notebook, and the others in sundry bits here and there on whatever is available.

While writing serves a need to explore, it can sometimes lead to ideas and emotions which defy expression. Said one writer, "Writing can occasionally get me into trouble. Sometimes the introspective exploring is confusing and sometimes it only exacerbates what you're trying to get away from." Echoing this same idea, another writer commented, "I sometimes tap into something deep within me that I'm not sure I'm always in control of." These probings seem to result from the quest to gain a deeper understanding of self and redefine goals and promises they once made to themselves. The professional writer in this group confided that he explores these ideas in "stuff I don't publish; in notebooks no one will see I think where I am in life, what stage, ponder my birth and death, and what's happening to me physically and mentally.

All writers in this age group recognized their own definite writing patterns, yet they claimed these approaches vary. Generally, all respond to an urgency to record
basic ideas and then go back and fill in their original skeletal form. "I like to 'flesh out' a line or phrase." "Just a basic idea is all I need." Exactly how the piece takes shape varies from writer to writer, however.

Like Penny, the preadolescent who spoke of her hand leading her mind, a mid-life writer experiences a similar force:

Sometimes I think you are inspired to write something down and it just comes out of you. In fact, I have once in a while had the feeling that I really only recorded something that wasn't actually particularly my doing. But other times it's been blood, sweat, and tears for sure.

This removed state is again expressed, but this time a greater intensity of the creative act is revealed:

Sometimes I'm above my conscious in a sort of other way of thinking. It only happens when I'm so involved in the act of writing. I see myself seeing myself; the engine is running by itself and I'm sort of watching it run.

Even though the writer is somewhat vague in describing the process precisely, he seems to be sensing various levels of consciousness at work.

The experienced, professional writer relies very little on inspiration alone as a motivator. He estimates pieces emanating from spontaneous inspiration represent only a third of what he writes. "If a writer waited around for inspirations, he wouldn't be able to start. So you have to say, 'Hey, I gotta get something done today', and you sit down and start working."
Yet, he quickly asserts his belief in the advantages of a single momentum in producing a finished piece:

Things I've agonized over for a period of years may be just as good, but I don't enjoy them as much. I don't feel like the discovery was as, uh, joyous, as, uh, as, serendipitous, maybe. A discovery that takes so much work and has to be chiseled out over the years loses vitality.

As a mode of expression, poetry was the most natural form for all but one writer in this age group. "Poetry is exciting to my mind -- to be able to clarify something, but to search for it, to really dig deep and find only those very specific descriptors." Another writer prefers poetry because of the economy of words: "it has a certain trimness I like." And still another prefers it for its definite line structure: "poetry defines very precisely how it's supposed to be read."

Two of the four subjects in this age group chose to write their poetry by the thinking-aloud method. For both writers the approach of verbalizing their thought processes while writing was a new experience. Neither reported feeling intimidated by an outsider listening in on this private process, yet both reported a difficulty in being able to voice "too many thoughts tripping over each other." Both believed the final product would probably have been the same regardless of composing method; however, both believed hearing her own voice impeded her word processing. The thinking-aloud protocol
failed to capture all the mental workings since both subjects felt the need to embellish their accounts with further details afterwards.

All subjects indicated most of their writing improves with a period for incubation. Only one writer is inclined to prefer telling it exactly like it is in a long journal entry. Sarah sometimes comes back to work after a period of two or three months, but the other two writers may permit years to intervene between rewritings. A subject who began a poem about doves when she was a teenager has expanded the original poem to three sets of poems. "You can see how one moves from the other and how the ideas about doves enlarged as I became more aware of things and had more experience." She now believes the set of poems trace certain developmental patterns in her life.

Developmental patterns were also significant components in the imagery evoked by the three gates stimulus. All four mid-life subjects ascribed some symbolic reference to either life stages or increasing levels of complexity of mental processing. One subject treated the gates as life's future stages, each representing a problem which must be resolved before she can be content with her life. Another subject depicted the gates as stages of ego development tracing a person's progressing from dependence in "an insular uterine sea" to deep trust when confronted by the final mystery of the third gate. Sarah's imagery
of a combined physical and mental journey into levels of consciousness has been addressed earlier in this section.

The fourth subject envisioned the gates as doors with each one transforming the others (see Appendix C). The third door, entitled "Door of Doors", merits further examination.

The third gate is a shadow, misshapen like mandrake, bent and twisted ginseng, dessicated. Inside is a secret, so private, only one person may know it. The passage leads down where gravity's got you and you thrust against the pull but it pulls with a thrust and you roll further down in the pit of doors.

The images of shadow, misshapen mandrake, twisted ginseng, and dessicated lend powerful negative connotations repelling the reader. The writer purposely created the dialectical forces tearing at the individual. The words "thrust" and "roll further down" intensify the struggle between the polarities and seem to personify the daimonic (May, 1969), the negative blind push, the nonrational assertion of ourselves. Yet, curiously, the writer sees the "pit of doors" again as a dialectical image, but with a positive connotation of many doors providing the "choice of all choices." He believes he has transformed all preceding doors by connecting opposites in a way that makes "a new third thing."
When asked for greater explication of this "new third thing", the poet humbly confesses he, himself, is not sure but rather suggests the readers bring their own interpretations to it. He claims his intent as a writer is to provide "dark areas that anyone can bring their mind to and see something moving in the dark. And that's them, and that's what it's for. That's why it's dark."

The discussion of the polarities at work in the poetry of this age group reflects some of the forces of contention in the lives of the writers. Another writer in this age group eloquently sums it up with these words:

Like life, writing is a joy or pain. It's so gorgeous, or it's so terrible that you want to deal with it. It's pushing you and shoving you and you want to get it down.
Case Study of a Late Adult Writer

Profile of the Writer

Elliot's (a pseudonym) intellectual curiosity, physical vigor, and self-expectations belie his 77 years. A kind, gentle man, this retired professor continues to inspire others as he shares his wisdom and instills self-confidence by honoring the positive potentialities in all fellow human beings. Because he extends Rogers' (1961) unconditional positive regard, he powerfully influences the life of others. In a book of his own poems, he addresses his effect on others with these lines:

I believe
the reason
I have
an effect on others,
when I have an effect
I like,
is not because
I address them
as individuals
though I do so—
nor because
I address them
as persons,
though I do so—
nor because
I address them
as humans,
though I do so—
nor because
I address them
as experiencers,
though I do so—but because
I address them
as living ones.

I bring my life
to them
as means
to life
being realized
by them
as in them.
I bring them
to life
in themselves.

At the same time he honors the "living-ness" in others, he also honors this quality in himself. Seeing himself as a part of a universe of subsystems, he has relied upon writing throughout the years to help him discover and clarify his philosophies. Even though he is a published writer in a number of academic journals, he sees poetry as his vehicle for examining reflective thought.

**Sources of Inspiration**

Elliot's greatest source of inspiration for his writing comes from his continuing persistent quest: the generation of life. During his college days he became aware of his affinity toward and compelling curiosity of man's role in the universe. Since that time he has given himself to studying, teaching, and writing about life development and self development.

His writing concentrates heavily on exploration of his own physical and mental functioning, but always the focus includes the interfacing of all social and scientific forces. A well versed scholar in both areas of sciences and arts, his topics frequently reflect his hunger to learn more about cognitive processes and layers of consciousness in resolving a way of generating life
in the mind for the benefit of human life extending on. This compelling issue continues to inspire his thinking and writing in this, his eighth, decade in life.

Writing Patterns

When given to probing reflective thought, Elliot tries to avoid preformed ideas and prescribed rhythm or rhyme schemes. He cultivates an open receptiveness.

"I have to see what wants to speak to me. I have to have an environment in which I can hear my own voice. My own experience will speak to me if I make arrangements to hear it. If I don't make arrangements to hear it, it has no way to speak.

While he maintains this open, receptive frame, he prefers composing an entire piece at one sitting, then coming back to it several times after some incubation time. Even though initial writings have few crossings-out, they are composed with numerous pauses while the writer rereads what has been written for further shaping of utterance (Britton, 1975). In Session I when writing about the summer rain, he reported "getting hold of the energy that was turned loose by the image." In describing his method of allowing his mind to direct this creative flow, he referred to his restraining control as "tucking it in." "When the poem gets to four or five lines, say, it needs to be tucked in, but I still have to stay with the feeling of it -- flowing -- so that I'm on the front end of it."
Further explaining his control devices, he compared this creative energy behind the image to a "freshet of water coming down the stream bed." He stressed the importance of maintaining this control (staying on the front end). "But the important thing is to stay with life coming through."

Revision patterns include not only rereading for further illumination to continue, but for errors which might have occurred in the haste or recording the idea. "At my age I can leave out words. I can misspell words a lot easier than I used to. So I have somewhat of a craft problem." As for reorganizing ideas on paper, he believes less of this is necessary when the writer has cultivated a favorable writing environment beforehand. "You have to be at peace with what is there to speak from."

Elliot's writing flows with unstructured preformed thought; yet, he believes the material is structured somewhat in the mind. "It's latent there; it's implicitly organized." Only occasionally does the written word surprise him:

Every once in a while the unexpected happens. My unconscious is free and it teases me sometimes. And it charms me and it funnies me. I give it free rein.
Incubation Activity

The first images occurring to Elliot were three Chinese gates. Next, he imaged three farm gates, in and out of the barnyard. His third image intrigued him most because he has already devoted considerable thought to the concept introduced by three gates as they would be on the concentric. For him the concentrics are:

Well, these are the successive, sometimes I've called them wombs, in which life is developed. You start from the universe which is the biggest one. The universe gave rise to the galaxy; galaxy gave rise to the solar system; the solar system gave rise to the earth; the earth gave rise to life; life gave rise to species and man.

His concentric gate system presents each gate becoming larger than the one before it. A person entering these gates goes into increasingly larger domains.

The gates in this incubation activity became psychological gates representing his intellectual system. He chose to let them symbolize his personal growth: "I have made these gates the openings I have gone through to expand my domains of understanding during the progression of my life over the decades." His decision to embark on this mental exploration was further defined when he found the gates image meshed with "something deeply meaningful in my life's experience -- that is, how openings and closings work relative to the domains of the psyche."
In completing the incubation activity, Elliot spent several extended time blocks with pen in hand immediately recording thoughts as they occurred to him. By the second day he reported the gates connecting in some way with a picture of three oriental gates. His thoughts made a further leap when they hooked into Jung's *The Secret of the Golden Flower* on which Elliot had already done symbolic-association work.

Central to that book are four pictures of a person meditating (see Appendix D); the first to show a man seated on his pad to begin meditation; the second to show him becoming centrally aware of a "man" inside of him (who is also meditating); the third to show that "man" projected from "in" to "out" and seated above the head of the person meditating; the fourth showing that "man" as central to five further "meditators" who are each the source of five further meditators.

Elliot suggests this whole sequence of pictures can be recognized as a sequence of gates of awareness, of a human reflecting thoughtfully on his existence. The order of generating imagery in the stages of meditation can be regarded as a parallel to generating life. With these pictures before him he sees the first gate symbolizing "conception inside the psyche"; the second is "conception born into the world"; the third is the repeating birth of the generations.
Elliot reports exploring the symbolic dimensions of the gates image for two days. Already noted in the above discussion, his symbolic gates images included: (1) concentric systems of the universe which permits entry into ever-larger domains, (2) psychological gates representing his intellectual system, (3) openings into various domains of the psyche (levels of consciousness and unconsciousness), (4) stages of meditation drawings in The Secret Flower (Appendix D). This last image seemed to play most powerfully in his mind during the incubation period. Elliot believed his conscious and unconscious thoughts were drawn to this image in part because he had recently written a paper on this topic and in part because the concept embodies and incorporates the other preceding images.

In an effort to heighten his awareness of all cognitive processes involved in writing, he first approached the assignment as a means to creative expression. Then he discovered he, himself, became a medium through which the creative events came. While probing the mental activity accompanying image production, he made these notations on a separate piece of paper:

The unconscious orders its phenomena toward imagery at the gateways to consciousness. If we use images consciously as we do in this assignment and then become reflective about them (i.e. meditative), we invite our unconscious to share with us consciously the order it possesses when it approaches consciousness.
He sees the Chinese drawings (Appendix D) as images depicting the story of the conscious-unconscious being addressed in meditation, and the reporting "out" in a form multipliable and shareable with others. Elliot refers to the entire sequence as generating in the generations.

A rather unique product evolved from the incubation activity. One would expect this writer to explore the mysterious intricacies of the mental workings of levels of awareness. However, as the appointed hour of Session II began to close in, Elliot's thoughts expanded to attending to the task of recording his thoughts in some poetic form. The poem, entitled simply "Gates", addresses with characteristic brevity all the dimensions he had considered during the incubation activity.

Gates

What gates do I use
to get from my life
to the life
of my muse?

When do my musings
result in a way
to walk through
from the me
that I am
in my own
hinterland
to the me
that I am
when I've
offered my hand
to my muse, who,
joining with me
in a union
of one from us two
lets life be born
and find its way
through gate number two

to its seed

in generate forms,

offered then

to a world

as a way

life can go on

through gate number three,

which is you?

The writer reports that before he wrote this poem, he was consciously aware of his effort to steer his concentration away from attempts to interpret his subconscious inclinations to the more external act of transcribing thoughts on paper. To accomplish this feat, he called upon his Muse, the source of his creative, poetic inspiration.

Muses were nine sister goddesses of the arts and sciences in Greek mythology. They lived on Mount Olympus with their leader, the god Apollo. Like him, the Muses remained young and beautiful forever and possessed the ability to see into the future and to banish all grief and sorrow. The Muses had pleasing, melodic voices and often sang as a chorus. Early Greek writers and artists called on the Muses for inspiration before beginning to work.

Throughout the ages poets have referred to relying upon their Muse to spark or direct creative expression. Elliot sensed his poem forming when his physical act of transcribing mated with the Muse from which the poem for others could then be born. In his personal log written during this activity he offers a most articulate account
of precisely what the Muse is to him and his artistic expression:

Art products are children of the psyche born of a willing and loving mating between the conscious and the unconscious. The Muse is an image standing at the portal between the unconscious and the conscious.

To address the Muse is to invite imagery to come on through from the unconscious to the conscious—from which gate it can get onto the page for others.

At this point in his analysis of his cognitive processes behind imaging, he not only assesses paths his thoughts are taking, but he "sees" the point where unconsciousness becomes consciousness and labels the passage a "gate."

Poetic descriptors paint a vivid picture of his Muse:

The Muse is not an arbitrary order-giver, but a naked, dancing, alluring figure wanting a conscious mate to dance with in a dance made up by the two, together, as one.

Elliot claims this image as the birthing source of his poem and thinks of it as an abbreviated way of telling what goes on when far more complex creations occur and succeed in carrying life within them to successive generations of people. "I could get the 'three gates image' to serve life coming through me when I let them fall into place on the framework of life-generation."

He believes further that the system that created the psyche is the same one that created the physical body. The order which characterizes the organic life generation is not (and need not be) any different from the order characterizing the birth of creative products. "Art forms
are life-carriers, born of the human psyche for the nourishment of the human psyche. We try to give each other life that way."

From these comments, one can readily see that the writer's philosophies and poetry are complex. These complexities became somewhat entangled for Elliot toward the end of his writing. A number of alterations appeared on his draft because "I had to try whether this was it or that was it." He relies on feelings, a kind of intuitive sensing which terms aptly coin his message.

I have to let the unconscious participate clear up to the end. The Muse is the poetic image that leads me, gives me the pairings to let me know that my actions are synchronous with something more than me. Without that, I wouldn't have a psychic birth.

**Implications from Images as Related to Life Stage**

Because Elliot has been keenly attuned to the interworkings of systems in the universe, he has come to some understanding of his own relationship to the universe. The gates stimulus evoked an image which permitted this tracing of reflective thought through incubation to illumination (imaging and uniting with the Muse) to final transcription on paper.

Most definitely the directions of his imaging were influenced by his philosophy that "the evolution of the mind and the evolution of the body are co-relative, relational phenomena." He offers this explanation of how life stage affects his imaging:
My poetry turns loose my reflective thought. Complexity comes out in the mode of poems. God made it possible for me to have the decades that unfold because they were implicit. It was an infolded order in me that unfolded. You can see that. Like a plant unfolds, the human life unfolds and the beauty of it, the music of it, the feel of it. Incredible!

**Common and Unique Patterns of the Late Adult**

Perhaps the most outstanding commonality shared by writers in this age group is their choice of subject matter: reflection and reminiscence. Though no subject was morbidly concerned about the brief span remaining in the life cycle, all were aware of the imminent possible physical and mental infirmity and their own mortality.

The 90-year-old subject personifies Jung's wise old woman and mother archetypes. Her alert responses, gentle humor, and zest for life reflect a hearty, stoic character. She exhibits a nonchalant attitude about her writing skills claiming she writes about "silly things." A homespun, earthy, positive attitude prevails in her approach to everything in life. Like others in this age group, she reminisces more now and enjoys recalling the most pleasant memories. An example of her cognizance of the fleeting life-span can be cited in November garden poem (Appendix E) with the lines:

> In the spring (God willing)  
> And we've had warm rain  
> I want to go walking  
> In my garden again
Other subjects, too, allude to some preoccupation with the imminent close of their life cycle. From the retired professor came these comments:

I have developed a laboratory installed inside of me and I have a position from which to experience the forming of experience. That, I think, is what the 70s are for.
I used to report to people in terms of their laboratories. I listened for 40 years to them, but I've turned the other way now and the audience has to listen to me in order to get the good out of this life before it goes to some other form.

Another subject phrases it differently: "I sit in my chair and dream a lot, I now have time to allow myself to think and create." And yet another subject describes her writing topics as reflecting "something past internalizing to something a bit wider with more perspective."

All seemed to communicate a pervasive sense of satisfaction with fullness of life. Erikson's notion of ego identity, Jung's concept of individuation, and Maslow's idea of self-actualization can be identified in the developmental stages of all the subjects in this age group.

Typifying this sense of wholeness with an accompanying clarity of internal ordering comes from this poem:

Asterisk

With an X-ray eye
this wintered shrub,
twigs branched
like hair on end,
roots branched
like outstretched hands
would form an asterisk.
It would be a round,
rayed sun,
with solid core
in earth,
seeking a sky.

Although the writer was unfamiliar with the writings of Carl Jung, his theories lend explanatory power to the poem. The stark, bare branches of this shrub form geometric figures within a circular mandala shape suggesting a unifying wholeness. The X-ray eye hints at an interior depth of awareness while the solid core at the center (possibly the ego) instinctively seeks growth. The Jungian writings on the symbolic significance of mandalas create a striking parallel to the visual image (varied geometric shapes within the circle) and substance of this poem.

Writing styles offered greater contrast with two female subjects insisting all true poetry has rhythm and rhyme scheme. Both believe good poetry must contain these features and claim because they have always written poetry this way, prescribed format does not hinder their expression. A third subject disagrees, "I can't be bothered rhyming June with moon." Instead, she approaches her writing as a craft:

It's something you refine, work at it as long as you would work at quilting or any other craft. It's an attitudinal thing, rather than saying, 'I'm gonna' wait here for some bolt out of the blue to hit me and then I'm going to write this thing!"
What a sharp contrast to this subject whose words sound almost like a benediction: "Writing is to court the Muse and, thereby, give birth to life."

Incubation patterns and revision tactics vary among this age group as well. No one appeared to revise extensively in the assigned writing activities; yet, their reasons differ. Said one, "There's a flow. And if you can feel that, you're on the right track." And another, "I like to get it down exactly as I think about it. I don't like to fuss around a lot." One charmingly honest appraisal was: "My internal editor is so glad to quit censoring. I mean, it's worn out!" This last writer simply wants to let the creative forces loose on paper. For all these writers, once an idea or image occurred, they worked quickly, often completing the poem in one morning's work.

All subjects in this group ascribed some integrating force of unifying wholeness to the three gates image. Elliot perceived it as stages of meditation paralleled with generation of life; another imaged three degrees of penetration required to bring someone out of seclusion; a third subject saw the gates in a somewhat literal manner symbolizing places in her family heritage. One writer contemplated such concepts as: morning, noon, night; childhood, adolescence, adulthood; opportunity, practice, experience. Yet with these rich possibilities, she went
back to her familiar pastoral poem and with fixed rhyme
scheme developed a single poem around her garden gate.
As the array of topics may indicate, each writer tapped
into an important developmental aspect unique to that
writer and reflective of decades of experience in the
life cycle.
CHAPTER V
CONCLUSIONS AND IMPLICATIONS

This final chapter includes a summary, a statement of conclusions, a statement of speculations, a statement of implications for practice, and recommendations for further research.

Summary

The primary purpose of this study was to investigate writing as a process-oriented activity. Particular attention was directed to incubation and illumination within the act of writing to determine if life-span development affects image production during these creative cognitive acts. Participating in this study were subjects from four disparate age groups (16 total) representing major developmental stages in the life cycle. All subjects were successful writers who exhibited characteristics typical of high creatives.

Research questions addressed in this exploratory inquiry included the following:

"model" of writing?

2. What are some identifiable characteristics of incubation? How does this stage lead to illumination in the creative phases of writing?

3. What is the nature of images? How do they reflect past experiences and layers of consciousness?

4. How does life-span development affect the processes of writing and the nature and content of images?

Qualitative techniques were employed in this investigative study. The research design provided two 90-minute sessions scheduled approximately four days apart with an incubation activity assigned between sessions. Data collection techniques consisted of conducting intensive interviews, conducting writing activities, and administering a questionnaire inventory to assess vividness of imagery.

The analysis of the data was accomplished through the constant comparative methodology (Glaser & Strauss, 1967). This approach permitted the researcher to arrive at certain findings by assembling data, searching for linkages, and developing conceptual categories. Theory emerging from these procedures was "grounded" in the data. A pilot trial assessing the appropriateness of the
research design indicated the design could be implemented in its original form.

Conclusions

Ample qualitative data gathered in this study justify a number of conclusions for this study of the writing process with a focus on imaging and the effects of life-span development on this creative activity.

1. All writers proceeded in a recursive rather than a linear sequence as they performed in these recurring phases:
   a. the catalyst that prompted the writing
   b. the image or insight which involved a struggle to connect words to experience
   c. the attempt to find an appropriate ordering of experience
   d. the internal reordering and revising of what has been written.

Though unpredictable in length, frequency, or sequence, each phase was an integral part of each completed written activity. While each writer performed in these recurring phases, the researcher hastens to conclude there is no single, uniform process of writing. Rather, age/stage as well as individual, even idiosyncratic, features influence processes of writing.
2. Imaging was instantaneous for all writers and reflected the accumulation of perceptions and experiences related to their age and stage in life-span development.

The images, which came freely and rapidly, were usually affected by life age and stage.

   a. Preadolescents, preoccupied with confirming or validating earlier social learnings, are still somewhat unfettered by society's constraints and imaged fanciful motifs in the world of make-believe.

   b. Late adolescents, involved in an internal and external quest for identity and life-choices tended to image actively in both the mythological world of fantasy and everyday reality.

   c. Mid-life adults, engrossed in re-evaluating accomplishments and future directions, were included to image in a symbolic mode drawing from both the conscious and the unconscious.

   d. Older adults moving toward individuation imaged from their accumulated reservoir
of experiences as well as reflective levels of awareness from the conscious and the unconscious.

3. The impetus to continue the unique, individual path of thought evolution depended on the skeleton of meaning that emerged from initial images.

4. Writing-out was a key method for interpreting the initial images -- for filling in the initial skeletons of meaning.

All writers, with varying degrees of confidence and practice, trusted their intuitive power to select the right words and arrange them into new constructs of meaning. Thus, they were able to make initial jottings, experiment with loose ends of thought, indulge in a mental hop-scotch of thought and word, all with a conviction that meanings would ultimately evolve and a comprehensible expression would eventually emerge.

5. All writers sensed the importance of incubation in their writing.

Two types of incubation operated in their writing patterns: (a) the recurring on-going incubation that is functioning while mental revising is taking place; and (b) the long-term incubation period that may go on for days, months, or years. Following the relaxation of the
incubation phase is the illumination stage. The illumination stage enabling writing may inspire an entire piece, or illumination may continue to inspire sporadically, urging the writer to alter what has already been written.

6. All writers expressed awareness of both conscious and unconscious influences to begin and complete their creative writing.

The assigned incubation activity heightened awareness of the functioning of the unconscious. Those writers who experienced sudden enlightenment were especially aware of this deeper mental functioning where structural patterns of stored experience emerged. This flash of insight was accompanied by a personal energy and power focused in what for the individual was a significant direction. Increased awareness triggered a releasing, enervating, and productive flow of expression for these subjects. A sense of fulfillment accompanied the final stages of the writing activity.

7. The presence of symbolism characterized a significant number of images.

While some of the symbolic images reflected past personal experiences, frequently they suggested more broad cultural meanings. Images in this second category
appear to spring from the collective unconscious, the deepest layer of unconsciousness serving as a reservoir of instinctual, biologically inherited material common to all human beings. With the exception of one subject, the writers were unaware of the archetypal symbolism behind their images.

Typical of the most striking examples of these primordial images are those of the mother archetype, as exemplified in Michelle's image: "All life in earth is locked within her womb." This image relates to the mother symbol, to place of origin, a unifying, protecting power. Another poem describing the asterisk offers deep symbolic meaning with "twigs branched like hair on end", "roots branched like outstretched hands" suggesting irregular shapes extending outward: yet, the unifying mandala form brings it together with "X-ray eye", "round, rayed sun", and "solid core." Universality of meaning comes through this depiction of the unification of parts of the self into a whole. Ego differentiation is suggested as the psyche moves toward individuation. Also carrying universal meaning are the images of mythological figures and life's cyclical patterns.
Speculations

In the preceding section the statements of conclusions were formed after rich and varied data were reduced to consistent findings. This section, however, serves as a kind of sounding board to state conclusions of a more speculative nature, to make observations about aspects of the writing process which, though very real, defy categorization or reduction. Some observations in this section may be too sweeping or forceful to be appropriately labeled "conclusions"; yet, their significance demands recognition.

1. Writing serves as a communicative outlet -- a natural force that must happen.

Writers in this study claimed the act of writing helped shape and clarify ideas in their formative stages. Because thinking and writing are concurrent activities, they serve to foster and augment one another. Not only does writing permit a sharing of thoughts with others, it promotes an ordering of perceptions and experiences within oneself.

2. Writing is more of an inborn, intuitive gift than a learned skill.

While precisely defined rules and conventions can be presented and practiced through drill and exercise,
true creative invention comes as natural, unbidden instinct. Guidelines of usage, syntax, and style may certainly refine technique, but even these conventions are more readily learned than taught.

3. Writing habits defy precise predictability.

All writers in this study admitted to irregular sequences of thought patterns and writing activities. Unexplainable variables in the cognitive processes prevent researchers from isolating or defining a "true" model of the composing process. Idiosyncracies of the subjects sampled coupled with the inability to actually see what goes on inside the mind complicate the researcher's task in attempting to design a stage model.

4. Life-span development appears to have little effect on writers' patterns.

Approaches to writing tasks vary little with respect to age and stage in life. All writers are as likely to work from parts to wholes as from wholes to parts; the concept of the completed piece shapes the immediate focus just as frequently as the concern for what comes next affects the total finished piece.

Basic patterns, styles, and approaches remain unchanged over the years. Mid-life and older adult writers in this study tend to write with the same rhyme schemes and stylistic conventions established early in their writing habits.
5. Life-span development seems to affect subject matter of images but has no effect on vividness or modality.

While accumulated perceptions and experiences seem to affect what writers are inclined to image (see Conclusion 2), other aspects of imaging remain unaffected by age or stage. Degree of vividness and mode preference appear unaffected by life-span development.

6. Pacing and rhythm are irregular and unpredictable for writers of all ages.

A number of writers claimed that writing frequently flows effortlessly on the page, often with the hand seemingly leading the mental flow. These same writers, on the other hand, also claimed periodic writing blocks and experienced exasperating difficulty in writing anything.

7. A final speculation may be more aptly phrased in the form of a question: Is it possible to tap or harness the levels of unconsciousness to determine what degree of influence the unconscious really has in shaping imaging and the conscious flow of thought?

Perhaps this final speculative query may signal the beginning of other cycles of inquiry. If the conclusions and speculations have raised more questions than they have answered, then they have succeeded in advancing the developmental theory of writing -- since the nature of developmental
Implications for Teaching

The findings in this study can be examined for their appropriateness and usefulness for practical application in the teachings of language arts. That the teaching of writing is involved in a paradigm shift is becoming more widely acknowledged. This shift reflects a focus from the traditional, product-oriented, content-conscious point of view to a more process-oriented, holistic point of view.

Despite this growing awareness of shift in focus, a vast number of writing teachers still cling to the traditional paradigm highlighting spelling, punctuation usage, and capitalization. Because these features are most readily identified, they too often receive a disproportionate amount of classroom instruction. That which is not measured is often regarded as too difficult to see, too difficult to explain, and especially too difficult to assess.

In order to cease looking at text autonomously, as text alone, writing must be viewed within a total rhetorical context which includes writer, audience, and world as well. And unless composing as a process is actually taught, not just identified, the idea cannot be useful in a practical sense. Instead of thinking of writing as a set of conventions to be manipulated, it must be viewed
as the making of meaning.

This process begins by each person's unique theory of the world. Michael Polanyi (1962) suggests this knowing evolves from an unnamed logic within us which he terms "implicit knowledge." The potential structure is there waiting to be shaped by experience. Personal knowledge, then, is formed through need and an intuitive sensing or hunch that something is true. Planning and eventual execution of these plans may validate or invalidate this hunch, but the intuitive knowing was already there.

Tearing away the paper screen of graphs, equations, and computations, I have tried to lay bare the inarticulate manifestations of intelligence by which we know things in a purely personal manner. . . . personal knowledge in science is not made but discovered. (Polanyi, 1962, p. 64)

George Kelly (1955) refers to this kind of knowledge as "personal constructs"; Margaret Donaldson (1978) labels it "embedded thought"; David Bohm (1978) calls it an "implicate order"; Susanne Langer (1953) notes the importance of "prelogical conceptions"; and Coleridge maintained that the poetic imagination "shapes as it develops itself from within." Yet, while everyone possesses this internal ordering, each person views the world differently because of differing experiences and differing personality typologies.

Perhaps writing can be taught best by conceiving of it as a continuum of making meaning, by seeing the writing process as analogous to all those processes by which we
make sense of the world. Rather than teaching writing as an isolated set of skills, we need to let students know that writing does have something in common with other things they do. Taught as a process of making meanings, writing becomes taking in an experience, forming an opinion, finding new directions. Each person's natural internal ordering includes the apparatus to make meaning: thinking, perceiving, and writing.

Meanings must be found and formed through a "personal construction" of experience (Kelly, 1955). Findings from the imaging activities in this research design indicate all subjects made meaning (furthers their own theory of the world) from the images shaped by present context, past experiences and remembrances, and the mysterious deeper levels of unconsciousness only dimly understood. Just as language itself was a great heuristic in naming and interpreting images in this study, so, too, can language serve as the same heuristic in the classroom in permitting students to build their personal constructs.

Such an approach incorporates and correlates a developmental approach to both the refinement of language skills and the refinement of personal constructs influenced by the life-span cycle. Language arts curriculum design, whether for elementary, secondary, or higher
education, ensures the functioning of this developmental theory by permitting students to learn that making meanings is the work of the active mind of any age or stage in life and thus is within their natural capacity.

This developmental, process-oriented approach has decided implications for pedagogy and course design. Writing activities must begin with resources of the self, then diverge outward toward knowledge of the world and awareness of audiences beyond the self. To assure that writing is practiced regularly and extensively, students can be encouraged to keep journals. Whether these are private or classroom projects, students can experiment with forms, ideas, voices and audiences.

Another activity to foster command of writing skills is to encourage students to explore their own writing experiences. Student writers may engage in self-exploration by keeping a composing diary in which they record paths, procedures, and processes they go through in writing. A similar approach is keeping a retrospective protocol as some of the subjects did for this study. Notes are made about what seems to be happening as they write. All drafts and notes are dated and kept in order; then, after the project is completed, they describe and comment on the writer and what behaviors and strategies are used. That the exercise focuses on
self-exploration assures an interesting and revealing object of study.

Sharing writing and gaining helpful responses from others in the classroom permit students to experiment with language -- play with it, work with it, revise and even start over again. To assure growth and the freedom to experiment, students need to be encouraged to make many new beginnings along with any number of different developments of these opening thoughts. As one writer in this study observed:

There are many tracks and traces which are sort of paths not taken. As you go through a sentence, the verb is sort of a hinge of a sentence, and when the sentence turns on the verb, you have a few choices to make. When I make one choice, the other choices die.

Keeping those "other" choices alive must be a mission of the writing teacher. The inclination to explore several choices needs to be nurtured by permitting both verbal and written exchanges in class. In the classroom exchange, the various selves are heard and an audience's response is provided. Language is a dialectical process: the writers know what was said and what can be understood from it, and when they get a response, they come to know what they mean when they hear what they say. It is this critical, reflexive character of language which allows and even inspires us to think about thinking.
Critical thinking and creativity can be fostered by extending assignments to provide incubation time for writers. Providing incubation time allows openness and relaxation of attention to external stimuli. Comments offered by subjects in this study verify and expand on creativity literature in reporting illuminating insights following a period of incubation. The "deep well of unconscious cerebration" (James, 1934; cited in Miller, 1972) is a common resource. These deep wells permit the writer to reach into various levels of conscious and unconscious awareness, to acknowledge and explore the origins and complexities of thought processes. Jung emphasizes the importance of tapping these various levels of awareness:

Just as conscious contents can vanish into the unconscious, new contents, which have never yet been conscious, can arise from it ... The unconscious is not mere depository of the past, but it is also full of germs of future psychic situations and ideas. (1964, pp. 37 - 38)

Recommendations for Further Research

Based upon the findings of this study and what is already known about the writing process, the following recommendations for further research are offered.

1. A study comparing writers' successes based on activities reflecting a creative, developmental approach as opposed to the
A traditional, product-oriented approach.

2. A study interrelating composing processes with paradigms of individual differences, such as the theory of psychological types developed by C.G. Jung.

3. A longitudinal study tracking one or several writers' composing patterns and processes from youth through the older adult stage.

4. The development of more adequate instruments that measure single images as well as complex patterns of imaging and that will give more clues about creative persons and their mental functioning.

5. A study exploring certain aspects of neurological functioning and hemispheric specialization as they may operate in the processes of imaging and writing.

6. A study further exploring conscious and unconscious levels of awareness and how these states impact on the imaging and writing processes.
   a. role of ego consciousness in processes of imaging and incubation.
b. cultivation of insight during the process of working on a composition.
c. exploring the degree of awareness people have of the dimensions of the creative process.

7. A study which assesses the ontogenetic and sociocultural factors affecting life-span development and curriculum design for lifelong learning.

8. A study of composing processes based upon tenets proposed by dialectical psychologists.

9. A study exploring the concept of "image" in a number of fields including philosophy, psychology, perception, and neurological functioning.

10. A study exploring relationships between individual life experiences of writers and the symbolic meanings in their images.

11. A study exploring the archetypal features of images which emerged in the writing.
APPENDIX A

MATERIALS GIVEN TO SUBJECTS
Title:
The Writing Process: Effects of Life Span Development on Imaging

Purpose:
The purpose of the study is to examine the incubation and illumination stages of writing and to determine if individual stages of development affect image production during these creative stages.

Subjects:
The subjects will be four volunteers from four distinct age groups (16) total. Selection criteria will have been satisfied.

Design:
There will be two separate 90-minute sessions scheduled approximately four days apart. Interviews will be conducted to determine how each subject moves through the creative writing process. Subjects will be asked to produce images and create a short poem, then following an incubation period, write a longer piece between sessions. The Shortened Form of Betts' Questionnaire Upon Mental Imagery will be administered.
CONSENT FOR PARTICIPATION IN

SOCIAL AND BEHAVIORAL RESEARCH

I consent to participating in (or my child's participation in) research entitled:

The Writing Process: Effects of Life Span Development

Robert R. Barger/ Diane H. Shock or his/her authorized representative has

explained the purpose of the study, the procedures to be followed, and the expected duration of my (my child's) participation. Possible benefits of the study have been described as have alternative procedures, if such procedures are applicable and available.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am (my child is) free to withdraw consent at any time and to discontinue participation in the study without prejudice to me (my child). The information obtained from me (my child) will remain confidential unless I specifically agree otherwise by placing my initials here ____________.

Finally, I acknowledge that I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: ___________________________ Signed: ___________________________

(Participant)

Signed: ___________________________

(Principal Investigator or his/her Authorized Representative)

Signed: ___________________________

(Person Authorized to Consent for Participant - If Required)

Witness: ___________________________

HS-027 (Rev. 12-81) - To be used only in connection with social and behavioral research.
Incubation Activity

Instructions

Do not consciously try to form any images when you first read the topic for your next poem. Rather, let the idea rest in your unconscious and let images come spontaneously at any time.

As you go about your daily routine between now and the next meeting, be alert to any mental images that come to mind on their own accord. When mental images and resulting creative word passages crowd into your thoughts, immediately record them.

As soon as a few ideas, insights, or images have occurred (this could take two or three days), you may begin writing. Either prose or poetry is acceptable, although generally the essence is in the poetic kernel. Expand and develop any ideas as you wish. There is no prescribed length.

Please bring this material (everything at all stages) with you for the next session.

TOPIC:

Imagine three gates in a row, one behind the other. Open each in turn and then report what you see, hear, and feel.
THE BETTS QMI VIVIDNESS
OF IMAGERY SCALE

Instructions for doing test

The aim of this test is to determine the vividness of your imagery. The items of the test will bring certain images to your mind. You are to rate the vividness of each image by reference to the accompanying rating scale, which is shown at the bottom of the page. For example, if your image is 'vague and dim' you give it a rating of 5. Record your answer in the brackets provided after each item. Just write the appropriate number after each item. Before you turn to the items on the next page, familiarize yourself with the different categories on the rating scale. Throughout the test, refer to the rating scale when judging the vividness of each image. A copy of the rating scale will be printed on each page. Please do not turn to the next page until you have completed the items on the page you are doing, and do not turn back to check on other items you have done. Complete each page before moving on to the next page. Try to do each item separately independent of how you may have done other items.

The image aroused by an item of this test may be:

Perfectly clear and as vivid as the actual experience

Very clear and comparable in vividness to the actual experience

Moderately clear and vivid

Not clear or vivid, but recognizable

Vague and dim

So vague and dim as to be hardly discernible

No image present at all, you only 'knowing' that you are thinking of the object

An example of an item on the test would be one which asked you to consider an image which comes to your mind's eye of a red apple. If your visual image was moderately clear and vivid you would check the rating scale and mark '3' in the brackets as follows:

Item

Rating

5. A red apple

(3)

Now turn to the next page when you have understood these instructions and begin the test.
Think of some relative or friend whom you frequently see, considering carefully the picture that rises before your mind's eye. Classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The exact contour of face, head, shoulders and body</td>
<td>( )</td>
</tr>
<tr>
<td>2. Characteristic poses of head, attitudes of body, etc.</td>
<td>( )</td>
</tr>
<tr>
<td>3. The precise carriage, length of step, etc. in walking</td>
<td>( )</td>
</tr>
<tr>
<td>4. The different colours worn in some familiar costume</td>
<td>( )</td>
</tr>
</tbody>
</table>

Think of seeing the following, considering carefully the picture which comes before your mind's eye; and classify the image suggested by the following question as indicated by the degree of clearness and vividness specified on the Rating Scale.

| 5. The sun as it is sinking below the horizon                       | ( )    |

**Rating Scale**

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience **Rating 1**
- Very clear and comparable in vividness to the actual experience **Rating 2**
- Moderately clear and vivid **Rating 3**
- Not clear or vivid, but recognizable **Rating 4**
- Vague and dim **Rating 5**
- So vague and dim as to be hardly discernible **Rating 6**
- No image present at all, you only 'knowing' that you are thinking of the object **Rating 7**
Think of each of the following sounds, considering carefully the image which comes to your mind's ear, and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. The whistle of a locomotive</td>
<td>( )</td>
</tr>
<tr>
<td>7. The honk of an automobile</td>
<td>( )</td>
</tr>
<tr>
<td>8. The mewing of a cat</td>
<td>( )</td>
</tr>
<tr>
<td>9. The sound of escaping steam</td>
<td>( )</td>
</tr>
<tr>
<td>10. The clapping of hands in applause</td>
<td>( )</td>
</tr>
</tbody>
</table>

*Rating Scale*

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience *Rating 1*
- Very clear and comparable in vividness to the actual experience *Rating 2*
- Moderately clear and vivid *Rating 3*
- Not clear or vivid, but recognizable *Rating 4*
- Vague and dim *Rating 5*
- So vague and dim as to be hardly discernible *Rating 6*
- No image present at all, you only 'knowing' that you are thinking of the object *Rating 7*
Think of 'feeling' or touching each of the following, considering carefully the image which comes to your mind's touch, and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Sand</td>
<td>(      )</td>
</tr>
<tr>
<td>12. Linen</td>
<td>(      )</td>
</tr>
<tr>
<td>13. Fur</td>
<td>(      )</td>
</tr>
<tr>
<td>14. The prick of a pin</td>
<td>(      )</td>
</tr>
<tr>
<td>15. The warmth of a tepid bath</td>
<td>(      )</td>
</tr>
</tbody>
</table>

**Rating Scale**

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience  
  Rating 1
- Very clear and comparable in vividness to the actual experience  
  Rating 2
- Moderately clear and vivid  
  Rating 3
- Not clear or vivid, but recognizable  
  Rating 4
- Vague and dim  
  Rating 5
- So vague and dim as to be hardly discernible  
  Rating 6
- No image present at all, you only 'knowing' that you are thinking of the object  
  Rating 7
Think of performing each of the following acts, considering carefully the image which comes to your mind's arms, legs, lips, etc., and classify the images suggested as indicated by the degree of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Running upstairs</td>
<td>(      )</td>
</tr>
<tr>
<td>17. Springing across a gutter</td>
<td>(      )</td>
</tr>
<tr>
<td>18. Drawing a circle on paper</td>
<td>(      )</td>
</tr>
<tr>
<td>19. Reaching up to a high shelf</td>
<td>(      )</td>
</tr>
<tr>
<td>20. Kicking something out of your way</td>
<td>(      )</td>
</tr>
</tbody>
</table>

**Rating Scale**

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience **Rating 1**
- Very clear and comparable in vividness to the actual experience **Rating 2**
- Moderately clear and vivid **Rating 3**
- Not clear or vivid, but recognizable **Rating 4**
- Vague and dim **Rating 5**
- So vague and dim as to be hardly discernible **Rating 6**
- No image present at all, you only 'knowing' that you are thinking of the object **Rating 7**
Think of tasting each of the following considering carefully the image which comes to your mind's mouth, and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Salt</td>
<td>( )</td>
</tr>
<tr>
<td>22. Granulated (white) sugar</td>
<td>( )</td>
</tr>
<tr>
<td>23. Oranges</td>
<td>( )</td>
</tr>
<tr>
<td>24. Jelly</td>
<td>( )</td>
</tr>
<tr>
<td>25. Your favourite soup</td>
<td>( )</td>
</tr>
</tbody>
</table>

**Rating Scale**

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience *Rating 1*
- Very clear and comparable in vividness to the actual experience *Rating 2*
- Moderately clear and vivid *Rating 3*
- Not clear or vivid, but recognizable *Rating 4*
- Vague and dim *Rating 5*
- So vague and dim as to be hardly discernible *Rating 6*
- No image present at all, you only 'knowing' that you are thinking of the object *Rating 7*
Think of smelling each of the following, considering carefully the image which comes to your mind's nose and classify the images suggested by each of the following questions as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. An ill-ventilated room</td>
<td>(      )</td>
</tr>
<tr>
<td>27. Cooking cabbage</td>
<td>(      )</td>
</tr>
<tr>
<td>28. Roast beef</td>
<td>(      )</td>
</tr>
<tr>
<td>29. Fresh paint</td>
<td>(      )</td>
</tr>
<tr>
<td>30. New leather</td>
<td>(      )</td>
</tr>
</tbody>
</table>

*Rating Scale*

The image aroused by an Item of this test may be:

- Perfectly clear and as vivid as the actual experience: *Rating 1*
- Very clear and comparable in vividness to the actual experience: *Rating 2*
- Moderately clear and vivid: *Rating 3*
- Not clear or vivid, but recognizable: *Rating 4*
- Vague and dim: *Rating 5*
- So vague and dim as to be hardly discernible: *Rating 6*
- No image present at all, you only 'knowing' that you are thinking of the object: *Rating 7*
Think of each of the following sensations, considering carefully the image which comes before your mind, and classify the images suggested as indicated by the degrees of clearness and vividness specified on the Rating Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. Fatigue</td>
<td>(      )</td>
</tr>
<tr>
<td>32. Hunger</td>
<td>(      )</td>
</tr>
<tr>
<td>33. A sore throat</td>
<td>(      )</td>
</tr>
<tr>
<td>34. Drowsiness</td>
<td>(      )</td>
</tr>
<tr>
<td>35. Repletion as from a very full meal</td>
<td>(      )</td>
</tr>
</tbody>
</table>

**Rating Scale**

The image aroused by an item of this test may be:

- Perfectly clear and as vivid as the actual experience **Rating 1**
- Very clear and comparable in vividness to the actual experience **Rating 2**
- Moderately clear and vivid **Rating 3**
- Not clear or vivid, but recognizable **Rating 4**
- Vague and dim **Rating 5**
- So vague and dim as to be hardly discernible **Rating 6**
- No image present at all, you only ‘knowing’ that you are thinking of the object **Rating 7**
APPENDIX B

SELECTED POEMS FROM THE ADOLESCENT AGE GROUP
County Fair Image Developed for Session I

Signs say, "Come to the fair,"
As sadness wells inside.
For one who does not care,
For feelings he must hide.

Show joy, smiles, happiness,
Swallow signs of sorrow.
Today's our day of rest,
We'll talk of pain tomorrow.

Ride the horses, play their games,
Pretend you're having fun.
And after you've raced forever
Someone else has won.

Smile on the Ferris wheel,
Cry only tears of love.
No better place for fun,
No place that I can think of.

Signs say, "Come to the fair."
But I won't go this year.
For I cannot have fun
When joy is what I fear.
Yanked through the first gate,
The light hits our eyes.
Spanked at the toll gate,
We start life with cries.

From warmth to coldness,
From calm to madness,
Always does it seem,
So difficult to dream.
Remembering past this very moment,
The time before our memories,
The time when life was just beginning,
When boats were launched on calmer seas.
Pass through the next gate.
We've opened our eyes.
We've learned so much now,
The light's no surprise.

From days to years,
From eternity to eternity,
Walking swiftly by
Times to laugh and cry
So many times are just beginning.
So many have ended and fallen apart.
At life's crossroads we savor our memories,
Seasoned by feelings held close to the heart.

Pulled through the last gate,
One rests where he lies.
The light is not strong,
The dark soothes our eyes.

From dawn to dusk,
From beginning to never-ending.
The years have passed by,
The tears are wiped dry,
And no one cries for your pains anymore.
For a spirit let free never lingers.
And the flower we held to so tightly,
Slowly wilts and slips through our fingers.
APPENDIX C

SELECTED POEM FROM THE MID-LIFE AGE GROUP
THE WHITE ONE

THE FIRST DOOR IS FAR AWAY WHEN I SEE IT WHITE, WHEN ALL IS BLACK; UNLOCKED AND OPEN WHEN ALL ELSE IS A VICE, IN A SAFE IN A TUNNEL. IT IS THE ONE WAY OUT; THE KEY IS IN ME.

THE DOOR OF TRANSFORMATIONS

THE SECOND DOOR IS A MIRROR, FLASHING IN A CLOUD, ORNATE, A BLOOD-RED BLOT ON THE MOON, A PULSATING NOVA. THE PATH, Lit WITH PRISMS, LIGHT, PLAYING IN PATTERNS THAT SEEM SO REAL, TRUE AND TIMELESS. IT OPENS EVERYWHERE.

THE DOOR OF DOORS

THE THIRD GATE IS A SHADOW, MISHAPEN LIKE ANNOUFAK, BEAT AND TWISTED GINSENG, DESSICATED. INSIDE IS A SECRET, SO PRIVATE, ONLY ONE PERSON MAY KNOW IT. THE PASSAGE LEADS DOWN WHERE GRAVITY'S Got YOU AND YOU THRUST AGAINST THE PULL BUT IT PULLS WITH THE THRUST AND YOU ROLL FURTHER DOWN IN THE PIT OF DOORS.
APPENDIX D

FOUR STAGES OF MEDITATION
Meditation, Stage 1: Gathering the light.
Meditation, Stage 2: Origin of a new being in the place of power.
Mediation, Stage 1: Separation of the spirit-body for independent existence.
Meditation, Stage 4: The centre in the midst of the conditions.
APPENDIX E

SELECTED POEM FROM THE LATE ADULT AGE GROUP
My garden in November.

I walked into my garden.
Nothing looked the same.
Everything was different.
Since the cold weather came.

Under varied colored quilts,
the flowers had gone to bed,
soon they will be covered
by a snow-white spread.

In the Spring (Get Welling)
and warm rain
I want to go walking
in my garden again
I want to see my flowers
when they all come awake.
And into the house, with me
a pretty Bogyet will take.


