

THE 'GENERATION OF METAPHOR
IN THE WRITING PROCESS,

by

Elaine Long Montjoy

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

in

Curriculum and Instruction

APPROVED:

P. P. Kelly, Chairperson

D. A. Clowes

W. P. Self

R. C. Small

L. I. Middleman

December, 1985

Blacksburg, Virginia

58-228-86
H G 48

THE GENERATION OF METAPHOR IN THE WRITING PROCESS

by

Elaine Long Montjoy

(ABSTRACT)

Metaphor is used for persuading, teaching, creating, exploring, problem solving, and explaining the unexplainable. Despite the generations of philosophical and literary scholars who have analyzed metaphor and the attention focused on metaphor in recent years by cognitive psychologists, little is known about how writers generate metaphor in the process of composition. Using Protocol Analysis to create a process model of the generation of metaphor, this case study examines the writing processes of four undergraduates

Subjects, who were selected for their penchant for metaphoric writing, composed two drafts of a narrative and descriptive essay while recording their thoughts into tape recorders. Transcripts, essays, interviews, and observations were examined for evidence about how metaphor evolves. Findings indicate that a catalyst in the form of image, emotion, or tone precipitated the creation of original composed metaphor. The topic preceded the vehicle in sentence structure, as well as in thought processes. Search for the vehicle required effort and strategy that was lost in the short term memory: in the follow-up interview subjects had forgotten their struggle to identify a vehicle, reporting that the creation of metaphor was effortless and spontaneous. Metaphors that were generated spontaneously were usually clichés, derived forms, or were not

original with these essays. Subjects reinforced their use of metaphors by expressing a fascination for them and pleasure in their creation. Metaphor not only enriched the text but opened investigation, engendered a point of view, reversed an attitude, and created new realities.

ACKNOWLEDGEMENTS

I want to thank my committee members, specifically
for making my way clear to pursue this project several years ago and
for sharing valuable references; for his interest in my
subject and his thoughtful attention to the copy; for
his humor, kindness, and insight. Especially I owe gratitude to
 , who directed the dissertation, and who with
 started me thinking about writing as process in the Virginia
Writing Project.

Also I appreciate the patience, faithfulness, and good nature of
 , who typed this manuscript.

Most of all, I have not forgotten one of my earliest childhood
memories of my grandfather, encouraging my
education.

TABLE OF CONTENTS

	Page
Acknowledgements	iv
Table of Contents	v
List of Figures	x
Chapter	
1. Theory	1
Research Questions	9
Assumptions and Limitations	9
Organization of the Study	10
2. Review of Literature	12
Rhetorical Perspectives	13
Philosophical Perspectives	15
The Substitution View	15
The Interaction View	16
The Transformation View	21
Creativity Perspectives	22
Cognitive Perspectives	23
Comprehension	24
Memory	25
Developmental	25
Generative Studies	28
Process	30

3. Methods of Research	39
Protocol Analysis	39
Selection of Subjects	45
Accessible Population	45
Sample	46
Data Collection	46
Training	47
Trial	47
First Draft Narration	49
Second Draft Narration	50
First and Second Draft Description	50
Discourse Based Interview	50
Follow-up	52
Analysis of Data	52
4. Analysis: Four Case Studies	56
Subject A, Pat	56
The Second Draft of Pat's Narrative Essay	57
Pat's Narrative Session	58
The Second Draft of Pat's Descriptive Essay	64
Pat's Descriptive Session	65
Discussion	73
Type	73
Catalyst	74
Effort	76

Reread	78
Association	78
Spontaneity	79
Reinforcement	80
Order	81
Subject B, John	82
The Second Draft of John's Narrative Essay	82
John's Narrative Session	84
The Second Draft of John's Descriptive Essay	88
John's Descriptive Session	89
Discussion	93
Type	94
Catalyst	94
Effort	95
Reread	95
Association	97
Spontaneity	97
Reinforcement	98
Order	98
Subject C, Penny	99
The Second Draft of Penny's Narrative Essay	99
Penny's Narrative Session	101
The Second Draft of Penny's Descriptive Essay	104
Penny's Descriptive Session	105

Discussion	109
Type	109
Catalyst	109
Effort	111
Reread	111
Association	111
Spontaneity	113
Reinforcement	113
Order	114
Subject D, Ingrid	114
The Second Draft of Ingrid's Narrative Essay	115
Ingrid's Narrative Session	117
The Second Draft of Ingrid's Descriptive Essay	121
Ingrid's Descriptive Session	123
Discussion	125
Type	125
Catalyst	126
Effort	127
Reread	127
Spontaneity	127
Reinforcement	129
Order	130
5. Conclusions and Implications	131
Summary of Process Models	132
Summary of Results	133

Prelinguistic Precursors	133
Conscious/Unconscious Generation	135
Behavioral Patterns	136
Location in Process	138
Conclusions	140
Implications for the Way We Look at Instruction	142
Areas for Further Research	144
Bibliography	148
Appendix	161
The Text of Pat's First Draft Description	161
The Protocol of Pat's First Draft Description	164
The Text of Pat's Second Draft Description	171
The Protocol of Pat's Second Draft Description	177
The Discourse Based Interview of Pat's Description	195
The Follow-up Interview of Pat's Description	199
Table 1 - Pat's Descriptive Essay	200
Vita	202

LIST OF FIGURES

Figure	Page
1. A Process Model of the Generation of Pat's Metaphors	77
2. A Process Model of the Generation of John's Metaphors	96
3. A Process Model of the Generation of Penny's Metaphors	112
4. A Process Model of the Generation of Ingrid's Metaphors	128

CHAPTER 1

Theory

It was Aristotle (1948:659) who first observed, "The greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars." Hundreds of years later the mystery of the creation of metaphor still pervades the study of the language. Very little is known about how metaphors are composed or how effectively they can be taught. As was pointed out at the Symposium on The Interrelationship between Interpretation and Creation at The University of Chicago in 1982, "No algorithm exists for the metaphor, nor can a metaphor be produced by means of a computer's precise instructions, no matter what the volume of organized information to be fed in" (Eco, 1982:269).

I. A. Richards (1936:89) disagrees with Aristotle's assumption that the ability to make metaphor is a gift bestowed on some and denied to others, even though he acknowledges that some are better at thinking analogously than others. The difference, according to Richards, is a matter of degree and can be remediated with research and study. Cognitive psychologists such as Hoffman and Honeck (1980) report considerable effort has been put into the study of the cognition of metaphor but very little on the creation of metaphor. They find no concrete criteria have been developed for testing

metaphorical theory and suggest that perhaps "metaphoricalness itself can be used to make some rational decisions about theory."

I use the term "metaphor" to encompass figurative language in general. The word "metaphor" comes from the Greek "meta" which means "trans" or "across." "Phor" means "fer" or "ferry." Metaphors are most often used to concretize abstractions by carrying a meaning across (Baker, 1972:191-192). As Ciardi (1975:9) observes, "Whether the creature is seen as symbol or metaphor is to some degree a matter of definition and, therefore, somewhat arbitrary." We have developed elaborate classifications of figurative language which make fine distinctions between simile, analogy, and metaphor for convenience in analyzing literature; however, Berthoff (1981:7) notes in The Making of Meaning: Metaphor, Models, and Maxims for Writing Teachers:

Like metaphors and images, models are picturable analogies that are aids in reflection--speculative instruments. (Psychologists call their metaphors "models" in the belief that that makes them "scientific".) There are differences between images and models but both are analogies.

According to Black, (1962:219) to call scientific theories "models" is a metaphor in itself. Since similes are metaphors that use "like" or "as," and analogies are extended metaphors, I will use the term "metaphor" as the generic term for figurative language. As Bede the Venerable (1863:607) concludes, "Metaphor is a genus and other tropes are species."

Indeed, a number of scholars (Barfield, 1960; Cassirer, 1953; Ciardi, 1975; Kytte, 1972; Langer, 1957) trace the source of all language to metaphor.

Historians of the language have long taught that we find no word or description for any of the intellectual operations which, if its history is known, is not seen to have been taken, by metaphor, from a description of some physical happening (Richards, 1936:91).

Hawkes (1972:60-67) refers to metaphor as the "omnipresent principle" of all language:

No use of language can be "straight-forward" . . . since it will make use of metaphor even while making that claim. . . . Metaphor, in short, is the way language works. That the process of metaphor is located at the heart of language and indeed defines and refines it . . . is the central stance of most twentieth century writers on the subject.

Empson (1951:339) credits most original thoughts to an initial metaphor and notes that psychologists find more truth in our use of metaphor than in our attempts to define ourselves in an objective way. According to Elbow (1973:54) there is no such thing as a person who does not create metaphors since all people dream, and dreams are metaphors in disguise. Apparently, the creation of metaphor is a process natural to the mind which orders, compares, differentiates, selects on what may be an electrochemical level (Berthoff, 1981:75).

If metaphor is at the heart of all language, why has so little research been done on how metaphors are created? One reason for the dearth of knowledge about the creation of metaphor is a widely held misconception that the use of figurative language is a frill, used to decorate the surface of poetry. As Irmischer (1969:119) notes, some theorists relegate figurative language to the expressionist mode and deny its place in practical communications, failing to recognize that figurative language can be the most forceful and pragmatic means of

discourse as it "sends its roots down into the familiar experiences." As a rhetorical device, metaphor has been used for persuasion from Aristotle on (Kennedy, 1972:289). In most instances, "a figure of speech attempts to transfer our association with the familiar and concrete to something unknown and abstract. . . . The compactness of figurative language makes it not only a vivid form of expression but an economical one as well" (Irmscher, 1969:119). Moreover, through metaphor it is possible to describe the unexplainable, to relay information that seems to defy objective language (Carroll, 1982:88-89). Through metaphor the writer reveals a personal vision that language is inadequate to carry in any other way:

Ultimate truths cannot be communicated; language can only deal with the realm of error, the world of flux. . . ." As Plato demonstrates in The Republic and in Phaedrus we come closer to expressing truth through metaphor than through any attempt at objectivity (Berlin, 1982:771).

The misconception that creative and analytical writing are different subjects to be kept separated in curriculum is one of the most damaging superstitions according to Berthoff. She maintains we need a theory of the creative process in order to teach all the thinking and writing skills (Berthoff, 1981:24-26). Failure to understand a concept may be traced to the failure of teachers to find appropriate analogies. Likewise, when teachers are unable to explain by analogy, it may indicate a failure within themselves to fully comprehend the subject (Stewart, 1972:127).

Metaphors are creative teaching tools in most disciplines, used to explain the unfamiliar by comparing it with the familiar. Petrie

(1979:440) carries this argument a step further when he suggests that in order for humans to learn anything, totally new some mental process akin to metaphoric reasoning must take place. "Metaphor is one of the central ways of leaping the epistemological chasm between old knowledge and radically new knowledge." As Stight (1979:474) concludes:

The metacognitive knowledge of how to manipulate ideas explicitly in metaphor so as to transform either one's own or another's knowledge into new knowledge makes metaphor a major tool for extending our capacities for analytical thought while at the same time changing the tool users. . . . Just as the repeated use of a hammer may strengthen the arm, the repeated use of metaphor may strengthen the powers of analysis and synthesis. Also, much as the telescope may produce knowledge that changes our basic assumptions about ourselves and the nature of our universe, the use of metaphors may . . . bring about basic changes in how we understand ourselves and the world around us.

Ghiselin (1952:2-11), who compiled one of the earlier creativity studies, points out that, in a complex society characterized by rapid change, creative thinking may be our salvation. "If we can reclaim the imagination as the forming power of the mind, we will have the theoretical wherewithal for teaching composition as a mode of thinking and a way of learning" (Berthoff, 1981:64). Even though creative thinkers such as Bartok and Galileo often go unrecognized or are even persecuted in their time, our repeated failure to deal with global issues such as social injustice, environmental abuse, war and peace, implies some fresh insights are in order. It is possible that research into the creative processes can contribute to the ability to

visualize options and solve problems when traditional methods have failed.

Synectics, a problem solving method or device of conceptual blockbusting, moves systematically through a series of personal, symbolic, direct, and fantasy analogies (Adams, 1974:117). Through synectics it is possible to "sort through stored knowledge for good ideas which aren't yet cross-indexed to each other in our memory" (Flowers and Hayes, 1977:455). The exploratory analogy can be used as a working hypothesis which generates new ideas, especially in pre-writing (Kytte, 1972:29). Metaphor, therefore, can be used to teach, to learn, or to remember a theory or principle. It can describe methodology, illustrate points, and predict, demonstrate, and test hypotheses. Moreover, metaphor can suggest reinterpretation of old theories or indicate new ones by illustrating inter-relationships or similarities (Hoffman, 1980:410-411).

Some scientific metaphors are pedagogical, but other metaphors are often critical to the formulation of new scientific theories. For example, "wormholes" and "electron clouds" are used to describe general relativity theory and bound electrons. More significantly, however, metaphors can be theory-constitutive because scientists may be unable to explain certain principles in any other way, i.e., thought as information processing; the brain as a computer; consciousness as a phenomenon of feedback; preprogrammed, encoded, and indexed cognitive processes (Boyd, 1979:359-361). Metaphor is central to scientific discovery, theory change, and transmission

(Kuhn, 1979:416-418). Arber (1947:219-233) claims genius may be more readily perceived in the choice of metaphor than in scientific methodology. The function of metaphor is critical in even the least likely discipline, higher mathematics. When physicist Niels Bohr conceived the electron as a planet orbiting the sun it freed him to use astronomical equations. "The Bohr principle cannot do without the math; it is math." In Bohr's words, "When it comes to atoms, language can be used only as in poetry. The poet, too, is not so concerned with describing facts as with creating images" (Hoffman, 1980:409-410).

As metaphor is central to scientific and even mathematical theory, the sciences are central to metaphor. Science and literature wax and wane together. Bronowski (1967:140) notes, "The great ages of science are the great ages of the arts". The Greeks of antiquity were fascinated with the eclipse because it was so beautiful, but Kepler and Newton based their theories on Greek records. Henri Poincare asserts he allows his esthetic sense to lead him in scientific discovery (Ghiselin, 1952:10). James Watson (1980:124) and his associates knew they had found the model for DNA in the double helix when they saw the beauty and symmetry of the design. "To observe what varies with what is as good a characteristic of the scientific method as any I know; but isn't it also at the heart of composing a poem" (Berthoff, 1981:10-11)?

If metaphors are theory constitutive, then the relationship between thought and language becomes one of interdependency. Thought

and language form a dialectical continuum (Berthoff, 1982:47). As Allen Tate (1952:139) observes, "My verse or anybody else's is merely a way of knowing something: if the poem is a real creation, it is a kind of knowledge that we did not possess before. . . . The poem is its own knower" (Ghiselin, 1952:139). The view of metaphor as creating reality is of particular significance to the semanticist. Kitch, Konek and Majors (1981:191) question how it affects western attitudes and views of reality to "use the same language for time that we do for finance (saving, wasting, budgeting)? Does it make a difference that we speak of taking courses and having taken courses in the University--as if education were like aspirin?" If metaphor is a tool of the creative mind to define reality, then through language we select and create our world. We understand the world by perceiving experience filtered by other experience. Since our consciousness of the world is intensely subjective, we are unable to separate our interpretation of experience from the experience itself. We assign truth according to prior experiences and interpretation. This ability to make associations, then, is a major way of knowing. Creative and critical thinking and writing become synonymous since it is the imagination that separates human kind from other forms of life (Bronowski, 1967:135), and it is the imagination that forms the impetus for problem solving and expression in virtually all areas of life.

Research Questions

In recent years Protocol Analysis has developed as a method of analyzing the process of writing. This study will employ the method of Protocol Analysis to develop a narrative description and a process model of the creation of metaphor.

1. Is there any evidence as to whether or not metaphor is a prelinguistic phenomenon?
2. Does metaphor develop intuitively, unconsciously, or through conscious calculation?
3. Are there patterns of behavior associated with the generation of metaphor?
4. Where does the creation of metaphor occur in the process of composition?
5. Does metaphor have the power to influence the writer's attitude or approach?

Assumptions and Limitations

The theoretical background of the study is based upon the assumptions about the nature of reality summarized in the introduction. Other assumptions involve the methodology. One critical assumption of the study is that Protocol Analysis itself does not interfere with the creative process to the degree that it invalidates the study. The use of Protocol Analysis has been criticized by those who fear the extreme self-consciousness required

of the writer would block the creative impulse, which is essentially unconscious. To some degree this must be a valid reservation. Swartz, Flower, and Hayes (1979:4), however, quote a series of studies done by Ericsson and Simon which finds that the process of speaking thoughts aloud takes longer but does not change the "writer's focus of attention." They found it important that subjects not attempt to analyze their thoughts but to simply think out loud. When Donald Murray (1983:170) writes of his experience with doing a protocol, he describes the discomfort and stress, but he believes his articulation of his writing process was accurate during the protocol. The follow-up interview was less productive because he was unable to reconstruct his process after the fact.

An obvious limitation exists in using student writers rather than professional creative writers. Students are apt to be less creative and flexible and are apt to rely less on expressive devices than more sophisticated writers. That same innocence of the student writer, on the other hand, might illustrate how beginning writers develop creative faculties and how instructors can encourage creative thinking in student writers. Swartz, Flower, and Hayes (1979:5) also find the "very advantages of protocol are also the researcher's nemesis." Protocols are so rich in data that they may be difficult to control.

Organization of the Study

This study will be composed of six sections. The first chapter will develop the theoretical basis, including limitations and assumptions. This chapter will define the problem, state the purpose, support the significance and pose the research questions. Chapter two will review the literature of theories of metaphor and Protocol Analysis. The third chapter will describe the methods of research, including a rationale, the methodology, and the analysis of the data. Chapter four will be a narrative description of the study with analysis. The fifth chapter will include implications and conclusions.

CHAPTER 2

Review of Literature

After studying the history of figurative language, cognitive psychologist Richard Honeck (1980:37) decries the lack of organized research in his collection of essays, Cognition and Figurative

Language:

Figurative language has a long past but a short history. Little of the earlier work has had a direct influence upon contemporary efforts. This is not unusual in the history of figurative language, this history being more a conglomeration of discontinuities than a coherent progression toward resolution of common problems.

Although interest in metaphor stems from the ancient Greeks, it was not until the 1970's that a host of serious studies began to appear in psychological literature. Interestingly enough, even though as early as 1964 scholars such as Phillip Ellis Wheelwright (71) in Metaphor and Reality and Janet Emig (1972:63) in "Children and Metaphor" called for English educators to explore what Emig calls this "major mode of learning," we have scarcely ventured beyond literary analysis or the grammarian's categorizations.

Some reticence about taking metaphor seriously may be rooted in the recognition that metaphor can be dangerous. Stewart (1972:126) warns:

Unless you have had your proper poetical education in metaphor, you are not safe anywhere. . . . You don't know the metaphor in its strength and its weakness; you don't know how far you may expect to ride it and when it may break down with you. You are not safe in science; you are not safe in history.

Collins and Gentner (1980:62) also admit that the very charm of metaphor can be distracting and can muddle the waters of clear thinking. In Philosophy in a New Key, Susanne Langer (1942:24-25) speaks of how we become prisoners of metaphors which have lost their power to be creative.

Rhetorical Perspectives

Throughout the years linguistic and literary studies have centered on the interpretation and classification of metaphor. Aristotle classifies metaphor into "species/genus" categories, but his immediate successors prefer "Animate/Inanimate" classifications. Later writers developed "Classification by Domain of Thought" or "Analysis by Dominant Trait" (Brooke-Rose, 1965:3). The most commonly recognized figures of speech today are described in Thrall, Hibbard, and Holman's (1960) classic Handbook to Literature. Figures of speech usually designated are antithesis, apostrophe, hyperbole, irony, metaphor, metonymy, personification, simile, and synecdoche. Often these figures are classified as either tropes, in which the meaning of the term usually is changed, or figures of thought, in which only the pattern of language is changed.

Antithesis is a figure of thought that balances in opposition ideas as well as grammatical structure. Pope was a master at this particular figure:

The hungry judges soon the sentence sign
And wretches hang that jury-men may dine.

Anthithesis is a sophisticated and artful level of figurative language that community college students would not be likely to employ. In apostrophe, someone or something absent is directly addressed. This type of figurative language was popular in classical literature as addresses to the muse and is commonly used in political oratory and satire today. Metonymy describes a term closely associated with an entity to that entity itself; for instance, "crown" may refer to the king. Closely related synecdoche refers to the whole by naming a part of that whole; for example, "the head" may refer to the individual who presides or is in authority. Hyperbole depends upon exaggeration for effect; irony means the opposite from what is said; and personification ascribes human attributes to non-human or inanimate forms. Metaphor is often defined as an implied comparison, and simile, a direct comparison.

All figures of speech are essentially comparison, however. In synecdoche and metonymy, an entity is compared to a part of it or something near it. In personification something non-human is compared to the human. In irony the real is compared to the false, and in hyperbole the real is compared to the extreme. With antithesis ideas and rhetorical structure are paralleled, and in apostrophe the reality of absence is compared to the dream of presence.

Countless literary critics such as Caroline Spurgeon (1935) have analyzed metaphor to illuminate the text, or in Spurgeon's case, to illuminate the personality of the author, Shakespeare. Endless

textbooks, handbooks, references, and rhetorics carefully establish rules to distinguish the figures of speech. Detailed classifications outline the characteristics of various types of metaphor from Christine Brooke-Rose (1965), who details elaborate grammatical analyses of literary metaphors, to Roland Bartel's (1983) Metaphors and Symbols, which discusses humor and clichés. This fascination of literary critics with metaphor speaks to their recognition of its power.

Philosophical Perspectives

The Substitution View

Even though Aristotle devoted an enormous amount of time dividing and subdividing the figures of speech and even though he refers to metaphor as "the most delightful of teachers" (Baker, 1972:192), he concludes that metaphors are comparisons used primarily as ornaments, which are sometimes ambiguous and, therefore, should be handled cautiously (Ortony, 1979:3). This substitution view of metaphor assumes there is a literal equivalent or paraphrase which would probably be a clearer expression of meaning. Similarly, Cicero, Horace, and Longinus consider metaphor only a decorative art or a point of style (Hawkes, 1972:11-12). In The Philosophy of Rhetoric I. A. Richards (1936:90) claims:

Throughout the history of Rhetoric, metaphor has been treated as a sort of happy extra trick with words, an opportunity to exploit the accidents of their versatility, something in place occasionally but requiring unusual skill and caution. In brief,

a grace or ornament or added power of language, not its constitutive form.

The substitution perspective pervades today when instructors ask the class, "What is the poet trying to say?" This question is usually followed by various attempts at paraphrasing the real meaning of the poem.

Shibbles (1971:13-14) in An Analysis of Metaphor argues that many empiricists, modern logical positivists, nominalists, and technicians who claim that reality can be empirically proved hold the view even though much of what is very real about life, including the scientific theories on which their principles stand, cannot be experimentally verified. Perhaps Aristotle's fundamental misapprehension of what metaphor is all about is due to his point of view as a critic and philosopher, not as a poet. He had no base to theorize about art as process, only as product (Carruth, 1983:251-260).

The Interaction View

In 1871 Max Müller in Lectures on the Science of Language sets the stage for Richards and Urban to act out their theories later. Müller (1871:355) speculates that words create thought and that all words are derived from sensuous roots. He describes a "mythic period" when all language was intensely metaphoric (Müller, 1871:373), consequently, denying the Aristotelian theory of metaphor which claims figures of speech as superficial and inaccurate

expressions. Almost all great world religions and mythos affirm, "In the beginning was the Word."

Richards (1936:93-94) and Urban (1939:21-22) conclude that the substitution view breaks down under close analysis because a new meaning is created when two ideas interact. Richards (97) labels the parts of the metaphor the "tenor" or underlying idea, the "vehicle" or what the tenor is compared to, and the "ground," or all else these two share in common. According to Richards (100):

The copresence of the vehicle and tenor result in a meaning . . . which is not attainable without their interaction. . . .[and which] in co-operation give a meaning of more varied powers than can be ascribed to either.

In "The Interactions of Words" published in 1942, Richards (84) maintains words are intensely context dependent. Quoting Yeats' poem, "How can we know the dancer from the dance," he concludes that form and content are an integral whole. "To read the poem rightly would be to hear and come," Richards proposes (1942:87). He denies that imagery is necessary for metaphor or thought but instead maintains that our view of the world is based on metaphors created by and for us. Metaphor, then, is not an adornment of language and thought but its essential form (Richards, 1936:90). Foreshadowing the work of cognitive psychologists, Richards (1936:136) asserts that the challenge of exploring the development of metaphor may reveal to us the secrets of the human mind. "We may in time learn so much about words that they will tell us how our minds work."

Suzanne Langer (1948:48) speculates on how the mind works when she infers that the tendency for images to assume symbolic significance is seen in the tendency to create metaphor. Metaphors are "our readiest instruments for abstracting concepts from the tumbling stream of impressions." These images from immediate experiences assume the significance of "fantasies" and are "spontaneously abstracted and used symbolically to represent a whole kind of actual happening" or a figurative meaning. She describes the impulse to symbolize as a human need (Langer, 1948:78). "Language is fundamentally the formulation and expression of conception rather than the communication of natural wants. Its motive is the transformation of experience into concepts (Langer, 1948:106-107).

In Models and Metaphors: Studies in Language and Philosophy

Max Black (1962:28) refines Richard's theories and introduces his own nomenclature, "focus" and "frame." In the sentence "The chairman plowed through the discussion," "plowed" is the focus and everything else is the frame. He is not at all concerned about his mixed metaphor of focus and frame. Many poets including Shakespeare are replete with mixed metaphors: the real issue is the effectiveness of the metaphor not necessarily consistency. To quote Peter Elbow (1973:54), "Anyone who is against mixed metaphors because they are mixed is like someone who is against kissing twice: he probably doesn't really like kissing. . . ."

Black (1962:220-222) specifies two different types of metaphor: models, which may be consciously contrived, and archetypes, which are essentially unconscious. He affirms that scientific models and universal archetypes have the potential to unite the sciences and the humanities (Black, 1962:243). In both cases when an attempt is made to paraphrase an interactive metaphor, the endeavor fails because the translation lacks the essential heart and essence of the original (Black, 1962:46). Even though he is wary of viewing metaphor as a total fusion or mystical union, Black (1962:35) claims that if A is B, a new entity is formed, a discovery.

Cognitive psychologists Johnson and Malgady (1977:250-251) call for a semantic theory to explain (A is B) as a "compound free association stimulus (AB)." When word meanings are considered as "a set or vector of potential underlying feature elements (e.g., elementary cognitive characteristics, features, attributes, properties)," when words are compared to each other as in a metaphor, the word combination blends the feature sets or vectors of both parts. The result is that the elements shared by the two words are exaggerated in significance: the sum is greater than its parts.

Terrance Hawkes (1972:91) reiterates the "neo-romantic anthropological view with an added dimension." He recognizes that metaphor creates reality, but he questions whether it is "a new reality so much as the reinforcement and restatement of an older one which our total way of life presupposes." He recalls how Shelly in The Defence of Poetry asserts that poetry was the indigenous tongue

of primitive man. Quoting the words of Giambattista Vico written in 1725, Hawkes harkens back to the ideas of Müller:

Primitive man's instinctive wisdom evolved through metaphors, symbols, and myths. . . . We live in a world of words made for us by our language, where minds are formed by the character of language not language by the minds of those who speak it. . . . Metaphor is not fanciful "embroidery" of facts. It is a way of thinking and of living, an imaginative projection of the Truth (Hawkes, 1972:38).

Barfield (1960:63) writes that all modern languages are composed of dead metaphors that were once original, then clichés, then integrated totally into the objective language. For instance, "right" and "wrong" once meant "straight" and "twisted." He goes on to say that it is the poet's task to reveal the primary relationship that primitive people recognized as that "direct perceptual experience" with which we have lost touch.

Berlin (1982:770-771) calls truth found internally and organically "Neo-Platonic" or the "New-Rhetoric" which is manifest through the dialect of metaphor. Because ultimate truth is inexpressible, analogy and metaphor come closer to suggesting it than any attempt at objectification. Young, Becker and Pike (1970:25) agree:

Constantly changing, bafflingly complex, the external world is not a neat, well-ordered place replete with meaning, but an enigma requiring interpretation. This interpretation is the result of a transaction between events in the external world and the mind of the individual--between the world "out there" and the individual's previous experience, knowledge, values, attitudes, and desires. Thus the mirrored world is not just the sum total of eardrum rattles, retinal excitations, and so on; it is a creation that reflects the peculiarities of the perceiver as well as what is perceived.

According to proponents of the New-Rhetoric, truth does not exist without language because language itself is truth and creates truth (Berlin, 1982:774).

The Transformation View

Cassirer (1946:83-99) carries the creative powers of metaphor into another dimension when he attributes to metaphor the power to establish the perspective from which we view the world. Schön (1979:254) calls this mode of transfer of viewpoints from one domain to another the generative metaphor, which involves "frame restructuring and frame coordination" (1979:279). Not only does metaphor create reality for us, it provides a vantage point from which we view, interpret, and generalize about future experiences. Psycholinguists (Bransford and Johnson, 1972, and Jenkins, 1977) maintain that meaning is not objective at all but intensely subjective, based on the context of the metaphor and the perceiver. Eisner (1982:33-34) describes a reciprocal relationship between the perception of each individual and the environment. Experience always occurs in an environment which is perceived through the senses, and our experiences are always linked to the memory of that set and the interpretation placed on it.

Verbrugge refines the concept of the interactive and generative metaphor by analyzing the process by which metaphor creates reality. According to Verbrugge, a metaphor invites us to transform the topic into the vehicle, "thereby altering perceptions in the future," a

transformation that may evolve into something that will later be called "literal." Verbrugge calls this the transformation or realist view of metaphor.

Creativity Perspectives

This "imaginative projection of Truth" characterized by intense subjectivity seems to capture the essence of metaphor. Berthoff (1981:36) stresses that teaching writing as a process necessitates a theory of creativity because "composing is forming. It is a continuum which goes on all the time. Composing is what the mind does by nature: composing is the function of the active mind. Composing is the way we make sense of the world: it is our way of learning." She goes on to claim that if we can recognize "the imagination as the forming power of the mind," we will arrive at a theoretical basis for teaching writing as a way of knowing (1981:64). "Imagination is the most important idea we could have to think with. We should . . . make it our chief speculative instrument" (Berthoff, 1981:18). In Barfield's words (1928:54), "Discovery, consciousness itself, and symbolization go hand-in-hand."

Original thinking to modern writers probably signifies something different from the commonly accepted interpretation. Arthur Koestler (1964:120) in The Act of Creation asserts:

The creative act is not an act of creation in the sense of the Old Testament. It does not create something out of nothing; it uncovers, selects, re-shuffles, combines, synthesizes already existing facts, ideas, faculties, skills.

Bronowski (1965:135), a noted American research scientist, defines the "imagination as the ability to make images and to move about one's head in new arrangements. . . ." He maintains that the imagination is a uniquely human act. "To imagine is the characteristic act, not of the poet's mind, or of the painter's or the scientist's, but of the mind of man."

In the introduction to his bibliography on metaphor, Shibbles (1971:8) concludes that what is commonly referred to as imagination does not exist. When one imagines or creates, one is making metaphors. The link between the ability to comprehend and make metaphors with creativity is so profound that modern psychologists use metaphor tests as a primary method of identifying creative people (Billow, 1977:83).

Cognitive Perspectives

Cognitive psychologists Hoffman and Honeck (1980:20) declare that if it had not been for the psychologists and philosophers who explored the use of metaphor in the development of scientific theory, problem solving, and self-knowledge, metaphor might have been relegated totally to the rhetoricians. The 1970's were characterized by a flurry of activity among psychologists concerning metaphor. A number of conferences, books, symposia, papers, and studies revolved around memory processes, developmental trends, individual differences, comprehension levels, and appreciation. Since the cognitive sciences are truly interdisciplinary, psychologists often

cooperate with literary critics, philosophers, linguists, and psycholinguists for the development of their theories.

Comprehension

Most contemporary psychological studies have dwelt on comprehension of metaphor (Billow 1975, Verbrugge 1977, Paivio 1979), a subject which dates back to the turn of the century. Early speculations about the comprehension of metaphor centered around psychologists of the Wurtzburg school who argued over whether metaphor was comprehended by images or by conceptual understanding (Downing, 1919). Gestalt psychologists Kohler (1929) and Werner and Kaplan (1963) considered comprehension of metaphor in problem solving and creative thinking tasks.

Ortony (1979:186-201) devised a test to determine if more complex cognitive processes are involved in comprehending metaphor as opposed to literal language by measuring the amount of time it takes to choose an appropriate paraphrase. His results were mixed because the context of the metaphor often determines its comprehension. Kogan (1980), Kogan, Connor, Gross and Fava (1980), and Connor and Kogan (1980) used the Metaphoric Triads Task (MTT) to study the comprehension of metaphor. In the Metaphoric Triads Task, the subject is asked to pair and explain sets of pictures. Verbrugge (1980) studied the effect of the direction of topic vehicle order on comprehension by having subjects record their thoughts when the order was reversed. He found the term which came first was the area

transformed in the subjects' thoughts. Fraser (1979:185) devised a test on how native speakers interpret novel metaphors and surmises that metaphor comprehension is grounded in language use not grammatical structure. The Pickins and Pollio (1979:309) study on "Figurative Language Competence," however, finds that the production of novel metaphors and their comprehension are independent processes.

Memory

Osgood (1953) performed early experiments that indicate comprehension of metaphor occurs when information is retrieved from the long-term memory, but it was Paivio (1979:155) who related comprehension to memory theory as a facet of long-term or semantic memory. Gestalt psychologists Kohler (1976) and Werner and Kaplan (1963) concerned themselves with how the use of metaphor affects the subject's ability to remember. Harris (1976) used sentences containing metaphors and nonmetaphors and found no difference in recall. In 1979, however, Harris found a significant increase in the ability to remember Shakespearean literary metaphor in examples matched for comprehensibility, suggesting that archaic language may be retrieved more readily when it is in metaphoric form.

Developmental

As early as 1926 experimental psychologists such as Piaget (1930) began exploring the relationship between language, developmental trends, and thought through children's misunderstandings of metaphor.

Piaget concludes that children produce metaphor because they lack linguistic skills. In 1960 Asch and Nerlove found in their study "The Development of Double-function Terms in Children" that pre-schoolers produce novel metaphors before they can explain them, leaving the argument open as to whether this is a lack of cognitive or linguistic ability. Later, Chukovsky (1968), Bettelheim (1976), and Koch (1970) all describe a great deal of novel and spontaneous metaphors, as opposed to inappropriate metaphors, in children's speech. In 1975 Kogan used matching pairs of pictures to demonstrate that children understand metaphors they can not paraphrase. Vosniadou and Ortony in 1982 found that even four-year-old children exhibit a basic level of production, comprehension, and recognition of metaphor.

Pollio and Pollio (1974:185-201) asked third, fourth, and fifth grade children to perform a composition task, a multiple sentence task, and a comparison task to observe their ability to use figurative language. The use of metaphor in the composition task decreased over grades, but it increased in the other two tasks, suggesting that the composition task as is commonly assigned in the classroom does not encourage the use of metaphor, perhaps because the emphasis is often put on mechanical correctness in classroom assignments. Compositions that contained metaphors were longer than those that did not, implying to the authors that the interest level may rise when metaphors are created.

Gardner, Kircher, Winner and Perkins (1975:125-141) followed with a design to test children's capacities to make metaphoric relationships and to judge the appropriateness of various comparisons. After subjects from age 4-19 completed a similes test, it was found that primary children favor non-metaphoric endings over metaphoric endings, pre-adolescents prefer conventional or frozen metaphors (clichés), and high school and college students appreciate novel metaphors.

In 1978 Project Zero at Harvard University launched a three year study to examine the development of metaphoric capacity in children, focusing on, among other issues, the question of whether the ability to use metaphor emerges late developmentally and is dependent upon a foundation of intellectual, linguistic, and experiential knowledge. The first operation of this inquiry was completed by Gardner and Winner in 1978, who organized three separate studies of the development of metaphoric competence using a sentence completion test. Advocates of the developmental position come largely from Piaget (1928) and his supporters, such as Bowerman (1976) and Clark (1973). One of the most interesting finds in the Gardner and Winner (1978:133) research, however, is apparent support for the Müller, Vico, Hawkes, Berlin, Barfield philosophical stance of the "child as poet." Pre-school children exceeded all other age groups in producing both appropriate and inappropriate metaphors. In a later study, Winner, McCarthy, and Gardner (1980:355) in "Ontogenesis of Metaphor" also found pre-school children produce original and

powerful metaphoric renamings, an ability that most seem to lose in middle childhood.

In 1981 Winner and Gardner (1-6) issued their final report on Project Zero with the publication of research that revealed metaphors in pre-school children develop from symbolic play as the child make-believes one object is another. These inactive metaphors decline with age as perceptual metaphors (those independent of symbolic play) increased; for example, the child may call skywriting a "scar." Psychological metaphors, which compare personality characteristics to concrete objects, develop last (i.e. comparing a person to an ice cube).

Generative Studies

Theories about the motivation for the creation of metaphor have always been central to Freudian psychology in the observation of dreams and speech patterns as the manifestation of truth which has been denied or repressed. Honeck (1980:36) notes that, according to Freudian psychology, metaphor is the product of repression that masquerades in symbolic form in order to relieve tension and stress. In Jungian psychology metaphor represents the myth making capacity of the archetype, which symbolizes universal truths inherited through racial memory. Modern psychologists such as Kaplan (1955) in "Some Psychological Methods for the Investigation of Expressive Language" suggest that metaphor is the result of sensitivity to experience. In A Theory of Literature, Welleck and Warren (1969:207-208) surmise

that the creator of a metaphor must have experienced the feeling behind the metaphor and that to some degree this feeling had to have been an uncomfortable one, alluding that unresolved pain is the catalyst.

Some evidence seems to indicate that figurative language arises from an emotionally excited state which can be stimulated with drugs, brain damage, anxiety, or even humor. Johnson and Malgady in "Some Cognitive Aspects of Figurative Language" maintain that schizophrenics use more metaphors because they have a higher level of "psychic activity." They suggest that artists share this elevated sensitivity and that all creative people have the ability to create metaphor. In "The Psychology of Metaphor" Anderson (1964:60-67) quotes a number of studies which indicate that an aroused state of "emotionality" correlates with metaphor production. The verb metaphor is associated with "impulsive extraversion" and the noun metaphor with "anxious introversion." He links the resolution that metaphor provides to the need to reduce this aroused state. Honeck (1980:36-38), on the other hand, cites a number of studies that illustrate the severely emotionally disturbed, such as schizophrenics, are unable to respond coherently to metaphor tests. Gardner and Winner (1978:138) designed an experiment for brain damaged patients in order to look for evidence of metaphoric competence in relation to the right or left hemisphere. Their results were enigmatic. Apparently brain damaged subjects can be

"competent in one modality or with one type of stimulus" but incompetent in another.

Process

Scientists, artists, and writers throughout time have described their creative processes as often involving some sort of trance or hypnotic state. Yeats in "A Long-Legged Fly" uses the metaphor of a long-legged fly floating in silence over the flux of the stream to depict the mind creating. Wordsworth in "The Prelude" and Coleridge's description of the composition of "Kubla Khan" relate a condition of revery or dream. Kekule had imbibed in alcohol when in a state of exhaustion he fell into a daydream in which he envisioned a snake swallowing its tail, leading to the discovery that the benzene molecule is a circle, not a linear atom string (Gerard, 1952:237). Eberhart (1978:87) says, "I did not believe in automatic writing, by possession, but there is something trancelike, or breathless . . . sometimes in the writing of poetry." Koestler (1962:210) portrays the dreamer as randomly associating two or more incongruent images which begin to assume some sort of logic as they merge with consciousness in the preconscious state immediately before waking.

Ghiselin (1952:42) and Turner (1978) also discuss a number of artists who relate that their creative state often is preceded by confusion and chaos. It seems that disorder may be a prerequisite for creating a new order. Berthoff (1981:129) quotes William James,

who muses that some minds are "filled with something like meteoric showers of images, which strike into it at random, displacing the focal ideas and carrying associations in their own direction."

Anderson (1964:58) points out that a number of psychologists and philosophers indicate it is psychologically compulsory that human beings attempt to define and understand their experiences in the world. When humans are faced with confusion and disparity, they are compelled to sort through it all in some way and make sense out of the morass. One way the process can occur is through the creation of metaphor.

Such descriptions seem to indicate a lack of control or even an unconscious process of the mind involved in creating metaphor. Ghiselin (1952:6-8) relates that countless writers as well as creative thinkers in all disciplines report that sometimes their inventions are automatic, involuntary, and spontaneous. Spender (1952:115) ascertains that poets' minds work in various fashions. Some seem to produce virtually spontaneously and others laboriously, but both may be of equal genius. Edson (1978:90) recounts, "I am as surprised as anyone might be as the writing begins to come out of the typewriter; the mysterious other life begins to send its message." DeMott (1981:43) ventures that perhaps "master poets come at their poems as a hawk on a pigeon in one dive. I can't. I chip away like a stonemason who has got it into his head that there is a pigeon in that block of marble." The irony in his words is that the above metaphors were apparently spun spontaneously in the course of a

casual, informal interview in his home. Turner (1977) in Fifty Contemporary Poets: The Creative Process finds not one to claim a conscious control over the process of creativity. These writers do not sit down to think up brilliant ideas or metaphors. Metaphors seem to happen out of the process of writing or occur spontaneously when they are least expected.

Psychological studies seem to bear this thesis out. When Gardner, Kircher, Winner and Perkins (1975:134) gave pre-schoolers similes to complete, they found the endings were created in a few seconds, suggesting the lack of a complex process of deduction or choice. Hoffman and Honeck (1980:6) quote Pollio, Barlow, Fine and Pollio, who estimate that about four figures of speech are spoken every minute in unconscious discourse, which averages 21 million figures of speech during a life span, including novel and frozen forms. They found spontaneous metaphors also are created continuously in conventional learning tasks. This extremely high rate of metaphoric use in free discourse suggests strongly that the creation of metaphor is a primarily spontaneous process of association.

Anderson (1964:62) discusses Osgood, Suci, and Tannenbaum who contend metaphor is the result of association. He defines the behavioristic viewpoint of metaphor creation as "an interchange of words or expressions that evoke the same meaning or representational mediational process because they are attached either directly or indirectly to different properties of the same significate." Koen

(1965:133) in "An Introverbal Explication of the Nature of Metaphor" asserts that metaphor may be seen as a phenomenon of psycholinguistic associations, as opposed to an unqualified perceptual event. If perception is the internalization of sensory input and the translation of that input into words, then the semantic and grammatical structures present may influence the perceiver through association with other semantic and grammatical structures.

Paivio (1971:475) cautions that the interpretation of metaphor cannot be viewed as a solely psycholinguistic issue, nonetheless, since imagery and symbolic processes must also be considered. Billow (1977:89) also sees limitations in a purely psycholinguistic approach because it does not explain personal metaphors that arise from one individual's unique experience when certain images assume a significance unknown to others. Eisner (1982:47-53) contends that genuine communication is based on the ability to translate such personal symbol systems to others.

Traditional thought assumes that symbol systems are usually grounded on imagery, but one of the most hotly debated issues in modern psychology is what comes first, the image or the word. Piaget (1926:16) claims action precedes thought and thought precedes language used in a meaningful way. I. A. Richards (1936:131) disagrees, insisting in his lecture "Metaphor" that "it is the word which brings in the meaning which the image and its original perception lack." Donaldson (1978:141) agrees with Richards, placing the image before the word and granting language the ability to give

meaning to the image. Paivio (1971:473) and many others assert the image may be the key to an illumination of meaning.

In ex post facto studies many writers seem to report the image as their first conscious recollection in the process of creating metaphor. Bell (1977:41) and Dubie (1977:83) credit a single visual image with the impetus for the metaphors of their poems. Koestler (1964:168) emphasizes the role of the image in creativity.

Thinking in pictures dominates the manifestations of the unconscious--the dream, the hypnogogic half-dream, the psychotic's hallucinations, the artist's "vision": But the "visionary" prophet seems to have been a visualizer, and not a verbalizer, the highest compliment we can pay to those who trade in verbal currency is to call them "visionary thinkers."

He goes on to say that pictorial thinking is also the most primitive form of thought through which the poet regresses to an older, more immediate experience of the world, harkening back to the earlier theories of Müller, Hawkes, Shelly, and Vico.

Emig (1978) recalls Révész's study of people who have been blind from birth and concludes it is impossible for them to make symbolic transformations. This lack of ability leads her to wonder if writers do literally experience an image visually in pre-writing before they assign words to the experience. Eisner (1981:40) maintains that perception and concept formation are "biologically rooted in the sensory system" and that our ability to experience the world depends upon our ability to symbolize this personal experience into a social dimension.

To the contrary, Harding (1960:12-13) points out that impulses can be related to abstractions before the image or the word form in the mind. The impulse may be moved about in relation to other impulses, suppressed, or acted upon before consciousness is ever achieved. "The images and words . . . may carry with them the results of extensive organization occurring before they make their appearance." As Amy Lowell (1952:110) contemplates in "The Process of Making Poetry," I meet [my poems] where they touch consciousness and that is already a considerable distance along the road to evolution."

Spender (1952:119) reports that he may lay a line of poetry aside for days, months, or years, and return to find it rewritten for him. Henry James in his Preface to The American recalls, "I dropped it for a time into the deep well of unconscious cerebration: not without the hope . . . that it might eventually emerge from that reservoir, as one had already known the buried treasure to come. . . ." As many modern students of the process of writing have indicated, an incubation period may allow the unconscious mind to do the sorting and make the associations for the writer. Harding (1960:20) goes on to point out that Jung clearly affirmed that the archetype stems from the "physiological remoteness" which exists behind consciousness and suggests the mystery of pre-cognitive thought might be penetrated through electro-myography, a process that records muscular relaxation and tension to explore what the expressive movement of the body reveals.

Psychologists from the Wurtzburg School such as Buhler argue for "imageless thought," a concept developed later by Gestaltists Werner and Kaplan (1963:68), who theorize that metaphor evolves from an "organismic state" composed of a "primordial matrix . . . of affective, interoceptive [specialized cells], postural, imaginal elements." Werner (1963:2) finds the ability to create and perceive metaphor depends on the syncretic condition (the ability to unite opposites) of the perceiver. This syncretic condition results from a blend of multiple variables such as the affective, the motor, the perceptive, and the imaginal which affect physiognomic perception. Physiognomic perception, or the assignment of interpretation or characteristics according to outward appearances, materializes in disparate ways, allowing the subject to perceive new comparisons. It is this ability to transcend the ordinary that allows metaphor to develop.

The organismic attribute of physiognomic perception yields to synaesthesia, placing one sensory event in relation to another modality. Worf (1954:39) contends metaphor develops from synaesthesia, which is its prelinguistic and primitive form. Osgood (1980:203-207) concurs and refers to synaesthesia as a basic and universal attribute of human cognition and the necessary precedent to metaphor. Synaesthesias assume a variety of forms, but they all necessitate a prelinguistic cognition on the level of the senses. After synaesthesia, one of the senses involved is assigned a word, and the first step toward metaphor has been taken. In Worf's (1954)

research, subjects were required to draw their responses to simple notes of music that would get louder, softer, faster, slower. Typically their drawings would get thicker, thinner, wavy and straight. When subjects were asked to describe their drawings in relation to the music, they created metaphors.

Brown (1968:148-149) conjectures that a basic intersensory characteristic of the sense modalities may account for metaphor, i.e., coldness usually associated with temperature is also universally associated with personality type. Modern behaviorists such as Osgood, Suci, and Tannenbaum (1957:23) propound that "The process of metaphor in language as well as in color-music synaesthesia can be described as the parallel alignment of two or more dimensions of experience, definable verbally by pairs of polar adjectives. . . ." They venture that to perceive loudness with an image large in size uses the same cognitive processes that are involved in creating and understanding metaphor. Such associations are based on the symbolic implications of abstract noun pairs. Similarly to metaphor, a new semantic relationship is created. The implications are that images are capable of acting as "mediators of associative learning," that images relate to creativity in language, and that meaning depends on the verbal as well as non-verbal context in which a word appears.

By and large the cognitive processes that are engaged in the generation of metaphor are still a mystery. Fraser (1979:185) observes:

Metaphors are black holes in the universe of language. We know that they are there; many prominent people have examined them; they have had enormous amounts of energy poured into them; and sadly, no one knows very much about them.

No one has devised a tool, a test, a measure, or a method to observe the cognitive processes of creating metaphor. Protocol Analysis affords a unique opportunity to examine at least a small portion of what goes on in the conscious mind as metaphor develops.

CHAPTER 3

Methods of Research

Protocol Analysis is based on the case study method of research. Such research is defended by Emig (1982:64-73) in "Inquiry Paradigms and Writing," where she distinguishes between positivism and phenomenology as different philosophical stances around which research may be structured. Her objection to the empirical approach lies in what Mishler calls "context-stripping," which occurs when subjects are placed in an experimental laboratory, randomly assigned to groups, the groups randomly assigned to treatments, and the results considered generalizable. Emig concurs that this model, which developed in colleges of agriculture is an important way of knowing about the world; but she maintains that the case study is another valid way. The study of human activity, she asserts, can be enhanced by recognizing the setting, the environment, and the essential subjective reality in which both the experimenter and the subject exist. Although Protocol Analysis has been criticized for the interference of situational variables, there is no way at the present time to observe metaphor creation in a task free environment.

Protocol Analysis

Confusion about the process of creating has led many writers and teachers to despair over their students and their own inability to

follow the "correct" process of writing. Stephen Spender (1952:116) chastizes himself over his composing habits when he writes:

I myself am scarcely capable of immediate concentration in poetry. My mind is not clear, my will is weak, I suffer from an excess of ideas and a weak sense of form. For every poem that I begin to write, I think of at least 10 which I do not write down at all.

Perhaps more understanding of the process of composing would free many potential writers from the conviction that they do not have the ability and that their methods of composing are wrong.

Adapted from cognitive psychology, "an experimental protocol is a sequential record of a subject's attempt to perform a task" (Swartz, Flower, Hayes, 1979:1). This transcript of the subject's thoughts "provides a unique window on the composing process. It allows the writing researcher to observe not only cognitive processes and their organization in the act of composing but the development of the writer's ideas" (Swartz, Flower, Hayes, 1979:3).

Before the development of Protocol Analysis what few studies were done on the writing process, such as Ghiselin (1952), were retrospective, based on famous writers' accounts. Most theories on which traditional writing texts are founded stem from examinations of the product. As many students of writing have noted, however, authors may not be fully aware of their own creative processes and tend to remember selectively. Nisbett and Wilson (1977:231) warn that the traditional approach of asking writers what their thought processes were when writing is not reliable, as subjects frequently are unaware how subtly their minds relate ideas. Retrospective

studies are limited by the loss of information from the short term memory and distortion through conscious recall and theorizing (Swartz, Flower, and Hayes (1979:4). The advantage of Protocol Analysis over retrospective studies is that Protocol Analysis has the potential to focus on the actual process of how metaphors evolve in the mind and how they affect the thinking process and the final product. No method of analysis is perfect, and even though Protocol Analysis has its flaws, its strength is in the breadth and variety of data it provides.

Theories about how metaphor develops also are based on retrospective reports of writers and examination of the product. Those dealing with the written creation of metaphor in experimental situations have focused on comprehension, memory, and developmental trends. The few who have tended to the generation of metaphor have treated it as a peripheral subject to their principle interest and have relied on artificial situations such as sentence completion tasks. The protocol is a particularly appropriate method to use for exploring such outlying areas on the fringes of knowledge. The inductive approach of the case study allows the researcher to sort out the tangled knot of the writing process, to separate the individual strings, and to look at them singly. As Barritt and Kroll (1977:57) acknowledge:

An exclusive reliance on operational definitions and experimental techniques can lead to the study of the measurable alone, often to the unfortunate neglect of the

significant. . . . Problems in the field of composition will suggest the small-scale "fine-grained" analysis. . . .

An early study recorded on the writing process took place in 1946 by John Van Bruggen who used highly mechanized home-made equipment to determine the flow of words during the writing process (Humes, 1981:3). The seminal study, however, that served as the catalyst for future work on the writing process was Emig's well known examination of the composing process of twelfth graders done in 1971. In the next few years dissertations and research on the writing process began gradually appearing in journals. In 1974, Stallard published "An Analysis of the Writing Behavior of Good Student Writers." Also in 1974 Graves used an observational checklist, an interview, and the product to look at the composing processes of seven year olds to conclude good writers spend more time planning, translating and revising than basic writers. In 1975 Sawkins observed the writing process of students in the fifth grade using interviews with analysis of the product to determine that most fifth graders only rewrite for neatness and proof for spelling. Britton et al followed with The Development of Writing Abilities in 1975, and College Composition and Communication printed Beach's "Self-evaluation Strategies of Extensive Revision and Non-revision" in 1976.

Sondra Perl's dissertation in 1978 on Five Writers Writing: Case Studies of the Composing Processes of Unskilled College Writers broke the ground for further research in the writing process using

the method of Protocol Analysis to record exactly what subjects thought and did while they wrote. The experimenter selected five basic writers, taped their composing, collected the products, held interviews, and graphically coded the operations. In 1979 Pianko aimed at analyzing the writing processes of college freshmen to compare remedial, traditional, adult, teenager, male, female differences. Subjects did not compose out loud, but were observed, videotaped, and interviewed.

Graves (1981a, 1981b), Graves and Murray (1980), Calkins (1980a, 1980b) launched a two-year study of the composing processes of primary aged children who were observed and videotaped. In 1980, Glassner videotaped and used the electroencephalograph to scan right and left brain activity as subjects composed, finding the right hemisphere was used more in planning and thinking through the topic. Again in 1980, Flower and Hayes released a collection of protocols garnered over a five year period called "The Cognition of Discovery: Defining a Rhetorical Problem." Flower and Hayes completed another protocol in 1981 on the location and duration of pauses in good and poor writers.

In 1981 Matsushashi released a study of videotaped high school seniors in which she had used two cameras, one aimed at the writer and the other at the composition. The study was designed to observe pausing and planning behavior. Atwell in 1981 compared traditional and remedial undergraduates who wrote on masters that only recorded on attached carbon copies. Sommers (1980), Bridwell (1980), and

Faigley and Witte (1981) all treated the revision process. Sommers used freshmen and professional adults who composed aloud and then were interviewed. Freshmen were largely concerned with word repetition and adult writers with reorganizing, adding, and deleting. Bridwell used twelfth-grade students who wrote the first draft in one color of ink and the second in another to reveal that most revisions were on the word level.

Berkenkotter in 1983 asked Donald Murray to do a thinking aloud protocol in his natural environment to eliminate the influence of the artificial classroom or laboratory. She found considerable differences in the writer's composing process in a familiar as opposed to an artificial setting. In the same issue of College Communication and Composition that published Berkenkotter's study, Murray described his reaction to the process in "Responses of a Laboratory Rat--or, Being Protoled" as frustrating but enlightening, since he learned how a subject performs a task.

In 1984 Rose analyzed writing blocks of college students who were assessed to be high or low blockers. They were videotaped while they composed and interviewed. Rose's study is testimony to the power of Protocol Analysis to access writing processes. Enormous strides in the understanding of the writing process have been made in recent years that have revolutionized the teaching of writing. These early studies are necessarily descriptive in nature: as the analysis becomes more refined, undoubtedly attempts will be made at defining how these processes work together.

Selection of Subjects

I chose four students from the honors English sections of the small rural community college where I teach. The college, which has an enrollment of about 1,200 students, is located at the juncture of the Allegheny and Appalachian mountains in a village of 5,000 people, but there are about 70,000 to 75,000 in the service area. Our students are typically southern, rural, first-generation college students who tend to be conservative and provincial. Most of our students were graduated from small local high schools that could not afford to offer varied English programs; consequently, few have had much experience in writing at all, let alone creative writing. From my experience in teaching English, I have concluded that many of our students are likely to be unfamiliar with the term "metaphor" before they take freshman composition.

Accessible Population

Students in the honors English sections are usually, but not always, in college transfer programs. Many are traditional 18 year old college freshmen, but many are adults who are coming to the college to complete their educations. Adult students often seem the most sophisticated and creative writers in the community college student body because they have had more time to read, more time to figure out what is important, and more time to grow. Their varied experiences and travel often give them perspectives unknown to the average high school graduate. Adults in the honors section may be

retired military personnel or those taking advantage of their educational benefits. Many honors adults are bright women who married young, reared families, and now need jobs or enrichment. Often honors adults are workers who have lost positions because of the high unemployment in our county. The average age for students at DSLCC is 24-27, and in the honors sections the average age is even higher. Students are selected for the honors sections based on a combination of high school grades, the recommendations of counselors, a writing sample, and scores on the Scholastic Aptitude Test (SAT) or the College Guidance and Placement Test (CGP).

Sample

Since some writers seem to rely naturally more on figures of speech than others, I chose students whom I have observed to use metaphor frequently in their compositions. I was careful not to mention the subject of my dissertation to my students and not to comment on their use of metaphor in class before I selected my dissertation subjects.

Data Collection

Each subject participated in seven sessions.

1. Training	Monday	1 hour
2. Trial	Wednesday	1 hour
3. First Draft - Narration	Friday	50 minutes
Discourse Based Interview	Friday	10 minutes

4.	Second Draft - Narration	Monday	50 minutes
	Discourse Based Interview	Monday	10 minutes
5.	First Draft - Description	Wednesday	50 minutes
	Discourse Based Interview	Wednesday	10 minutes
6.	Second Draft - Description	Monday	50 minutes
	Discourse Based Interview	Monday	10 minutes
7.	Follow-up	Wednesday	30 minutes

Training

The purpose of the training and the trial was to familiarize the subjects with what would be expected of them in order to decrease anxiety that might interfere with the creativity processes. During the training session I explained the method of Protocol Analysis and welcomed the subjects to ask questions. I described Protocol Analysis as a tool used by writing researchers to analyze the writing process, but in order to protect the internal validity of the study, I did not tell them I was looking specifically at metaphor. Participants viewed a video-tape designed to introduce Protocol Analysis to students, which was directed by Don Sowers, a graduate student at Virginia Tech. On the one hour tape the subjects observed a protocol taking place.

Trial

One objective of the trial was to create as non-threatening a task environment as possible to protect the validity of the study. Before the trial, I informed the subjects as to what would transpire

during each session and exactly what was expected of them. I reassured participants that nothing they could do during this writing exercise would be "wrong," except failure to verbalize their thoughts. Subjects were told that it is impossible to capture all thoughts, but the object was to verbalize as many thoughts as possible without analyzing them. The subjects were reassured that their anonymity would be protected at all times. They worked individually in a classroom with a desk, writing materials, a cassette tape recorder, a 90 minute tape, and the experimenter, who observed and took notes. I told the subjects to try to forget I was in the room with them, and I sat to the side of the subjects' direct line of vision so my notetaking would not be distracting.

I asked the subjects to turn on and adjust their tape recorders in order to capture their first thoughts while reading the assignment. I then handed them a typed sheet with instructions to read the topic aloud: "In one or two paragraphs describe what you did before you came to the College this morning while recording thoughts into the tape recorder." If subjects lapsed silent, I reminded them to speak their thoughts out loud. After the trial I asked the students how they felt about doing the protocol to give them the opportunity to express frustration, reservations, and receive assurance. The trial took about one hour.

First Draft Narration

Since narration is the mode students develop first (Moffett and Wagner, 1983:566), the subjects began with a narrative essay. I informed the subjects that I would give them several areas from which to choose and ask them to select their own topic, their own approach, and their own thesis for a narrative essay of two or three pages or approximately 500 words. I explained that a narrative essay simply tells the story of some event that is remembered with particular vividness and that it may not be until after the paper is written that the significance of the narrative is clear to the writer. I encouraged subjects not to worry about mechanics and spelling at this stage, not to worry about the time constraints, but to use a "feeling approach" to the subject. Kaplan finds that encouraging students to use a feeling approach seems to promote metaphors (1955:22). I also told the subjects that completing the essay is not a significant factor. Many prior studies indicate that an early concern with mechanics inhibits creativity, and it seems reasonable that an over concern about completing on time might do the same. I then asked the subjects to turn on their tape recorders and adjust their recorders; I gave them the assignment typed on a plain sheet of paper: "Write a narrative essay of approximately 500 words or two or three pages on one of these topics: home, school, or childhood."

As the subjects began composing aloud, I observed and took notes on their behavior when a metaphor appeared. I observed physical reactions, body language, reflexes and expressions that revealed tension or signs of cognitive or emotive activity. The first draft

took approximately 50 minutes, followed immediately by a discourse based interview. Subjects were told they could bring a dictionary or a thesaurus to the second draft protocol if they usually used them. I then collected their first drafts and made photostatic copies for me to use while they completed their second draft text and protocol.

Second Draft Narration

Instructions for the second draft were similar to the above. Subjects were requested to revise their papers, still with the acknowledgement that mechanics and total completion were not factors. Several days' lapse between first and second draft were allowed for an incubation period.

First and Second Draft Description

The protocol for the descriptive essay was administered as above. Topics for writing were be a place, a person, or an object. I explained that description and narration often overlap, but the emphasis on this paper was to be on description.

Discourse Based Interview

As I observed the protocol taking place, I noted figures of speech that developed, including clichés and frozen metaphors, bearing in mind the subjects were community college students, not professional writers. I interviewed each student after each of the four drafts to eliminate as much interference as possible. Questions

in the interview were discourse based, that is centered on the text produced by the student. The objective was to assess if the subjects had any information in their immediate memories that would illuminate the process of generating metaphor. In order to protect the internal validity, the interview included distractor questions or questions that do not pertain to metaphor so the subjects would not become overly self-conscious about using figurative language on subsequent drafts. The blanks in the interview were filled in with the metaphors the subjects produced. As I took notes, I recorded the responses with different color ink in order to distinguish the interview from my notes. The questions were as follows:

1. What were you thinking or feeling before _____ came to your mind?
2. Did your main idea change in the process of writing?
3. Did you think about tone as you wrote?
4. How did you organize your paper?
5. Did you have a mental image in mind when you wrote _____?
6. Did you consciously search for a figure of speech to express _____?
7. Do you use any tricks, gimmicks, or strategies to come up with something like _____?
8. Did you consider audience when writing your essay?
9. Did you associate _____ with anything else?
10. Are you fairly satisfied with your essay or would you rather have more time to complete it?

11. Are you satisfied with _____?
12. Did _____ change your way of looking at your subject?

Responses to the discourse based interview were not as neat and clearcut as the questions indicate since the questions served as launching pads to encourage the subjects to talk freely about their composing processes. These spontaneous responses helped mask the real purpose of the study even further because some critical questions were answered without being asked.

Follow-up

After the second draft of the descriptive essay, I asked the subjects to jot down any thoughts they had over the weekend about how they generated metaphor. The verbal protocols were completed at this point so students were informed as to the specific nature of the study. During the last session I asked them to explain any other thoughts about the process of creating metaphor that we had not discussed previously. The purpose here was to allow time for reflection and distance to illuminate the question.

Analysis of Data

After the data had been gathered, the essay, drafts, and notes were numbered in order and the tape recording were transcribed into a double-spaced, typed manuscript with both pages and lines numbered.

I analyzed the tapes, texts, interviews, and notes for evidence of how metaphor was generated.

After identifying the metaphors in the first and second drafts of both texts and protocol, I numbered them in the margin in order of their appearance. Metaphors were identified and numbered by concept. Some sentences contained more than one metaphor and other metaphors ran several sentences. I underlined and enclosed each metaphor in parentheses in the text, and I underlined and enclosed in parentheses all the material related to the creation of metaphor in the protocol transcript, including editing processes that immediately followed the creation of metaphor. I then counted words and lines of protocol related to the generation of each metaphor. Next, I labeled the metaphors by literary type on the text copy. Then, following the pattern of Perl's "Case Material on Vern" (1981), I typed the metaphors in a column on the right side of a page with a running analytical commentary in a column on the left side of the page.

In the extreme right margin, I labeled the process of metaphor evolution according to the cognitive process model of Flower and Hayes (1981:365-387). The planning stage includes generating ideas, memory probes, or associations, as well as organizing techniques. Goal setting, another process of planning, can be broken down into process goals and content goals. Process goals are self-instructions on the process of composition, and content goals outline what the writer wants to say to the reader or how the writer wants to affect the reader. The reviewing stage includes evaluating or editing and

revising; reviewing may incorporate systematic planning maneuvers when the writer consciously decides to go back and reread, reconsider, re-evaluate whole sections of composition.

I then examined each metaphor according to each of the five research questions.

1. Is there any evidence as to whether or not metaphor is a prelinguistic phenomenon?
2. Does metaphor develop intuitively, unconsciously, or through conscious calculation?
3. Are there patterns of behavior associated with the generation of metaphor?
4. Where does the creation of metaphor occur in the process of composition?
5. Does metaphor have the power to influence the writer's attitude or approach?

Using tapes, texts, notes, and interviews, I observed where metaphors came in the writing process and the degree to which they affected the subsequent text. I analyzed the dilemmas of image and word order, of conscious and unconscious creation, of order and confusion, and of free association as well as the generating, translating, goal setting, memory probing, and editing processes.

Next I compiled charts listing all metaphors and the variables related to their generation in order to determine if patterns existed. The notes of my observation proved invaluable here as the protocol itself did not reveal silent or unintelligible rereading or

body language. It became apparent that certain behaviors did emerge in the generation of most composed metaphors. As I outlined and classified those behaviors and processes, the taxonomy took form. Free association subdivided into oral memory probing and free writing led to the catalyst, which was the controlling tone, image or emotion of the essay. More free association preceded the topic followed by varying degrees of elaborate strategies which resulted in the vehicle and, consequently, the metaphor. "Novel metaphor" indicated those that appear to be fresh, new authentic creations and "traditional metaphor" those that fit the time honored definition, a figure of speech which compares two entities without using "like" or "as." Some sort of reinforcement usually concluded the process. The appendix contains a complete sample study.

Since these exploratory case studies are based on a selected sample of a very limited population, few generalizations can be made, but I hope to be able to crack the door for further repetitions and variations in research to follow. The model derived is provisional, but it examines what Protocol Analysis has to reveal about how metaphor evolves in the writing of four community college students.

CHAPTER 4

Analysis: Four Case Studies

Following is a description of each subject, the second draft of the essays, an overview of the protocol and interview, a discussion, and a taxonomy of the generation of metaphor. The overview of each session contains a summarized description of the sequence of thoughts and behavior in which the writers engaged as composed metaphors were generated. The subjects were instructed not to concern themselves with spelling and mechanics, and their texts are printed unedited, exactly as written. All direct quotations in this section are from the students' texts, protocols, or interviews.

Subject A, Pat

Pat is a 47 year old retired non-commissioned CIA officer. He has traveled widely, completed several language schools while in the service, and speaks three languages. At the time of the study, he was a sophomore working on an Associate Degree at Dabney S. Lancaster Community College in the Police Science Program. Pat has read widely, has been exposed to a variety of cultures and experiences, and, consequently, has a rich long-term memory store. While in the service he continually wrote reports, interpreted data, and attended schools, so he also may have well-developed writing conventions or schemata. He completed a year of English composition during the regular term and a year of American literature in the summer session.

I asked him to participate in this study because of his unique and natural voice that expresses itself metaphorically at every turn.

The Second Draft of Pat's Narrative Essay

Childhood should happen to all of us for prolonged periods. Ours was super. We know it was because our hindsight has crystalized with the diamond polish of time and we can see clearly now. Our memories can sharply focus on the refracted light of the good times and the pleasantries of things free. We can remember the tinkle of the bell on the ice cream scooter and how fast we ran home to beg for a nickel and dashed back to buy popcicles with two sticks. We all knew or suspected that a popcicle with two sticks had to be a better buy.

We can recall the long walks in the hot sun, or the rain, to the old swimming hole. We would stroll for miles along the railroad tracks, stepping on every other tie or doing a balancing act on the rails. We dreamt of being policemen, pilots, trailer truck drivers, baseball players, race-car drivers, soldiers, cowboys and doctors. Peanut butter and crackers were the main staples of our young diets and we can still taste the earthy fragrance of peanuts in our memories. We can almost still feel the icy and ecstatic shock of ice chips snatched from the back of the old ice truck, sometimes under the friendly glare of the truck driver. We all knew he had been a kid once. We were all scared of Santa Claus and only half believed in him. We were all pretty darned normal and having these experiences behind us, we became graduates of a school that had prepared us for our second childhood.

Now we could enjoy some of the things we never had as children. We could look our spouses in the eye and say that we weren't really playing with the kids' electric trains, but just making sure they worked before they were placed under the Xmas trees. We could be very convincing in our description of events which led to our buying the pinto pony for the youngest girl. Since almost everyone needs a watch dog, it was fairly easy to bring home a matched set of beagle puppies. Now that some comic book collections are worth a fortune and some individual books have become quite valuable, there is no reason not to buy comic books.

We have all known someone who was apparently going through a second childhood and we have marvelled at the joy of their situation. We have stood astounded watching middle-aged persons buying sleds, roller skates, hula hoops and preprogrammed musical horns for their sports cars with wire wheels. Perhaps we watched with envy as these lucky people with apparently heavy duty charge accounts indulged in nostalgia producing purchases. It was a fleeting envy because we would soon emulate them. We

have also seen our mature friends hang stockings at Xmas, knowing exactly how and with what they'll be filled. Perhaps like all of us that dream, they long for that one last miracle. Let us wish them luck.

Pat's Narrative Session

After he read the assignment, Pat spent 30 lines brainstorming, free writing, and probing for a topic before he finally settled on comparing childhood to second childhood as perceived through the eyes of the adult. Consequently, his paper turned out to be more of a comparison/contrast essay than a narration. During the second draft protocol, he questioned the use of the first person plural. "What's this 'we' business anyway. . . . How arrogant (pause) or is it modest? Umm." He eventually decides to stay with the first person plural on both essays.

As early as the seventh line of Pat's planning stage, the image of ice emerged when he nostalgically remembered the ice man of his childhood. He demonstrated a marked physical reaction to the memory of a "a shower [shiver] of little chips of ice [laughter]." Images of ice, crystals, light, and glare form the catalyst of his paper, comprising the vehicles of six metaphors and the central concept of two, including the final one.

The original version of the first metaphor was "Our hindsight has crystalized and we can see clearly now," which seems to express his mental state following an initial free writing in the planning stage. After he journeyed back into his past, stumbled around among various images, including funerals, he decided to focus on the

positive and through "hindsight" froze it all for a moment in time. He rejected "20/20 vision hindsight" because he feared it was a cliché and deliberately searched for a verb. He evidenced considerable struggle in his body language and expressions (whew! pauses, coughs, throat clearings, ums and uhs) before he finally came out with his metaphor. Immediately, he stamped it with approval, "I like it!" In his interview, he recalled that "crystalized" was triggered by memory of the ice man." I pictured the image in my mind; I felt the physical sensation of my hand cold, the cold air under the canvas, the rotten boards on the bottom of the ice truck." After reading, he visualized the image, arrived at the concept, and worked very hard editing, searching for verbs and sensations to serve as the vehicle, followed by reinforcement.

After more stuttering and rereading, he created the next metaphor relatively quickly as it grew out of the "crystalized" image. He deliberately searched for senses other than sight but remained with vision in his metaphor. Pat acknowledged that memory can focus on bad as well as good, but that he was choosing to focus on the good. The sequence of this metaphor's growth was reading, imaging, laboring, logical processing, and editing to associate images for his vehicle, then reinforcement.

In the second draft he developed the two metaphors further after a great deal of effort, fighting, and rereading by asking:

What is crystalized like? . . . Not ice. . . Like sugar?
 Little crystal things. Ah! Diamonds! Has crystalized with the
 diamond polish of time. Yeah! Diamonds refract light. I'm

going to do it! Take a shot. Our hindsight has crystalized with the diamond polish of time and we can see clearly now. Our memories can sharply focus on the refracted light of the good times and the pleasantries of things free.

In the interview, he said he visualized a bucket of salt or sugar . . . huge icicles in artic caves." He recalled that he used a "shot gun approach, thinking of everything he knew that concerned diamonds, cut glass, drill tips, the guy who carries diamonds in a brief case, polishing diamonds." In this draft he labored, edited, associated, and used logical processing to further develop the vehicle of his metaphor.

The next metaphor, "doing a balancing act on the rails," was created in 18 lines or 198 words after considering that walking on railroad ties is an art form, recalling Thoreau's reference to railroad ties, and questioning why they are called ties. He then launched a series of associations, rereading, and memory probes about the long hot summer days of childhood. After he came out with "balancing act," he made some rhymes, reread, laughed, and described how they would walk with arms outstretched. He reread the metaphor again with pleasure. The sequence of this metaphor's development was again rereading, imaging, topic, associating, vehicle, and reinforcement.

"We can still taste the earthy fragrance of peanuts" is Pat's only example of synaesthesia. He composed this metaphor in the first and second drafts after lengthy rereading and stumbling for 100 words. He searched for words, rejected repetition, considered

senses, and recalled the smell of a country kitchen on Sunday morning, which he did not use because he feared it was a cliché. Then he asked the pointed question, "What do peanuts taste like?" He considered salt, sweat, and earth, but was not satisfied. In the interview he said he thought of digging for peanuts in the ground, the good smell of fresh earth, and the training video-tape topic which was "earth." When he completed the metaphor he expressed satisfaction with it. This metaphor was preceded by rereading, imaging, laboring, editing, and associating to arrive at the vehicle and reinforcement.

The "ecstatic shock of ice chips" was originally "the electric shock." It came as the response to the direct question in the protocol, "Those ice chips, I can feel them almost. What was it like? How do the ice chips feel on the tongue--stings--melts?" After a considerable reflection about the tactile sensation he laughed, "Don't want to use a word like frigid [shiver]." At this point Pat blocked and decided to come back in the next draft. In his second effort, after rereading he immediately associated the sound of "ecstatic" and "electric" with enormous delight. Both are three syllable words that share similar sounds and stress. Pat added in his interview that "electric shock" was painful and, therefore, inappropriate because ice doesn't hurt children's teeth. He also admitted that he panicked when he blocked, but when he got it right, "'It feels like the top of my head comes off,' as Emily Dickinson said." The order of composition of this metaphor was rereading,

imaging, topic, searching for sensation, laboring, editing, associating, vehicle, and reinforcement.

"The friendly glare of the truck driver" was created in the second draft as the response to the question, "What did he look like? Big, mean, but nice, gruff." In the interview Pat said the glare was "that ice again in his eyes. I associated the sparkle in the truck driver's eyes with Santa Claus. We were afraid of both of them, but they also brought good things and were supposed to be good guys." Pat reread, imaged, labored, edited, and associated to create the vehicle that he accepted.

"We were all pretty darned normal" is an example of irony if "darned" is considered a euphemism for damned, since normal people are not ordinarily considered damned. This expression seemed to happen spontaneously after he made an ink blot and said, "Darn!" but the word "darn" Pat immediately associated with his sox, which needed to be darned, which reminded him of his daughter's band gloves that she refuses to darn, and then the red, white, and blue band colors which are "normal" colors. This loose pattern of free association is typical of the way Pat's mind works.

"We became graduates of a school that prepared us for our second childhood" developed in the second draft from the first draft variation after 21 lines or 231 words. "Having the childhood experiences behind us, we were prepared for our second childhood." After a limited reread, this metaphor grew from an association of concepts: "Is anyone ever prepared for senility? . . . The whole

thing is a comparison of one and the other [childhood to second childhood]. Why do they call it second childhood when childhood is a learning process for kids? What's going on here?" He then launched into a memory probe about how it would be out of the question for him to have a red low slung ten cylinder Mazaradi at his age, but that it was not too late for his son. He was not satisfied with the metaphor but decided to come back to it in the second draft and polish it. When he returned to the metaphor, he rejected "life's school" because it was "a cliché, corny, sappy." He was never pleased with "second childhood" and planned to come back to it once more but time elapsed. Pat's sequence here was rereading, topic, laboring, editing, associating, and vehicle.

"Heavy duty charge accounts" was created quickly, but Pat reported he pictured a statement with lists and lists of items loaded down. He evaluated and questioned the metaphor after he composed it and decided to stay with it.

"A fleeting envy" was also created spontaneously, but in the protocol he wondered, "Why fleeting?" In the interview he concluded it was a fleeting envy instead of a fleeting thought because "we have to keep up with the Joneses; we would soon envy them, but we really know better." In Pat's mind, he linked this metaphor back to the original concept of crystalized hindsight. Now he knows better than to envy. The ice image returned to round out and, in his own mind, to complete the essay.

The Second Draft of Pat's Descriptive Essay

We have all seen kitchen gadgets that have no apparent use and if aliens or reactivated cave men saw them, they would not know what they were seeing. How in the world could a martian identify an egg slicer, an egg separator or a spaghetti lifter? They couldn't, no more than they would realize the true worth of a potato peeler, cork screw or a metal tea ball. There seems to be no end of eye-catching and useless gimcracks, widgets and whatchamacallits, which are designed for visual effect as opposed to efficiency.

Salesmen have long earned an honest living by offering little and large metal miracles to unsuspecting housewives and the gullible general public. All of these wonder workers are highly touted as the last word in helping us to cope with reluctant cucumbers, sassy tomatoes, squishy squash. We blithely buy each and every alleged work saver that comes on the market or thru the mail and after they fail to produce the advertised results, we put them in a drawer with their predecessors, where they rest in permanent and unearned retirement, and where they will * stay until the next yard sale or until the will has been read.

We really wonder how we ever survived without the beautiful blenders with eight forward gears and overdrive reverse which mash, bash, rend, rip and tear everything from ice cubes to tennis shoes. How did we live without the magic slicer that makes tons of julienne fries, takes the tears out of onions, slices of bunions, and rends asunder old love letters. How did we make daquaries without the aid of this electric whirling dervish? We would hate to think of having to jump on or stomp ice cubes into powder, in order to simply have an after dinner snort. We now own electric knife sharpeners that also put an edge on scissors, trim our toenails, polish our shoes, brush the dog and eat old mop strings. These gadgets do require that we maintain a large supply of band aids, sterile gauze, iodine and other medical supplies, because we are likely to catch our ties, fingers and other extremities in our automatic pickle slicer, olive dicer, potato ricer and canary plucker.

We are not satisfied to cut pizza with a knife because the in crowd uses pizza cutters. These gadgets are not as efficient as a solingen steel bladed paring knife but they are widely used for dissecting pizza because they have absolutely no other purpose or use. Imagine the joy of the lucky lady who finds her very own chrome plated pizza cutter in her Xmas stocking. What else does life have to offer for the person who has everything except a box to put it in?

Certainly no home would be complete without a kitchen full of the modern marvels for opening tin cans. These items of wizardry come in all shapes and sizes. They whir, click, clank, and scalp the lids off beans, hominy, tomato paste and mushroom

soup. They are designed to self destruct after a short time so that they can be replaced at higher cost and therefore they are good for the economy.* They have so endeared themselves to us that we find it hard to throw them away after they have worn out. They have become our friends and members of the family. They have served us long and faithfully and helped us grow fat together. Have you hugged your can opener today?

Pat's Descriptive Session

Before Pat began this protocol, he suggested that he would like to try to write this paper more naturally, more freely. Since the technique was new to him, he felt more tension during the first protocol than is normal for him when composing. As he began exploring for subjects, he arrived at irony and hyperbole as early as the seventh line of the planning stage, and that ironic tone pervaded his search until he finally decided on a topic in the eighteenth line. This overall metaphoric tone of irony and hyperbole dominated all his tentative thoughts as it eventually permeated all the metaphors he created. After he established the ironic tone, he decided to write on useless kitchen gadgets and set about searching for imagery to work with his ideas.

Pat determined that he didn't need inventive techniques to write about kitchen inventions and that he would stick with the first person plural once more because he was "accusing the entire world here." He laughed at those "unfounded allegations" and proceeded directly into his text. The ironic tone extended from the first paragraph as he questioned the value of kitchen gadgets, but it took 23 lines of mumbling, sighing, questioning, rereading, editing, and

searching to come up with the concrete objects, "potato peeler, cork screw, and metal tea ball." When he finally got it right, he made an expression of relief and approval. After the topic, this metaphor was created by rereading; imaging; laboring; editing; associating concepts, nouns, and images; and reinforcing.

From the first line of the second paragraph on, every sentence in the essay is ironic in tone with a great deal of hyperbole. The irony seemed to flow naturally and effortlessly once it had been established. "Salesmen" was suggested to him because they sell "widgets." From that link he went directly into, "Salesmen have long made an honest living [a wry facial expression] by offering little metal miracles to unsuspecting housewives." After he finished this section, he laughed, enjoyed the irony, and reread.

Immediately after rereading, he launched into 198 words of struggle and editing before he finally completed the 24 word sentence: "All of these wonderworkers are highly touted as the last word in helping us to cope with reluctant cucumbers, squishy tomatoes and sassy squash." He mumbled, chuckled, reread, growled, laughed heartily, heaved a great sign, and paused five times at length. He also wiggled in his chair, rattled his paper and evidenced struggle in his expression and body language. Pat recalled a process paper he wrote in freshman composition on how to build a sandwich; then he created several other examples of personification which he proceeded to reject. He composed the reluctant cucumber image in the first draft by a process of generating words and phrases. He blocked in

his effort to find an alliteration to go with cucumbers and put it aside for the second draft. In the next draft, he spent 264 words to switch two words around. He searched unsuccessfully for an adjective that begins with "c" to describe cucumber. He associated "wonderworker" with wonderwoman and "aid" with foreign money. He remembered picking cucumbers in his garden the day before. Pat finally settled on "sassy squash" primarily because of the alliteration but changed it to "sassy tomatos and squishy squash" in the second draft through a process of editing. In the discourse based interview, he said that he pictured himself picking cucumbers: "The thing that makes cucumbers reluctant is that they hide under a leaf and swear they weren't there yesterday when you go back to the garden." He concluded the metaphor with a little humming, apparently pleased. The sequence after the topic was to reread, image, labor, edit, free associate, alliterate, and reinforce.

The subsequent ironic sentence was composed spontaneously: "We blithely buy each and every work saver that comes on the market or through the mail." He worried about spelling and decided that he should not be concerned about it. When he moved into the next sentence, however, it was with laughing, sighing, rereading, stumbling, and paper rattling 297 words later. "And after they fail to produce the advertised results, we put them in a drawer with their predecessors where they rest in permanent and unearned retirement [pause, sigh] and where they will stay until the next yard sale or until the will has been read." After he completed this section he

engaged in a lengthy reread and exclaimed, "Good!" with vigor and moved on. In the second draft he repunctuated the sentences, explored numerous memory probes, and decided to leave it intact after 176 words of protocol, during which he imagined in great detail a cemetery and a funeral ceremony for retired kitchen gadgets. The pattern of this metaphor was rereading, imaging, laboring, editing, alliterating, and reinforcement.

"We really wonder how we ever survived without the beautiful blenders with eight forward gears and overdrive reverse which mash, bash, rend, rip, and tear everything from ice cubes to tennis shoes." The initial ironic hyperbole was composed spontaneously in the first draft after rereading the previous metaphor. The traditional metaphor comparing a blender to a four wheel drive vehicle was developed in the second draft after 110 words of rereading, imaging, editing, and associating. He started out slowly, repeating until he set the goal to free write; then he began spinning a string of action verbs and stopped to clear his throat before he created the metaphor. As he concluded with the final hyperbole, he paused, repeated, coughed, laughed, mumbled, edited, and questioned. Pat doubted the logic of a memory probe about the process of technical writing. He thoroughly enjoyed the slant rhyme and the absurdity of "ice cubes to tennis shoes" and made no changes in the second draft. In the discourse based interview he acknowledged that he pictured a television barker making outrageous claims for his product. This combined form was created after rereading, imaging, laboring,

editing, free associating, associating sounds and concepts, and reinforcement.

"How did we live without the magic slicer that makes tons of julienne fries, takes the tears out of onions, slices off bunions, and rends asunder old love letters." After a limited rereading, Pat moved ahead into this next example of irony and hyperbole which took 15 lines to compose. He slowed his pace, paused five times, laughed, stuttered, asked himself a question, and proceeded to answer it in the tone of a carnival barker with lots of laughter and gesturing. This metaphor was composed using goal setting, editing, translating, and generating. In the interview, he recalled he pictured the french fries, shredded letters, and bunions and associated "rend asunder" with the marriage ceremony, "Let no man rend asunder," which led to the love letters. He marveled at and questioned his own thought processes and expressed approval of the metaphor. This hyperbole was developed by imaging, free associating, associating verbs, and reinforcement. The topic was arrived at first, followed by the vehicle.

The next metaphor, comparing a blender to an "electric whirling dervish" was composed quickly in 44 words after rereading. He worried about spelling as he did many times in the course of the protocol, but since he had been instructed not to concern himself with it, he moved on. Pat remembered writing a paper on Afghanistan and pictured a whirling dancer in his mind. In the second draft he said this metaphor would survive up to the fourth draft." After

rereading, he composed the next example of irony and hyperbole spontaneously: "We would hate to think of having to jump on or stomp ice cubes into power in order to simply have an after dinner snort."

Pat reread at this point to look for a "springboard," acknowledged that he was grasping at straws and thought of a pogo stick. He then asked himself how he ever lived without knife sharpeners, questioned his paragraming, and completed the next hyperbole in 132 words. "We now own electric knife sharpeners that also put an edge on scissors, trim our toenails, polish our shoes, brush the dog, and eat old mop strings." Afterward, he chuckled and then considered rejecting the toenails because he could not "see it" but left it in for the sake of the ridiculous. He associated knife sharpener with his kitchen table that needs to be cut down, which led to the mess on the kitchen floor that would have to be mopped up. He had no trouble picturing the dog with a pointed tail, which led to the next metaphor. In the interview he said:

I try to fill in the blanks with all the things I can think of that are distasteful. I try to cover as wide a spectrum as possible, to be as far apart as I can. . . . I want it to be outlandish. I started to include everything from iodine to prayer beads, but I decided I wanted to keep religion out.

In the process of developing the metaphor, he expressed great frustration verbally as well as through growls, frowns, and physical activity. This hyperbole was generated by rereading, imaging, laboring, and free associating. The topic preceded the vehicle.

After rereading, Pat began his next hyperbole, "These gadgets do require that we maintain a large supply of band aids, sterile gauze, iodine, and other medical supplies, because we are likely to catch our ties, fingers and other extremities in our automatic pickle slicer, olive dicer, potato ricer, and canary plucker." He spent 230 words exploring options in the first draft, rejected a "spring loaded olive pitter," including sound effects, because he could not "visualize it in his mind." In the second draft he spent 40 lines looking for rhymes, the absurd, and opposites. He engaged in memory probes, numerous dead end associations, and constant visualization. He thought of his daughter who uses bandaids on every scratch, of the days when he cooked in a coat and tie, made a joke about "extremeties," looked for rhymes, thought of the opposite of a cat trimmer, and came up with "canary plucker." This hyperbole involved rereading, imaging, laboring, free associating, associating opposites and images, and reinforcement. The topic preceded the vehicle.

The next ironic two sentences were written quickly in only 7 lines. After they were composed, he associated, reread, and began thinking of all the things a pizza cutter could not do, then wrote his next metaphor: "Imagine the joy of the lucky lady who finds her very own chrome plated pizza cutter in her Xmas stocking." The next ironic sentence followed immediately: "What else does life have to offer for the person who has everything except a box to put it in."

He pictured the pizza cutter reflecting the Christmas tree lights and all the useless gifts under the tree.

After reading he began immediately, "No home would be complete without a kitchen full of modern marvels for opening tin cans." With some pausing and stumbling, he completed the remainder of the metaphor spontaneously: "These items of wizardry come in all shapes and sizes. They whir, clink, clank, and scalp the top off of beans, hominy, tomato paste, and mushroom soup." In the second draft he spent 15 lines to change "top" to "lids" and engaged in five dead end memory probes. The interview records that he heard the sound of the words "whir, click, clank, and scalp" when composing. In developing this personification, Pat arrived at the topic then reread, imaged, labored, and reinforced.

"They are designed to self-destruct after a short time so that they can be replaced at a higher cost and therefore are good for the economy," is an example of irony composed spontaneously after reading. After rereading once again, he generated the final metaphor:

They have so endeared themselves to us that we find it hard to throw them away after they have worn out. They have become our friends and members of the family. They have served us long and faithfully and helped us grow fat together. Have you hugged your can opener today?

This four sentence personification composed of 20 words was written through translating and generating in 88 words of protocol. After five pauses, two sighs and a laugh, he completed the last sentence by translating.

Discussion

Pat was the most prolific and complex creator of metaphors of all the subjects tested. He used more rereading, imaging, free writing, controlled searching and memory probes than any other subject. He generated twelve metaphors in his narrative essay and twenty-one in the descriptive essay, not including combined forms that represented more than one figure of speech. Scores more were spun in his protocol that were never translated onto paper. Apparently Pat is at one with the poet who laments that for every poem he creates, ten more never take form. Of the twelve from the narration, four were produced in the first draft and eight in the second. From the descriptive essay, eighteen were developed in the first draft and three in the second. This difference could be attributed to Pat's conscious decision to "write more freely" on the second paper. Since he did not consider the second draft of either paper a completed essay, it is possible metaphors could have continued to evolve as he polished his essay.

Type. In Pat's narrative essay, eight metaphors have nouns for vehicles, two have verbs, and two have both. In the description, fourteen have nouns, four verbs, and three both. In the narration, traditional metaphor is the form Pat relies on most, composing eight examples; whereas, in the description, Pat only completed three traditional metaphors. Every example of traditional metaphor in both essays involved editing through eliminating, substituting or

reordering; no other form consistently required editing. The different approach to composition Pat assumed in the two papers may account for the sparsity of traditional metaphors in the second paper since he does compose them more slowly and with more effort. All examples of hyperbole in both essays required free association or free writing. The five examples of personification in the descriptive essay all involved laboring, editing, and alliteration. The personification "fleeting envy" in the narration was spontaneous, but it is close to the cliché, "fleeting thought," which came to his mind first.

Catalyst. The memory of ice, which was so acute that Pat experienced it physically, forms the central framework on which the entire narrative essay hangs. The crystalized hindsight suggested by ice crystals summed up his reaction to his initial invention stage. After sorting through various memories, punctuated by funerals and funeral parlors, he deliberately chose to focus on the good times. "Hindsight crystalized with the diamond polish of time" implies the art of memory creating a reality with which we choose to live out of the raw material of the past. Memory "sharply focused on the refracted light of the good times" alludes to the light of memory perceived as it passes through one medium to another. Near the end of his essay when Pat pondered over how "we become graduates of a school that prepared us for our second childhood," he returned to the "20/20 hindsight" image in his own mind. According to the discourse

based interview, "We can see clearly now what we only sensed then. Our memories focus sharply on the bad as well as the good, but that's another story." Pat returned again to the central concept in the conclusion as he mused that our envy of the second childhood is fleeting because we know that those idealized memories are selective and polished through time. In the narrative essay, the memory of ice forms the center from which the central ideas and images emanate and from which an attitude, a perspective, a reality is created.

In the second paper, Pat's ironic attitude toward worthless kitchen gadgets began to change as he personified them. He started off maintaining that they have "no apparent use whatsoever. . . . There are so many stupid things in a kitchen." His attitude began to change, however, with the image of the kitchen gadgets being put on the shelf in "permanent and unearned retirement until the next garage sale or until the will is read." He heaved several long, weary sighs. Pat had recently retired from a very active life, and the idea of being shelved was not new to him. By the end of the paper when he returned to the topic of items "designed to self-destruct after a short time so they can be replaced at a high cost," his attitude shifted to one of sympathy. "They have become [sigh] our friends and members of the family. They have served us long and faithfully and helped us grow fat together [sigh]. Have you hugged your can opener today?"

In the second draft, when he reread the first personification on retirement he commented, "I guess that says a whole lot about the

human condition, accidentally." Then he went on to develop a metaphor which he never used about a cemetery for retired kitchen gadgets. He continued with "we don't want to be thrown away when we're worn out. Just goes to show you how much we really love the things." Then he visualized giving the gadget recognition for faithful service or having a birthday party for it. At this point Pat recognized the shift in his attitude and saw that he was "heaping praise on something we truly think is like us." As in the narrative essay, the metaphor altered the perception and attitude of the author as well as the image structure of the essay (see Figure 1).

Effort. Pat's protocols demonstrate that he experienced a great deal of agitation and tension as he struggled to define seven of the metaphors in the narration and seven in the description. After he decided on his topic in the early planning stage, he lamented, "Having landed with both feet in the middle of a mess, let us proceed." Three of Pat's metaphors in the description were preceded by a particularly unsettled effort to find the right words. During his endeavor, he sighed, squirmed, fidgeted, frowned, and said things like, "Whew!" "Surely I can come up with something better than that." All three of these metaphors, "Diamond polish of time," "Hindsight has crystalized," and "Icy estatic shock" were direct links to the ice image and all involved deliberate searches for association. In the description all metaphors that required a laborious process also

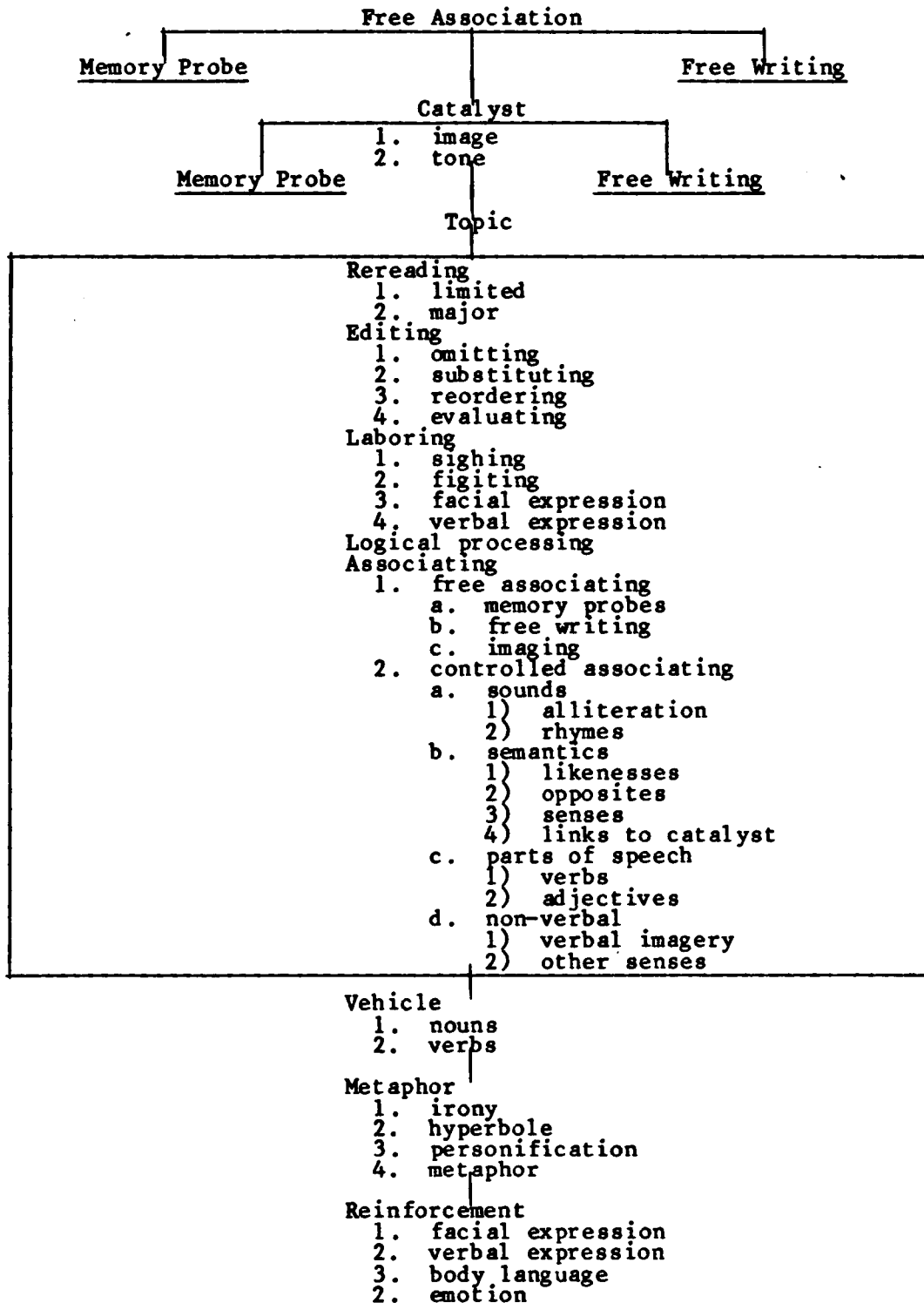


Figure 1

A Process Model of the Generation of Pat's Metaphors

included conscious searches for a variety of associations even though he had forgotten most of these processes when interviewed (see Figure 1).

Reread. Another variable that preceded all the metaphors except three examples of irony in the protocols was reading. In the first draft a limited or major rereading of the previous lines came immediately before the creation of each metaphor. In the second draft, rereading was interwoven into the entire protocol, including the position preceding metaphor. The rereading itself seemed to serve as a "launching pad" as Pat referred to it, or possibly as an invention device of its own (see Figure 1).

Association. In the course of moving from image to topic to vehicle, Pat engaged a number of different sequences of association. Besides the pattern of image association discussed earlier, he associated concepts as well as sounds and words. Concept association is evident in the development of the ice metaphors as well as others. For instance, "graduates of a school that prepared us for our second childhood" grew out of wondering why we use the term "second childhood" when childhood is a learning experience for children. He associated the sound of the word "electric" with "ecstatic" in the process of describing how ice chips feel on the tongue. "Pretty darned normal" was suggested by "Darn!" and led to holes in his socks. He deliberately searched for rhymes and alliteration in "squishy squash" and "shoes and cubes" and he looked for action verbs

before he arrived at "crystalized." He explored for likenesses for the taste of peanuts and for opposites in leaping from dog trimmer to canary plucker. Throughout his essay he kept going back to the ice image for new associations. Besides controlled, methodical searches, he also brainstormed, free wrote, and engaged in free association memory probes. At one point he admonished himself to quit worrying about words and write sentences. At other times he would decide to freewrite a while until something came up, which it always did. At one time he let his mind wander off on up to five dead end memory probes. He never reprimanded himself for getting off the subject, never told himself to get back to work. Indeed he seemed more relaxed and content when free associating than any other time during composition. Many of his most productive ideas came from these associations (see Figure 1).

Spontaneity. Five of Pat's metaphors in the narration developed relatively spontaneously, but the one example of irony was suggested by an antecedent homonym, and the remaining three were derived from earlier metaphors. "Our memories can sharply focus" grew out of and simultaneously with "crystalized hindsight" which resulted from much effort. Likewise, "The refracted light of the good times" developed out of and simultaneously with the process of creating "the diamond polish of time." "Heavy duty charge accounts" was related in his mind to the ice image as was "fleeting envy" which came first in his thinking as the cliché "fleeting thought." Six examples of irony in

the descriptive essay seemed spontaneous. One metaphor that appeared effortless used a familiar form "whirling dervish" as did the one personification, "Have you hugged your can opener today." It seems that irony is the only form that appears to happen effortlessly and then only in the second essay which he decided to write more freely. Irony also constitutes an integral part of Pat's world view, taking the form of tone or attitude that pervades much of his writing.

Despite the enormous amount of laboring, rereading, and associating the protocol reveals, in the follow-up interview Pat stated that he created metaphors completely spontaneously:

They just come out of the pen; I don't know where they come from; I don't think about anything. When I start thinking, I'm in trouble; thinking is the last resort. They are just there. It is easy and natural.

Apparently he is unaware how few metaphors were created quickly with little noticeable effort on his part, and even those few were derived forms. The laborious process is lost in the short term memory, demonstrating the Zeignarnik Effect and the value of Protocol Analysis. When I told Pat my findings, he replied, "Maybe that explains why I am so exhausted after I write."

Reinforcement. After Pat composed seven of the twelve metaphors in the narration and after sixteen of the seventeen in the description, he expressed some sort of pleasure or approval of them. This reinforcement took the form of laughter or verbal expressions, "That's good," "I like it," "Yeah!" "Hey, That's it." Apparently an

appreciation for metaphors may be one of the contributing factors that encourages them to develop (see Figure 1).

Order. Just as the ice image served as the catalyst for Pat's thesis, attitude, and approach to his essay, concrete images of various sorts were experienced prior to the creation of nearly all of Pat's metaphors, except the examples of irony which were often abstract. In the follow-up interview, Pat reported that a technicolor image seemed to be the most critical factor that elicited metaphor in his mind, although he demonstrated the experience of all five senses in the course of his protocol and interview. For instance, the image of the "ice man" occurred first; then he considered the topic of childhood nostalgically viewed from an adult point of view before the metaphor was composed. In the descriptive paper, however, it is the overall metaphoric tone of irony and hyperbole instead of image that surfaced early and formed the catalyst for the paper. As in the narrative session, Pat arrived at the catalyst of irony first, then decided on a comparison of childhood and second childhood, followed by the metaphors. Likewise, nearly all the individual composed metaphors follow a similar pattern. After the image, Pat had an idea and searched for a way to express it. Within the sentences themselves, the vehicle follows the topic in most all of Pat's composed metaphors. The pattern that finally emerged is reading ---> image ---> topic ---> vehicle ---> reinforcement (see Figure 1).

Subject B, John

At the time of the study, John was a 37 year old first semester sophomore Business Management student who was working on an AAS degree. He was graduated from Baltimore public schools and attended a northeastern community college 20 years ago for one year before he "received an invitation not to return" as he puts it in his narrative essay. For the past 17 years he has pursued a career in radio, where as news director and disk jockey he wrote and read radio spots and news copy. He was placed in the Honor's English Composition section based on a writing sample and completed a year of Freshman Composition. Apparently, his career as a merchant of words as well as his experience in the community college has stood him in good stead. After he completed the narration protocol he talked about how rewarding his job in the college bookstore has been. Shortly thereafter he entered a national student essay contest sponsored by Macmillan, which was open to four year students as well as those from community colleges. His essay on working in the college bookstore won the first prize, a \$500 scholarship.

The Second Draft of John's Narrative Essay

Revenge of the Underachiever

It was with a severe case of apprehension that I arrived at Dabney S. Lancaster Community College in September of 1983. After all it had been 17 years since my attempt at higher education, and the result of that ill-fated effort (or lack of) was a 1.0 grade point average and an invitation not to return.

Add to that, my star-crossed high school career the result of which was a class ranking of 696 out of a possible 71 students, and you have the picture of an individual not highly accustomed to academic success.

Actually, all things considered, it was somewhat of a fluke that I made it to Dabney at all, for just two months earlier I had been safely entrenched (or so I thought) as program director of WXCF Radio. Unfortunately the station manager was more entrenched than I was and in a textbook display of office politics sent the one-time boy wonder of local radio packing. Suddenly at the age of 36, I was faced with the ultimate mid-career crisis, no job, no money, and no firm prospects for either.

On a whim (or maybe out of desperation) I stopped by Dabney S. Lancaster Community College one day and asked about any program that I would qualify for. I initially spoke with Eleanora Burke, one of the school's guidance officials, and she informed me of several programs that I could enter. She then directed me to Charles Hileman, the school's financial aid officer. Believe you me this man is worth his weight in gold! Not only did I learn that I was eligible for several grant programs, I could also obtain a job in the school's work study program, working in the school bookstore. Boyed by the unexpected results of my conversations with Mrs. Burke and Mr. Hileman I took a deep breath, took the plunge, and enrolled as a first year student at the school.

My first day at school was a "trip" to say the least (Talk about being nervous)! Here I am at the age of 36, back in school with youngsters old enough to be my children. I really didn't know if I could relate to them, the age gap and all, but as it turned out we had more in common than I could have imagine. After all we were sharing a common goal (the pursuit of higher education). As time went on the age difference seemed to diminish and during the first year I made many new friends. I've come to value their opinions very much and it's been to my advantage to come to know them.

Another good thing about my return to academics has been the opportunity to work in the school's bookstore as part of the work study program. As far as I'm concerned, the bookstore job is the best (by far) work study job on campus. The bookstore is the pulse of the college campus. At one time or another everybody stops in, the students of course, as well as the faculty, administration, staff, even the college president. Contrary to other work study, it's an actual meaningful job and not just "make-work" running errands or the like. It can be hard work at times, but I at least feel like I'm making a contribution.

The happiest surprise of my return to school has been my success grade-wise. In years past I had been labled (rightly or

wrongly) as the "classic underachiever." Yet in my first year I posted a grade point average of 3.93 and made the President's List and the Dean's List two times each. I doubt if few students did better than that. Basically the credit for the seemingly unexpected development (well most of it anyway) goes to the environment here at school. With the support and encouragement I've received from everyone, students, faculty, and staff, it would have been hard to go wrong. Their support has given me the impetus to cast aside a lifetime of mediocracy and to finally attempt to capture my fullest potential. As it turns out, it looks like the "classic underachiever" could have the last laugh after all!

John's Narrative Session

After a series of memory probes, John settled on an ironic tone early in his invention stage as he recollected his "ill fated attempt in 1965 at the world famous community college" in the Northeast. He remembered a former employer, who was a professor of medieval literature at George Mason University, calling him "a classic underachiever." That epithet coupled with a popular movie with "revenge" in the title suggested to him the thesis and title of his paper. From that point on, John had a focus and a direction. In the discourse based interview, he recalled picturing a dunce cap and that glazed look of the bewildered and the uncertain when he thought of the words, "classic underachiever."

John began the first ironic statement spontaneously after rereading the previous sentence: "After all it had been 17 years since my attempt at higher education, and the result of that ill-fated effort (or lack of) was a 1.0 grade point average." At this interval, John began stumbling and editing as he completed the metaphor with "and an invitation not to return." In the discourse

based interview, he reminisced that he would never forget the day he received the letter in the mail informing him that he had been placed on academic suspension. He remembered how he felt. The topic clearly preceded the vehicle here, as well as emotion, imaging, rereading, and laboring, concluding with reinforcement.

He reread the metaphor with a sardonic smile and quickly wrote, "Add to that my star-crossed high school career." Here John began to stumble with the numbers and the concept, rereading and trying out various combinations until he decided on the hyperbole, "the result of which was a class ranking of 696 out of a possible 71 students." After a laugh, the remainder of the ironic statement evolved very quickly, "and you have the picture of an individual not highly accustomed to academic success." He reread and nodded before he began a new paragraph. Again, the topic, rereading, emotion, laboring, and editing came before the vehicle was established.

The next example of irony again developed effortlessly: "I had been safely entrenched (or so I thought) as program director of WXCF radio." With a rueful laugh, he completed his thought sequence: "Unfortunately, the station manager was more entrenched than I was and in a textbook display of office politics, sent the one-time boy wonder of local radio packing." In the discourse based interview, John reported that he felt for a moment the false sense of security that surrounded him while working at WXCF. "It was more a feeling than a picture, that feeling of assurance that you are needed and indispensable and your job will be there tomorrow and forever." The

"textbook display" was an association with the bookstore and was conceived out of admiration as much as anything else. He respected the way the station manager protected his position and manipulated the conditions to his advantage. When he composed "one-time boy wonder" he remembered that it was like in his early days in radio when everyone talked about what potential he had and how far he could go. He laughed wryly when he completed this section, sat back and reread extensively.

"This man is worth his weight in gold" again came naturally but with a great deal of vigor and genuine appreciation for the man and his position. After he reread it several times, he shook his head in acknowledgement and gratitude for the financial aid officer's assistance. John's facial expressions and attitude began to brighten here as he recalled getting the good news, but as soon as he started into the next metaphor, he slowed down, began to puzzle, and struggle with the images. After 165 words, fighting, rereading, editing, stuttering, and head scratching, he completed the first part of the metaphor: "Boyed by the unexpected results of my conversations with Mrs. Burke and Mr. Hileman." At this juncture, he mused about developing the swimming and diving imagery and then he completed the next stage of the metaphor, "took the plunge, and enrolled as a first year student at the school." John reread this with satisfaction and commented on extending the metaphor with a smile. "I could use 'enter the mainstream of college life, or the river of no regret', but that would be too much." As he developed the later section on

what it was like to go to school with 18 year olds, he toyed with continuing the swimming image but abandoned it again: "The second rate swimmer battling the high tide?" "The undertow of life?" They both seemed too over done for him. In the second draft he came back to the metaphor and completed it by adding, "took a deep breath." This traditional metaphor was generated by conceiving the topic with emotion, rereading, editing, laboring, and reinforcement.

The next cliché, "My first day at school was a 'trip' to say the least" was totally unplanned; John reported no imaging or association. In the second draft he tried "mind blower" "great experience," but left it at "trip." He commented that he knew it was bad but that he was too nervous to come up with anything else; next week he would be able to think of the perfect word.

The only metaphor composed entirely in the second draft was "The bookstore is the pulse of the college campus." John conceived of the topic in the previous sentence and searched for a way to express it. He engaged in a number of memory probes and associations, including the various jobs on campus and the picture of a woman in the business office who is the "pulse" of the whole office. He began thinking of the bookstore in that same way. After he wrote the metaphor, he paused a moment, reread it, edited it, and agreed with it before he continued on. This traditional metaphor was composed by rereading, imaging, laboring, editing, free association, controlled associating, and reinforcement.

As he composed his final ironic statement, he recollected teachers, friends, and parents who had referred to his lack of achievement. When he wrote "[The college's] support had given me the impetus to cast aside a lifetime of mediocracy and to finally attempt to capture my fullest potential," John felt like he was throwing off the chains of failure and experienced a sense of freedom. In the protocol he said, "You have to reach out and grab it, hunt it down, track it down." The final ironic statement, "The 'classic underachiever' could have the last laugh after all" was written quickly and was concluded with a smile.

The Second Draft of John's Descriptive Essay

Where Have You Gone Bert Rechichar?

Once upon a time in a far away land, there were heros, not just the kind you read about in papers or books, or magazines, but flesh and blood "giants" who allowed an impressionable youngster the opportunity to hope and dream and realize the oh so human experience of believing.

As I recall, my first true hero was a man named Ernie Blandin, a hulk of a man sometimes employed as defensive tackle for the Baltimore Colts. He was one of our neighbors in Pikesville, Maryland, and was idolized by every lad in the neighborhood. He really wasn't that great a ballplayer, in fact in all honesty some would have said that he was taking the team's money under false pretences. But he was a professional football player (albeit for as losing team) and to a seven year old boy, it didn't matter.

Later on as the team improved, so did the players, and there were heros aplenty, ones that produced visions as if by magic and created a fantasy-land of excitement and pride in the grimy, blue collar port city of Baltimore.

There was Johnny Unitas, "the main man" distinguished by his high-topped shoes, and Lenny Moore who raced like a ghost in the wind, and ole number 44, Bert Rech Rechichar (my personal favorite) whose face mapped the battlefield of a hundred

football wars. These men and others like them captured two championships in the late 1950's and fueled the fires of a young boy's passion for the game and those who would fight its noble cause. But that was 1959 and looking back it seems too long ago.

Sometime between 1959 and today everything must have changed and although the man in me could acknowledge this unsettling fact, the boy never could and probably never will. Sure, Johnny Unitas finally retired (I guess his arm fell off, or wore out, or whatever). Lenny Moore lost one step to time, and then two, and in a fleeting instant he was gone, and as for Bert Rechichar nobody really knows what happened. I read somewhere that he runs a bar in the coalfields of Pennsylvania, but too many of us who grew up in the 1950's he remains a fondly remembered figure on a dusty faded football card.

As for the Baltimore Colts, they're gone or well, lured to "America's heartland by the promises of tax-breaks, lease-benefits and the sparkly new "Hoosier Dome" in Indianapolis.

The team left Baltimore, literally in the middle of the night, taking not only the players and equipment but an entire city, heart and soul as well. To me this is the saddest truth of all. For years the Colts were the embodiment of the gritty working class image of the city. To many around the country, the Colts were Baltimore and vice-versa, and now they reside in the pastures of the midwest with a cast of woebegone characters more befitting a Shakespearian tragedy than a professional football war.

All that's left for people like me edging uneasily into middle age are the echoes and memories of a more placid era when a youngster could see a man dressed in blue and white armed in a helmet of gold ready to do battle against the forces of evil, The Lions, The Bears, The Rams, and to dream of success and a touchdown on that 100 by 40 yard battlefield. Looking back it seems, an eternity ago.

John's Descriptive Session

John launched into this essay with very little preplanning or invention. He thought of the previous assignment which suggested childhood as a topic, then summer days, baseball, and childhood heroes. He half way sang a bar of the old favorite, "Where Have You Gone Joe DiMaggio," commented that Joe really wasn't a hero of his,

and asked himself who was. After reading the assignment, he immediately settled on "childhood heros" as his topic and spontaneously wrote the first line, "Once upon a time in a land long ago there were heros," which served as the catalyst for the remainder of the essay. In the second draft, he changed the phrase to "far away land."

The first metaphor, "flesh and blood giants," was created quickly with little apparent effort. In the discourse based interview, John recorded that he felt small when he wrote those lines. From the point of view of the little child, his heroes were literally giants. The next metaphor is closely related: "There were heros aplenty, ones that produced visions as if by magic and created a fantasy-land of excitement and pride in the grimy, blue collar port of Baltimore." It was started quickly after rereading, but immediately after the first "heros" he slowed down his pace and began searching for the right words. He stumbled, edited, thought about his favorite television shows at the time which were fantasy and Walt Disney. He tried "dreamland," "fantasy world," "magic world" before he decided on "vision" and "fantasy-land." The sequence of this simile was rereading, imaging, laboring, editing, free associating, and controlled associating.

"Lenny Moore who raced like a ghost in the wind," was produced after several searches, rereading, and editing procedures. He paused four times, squirmed and tried out "flew" then "ran" before he chose "raced" in the second draft. He then labored over the simile, trying

out "like an apparition," "like a spirit," with a great deal of anxiety and rereading before he settled on "like a ghost in the wind." In the interview, he stated he had the image of something in his mind that wasn't real, too fast for reality. He pictured the winged Pegasus, chariots, runners. After he completed the simile, he reread it with satisfaction. Clearly, the topic preceded the vehicle. John created this simile by rereading, imaging, laboring, editing, searching for verbs and likenesses, followed by reinforcement.

"Bert Rechichar . . . whose face mapped the battlefield of a hundred football wars," was originally "who had a nose that mapped the battlefield." John searched for 10 lines before he was satisfied with this metaphor. He reread, struggled with verbs for "mapped" and debated about the phrasing of "battlefield" and "football wars." He edited and exhibited discomfort until he got it right; then he sat back and reread with pleasure. In the protocol he said he liked the idea of the face depicting the topographical map of a battlefield. He pictured the face with puffy cheeks, scars, smashed nose, before the days of masks. "That's my best line yet," he concluded. After John reached the topic, he reread, imaged, labored, edited, searched for verbs, and reinforced the metaphor.

The next metaphors, "fueled the fires of a young boy's passion for the game" and "those who would fight its noble cause" were composed separately in two drafts. The first half was written with little effort after some editing and revision. The second half was

not added until the second draft when he substituted "fight its noble cause." He pictured warriors and knights in armor as he completed this metaphor.

"I guess his arm fell off, or wore out, or whatever," was composed quickly, after a laugh and editing one phrase. "Lenny Moore lost one step to time, and then two, and in a fleeting instant he was gone," was written in the second draft after thinking about his own life in a series of memory probes. After he composed this metaphor, he said, "Me too," identifying with his lost hero. This metaphor was preceded by emotion, rereading, laboring, editing, free associating, and concluded with reinforcement. "America's heartland," was also written in the second draft and encased in quotation marks, indicating John recognized this was a well worn term. His first attempt was "Indianapolis, the plastic capital of the United States," but he quickly rejected that for an ironic use of "heartland."

"The team left Baltimore, literally in the middle of the night, taking not only the players and equipment but an entire city, heart and soul as well." As John composed this metaphor, he remembered for 17 lines the Baltimore in the old days after the old guard had moved to the suburbs and the ball team was the only thing left for the blue collar workers to be proud. He wrote this metaphor with free association and emotion.

At this point the apostrophe, "Where have you gone Bert Rechichar" floated through John's mind and he wrote the title for his paper. In the second draft, he determined he wanted to do something

with horses, agriculture, the midwest image. He blocked, went back to complete a major rereading, then composed his only synecdoche: "They now reside in the pastures of the Midwest." He was pleased with the imagery, but he said that the team is now a joke. "They were once the best, now total buffoons." The topic was composed first, then after rereading, imaging, editing, and searching for image, the vehicle was followed by reinforcement.

"A cast of weebegone characters more befitting a Shakespearian tragedy than a football war" was written after rereading, laboring, and editing in the first draft. "When a youngster could see a man dressed in blue and white armed in a helmet of gold, ready to do battle against the forces of evil, The Lions, The Bears, The Rams, and to dream of success and a touchdown on that 100 by 40 yard battlefield," was started in the first draft, and completed in the second after slow, painful rereading, editing, and memory probing for 133 words. In the interview, he attested that he had the image in his head of the "crusades and knights in armor." He said he felt very emotional when he wrote it; he felt it physically in the stomach. John wrote this metaphor with emotion, rereading, imaging, editing, and free associating.

Discussion

John generated ten metaphors in his narration and fourteen in his description, not including combined forms that represented more than one figure of speech. Several others were considered in his

protocol that never made it on to paper. Of the ten from the narration, nine were produced in the first draft and two in the second. In the description, nine were the product of the first draft and five the second. Perhaps because of his career in commercial radio, John tended to use more clichés and slang in his metaphors than the other subjects.

Type. Three of John's metaphors have verbs for vehicles and seventeen have nouns; the remainder have both. In the narration, John wrote three traditional metaphors, two hyperboles, five clichés, and six examples of irony. Seven metaphors were combined forms containing irony. In the description, he created three traditional metaphors, two similes, four hyperboles, one synecdoche, one apostrophe, and six clichés, three of which were combined forms. All examples of traditional metaphor required editing and some effort. Most examples of hyperbole required memory probes.

Catalyst. The basic irony in the title of the narration "The Revenge of the Underachiever" was fixed upon very early in the invention stage and was threaded through to the final conclusion. The first five metaphors deal with his history of failure and the final one of his eventual success. The four middle metaphors explain how this transformation occurred. In this sense all the metaphors in the paper were linked to the central concept and six of the ten contain irony. In the descriptive essay, the image of childhood heroes immediately captured John's imagination. From "Once upon a

time" on, his imagery is centered around giants, magic, fantasy-land, noble causes, Shakespearian tragedy, helmets of gold, ghosts in the wind, and battles against evil. The shaping power of the catalysts in John's essays is very clear. Otherwise, emotion seems to be the driving force behind his compositions rather than image. For instance, he was feeling "lighter" and more positive as he remembered his recent college experience prior to writing "boyed." He continued to play with the swimming and diving image in his protocol even though it did not have much effect on his final paper (See Figure 2).

Effort. Again, except for irony and cliché, two of the three traditional metaphors, and one of the hyperboles in John's narration; all the traditional metaphors, the similes, and the synecdoche in the description were composed after signs of effort and struggle. These metaphors were marked by a clear slowing of pace, editing, figiting, rereading, head scratching and expressions of frustration and discomfort. Except for one traditional metaphor the remainder written spontaneously were irony or clichés. All of the traditional metaphors but one, the similes, the synecdoche, involved editing, and five of the six hyperboles involved memory probes. The one hyperbole that did not require a memory probe was cliché (See Figure 2).

Reread. John used rereading to get his mind moving in order to develop seven of the metaphors composed in the first draft of the narration and before the one composed in the second draft. In the

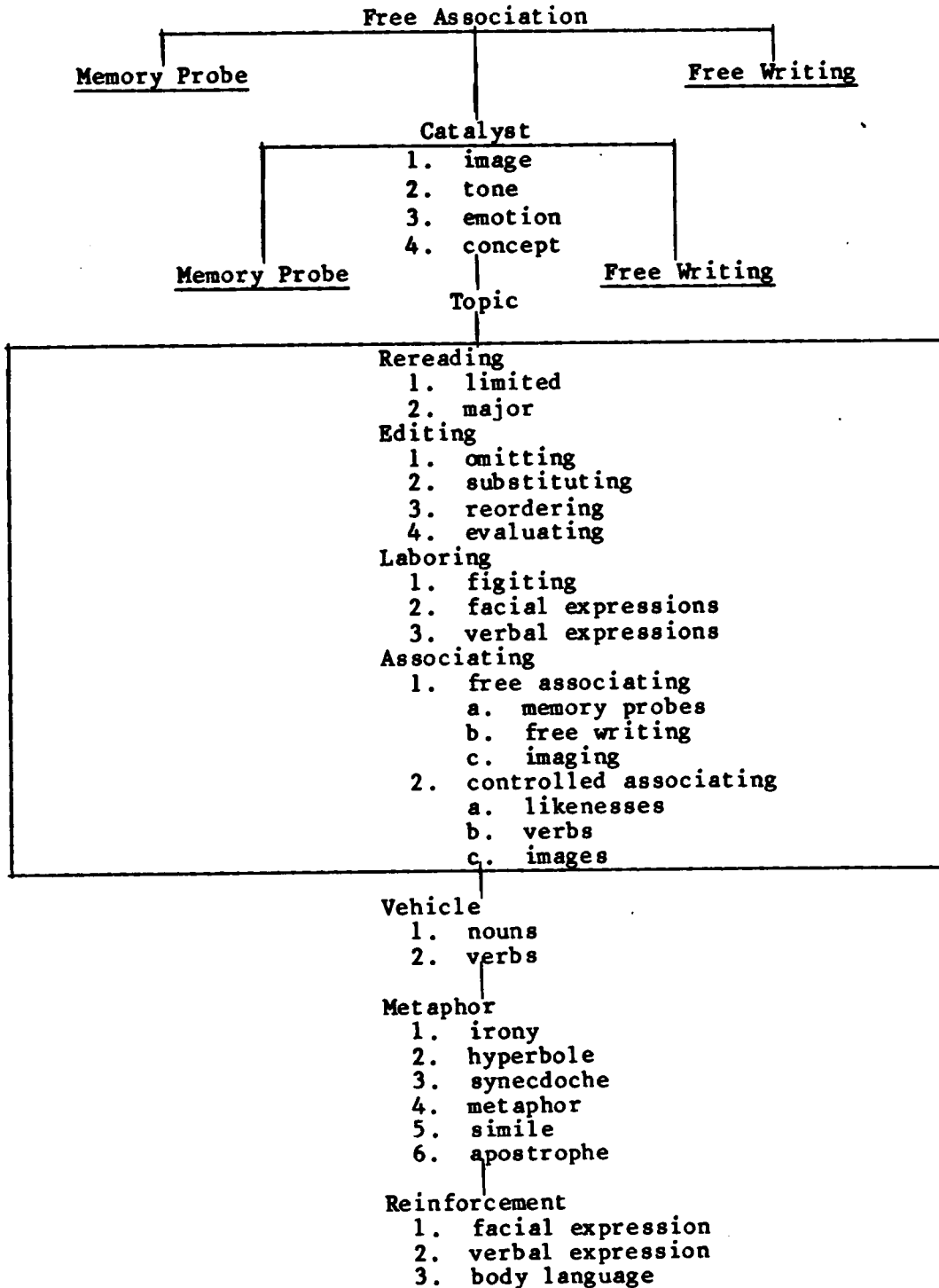


Figure 2

A Process Model of the Generation of John's Metaphors

description, rereading was involved in four of the eight metaphors composed in the first draft and in all of the five composed in the second. None of the first draft clichés in the narration necessitated rereading, but four in the description did (see Figure 2).

Association. John relied largely on free association in the form of memory probing and free writing through blocks. In five out of six hyperboles, he resorted to memory probes as well as in two other metaphors. He used controlled association, searching for nouns in three instances, verbs twice, likenesses once, and a deliberate sorting through imagery three times, but by the discourse based interview, he had forgotten most all deliberate searching (see Figure 2).

Spontaneity. Despite the work the protocol reveals, John believed he composed metaphors unconsciously. He did not recall laboring over them, nor did he remember much editing. He did recall some of the memory probes but not all, and he did recall the images. In the narration, of the seven metaphors that John composed spontaneously, five were clichés or phrases not original with him. The other two were examples of irony which seemed to flow effortlessly. In the description, two of the clichés and one example of hyperbole were spontaneous (see Figure 2).

Reinforcement. Fourteen of John's metaphors were followed by verbal or visible expressions of approval. He often laughed, smiled, nodded, or verbally expressed satisfaction. He recognized the power of his original novel metaphors over the clichés and expressed dissatisfaction with the slang he used. In the interview John admitted that he received pleasure in reading and satisfaction in creating metaphor (see Figure 2).

Order. Even though in the interview John agreed that the image or emotion preceded metaphor in his mind, it is not always possible to confirm that absolutely. If the image does not appear in the protocol but does in the interview, as is the case in several instances, it is possible that the image was associated after the metaphor was conceived or simultaneously with it. John's protocol and interview, however, record that strong feelings as well as images usually precede his composed metaphors. For example prior to "a class ranking of 696 out of a possible 71 students," John was reliving what it felt like to fail. . . . He felt a strong sense of loss before he wrote about the Colts leaving Baltimore "taking an entire city, heart and soul as well." After the experience of the image or emotion, John had an idea and then developed the vehicle to carry the idea. The exceptions were with simple irony and cliché. The pattern that emerged for most of John's composed metaphors is rereading ---> emotion/image ---> topic ---> vehicle ---> metaphor ---> reinforcement (see Figure 2).

Subject C, Penny

Penny was a 19 year old nursing student in the first year of a two-year program at the time of the study. She was graduated from the consolidated county high school where she took the challenge English sequence. She enjoyed her high school English classes and thought her instructors were very good. Her college counselor placed her in Honors English based on her high school grades and entrance examination scores, but at the time of the study, she had only completed two quarters of freshman composition and had no college level literature. She considers herself a careful reader and has developed the habit of paying close attention to how a piece is written.

The Second Draft of Penny's Narrative Essay

Grandma, how are you? It's been a long time since we've talked. There's so much I would like to say to you. I've thought about you a great deal since your death. In my memory sometimes we wander like strangers, yet at other times, you are with me as a friend walking down a mysterious long dark lonely path. Those memories, the good and bad, have encouraged me to relive some of the past, to examine my own life, and to prepare myself for the future.

Grandma, sometimes I feel like we are nothing alike, but I wish I could be like you. You were so gentle, positive, and thoughtful. You were so strong and courageous as you dealt with your illness. I wonder if I could be so resourceful and positive if I were faced with an illness or trauma as you were. You dealt with your illness in a way few people could. You didn't want to bother anyone, yet you didn't want to be alone. I know you reflected much warmth, understanding, and love because of this tie between you, your family and your God who seemed so important to you, but so remote from me.

Not only were you strong, but you were energetic and self-motivated to be the best person you could be. So few of us are like that. It's easy to fall deep within a well and become

trapped in the dark waters at the bottom, to feel sorry for ourselves and wait for someone else to pick us up and get us started once again. Even in your illness, you were always the one to help others up, rather than the one expecting others to help you.

I can see mother's eyes the day of your funeral, tears streaming down her face. I could see my mother's memories wash down her face with those tears. She yearned to hold on to those memories but the tears kept coming. She seemed so empty and lost. I was afraid she wouldn't be my mom again. She seemed to be caught up in a storm among dark clouds, being tossed around. If only I could reach her and pull her to safety, and security. But now, I know that pain and suffering had to be because we couldn't bring you back. Today in my mother's eyes, I still see some of that pain. Her eyes change like a Kaleidoscope when she talks of you, one minute bright blue and sparkling and the next dull brown and lifeless.

Grandma, there are so many little, somewhat insignificant things I remember about you and your home. I remember your kitchen, the aroma of freshly baked bread and the home made butter you churned from your cow, Sally. I remember getting up early in the morning and gathering eggs for you. I felt so important and needed. Remember that one hen I called Polka Dot, because it was speckled black and white? Remember when I would pick all your luscious red strawberries and eat them up before you could turn them into strawberry jam or a shortcake? Everytime I buy a basket of fresh strawberries, I remember your house and the patch I thought was my own. And the flowers, I will always remember your garden of roses, petunias, and gladiolas. You were so good to me Grandma. You made me the most beautiful clothes and you always baked pixies, my favorite cookies, when you knew I was coming. I still have that pink and white checked cape that you made for me one Easter. I plan to save that for my own little girl and I'll be sure to tell her that her great-grandmother stiched it herself for me when I was her age.

There are so many ways that your life has prepared me for the future. Because of you I realize that I must take my time and enjoy life the way it is and not to ponder and worry over what might have been. Everything wasn't perfect in your world, but you didn't dwell on the bad. I feel if I could look through your eyes I would see a brightly colored rainbow with a huge sunburst at the end, telling me to keep trying and to work harder, and to be an honest person so one day I will be the best person I can. I hope I'll be able to do that someday and that I won't allow myself to be caught in a webb that is woven with unhappiness, self-pity, and lack of motivation and determination to keep trying to improve myself and my life. Grandma, I know that I didn't show my appreciation for all that you did for me

and for what you've shown me, but I realize now how fortunate I was to be a part of your life and I hope to remember that when rearing my own children and grandchildren. We learn through our relationships with one another, through past experiences, and mistakes. We learn to face the disappointments of life as well as its joys by knowing people like you.

Penny's Narration Session

During Penny's trial session, she talked about reading an article on Alzheimer's disease in the library immediately before our appointment. This discussion triggered her thinking about her grandfather who is undergoing a personality change in his declining years, and her grandmother, who died some years ago. When she read the assignment, she immediately began memory probes into childhood and determined that she would write about her grandmother.

As she was free writing the first draft, Penny asked herself what she would say to her grandmother if she could speak to her once again. Her first response to that question was "the memories of you wander throughout my mind constantly." In the second draft when she reread that line she sighed and lamented, "I'm trying to think of a metaphor or something" and proceeded to toil through 124 words of editing, including omitting, substituting, reordering, and evaluating before she finally stopped with, "the memories wander like a stranger yet a friend walking down the long dark mysterious path alone." After she came to the end of the second draft, she returned to that original metaphor and grappled with it once more before she finally concluded, "In my memory sometimes we wander like strangers yet at

other times you are with me as a friend walking down a mysterious long dark path."

Penny declared in her interview that she is very much aware of metaphors and consciously uses them in her writing. She claimed she often looks around her for something in nature or even in the room with characteristics similar to that for which she is searching. In this case, she looked around and thought of the road she drives to college early on winter mornings. She related that to the long lonely road of her life with bare trees, brown leaves, no end. As she described her thoughts, she drew a long line on the table with her finger. Penny arrived at the topic, then after rereading, she used imaging, laboring, and editing to complete the vehicle.

After two apostrophes, Penny wrote: "It's easy to fall deep within a well and become trapped in the dark waters at the bottom, or to feel sorry for ourselves and wait for someone else to pick us up and get us started once again." Both seemed to be written spontaneously in the first draft although the protocol above it mentions a number of memory probes of grandmother's courage and unselfishness. In the interview she said she first felt the oppression, then experienced the sensation of being in a dark place when she wrote this metaphor.

"I could see my mother's memories wash down her face with those tears," was free written in the first draft after memory probes visualizing the funeral with colors and vivid pictures. "She seemed to be caught up in a storm among dark clouds, being tossed around,"

was derived from the previous metaphor but it required editing, evaluating, laboring, and imaging her mother's reaction. She considered the metaphor by adding, "not being able to find a soft, warm, fluffy cloud to rest upon," but rejected it. Penny recounted her own strong emotions here as she recalled her mother's grief. "Her eyes change like a Kaleidoscope when she talks of you, one minute bright blue and sparkling, and the next dull brown and lifeless." This simile was composed in the first draft after, the topic, laboring, imaging, questioning, and searching. When she finally found the word for which she was searching to complete the metaphor, she was pleased and concluded with reinforcement. Penny then created two metaphors that she rejected: one comparing the changes in our lives to the changes in leaves and another comparing the resiliency of her mother to the spring flowers that just keep coming back.

After extensive rereading, imaging, blocking, laboring, free writing, editing, searching for likenesses, and memory probing in the second draft, and after another apostrophe, she summarized her grandmother's positive attitude: "I feel if I could look through your eyes I would see a brightly colored rainbow with a huge sunburst at the end." The topic clearly came before the vehicle in the protocol. In the interview, she said she chose the sunburst because her grandmother would not consider the pot of gold a worthy goal. "I won't allow myself to be caught in a web that is woven with unhappiness, self-pity, and lack of motivation," grew spontaneously

out of the previous metaphor, accompanied by the visual image of a dark barn with spiders in the corners.

The Second Draft of Penny's Descriptive Essay

C. W. Byers store: Your old decrepit walls form a building that holds the key to a door that opens on the past. You serve the community in a special, unique way that probably goes unnoticed by many of its members. To some people you are a run down dirty country store to use when they can't get to town, but that old store with its old coca cola sign hanging in front and its antique rainbow bread case means something else to the men with wrinkly faces and hand carved canes who stagger in to flip coins and gossip about who died, what the first aid call was all about, and who is fooling around with whom. There are those who realize your importance, those such as my grandad, the man who gave you life. You provide memories of the past, and an opportunity for the elderly to be a part of this new world.

The past must be so important to you as you were built long ago. Those walls that are now wearing down and peeling hold memories like an old worn chest of jewels. I remember I loved to play there when I was little. Grandad would give me anything I wanted, candy and coke all day long. There must be so many memories that sparkle and reflect life through their red, green, and gold shining facets of the yesteryears. If only the young could now find a key to that chest and those simple happy times of the past like my grandfather and his friends do each morning that they met. Our lives have become so engulfed by this rapidly changing world and it is becoming so complicated that we sometimes don't seem to fit in. My grandfather is fortunate to have your old walls. The two of you fit together like that last piece that finishes the puzzle. You complete and fulfill his life.

Your opportunities seem limitless to these old fellows who come by every morning to sit in your torn ragged chairs and reminisce of the past. All day long they pick and tease one another or they argue about everything from Ronald Regan to the preacher and his sermons. The wrinkles on their faces are like the creases in your old walls that have deepened with the years. If only the creases and wrinkles could be pressed flat and were able to release the experiences and stories buried there. I could learn so much from you and these men that you support everyday. You offer much to these old fellows, a chance to talk about a changing world to others who understand.

One would never think that a building could be so important to someone's life, but obviously you, this old slowly paced store with a broken screen door, dirty old wooden floors with a

path from the antique coke cooler to the register are the link that continues the chain of life from our grandfathers to ourselves, the young, irresponsible, selfish, and unappreciative who will become the oldtimers of the future.

Penny's Descriptive Session

Penny spent 473 words of memory probing and free writing before she thought about how her grandfather and his country store fit each other so well. The topic of her grandfather had been suggested by the narrative essay she had written earlier, and the protocol included images of her old worn grandfather and his old worn store. She generated an extended metaphor, which she rejected, on her grandfather's eyes. They reminded her of a long dark tunnel where he was lost, searching for safety or stability now that her grandmother was gone. The first draft was composed of a series of random memories and free writing rather than an actual draft of the essay. The idea of apostrophe and personification were not arrived at until the end of the first draft session when she asked herself about audience. She wondered if it would be confusing to the reader to address the essay to the country store, but she decided the store might be easier for the reader to relate to than if she addressed her grandfather, a man the reader does not know.

"Your old decrepit walls form a building that holds the key to a door that opens on the past." The first metaphor was composed toward the end of the first draft after four pages of memory probing and free writing into the significance of the store to her grandfather and his cronies. In the protocol before the metaphor, Penny

concluded that the old men were fortunate to have been a part of a less complicated slower paced time, leading into the metaphor through the topic, concept association, and logical processing. The metaphor was generated quickly, spontaneously and is followed in the protocol by the point of view with which she concludes her paper: "The key can unlock the door of the past . . . which made a beginning for us, the newer generation." After that thought, Penny sighed and said, "O.K., I think I know where I want to go now," which served to reinforce the metaphor. In the interview, she reported the image of the key and the old door.

The next four examples of apostrophe/personification were written spontaneously in the second draft. The abstractions had no image association, but the others did: "You serve the community. . . . To some people you are a run down dirty country store. . . . There are those who realize your importance. . . . You provide memories of the past."

"Those walls that are now wearing down and peeling hold memories like an old worn chest of jewels." This simile was rewritten completely from the first to the second draft and was edited and revised again after the second draft was completed. It was preceded by lengthy memory probes and free association as well as major rereading which led to the topic. Penny detailed distinct visual imaging as she thought about the births, marriages, deaths, successes, failures, joys, and griefs these men have shared during their lifetimes. Most of them grew up together as children in the

community and bought their first soft drinks and penny candy from "the store." She also used editing, free associating, and laboring to complete the vehicle.

The next metaphor, "There must be so many memories that sparkle and reflect life through their red, green, and gold shining facets of yesteryear," extends the prior metaphor. It was also started in the first draft and completed in the second, was polished again after the second was written, and was preceded by the topic, rereading, laboring, editing, memory probes, and free association. In the interview, she reported thinking about the different emotions that are reflected in different colors. "If only the young could now find a key to that chest and those simple happy times of the past," was derived from the earlier forms and completed in the first draft after lengthy editing, substituting, and revising.

"The two of you fit together like that last piece that finishes the puzzle." This next simile was written after reflecting that she often felt like she didn't fit in the rapidly changing complicated modern world, as if she had not found her place yet. Her grandfather, on the other hand, was lucky to have a place where he fit so perfectly, and the place was lucky to have him. Clearly, the topic was arrived at first. Rereading, imaging, logical processing, and association all preceded the vehicle, but the simile itself was written spontaneously without editing. Again, Penny mentioned a visual image when she created this line accompanied by that feeling of satisfaction when the last piece is fit into the puzzle.

"The wrinkles on their faces are like the creases in your old walls that have deepened with the years." This simile was suggested in different sections in the first draft, as she considered in one place his old wrinkled face and in another the paint peeling off the walls. Immediately before the puzzle image it occurred to her that the old battered building and the old wrinkled faces were alike, but it was not until the second draft after slow painful editing, rereading, and imaging for 77 words that the sentence was written down as is. "If only the creases and wrinkles could be pressed flat and were able to release the experiences and stories that are buried there," is of course, an extension of the above and was written spontaneously after earlier rereading, laboring, and editing.

"Your opportunities seem limitless," and "You offer much to these old fellows," were written spontaneously in the second draft without image. "You . . . are the link that continues the chain of life from our grandfathers to ourselves. . . ." This final metaphor was laboriously composed in the second draft after rereading, memory probing, imaging, laboring, associating, and editing, even though it might be considered a cliché. With a sense of well-being, she pictured in her mind families, grandfathers, and children holding hands. She reread the entire essay and edited more before she handed in her paper. She did not consider this draft in final form, but indicated she would like to put it aside for a day or two and come back to it fresh.

Discussion

Penny generated ten metaphors in her narration and seventeen in her description including the apostrophe/personification of the country store which was used throughout. A few more were created in the protocol that were not entered into the composition of the essay. The invention of metaphor was equally distributed between the first and second drafts except for the apostrophe and personification of the description which were all created in the second draft.

Type. Most of Penny's metaphors have both nouns and verbs as vehicles. In the narration, six are traditional metaphors, one is a simile, and four are apostrophes. In the description, five are traditional metaphors, three similes, and the remainder personification/ apostrophe.

Catalyst. Penny spent most of both protocols struggling with what to say rather than how to say it. She spent the initial draft worrying about a focus and point of view for her writings which she did not find until the very end of the first draft. An image of falling and being trapped in a deep well of dark water is the first metaphor that appeared in Penny's oral protocol, but it was moved much later in the second draft of her essay. The first metaphor that she included in the second draft of her essay, which pictures her walking down a long dark, mysterious path, was actually composed at the end of the first draft. Four of the seven metaphors in this essay contain images of loneliness, helplessness, traps, webs, or

dark frightening places. The image and the feeling of falling and being trapped in the dark waters of a well became the catalyst for most of the metaphors in this essay and defined her fear towards life which she contrasts with her grandmother's courage and optimism.

A spin off of the catalyst was the memory of her mother's eyes weeping at the funeral that she recalled early in the protocol. The three metaphors that do not use scary places use eyes. She imagines viewing the world through her grandmother's eyes, the tears from her mother's eyes, and her mother's eyes changing like a kaleidoscope. After she compared herself to one who had fallen into a well, it occurred to her that she was not much like her grandmother. Several pages of protocol later she determined it was never too late to learn, change, and begin again. At this point she thought of looking at the world through her courageous grandmother's eyes and saw a rainbow and a sunburst. This concept led to the thesis of her paper which she developed in the second draft. In this essay the whole significance of the composition was inspired and amplified through metaphor.

The decision to personify the old store by addressing it directly might appear to be the catalyst for the description essay, but her intention was not formulated until the end of the first draft. Long before that, visual images of her old worn grandfather and his store manifested themselves early in the exploratory stage before the first draft began. The resemblance between the two was embodied in eleven metaphors and forms the foundation of the essay.

The key image found in the first metaphor extends to the three metaphors comparing the store to an old chest of jewelry and possibly to the final image of links in a chain. Again in the description, Penny found her point of view at the end of the first draft after she had created the metaphor about the lost puzzle piece and the key to the past. After associating and logical processing, she deduced her grandfather was blessed to have lived in a simpler time. Then she created the metaphors from which evolved the message of her paper and the topic of eleven metaphors (see Figure 3).

Effort. Penny labored diligently over all of the composed metaphors in both essays. She paused a lot, stuttered, stumbled, edited, squirmed, frowned or expressed frustration verbally. Several metaphors took over 100 words to compose and were written over the span of both drafts. As with John and Pat, all of her composed metaphors were edited (see Figure 3).

Reread. Rereading occurred before five of the seven metaphors in the narration and seven of the eight metaphors in the description, excluding the personification/apostrophe which was usually totally spontaneous. She used major rereading to plow through blocks and to look for an idea or image to develop (see Figure 3).

Association. Penny used considerable free association but relatively little controlled association, which is curious since she is the only subject who testified that she consciously searched for

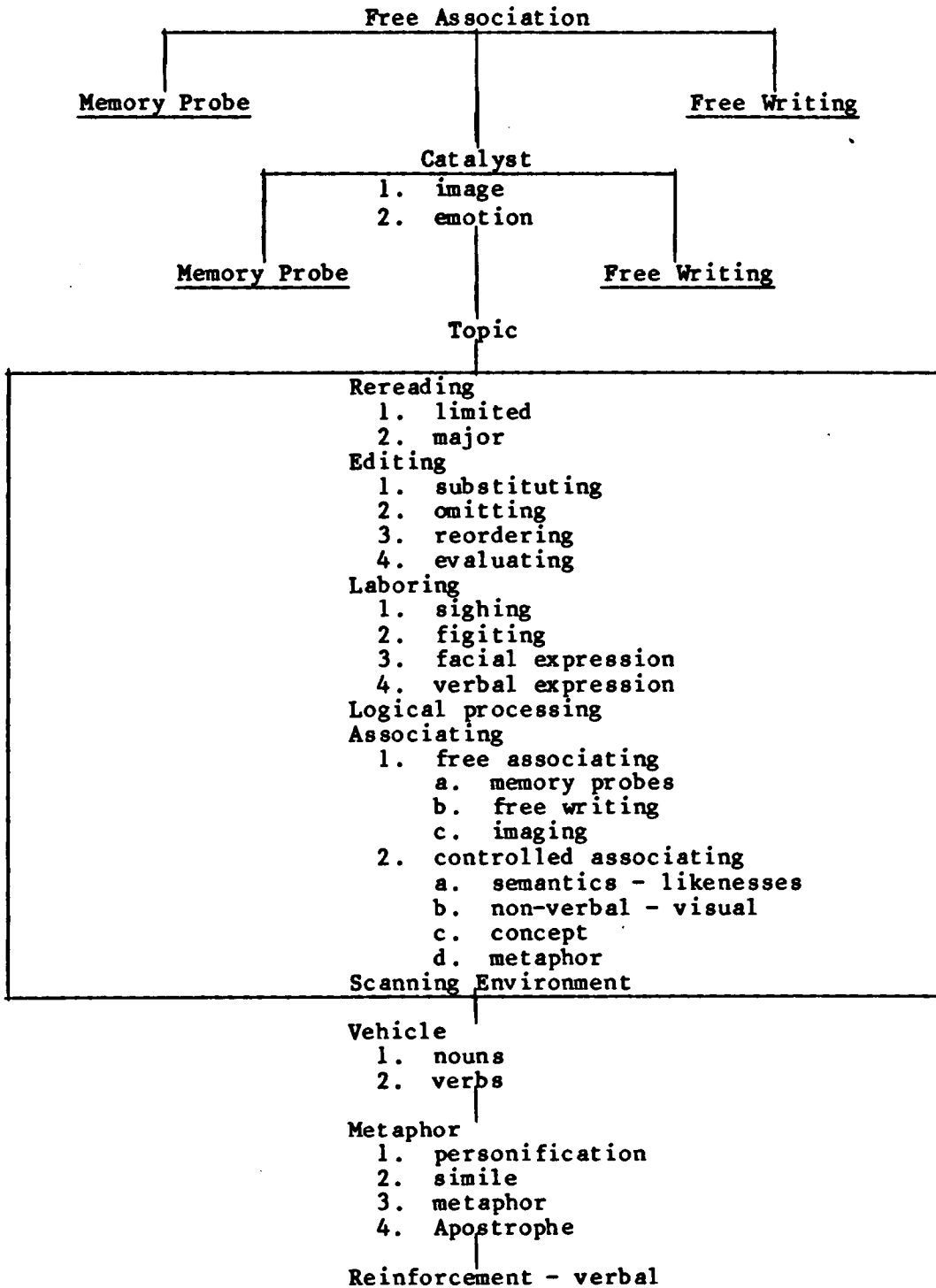


Figure 3

A Process Model of the Generation of Penny's Metaphors

metaphor: In her protocol, she remarked at one point, "I'm looking for a metaphor or something." Nevertheless, she only used controlled searches for two metaphors in the narration and one in the description where she sought for images and likenesses. In the interview, she pointed out that she would often look around the room or out the window for a color, a texture, or objects similar to what she was describing. She also associated concepts to logically sort through information and put it together again before she arrived at a topic.

Spontaneity. After the decision to use apostrophe/personification was fixed, all subsequent examples were spontaneously produced. Apostrophe/personification became the method of development as much as metaphor. All remaining spontaneously composed metaphors also were suggested earlier in the exploratory stage, in the first draft, or were implied through previous free association.

Reinforcement. Penny rarely congratulated herself or evidenced pleasure or satisfaction with a metaphor after she created it. In only one incidence on each paper did she acknowledge the metaphor after it was generated. This silence could represent a personality variable, a lack of self-confidence, modesty, or reserve on her part, since she values metaphor enough to set it as a conscious goal in writing. In the follow-up interview she mentioned that she did enjoy

creating and defining relationships through metaphor; that is why she uses them (see Figure 3).

Order. As images and emotions served as catalysts for Penny's compositions, images and emotions were the impulse for her metaphors as well. In the interview, she attested to experiencing the image and sometimes the emotion first; then she would think through an idea and look for the metaphor. Her protocol supports this sequence, but sometimes it is impossible to determine whether the idea or image was realized first. In the sentences that contain metaphors, the topic usually comes before the vehicle, and rereading usually preceded and was interspersed throughout the effort of generating metaphor. The order of Penny's creation of metaphor was rereading ---> image/ emotion ---> topic ---> vehicle ---> metaphor (see Figure 3).

Subject D, Ingrid

Ingrid is an 18 year old dramatics major who plans to transfer to a four year college. She was graduated from a rural high school in a neighboring county where she was placed in the college preparatory track. Ingrid had completed only one quarter of English composition at the time of the study and had no college level literature. She is a reader and has always enjoyed writing, beginning with fairy stories when she was a child. She was placed in Honors English based on SAT scores, a writing sample, and a professed

interest in literature, composition, and the arts. She had starred in two dramatic productions in college at the time of the study.

The Second Draft of Ingrid's Narrative Essay

I sick two times in my life.

Chicken pox--worst case Dr. J. had ever seen. I had them everywhere--eyelids, under fingernails, in scalp. I didn't go to hospital although I had a degree of 106. The fever made me delirious, and I said things that were funny to my family, but most of all these things were frightening to me. I used to go in the bathroom, the walls would start closing in on me, I'd start screaming and would wake up the whole house and Mom or Dad would give me a big good slap to bring me out of it. The first sign of chicken pox came on a night when I found myself being rocked by Daddy. I had a fever and had been muttering something about going back to Romper Room to get the other half of my balloon. The balloon was yellow--always yellow and I had many dreams where I would cling to that yellow ballon which would be flying about the rooftops. Daddy was always operating belts controlling the speed and direction of the balloon. This is where I developed my acute fear of heights. I was caught between clinging to a balloon for desperation or throwing myself off into the air to get it all over with.

Also, I was a danger when I had C. P. I tried to kill my sister twice. Once by strangling her and once by pushing her down the steps when she tried to stop me from sleepwalking. I had huge chicken poxes like a South American version or something. I have one scar on my leg that is about as big around as a fingernail and it was deep. I have a scar between my eyes that looks like I got hit by a BB. I have physical and mental scars from that illness. I didn't realize there were mental scars until about 6 years later when I had a close relative to Scarlett Fever.

We had just moved into a new house and everyone else was moving furniture. I was alone and pretty sick. Mom had gone, the pans in the kitchen had started tinkling, like someone preparing dinner. I thought Mom was home. So I crawled to the top of the stairs and called for her again and again, but she wouldn't answer. I got back in bed and was just laying there looking at the ceiling and out of the corner of my eye, I saw a rather well fed rat chewing on bloody sheets beside my bed, but when I turned to look directly at him, he was gone. I could hear him chew and I could hear his little claws scuffling on the sheets. I didn't know what he was chewing, but whatever it was, it was almost gone. Also, while I was laying there, I heard little spooky voices coming out of the intercom. They were

whispering my name and I thought they were demons or the like, that came over from the old house in our suitcases. For one day I lived in terror, just something like Edgar Allen Poe, I don't know it was just one whole day of nothing but sheer terror. That was a long time ago, but today when someone speaks slowly or they do something slowly I get little snips of chicken pox, that I didn't know I still remembered. I almost panic, just for a second, I mean I don't think anyone could tell, but I go back to being seven years old again and laying on the cot downstairs and everything comes flooding back. There was a man in my closet who just stood there watching me. He had glasses and looked some like my father.

Probably the climax of my feelings of terror came when I had a run-in with a stuffed rabbit. The rabbit was supposed to be a frog, but some little lady had a stroke of genius and decided that it would make a cute bunny, so I turned out to be a rabbit with flat feet and bug eyes. It was propped up at the end of my bed, and I curled up to go to sleep. When I was almost asleep, I felt a bump or more like a nudge at the back of my legs. I looked down and there was the rabbit. I didn't know what to think. I pushed it back down to the foot of the bed and tried to go back to sleep. In few minutes later, I felt the same nudge again and once again there was the rabbit. There was a mattress at the foot of my bed and I looked over it, thinking that maybe Kelly and Jon were playing the old chicken pox game w/me again. When I looked over, no one was there, and a very cold feeling came over me. If you've ever had a cat hiss in your face, you just start getting cold, your face gets cold, your shoulders get cold, your arms get cold, everything gets cold and you start shaking. And that is how I felt. It was like a ghost was there. I knew there was a ghost there and it was pushing that rabbit, throwing the rabbit. I tried to go back to sleep and I was shaking I guess from the fever and that nudge woke me up again and there was the rabbit. So I slung him across the room.

I called Mom and they came home. Later that evening they were downstairs eating, my brother came to find me having a bad dream. When they woke me up, I had been having a dream about a very stern almost cruel looking woman. It was the same woman that appeared in a dream when I had the chicken pox. Her hair was pulled tightly in a bun and looked painful. She was thin and had long fingers and fingernails. When I had chicken pox she had black hair. And she drew circles with her fingernails on my cheeks. When I had that dream, she was still drawing circles on my cheeks and she still had her hair pulled tightly in a bun but her hair had greyed slightly as if she had aged over that 6 years along with me. Everynow and then something will remind me of that time by whispering my name or by talking or moving real slowly and it nearly makes me sick on my stomach.

It is like after you have been hung over and drunk too much beer and then someone the next day shoves a can of beer under your nose. It's that same feeling. I have gotten over that yet.

The effects of my illness are as big and unbelievable as the sores themselves were. I don't know what she means or what she was supposed to represent, but I have a feeling that she means something in my life. I don't know how, but it's just a feeling. One day I'll talk to a psychologist and find out what that and all these other happenings during my illness mean, and if they have any bearing on who and what I am now, and who and what I will one day be.

Ingrid's Narrative Session

Ingrid's paper started out in the form of notes rather than complete sentences or paragraphs. As she moved into her topic, her writing became more coherent. Since she has written a number of essays for me both in and out of class that were polished and complete, I asked her if it were possible that speaking aloud her thoughts interfered with her normal writing processes to the point that she could not compose. She disagreed, asserting that sometimes her normal process was to jot down multiple drafts of notes. After she worked out her ideas, then she tackled sentences and paragraphs. Sometimes, however, her first draft turned out to be virtually her final paper with very little rewriting. In this case, it took her a long time to focus on one facet of childhood, and after she did all the while she was writing she was questioning how much significance these memories could have to a reader even though they were of great significance to her. When she finished, she said if she were writing for a class, she would have reviewed and chosen another topic.

Ingrid spent three pages exploring childhood memories before she decided to freewrite from her earliest childhood, on to arrive at a focus. Even though she spoke in lucid sentences, her writing was in the form of notes. She would stop writing completely for lengthy periods while she continued talking. This exploratory draft took eleven pages of free writing at the end of which she resolved to limit her subject to her two major childhood illnesses. The first and second drafts were again spoken in sentences but written as notes.

At the end of her exploratory draft, when Ingrid recalled the severe case of chicken pox which traumatized her childhood, the images of the sores came immediately to her mind with revulsion. On the last page of the first draft, she composed her first metaphor which would come fourth in her final paper: "When someone speaks slowly or they do something slowly, I get little snips of chicken pox that I didn't know I remembered." This metaphor was written totally spontaneously with no rereading or editing but following lengthy free association. What ensues appears to be "little snips" of memories of that time. As she composed this metaphor, she slowed her voice down in imitation of the fearful memory; her eyes widened and she spoke dramatically. In the interview, she confided that she still feels the coldness when she thinks about her nightmare. Even though this metaphor was written quickly, it was preceded by the topic, emotion, image, and free association.

The second metaphor Ingrid composed and the only other written in the first draft might be considered a cliché: "I go back to being seven years old again and laying on the cot downstairs and everything comes flooding back." This was suggested by the previous metaphor and associations even though it was written totally spontaneously. In the protocol and interview, she spoke of hearing the whispers that set off her terror before she composed this metaphor.

The first metaphor in her essay, "I had huge chicken poxes like a South American version or something," was free written in the second draft with vivid imaging and a little editing. In the interview, she reported that she thinks of everything in South America as being larger than life. This is a phrase she has used before in describing her disease to others. "I have a scar between my eyes that looks like I got hit by a BB," was something someone said to her once. This simile was written spontaneously with topic, emotion, rereading, free associating, and imaging, a little editing, but it was not original with her.

"For one day I lived in terror, just like something out of Edgar Allen Poe." This simile was written after major rereading in the second draft and was also preceded by the topic, free association, emotion and imagery. During her protocol, she spoke these lines with vigor, but not with the drama and gestures that she used when she wrote, "If you've ever had a cat hiss in your face, you just start getting cold, your face gets cold, your shoulders get cold, your arms get cold, everything gets cold and you start shaking. And that is

how I felt. It was like a ghost was there." When Ingrid composed these lines, she extended the word "hiss" and shivered extravagantly. In the interview, she said she felt the coldness again when she composed the metaphor and that the cat was intimidated by Poe's short story. This example may be considered simply a comparison as much as a metaphor. Since Poe evokes images of horror (catacombs, pits, and ghouls), however, a metaphoric suggestion exists. The topic was preceded by rereading, emotion, image, free association, and editing.

"It is like after you have been hung over and drunk too much beer and then someone the next day shoves a can of beer under your nose." This simile was written after lengthy free association had suggested numerous unpleasant images (visual, tactile, and auditory) which she experienced in her nightmares or hallucinations. Again, this expression may be viewed as a comparison of two emotions, but enough disparity exists between the two extremes to consider it as metaphoric. It was written spontaneously in the second draft after the topic, rereading, emotion, imaging, free associating, and a little editing. As Ingrid wrote these words, she made a sick expression and stuck her tongue out; her interview also recorded strong negative emotions associated with the creation of this metaphor.

The last simile, "The effects are as big and unbelievable as the sores themselves were," was written in the second draft after the topic, rereading, free associating, imaging, and a little editing.

In the interview, Ingrid said she had physical scars and mental scars from that illness and that when she wrote the metaphor she remembered picking at the sores. She wondered if she was picking at her emotional sores by dredging up these memories to write the paper.

The Second Draft of Ingrid's Descriptive Essay

The Christmas Tree

Christmas represents many things to many people what ever their religious preference may be. Christmas is undoubtedly my favorite time of year. Even though I know it is the birthday of Christ, when I think of Christmas, I always think of the Christmas tree.

Bringing home the Christmas tree is always a very big deal at our house. When I was little, we would always go out in the woods and cut, but never paid any attention to me and I never got I wanted. Last year we went to buy, from \$15 to \$25. Of course Mom picked a \$15 one but I saw this gorgeous full Scotch Pine laying against the fence that was \$25. Mom said she wouldn't pay over \$20 but Dad said he'd pay half since it was the prettiest tree in the lot. It was a bitter cold night, perfect for buying the tree. My breath curled way up in the air and disappeared as I watched the man tie the tree to the roof of the car. I was so afraid he would damage it. We never buy cedars even though they do smell good. They are an ugly color and shape and they aren't strong enough to hold our old fashioned ornaments.

When we decorate the tree, everyone wants to be there because they know there will be homemade potato soup, hot vanilla milk, cookies and cake at the Murry's. All of our family has to be there because we are sloppy sentimental, three or four friends unexpected. We all have our favorite ornaments and we usually argue over who gets to hang what. It's grab and growl time when we open the boxes. My special one is an antique hand blown glass ball with sugar crystals and green crystal zig-zags. It is clear wavy glass, uneven and lopsided when you hold it in your hand. My other favorite I call my Scarlet O'Green or my O'Hara Green ball. It's a spun silky color of green that looks like what I imagine the color of Scarlet's barbeque dress that she wore in the beginning of Gone With the Wind. Kelly's favorite is the navy blue ball with silver stars, Barry loves the brass bells, Mom had these hidious real bird

nests that are probably full of manure and feathers. We always hang balls in the middle of the tree where it looks like they are floating or suspended, hovering. The real crystal icicles look like they are just about ready to drip if you hang them in front of a light. My sister made snow flakes out of tin cans that are so fragile looking and beautiful and there are snowflakes crocheted from string that mom starched in sugar water, heirloom. We use the tiny little fairy lights and the bubble lights that make the tree come alive. Then there are the musical ornaments that turn and play Christmas songs and the creamy glass harp, violin and the trumpet that really plays, the tiny china hobbie horse that shakes and tinkles when you walk past. All this is topped by a tacky tinsle star that Mom and Dad got when they were first married. The star is the most important one to me, 25 years, replace it was an electrical one but we won't allow it. With such a conglomeration of sizes, shapes, colors, the tree gets an over stuffed look, kind of crowded like an old Victorian parlor with knickknacks on every table, big fat lamps, and over stuffed cushions. It's an elfin tree like something you would find in Mirkwood, in the Hobbits.

When ever I have a bad dream, I can go down stairs, turn on the tree lights and sit under the tree for hours and not be afraid. Last year I found my little brother down there in the middle of the night and we talked for the first time. I've never really liked my younger brother very much but the Christmas tree brought us together. We talked about things I didn't know he thought about. Mom feels the same way. She would hug the tree everynight before she goes to bed if she could. Christmas trees are magical.

Last year Mom and I went visiting a welfare family that is her project for the year. Behind their door was a pitiful little cedar about waist high in a coffee can with a few packages wrapped without boxes in used paper. The tree had some of our discarded ornaments and some their little girl had made in school. I know that is the best they could do but I felt so depressed when I walked away from there thinking of their Christmas morning sitting on those bare wooden floors around that pathetic tree. When I got home and looked at our tree for some reason I became angry at them, as if it was their fault. It is so sad to see some have so much and others so little. Dad says Christmas is too commercial so maybe their little tree is just as beautiful to them as ours is to us. Even if it is too commercial and Christmas trees are pagean, I don't think anything that brings so much healthy happiness to so many could be frowned upon by God.

Ingrid's Descriptive Session

Once again Ingrid's second draft is incomplete and fragmented. She either appeared to become lost in talking and forgot to write or had difficulty talking and writing at the same time. Ingrid spent 19 lines of protocol exploring for a subject before she decided to describe their Christmas tree. After she settled on her topic, she used freewriting for 12 pages of protocol before she started her first draft. It was in the exploratory free writing stage that she first described the "tiny little fairy lights," but it was in the first draft when she wrote that the lights made the tree come alive. In the protocol she recalled how when she was little she would pretend that the colored lights were fairies that danced about their magic tree. Both she and her sister call them "fairy lights" to this day, so the concept was not new with this paper. The idea that the lights make the tree come alive came from the blurb on the box in which they were sold. Both facets of the metaphor were created spontaneously and were followed by reinforcement, but neither was original.

"...My Scarlet O'Green or my O'Hara green ball. It's like a spun silky color of green . . .," came after rereading, free associating, and imaging in the exploratory freewriting and was completed in the first draft. It was written spontaneously with a bit of effort and editing. This metaphor is Ingrid's only attempt at synaesthesia and she was pleased with it, but again the nomenclature was not original with this paper.

The next simile created was, "It's like something you would find in Mirkwood, in the Hobbits." This was composed in the second draft after rereading, imaging, and free associating about how magical the tree looked, and was concluded with reinforcement. It was written spontaneously with great delight and elaborate imaging. In her mind she pictured the scene where "Bilbo and all his friends were having a picnic; there were lights all over the place and the river birches were glowing like right before it gets dark; they stood out like waxy pines." Here Ingrid invented another metaphor that she did not write down, "the snow flakes are so dainty and fragile they look like egg shells."

"With such a conglomeration of sizes, shapes, colors, the tree gets an overstuffed look, kind of crowded like an old Victorian parlor with knickknacks on every table, big fat lamps, and overstuffed cushions." This simile Ingrid created toward the end of her second draft protocol after free associating about all their various decorations. She reported vivid visualization, and even though the metaphor was created spontaneously, she slowed down her rate of production as she wrote each phrase. In the interview, Ingrid stated that first she saw the tree in her mind, then she thought of how overstuffed it looked. When the idea of the Victorian parlor popped into her head, she treated it tentatively until she began thinking about how well the metaphor worked, how she agreed with it. She pictured maroon velvet, bubble lamps, little ornate tables covered with everything the owners wanted to show off. In the follow-up

interview, Ingrid said that she would often think of a metaphor spontaneously, then with a gradual sense of awareness realize how apt it is. She was pleased with this one. The pattern of this metaphor was topic, rereading, imaging, free associating, vehicle, and reinforcement.

Discussion

Ingrid generated twelve metaphors, eight in the narration and four in the description. Several more were created in the protocol that were never translated on paper. Four of the metaphors were the product of the first draft and eight the second. These drafts are not typical of the kind of work Ingrid usually does. She may have needed time to develop and polish her writing, to sort through topics, or perhaps the process of composing aloud was distracting. She tended to get lost in memory probing and forgot that the object was to write a paper. Several times she reprimanded herself for neglecting to write, and when she did write, she often omitted words and phrases and wrote fragments. Both drafts were composed through a process of free association even through the end of the last copy. She rarely looked back at what she had written earlier but continued with the invention process until time elapsed. She confirmed that she was not ready to refine sentences yet because she was still exploring for ideas.

Type. Seven of Ingrid's metaphors have nouns for vehicles, two have verbs, and three both. Simile was her favorite form, totaling

eight, with three traditional metaphors and one personification. All of Ingrid's similes were composed in the second draft, implying that some processing introduced them even though it is usually not clear what that was. Both papers were written through memory probing, including the invention of metaphor.

Catalyst. In the narration, five of the eight metaphors were precipitated in the exploratory stage by the memory of the terrible sores that resulted from a childhood bout with chicken pox. When she visualized the sores in her mind, she shuttered and evidenced a strong emotional reaction. In the conclusion of her paper, she surmises that the residual emotional scars are as enduring as the physical scars, and the three remaining metaphors treat these emotional wounds. The power of the catalyst in the narration is clear: it leads her through her memories to evoke those little "snips" of chicken pox and finally to question the wisdom of doing so. The conclusion results from an examination of the emotions the metaphors stir. In the description, the "tiny little fairy lights" form the catalyst for much of the account of the tree and of Christmas itself as having magical qualities. Of the four metaphors, two allude to magical times and two to the romantic past. In her conclusion, she returns to a concern about the pagan tradition. The "little fairy lights" suggest to Ingrid the pagan qualities of Christmas tree adoration that her father deplores, but after examining the significance of the tree to her and her family, she

infers it is a positive factor. The conclusions of both papers grows out of the process of composition and are elicited by metaphor (see Figure 4).

Effort. Ingrid composed almost effortlessly through a directed free writing technique. She would stop and ask herself what else there was to say about Christmas trees; then she would begin again. Most metaphors did not appear to involve any more effort than the rest of the paper. Occasionally, she would slow her pace when she was generating a metaphor, but there was little sign of discomfort or frustration and no evidence of any kind of controlled association or strategy. Neither did she engage in much editing; the four metaphors that were edited only amounted to switching a word or two. Editing was exercised quickly and appeared to be without laboring or distress (see Figure 4).

Reread. She used no rereading in her first draft before the two traditional metaphors and the one personification created there. The rereading she did in her second draft was primarily when she reread the entire draft before she started the second copy. Only twice did she stop association and reread immediately before a metaphor was generated, but since all the similes were written in the second draft, they were preceded by rereading (see Figure 4).

Spontaneity. All of Ingrid's metaphors were relatively spontaneously produced with no evidence in the protocol of anything

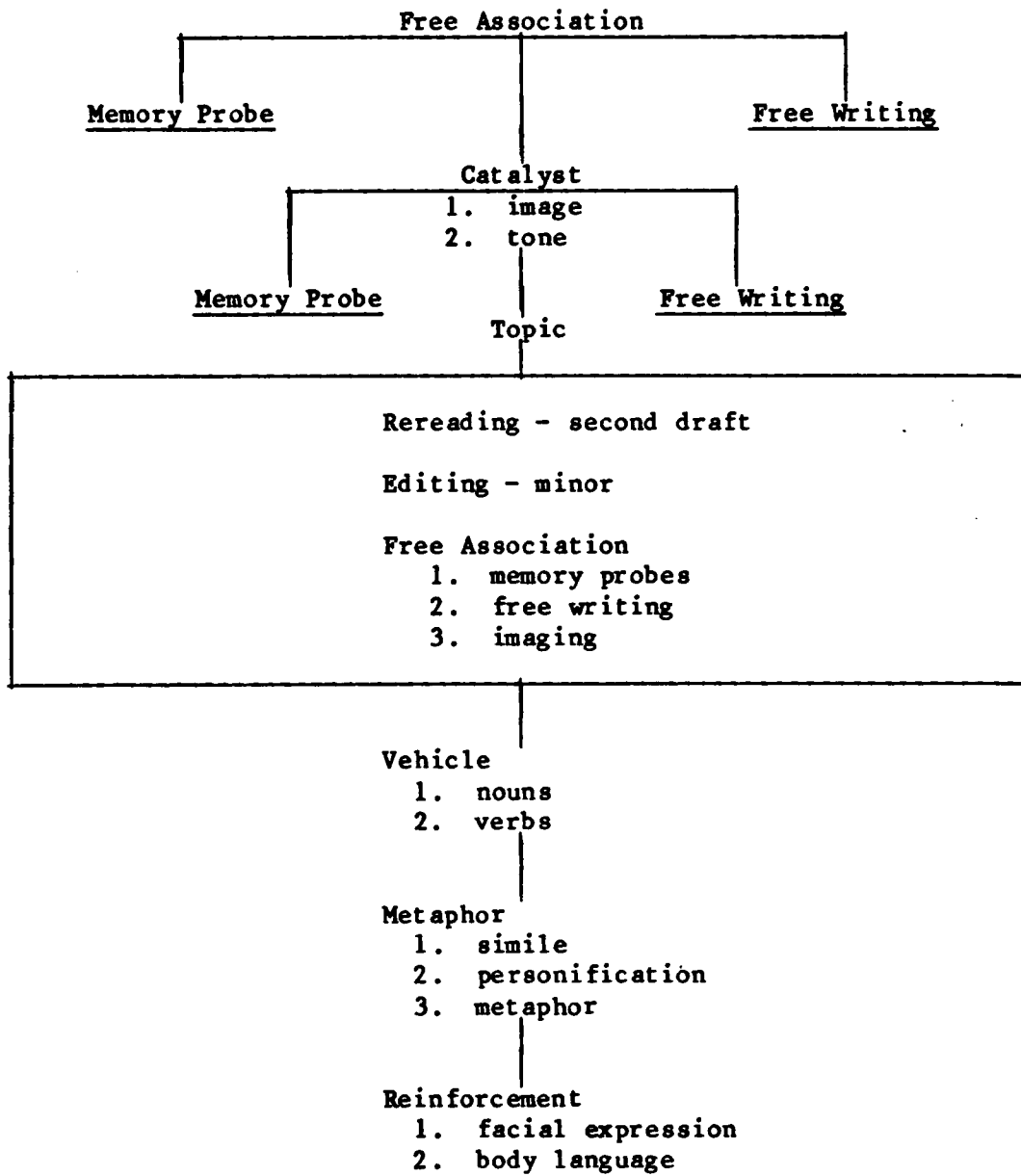


Figure 4

A Process Model of the Generation of Ingrid's Metaphors

leading up to them except free association. On the other hand, Ingrid admitted that over half of the metaphors were not original with these papers; they were descriptions she had used before or that she had heard before. The stories of her illnesses she had told many times before, and most of the descriptions of the tree were family expressions. The one clearly original metaphor is the comparison of their tree to a Victorian parlor. As she created this, she slowed her pace markedly, perhaps attending to cognitive processes she did not express. In the follow-up interview she asserted in this case, as is often true, the image occurred spontaneously, and the more she dwelled on it, the more she realized it was fitting. This process was apparent in her protocol: as she added each phrase, it was with a growing sense of awareness and appreciation.

Reinforcement. Like the other female subject, who was also very young, Ingrid rarely expressed pleasure or satisfaction with her composition and then only in indirect ways. Three times in the description she smiled after she generated a metaphor, but she smiled a lot while she wrote that paper. After she alluded to Mirkwood and the Hobbits, she looked absolutely delighted and laughed aloud. That could have been due to the charming images the Hobbits awakened in her mind. In the interview, she affirmed that she responded to metaphors in reading and enjoyed creating them; she is very aware of metaphor and takes pleasure in using them in speech. "Some people's whole lives are metaphors," she said in her follow-up interview. "I

am always looking at things and thinking about what they are like" (see Figure 4).

Order. Ingrid displayed a great deal of emotion in conjunction with seven of the metaphors she created; but in all but one example, the emotion was negative. In most instances, the emotion clearly introduced the metaphor; however, in two samples it was impossible to determine whether the emotion occurred first, in conjunction with the metaphor, or followed it. She often used elaborate imaging in the creation of her metaphors, even the abstract ones; i.e., when she wrote that she lived "in terror, just like something out of Edgar Allen Poe," she pictured a black cat, which she later used in another metaphor. In two cases she heard sounds, in one instance felt cold and shivered, in another felt faintly sick. In the interview, she attested that a color image comes to her mind first, sometimes only dimly formed, while she explores for words. In all eight of Ingrid's similes, the topic was antecedent to the vehicle both in her sentences and in her thought processes. In two of the traditional metaphors, the topic was considered in the protocol before the vehicle was generated. The order of Ingrid's creation of metaphor appears to be reread ---> emotion/image---> topic ---> free association ---> metaphor (see Figure 4).

CHAPTER 5

Conclusions and Implications

The four subjects demonstrated certain patterns that were shared by all, but each subject also exhibited personal and idiosyncratic individual differences. The arrangement of the subjects in this study is in order of the complexity of their approaches to metaphor generation, which corresponds exactly with the number of quarters of college level English classes completed and, oddly enough, with age and sex. Since they were all my students, I can vouch that they received no instruction or emphasis on the use of metaphor at the college level; I purposefully avoided any particular attention to metaphor in my classes in anticipation of using students for this study. Even though I encourage creative approaches in my classes, none of the subjects had taken a creative writing course. It is possible, therefore, that a relation exists between reading and writing experience and metaphoric creativity for those who have a disposition for metaphor.

Factors that all subjects held in common to varying degrees were evident. Prelinguistic precursors acted as catalysts to the sequential development of metaphoric patterns. Behavioral activities included rereading, associating, laboring, and reinforcing, but different types of metaphors tended to be spontaneous as opposed to consciously generated. Finally, metaphor exerted considerable power to influence composition. These factors

hold implications for the way we look at instruction and suggest areas for further research.

Summary of the Process Models

All four subjects followed a basic pattern in generating metaphor. First, they used free association, which was composed of memory probing and freewriting, to arrive at a catalyst. The catalyst, which assumed the form of image (ice), tone (irony), or emotion (nostalgia), provided the driving force behind the essays and most of the metaphors that followed. After the catalyst formed, the subjects engaged in more memory probing and freewriting, which resulted in an idea or topic for their metaphors.

After the topic was explored, the subjects began the search for the vehicle. This search was highly elaborate for the most skilled maker of metaphor, Pat, and fairly limited for Ingrid, the least prolific creator of metaphor. All subjects initiated the search for vehicle by rereading. Pat, John, and Penny also used editing by omitting, substituting, reordering, and evaluating. All subjects except Ingrid engaged in considerable effort and laboring as they generated metaphor: they sighed, fidgeted, and experienced frustration in their search. Pat and Penny also employed logical processing, and all subjects used free associating to arrive at a vehicle. In addition, Pat, John, and Penny developed varying degrees of controlled association techniques. Pat, who had the most complex system, looked for rhymes, senses, imagery, likenesses, opposites,

parts of speech, and links to the catalyst. John considered verbs, likenesses, and visual images. Penny explored for concepts, images, likenesses, and was the only subject to state that she was looking specifically for metaphor. She also scanned her immediate environment for concrete objects or images she could use for vehicles.

After the vehicle was identified, the metaphor was formed. The combined subjects composed examples of irony, hyperbole, personification, synecdoche, simile, and apostrophe, and all subjects composed traditional metaphors. After the metaphor was generated, all subjects expressed some kind of reinforcement. The adult male subjects were more profuse in their expressions, the young women more reticent, but all revealed appreciation for metaphors and their creation of them.

Summary of Results

Prelinguistic Precursors

The protocols strongly attest that the subjects visualized an image, experienced emotion, or established an attitude or tone before the creation of novel metaphor, and the interviews conclusively support the subjects' post hoc recall of this sequence. These prelinguistic precursors of image, emotion, and tone seemed to act as catalysts for the entire paper as well as the individual metaphoric structures which followed. The image was usually visual, but all the other senses were mentioned at times. The image of ice in Pat's

narration, which emerged very early in the invention stage, became the central image of the entire paper. Likewise, some sort of image, emotion, or tone preceded the development of subsequent metaphors. Usually the image was ice, but he also visualized walking on railroad ties, smelled peanuts, and pictured an invoice. In Pat's descriptive essay, he slipped into an ironic tone with lots of hyperbole early in the invention stage, and that tone pervaded the entire paper. Again, the composed metaphors that followed were preceded by hyperbole and irony as well as image. He pictured picking cucumbers, a funeral for kitchen gadgets, a carnival barker, a whirling dancer, a canary plucker, and a pizza cutter on the Christmas tree. Often the image was rendered in colorful detail with feeling and animation before even a simple metaphor or cliché. Two subjects volunteered the importance of color in their imaging, and the other two agreed. Ingrid noted the developmental stages of her images as they gradually penetrated her awareness. First she pictured a Victorian parlor, then fat lamps, cluttered tables, fringed cloths, and chandeliers.

Most subjects also evidenced the experience of emotion before metaphor was generated, sometimes in conjunction with the image and sometimes without. The protocols of John, Penny, and Ingrid verified emotion as precursor to metaphor and the interview confirmed it. John pictured himself in a dunce cap with all the attendant feelings of failure. Ingrid visualized her sores with revulsion. Cognitive psychologists who theorize that metaphor stems from an excited state and that image precedes the word receive testimony from

this study.

At times, however, it is impossible to determine from the protocol if the image appeared prior to metaphor, developed in conjunction with it, or was amplified during the interview. In addition, some examples of irony, cliché, apostrophe, and abstract metaphor appear to be free of any such dependency. It is important to keep in mind that this study analyzes writing processes. Most assuredly a great deal of cognitive activity takes place before the level of speech is reached to be recorded in a protocol, and all protocols are incomplete by nature.

Conscious/Unconscious Generation

The relatively few metaphors that were generated spontaneously were usually clichés or derived forms, supporting the long held suspicion of critics that clichés and frozen metaphors are produced with little discernment. Similarly, hyperbole, irony, personification, or apostrophe which assumed the role of tone or approach were sometimes conceived impromptu. For example, once Pat decided to personify kitchen gadgets using hyperbole and an ironic tone, all subsequent incidences of irony, hyperbole, and personification appeared to be extemporaneous. Once Penny decided to address her essay to her deceased grandmother, she no longer had to struggle to create apostrophe. Again, since the human mind can think several times as fast as the voice articulates (Howard and Tracz,

1979:5), it is impossible to claim that cognitive processes were not operating even though nothing was spoken out loud.

Behavioral Patterns

Rereading seemed to function as a method of eliciting metaphor of which the writer was unaware. The fact that the subjects were rereading was not always clear from the tape recording of the protocol alone because they often stopped talking or mumbled unintelligibly when rereading; however, I could detect rereading by eye movement and behavior. Rereading manifested a similar function to freewriting: it allowed the subjects to start thoughts flowing, triggering ideas, and it served as an invention device and a tool to break blocks. Another tool for encouraging metaphor development that appeared to be totally unconscious and perceptible only from the protocol was the use of memory probing before novel hyperbole for all subjects. Pat was the only one who also used controlled association before hyperbole by inviting himself to "think big," but memory probing apparently allows hyperbole to happen. Perhaps the writer has to release inhibitions and expand to exaggerate effectively. Pat, and to a lesser degree Penny and John, resorted to a system of controlled associations. Pat associated concepts as he developed his ice and school images; he also associated sounds of words, rhymes, alliteration, likenesses, and opposites. The one tool employed by all subjects extensively was free writing, which was used both to break blocks and as an invention technique.

One of the most surprising results of this study was the effort, diligence, and industry with which novel metaphors were generated. Ill-contrived metaphors, such as Penny's image of ironing out the wrinkles on her grandfather's face, were produced using the same processes as more agreeable ones were. Traditional novel metaphors and synecdoche necessitated editing in the form of substituting, rephrasing, omitting, reordering, or evaluating. Traditional novel metaphors also took longer to generate and were usually distinguished by pausing, rereading, and a slowing of pace. Physical signs of distress and tension as well as verbal and facial expressions of struggle were evident during the protocol when most novel metaphors of all types were created. Pat, John, and Penny displayed stress in the generation of simile but to a lesser degree. Most clichés, hyperbole, personification and apostrophe were labored over less than traditional metaphor, but the creation of novel metaphor was distinguished by signs of effort. Controlled association and searching were always laboriously conducted. Pat, the most generous author of metaphor, commanded the widest variety of controlled association, but John and Penny followed similar patterns, most of which they had forgotten by the time the paper was completed. Ingrid, the one exception, free wrote her papers with little apparent struggle. Ironically, despite the clear signs of effort required for the creation of most novel metaphors, none of the subjects recalled that composing metaphor required any work on their part at all. They all reassured me that the generation of metaphor was an unconscious

process, that they did not compose them at all, that metaphors just happened. All subjects maintained that the creation of metaphor was a mystery to them: none remembered any special effort or time spent in writing metaphor.

The one certainty that all subjects acknowledged as a common denominator was the appreciation for metaphor in reading and joy in its creation. Both adult men were outspoken in their approval of their own use of metaphor, relishing novel metaphors once on paper and rereading them with satisfaction. The two young women were not so confident in their own work; even so they professed a fascination for metaphor and the desire to create them. Penny consciously tried to introduce metaphor into her writing, and all four subjects are avid readers who favor metaphoric writers.

Location in Process

The catalyst, a controlling image, tone, or emotion, was formulated in the exploratory stage or, in one case, very early in the first draft; the majority of metaphors in each essay were rooted in the catalyst. Six of the eight essays appeared to be stimulated by images and two by irony. In John's descriptive protocol, the first words he uttered in the exploratory stage that were related to the essay were "childhood heroes" followed immediately by a strain of "Where have you gone Joe DiMaggio?" From the protocol itself, it is not possible to assert definitely whether the image or the abstract concept arrived first. In the interview, he claimed pictures of

heroes floated through his mind, but retrospective testimony is not as reliable as the protocol.

Once established, the catalyst may embrace various modes, be translated into the abstract, or exist only in the mind of the writer; nevertheless, it remains the prime mover of the essay and endures intact in its original form in the author's memory. Without the protocol for reference, what often appears to be the catalyst may actually consist of an image that developed in later drafts. Most metaphors were created in the first draft although the sequence varied from subject to subject and from assignment to assignment. Metaphors continued to evolve through the very end of most essays, and since none of the subjects considered the essays complete, it is likely that more metaphors would have developed as they continued to revise.

Following the catalyst, in the majority of protocols it is clear that the concept or topic was precursor to what the topic is compared to or the vehicle. Indeed in most metaphoric sentences written by these subjects, the topic is located prior to the vehicle. This order may be misleading; however, for most of these subjects, metaphor was not the simple description of a full blown concept so much as the couching in image of a germinating idea. The common pattern that all subjects shared in the generation of novel metaphors was rereading ---> emotion/image ---> topic ---> vehicle ---> reinforcement.

Conclusions

Even though the concept does usually precede the metaphor, from these four subjects it is apparent that metaphor manifests enormous power to enrich the text as well as alter or create reality for the writer and the reader. In these examples, metaphor claimed the authority to open up subjects for investigation, engender a point of view, reverse an attitude toward a topic, and constitute reality. In Pat's narration, the ice metaphors molded the content of the essay. As each new metaphor was perceived through "crystalized hindsight" and "the diamond polish of time," he consciously selected the reality with which he chose to live. In his descriptive essay, Pat began ridiculing useless kitchen gadgets, but once he personified them, his attitude reversed to affection as he concluded with "Have you hugged your can opener today?" In this example, the metaphor totally altered his attitude toward his subject. Once Penny perceived of the relationship between the old country store and her grandfather, the essay, the images, the metaphors unfolded. Metaphor also played a role in discovery; the sum of the two entities being compared were greater than the individual parts. The combination of Penny's grandfather and the old store fit like that last puzzle piece, making the metaphor richer than either perceived separately. The store and old man do give each other life. Penny's view of her grandfather and the store have been permanently altered by the creation of metaphor. The "fairy lights" which open Ingrid's essay reminded her of her father's criticism of the pagan influences on the Christmas

celebration, the concept with which she concludes. Clearly, the metaphors created by these writers empowered and enriched their text in the most wholistic sense.

Evidence in the protocols and interviews indicate that, at the time of the composition, the writers themselves were cognizant, momentarily, of the power of their metaphors to influence their own thinking. After Pat's attitude toward kitchen gadgets shifted, Pat saw it and attributed the shift to the imagery. When Pat said things like, "Now we're going somewhere," "That says it all" after a metaphoric statement, he indicated he recognized the empowering force of his metaphor. When Penny said, "That store is like a key that can unlock the door of the past," she acknowledged that the metaphor had unlocked the flow of memories that would shape her essay. "I think I know where I want to go now," she said. In the follow-up interview, Ingrid expressed a strong recognition of the power of metaphor to shape her thinking. She said that after she would conceive of a visual image, such as the comparison of their Christmas tree to a Victorian parlor, the significance and detail of that image unfolded with almost a shock of recognition. The more detail added (fat lamps, cluttered table tops) the more she affirmed within herself how fitting the metaphor turned out to be.

After examining the protocols and texts in this study, it becomes very clear how inherently interdependent are both thought and language, and how we select and create our world through metaphor. The memory of the ice truck led directly to Pat's first metaphor,

"Our hindsight has crystalized and we can see clearly now." As he reread that metaphor, he determined to focus on the good memories even though there were as many funeral parlors as flower shops there. With that thought in mind, he added, "The diamond polish of time" and "Our memories can sharply focus on the refracted light of the good times and pleasantries of things free." Then he proceeded to probe his mind for sunny images from his childhood. He concluded his paper with another metaphor, "fleeting envy," which described his feelings towards others who are experiencing second childhood. His envy was fleeting because he knew that his hindsight was crystalized and focused selectively. Metaphor, then, became the driving force of language, its formative power. The imagery of metaphor interwove with the developing concepts to select a new reality, create a viewpoint, establish order out of the confusing barrage of stimuli that comprises life.

Implications for the Way We Look at Instruction

If metaphor forms the fundamental principle of all creativity, it unquestionably merits further consideration. Gardner, Kircher, Winner, and Perkins (1974:140), who have completed the most extensive developmental study on metaphor, suspect that something in the process of education suppresses the exercise of metaphor. A tacit restraint seems to exist in the normal classroom environment that censures metaphor production. Perhaps permission is required to dispel such restraint. They also found that with a little

encouragement students could significantly expand their ability to generate metaphor. Whether it is the classroom emphasis on correctness, on the empirical world view, on metaphor as decoration, on metaphor making as inspired, whatever the cause, the creation of metaphor has realized little standing in the curriculum.

Evidence in this study suggests that metaphoric competence can be fostered by teaching an appreciation for the language of metaphor. All these subjects are self-acknowledged readers who already professed a fascination for metaphor. Writers who make metaphors enjoy reading them and derive noticeable satisfaction in creating them. As Donald Hall (1971:34) quotes Robert Frost, "Once a man had known the pleasure of making a metaphor, it unfitted him for all other work."

Furthermore, this study indicates that making metaphor need not be thought of as the faculty of a creative few who rely only on inspiration. As Ghiselin (1952) suspected, metaphor seems to be the result of extensive cognitive processing. The individual taxonomies attest that the most prolific generators of metaphor work the hardest and have developed the most sophisticated strategies. Those who generate metaphor use specific techniques that perhaps can be encouraged, developed, and learned. From elementary school on students can be taught the value of inventing through to the conclusion, of imaging in all five senses, especially color, of uninhibited free writing, rereading, and memory probing. Editing strategies can certainly be taught with exercises in reordering,

omitting, substituting, and evaluating. Controlled searching techniques for likenesses, opposites, senses, images, and parts of speech can be learned. Of course exercises such as these have been included in creative writing texts for years, but metaphor theory suggests that they should also be included as a way of thinking and writing in all disciplines. One of the most salient points this study makes is that what may seem like inspiration and genius may really be something more prosaic--hard work, but hard work motivated by the intrinsic satisfaction of the creative act itself. Like birthing a child, the labor is quickly forgotten in the joy of the creation.

Areas for Further Research

This study witnesses to the power of Protocol Analysis to reveal information about the writing process that at this juncture is inaccessible in any other way. Very little is known about how metaphor is generated and what behavioral or strategic patterns are associated with metaphor production. Once again Protocol Analysis disclosed that retrospective testimony is incomplete and often unfounded. Protocol Analysis also uncovered patterns and behaviors related to metaphor creation unrecorded in the literature. This study as well as others speaks to the value of continuing research using Protocol Analysis to analyze the generation of metaphor in the writing process. Follow-up studies would be of interest in a number of areas.

A Protocol Analysis on the generation of metaphor with subjects grouped by personality characteristics might indicate if there are correlations between certain variables, i.e., (introvertism/extrovertism, locus of control, dependence/independence, conformity/flexibility) and the production of metaphor. This study identifies differences in patterns of metaphor development between sexes as well as ages. It is possible that personality characteristics might also reveal differences in patterns of development. As noted in Chapter 2 under Generative Studies, cognitive psychologists have long speculated that such differences might exist.

The subjects in this study were among the most talented students available, but they were all lower division undergraduates from a community college population. Three are enrolled in two-year, terminal degree programs; only one, in the college transfer curriculum. Since the complexity of metaphoric strategy in this study correlates with age and the number of quarters of college level English, upper division students, English majors, professional writers, and published poets may have developed considerably more sophisticated techniques. A Protocol Analysis to examine developmental trends in the generation of metaphor beginning with the primary grades through adult level might prove fruitful.

This study uses narrative and descriptive forms because they are the most basic and primitive modes of discourse. Follow-up studies using persuasion, classification, definition, or other patterns might lead to varied approaches or strategies. Assignments in the

extensive mode that define audience and purpose might reveal additional proficiencies. These subjects all composed writer-based prose in the reflexive mode. Even more specifically assigned tasks might be employed to encourage the generation of metaphor, i.e., what animal are you like and how and why are you like it? Explain how to perform a designated task to a five year old.

As Chapter 2 indicates, an enormous amount of work has been conducted by cognitive psychologists on metaphoric comprehension under the assumption that metaphoric competency can be measured by assessing comprehension. Protocol Analysis provides a tool to examine that premise. It might be interesting, for instance, to determine if those who use elaborate measures to produce metaphor use similar measures to comprehend them.

All four of these subjects were uncomfortable submitting only two drafts of their essays which were written under pressure in an artificial environment. All expressed the desire to take their papers home, think about them, revise extensively, and proofread carefully. A study following Berkenkotter's (1983) design which used Protocol Analysis in a task-free environment to eliminate as many situational variables as possible would allow for the possibility of invention to occur throughout the writing process. Subjects would complete multiple drafts in a normal writing environment, producing a finished product. The important information gained by the experimenter's observation, however, might have to be forfeited in such a design.

Research into metaphor and the writing process remains a productive area for a variety of studies other than Protocol Analysis: for instance, an analysis of classroom activities to determine if certain behaviors or attitudes militate against metaphoric appreciation, thinking, or writing; an analysis of textbooks for the same purpose; or an experimental design that compares metaphor production before and after teaching metaphor, rewarding metaphor, and reading metaphor. All the while the researcher should bear in mind the caveat of John Middleton Murry (1972:27), "The investigation of metaphor is curiously like the investigation of any of the primary data of consciousness: it cannot be pursued very far without our being led to the borderline of sanity."

BIBLIOGRAPHY

- Adams, H. Philosophy of the literary symbol. Tallahassee: University of Florida Press, 1982.
- Adams, J. L. Conceptual blockbusting: A guide to better ideas. San Francisco: W. H. Freeman, 1974.
- Anderson, C. The psychology of metaphor. Journal of Genetic Psychology, 1964, 105, 53-73.
- Arber, A. Analogy in the history of science. In M. F. Ashley-Montagu (Ed.), Studies and essays in the history of science and learning offered in homage to George Sarton. New York: Schuman, 1947.
- Aristotle. In W. J. Oates and C. Murphy (Eds.), Greek literature in translation. New York: Longman, Green and Co., 1944.
- Asch, S. The metaphor: A psychological inquiry. In R. Taguri and L. Petrullo (Eds.), Person, perception and interpersonal behavior. Stanford, California: Stanford University Press, 1958.
- and Nerlove, H. The development of double-function terms in children. In B. Kaplan and S. Wapner (Eds.), Perspectives in psychological theory. New York: International Universities Press, 1960.
- Atwell, M. A. The evolution of text: The inter-relationship of reading and writing in the composing process. Presented at National Council of Teachers of English, Boston, Massachusetts, November 1981.
- Baker, S. The complete stylist and handbook (2nd ed.). New York: Thomas U. Crowell Co., 1972.
- Barfield, O. The meaning of the word "literal". In L. C. Knights and B. Cottle (Eds.), Metaphor and symbol. London: Butterworths, 1960.
- . Poetic diction: A study on meaning. 1928; rpt. New York: McGraw Hill, 1964.

- Barritt, L. and Kroll, B. Some implications of cognitive-developmental psychology for research in composing. In C. Cooper and L. Odell (Eds.), Research on composing: Points of departure. Urbana, Illinois: National Council of Teachers of English, 1977.
- Bartel, R. Metaphors and symbols: Forays into language. Urbana, Illinois: National Council of Teachers of English, 1983.
- Beach, R. Self-evaluation strategies of extensive revisers and non-revisers. College Composition and Communication, 1976, 27, 160-164.
- Bede. De schematibus et tropis. Rhetores Latini Minores. In W. Shibbles (Ed.), Metaphor: An annotated bibliography and history. Whitewater, Wisconsin: The Language Press, 1971.
- Bell, M. Gemwood. In A. Turner (Ed.), Fifty contemporary poets: The creative process. 1977; rpt. New York: Longman, 1978.
- Berkenkotter, C. Decisions and revisions: The planning strategies of a publishing writer. College Composition and Communication, May 1983, 34, 2, 156-169.
- Berlin, J. Contemporary composition: The major pedagogical theories. College English, December 1982, 44, 765-777.
- Berthoff, A. Forming, thinking, writing: The composing imagination. Montclair, New Jersey: Boynton/Cook, 1982.
- . The making of meaning: Metaphors, models, and maxims for writing teachers. Montclair, New Jersey: Boynton/Cook, 1981.
- Bettelheim, B. The uses of enchantment: The meaning and importance of fairytales. New York: Knopf, 1976.
- Billow, R. Metaphor: A review of the psychological literature. Psychological Bulletin, 1977, 84, 81-92.
- . A cognitive developmental study of metaphor comprehension. Developmental Psychology, 1975, 11, 415-423.
- Birdwell, L. S. Revising strategies in twelfth grade students' transactional writing. In Research in the Teaching of English, 1980, 14, 197-222.

- Black, M. Models and metaphors: Studies in language and philosophy. Ithaca, New York: Cornell University Press, 1962.
- Bowerman, M. The acquisition of word meaning: An investigation of some current conflict. In N. Waterson and C. Snow (Eds.), Proceedings of the third international child language symposium. New York: Wiley, 1976.
- Boyd, R. Metaphor and theory change: What is "metaphor" a metaphor for? In A. Ortony (Ed.), Metaphor and thought. New York: Cambridge University Press, 1979.
- Bransford, J. D. and Johnson, M. Contextual prerequisites for understanding: Some investigations of understanding and recall. Journal of Verbal Learning and Verbal Behavior, 1972, 11, 717-726.
- Britton, J. et al. The development of writing abilities. London, England: Macmillan Education, 1975.
- Bronowski, J. The nature of scientific reasoning: Science and human values. In A. Eastman (Ed.), The norton reader. New York: W. W. Norton, 1977.
- Brooke-Rose, C. A grammar of metaphor. London: Mercury Books, 1965.
- Brown, R. Words and things. New York: Free Press, 1968.
- Calkins, L. M. Children's rewriting strategies. Research in the Teaching of English, 1980, 14, 331-341. (a)
- . The craft of writing. Teacher, 1980, 98, 41-44. (b)
- Carroll, J. A. The sensuous metaphor. English Journal, January 1982, 88-90.
- Carruth, H. The question of poetic form. In J. Oates (ed.), First person singular. Princeton, New Jersey: Ontario Review Press, 1983.
- Cassirer, E. The philosophy of symbolic forms. New Haven, Connecticut: Yale University Press, 1953.
- Chukovsky, K. From two to five. Berkeley: University of California Press, 1968.

- Ciardi, J. and Williams, M. How does a poem mean? (2nd ed.). Boston: Houghton Mifflin Co., 1975.
- Clark, E. V. What's in a word? On the acquisition of semantics in his first language. In T. E. Moore (Ed.), Cognitive development and the acquisition of language. New York: Academic Press, 1973.
- Collins, A. and Gentner, D. S. A framework for a cognitive theory of writing. In L. W. Gregg and E. R. Steinberg (Eds.), Cognitive processes in writing. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.
- Connor, K. and Kogan, N. Topic-vehicle relation in metaphor: The issue of asymmetry. In R. Honeck and R. Hoffman (Eds.), Cognition and figurative language. Hillsdale, New Jersey: Erlbaum, 1980.
- Cooper, C. and Odell, L. Research on composing: Points of departure. Urbana, Illinois: National Council of Teachers of English, 1978.
- Crismore, A. The composing process: A critical review of some recent studies. (ERIC Document Reproduction Service No. 221 885, 1979).
- DeMott, B. Archibald MacLeish. In G. Plimpton (Ed.), Writers at work. New York: Penguin, 1981.
- Donaldson, M. Children's minds. London: Fontana/Croom Helm, 1978.
- Downey, J. E. The psychology of figures of speech. American Journal of Psychology, 1919, 30, 103-115.
- Dubie, N. Monologue of two moons, nudes with crests. In A. Turner (Ed.), Fifty contemporary poets: The creative process. 1977; rpt. New York: Longman, 1978.
- Eberhart, R. A snowfall. In A. Turner (Ed.), Fifty contemporary poets: The creative process. 1977; rpt. New York: Longman, 1978.
- Eco, U. Metaphor, dictionary and encyclopedia. New Literary History, Winter 1982, 25, 255-271.

- Edson, R. Counting sheep. In A. Turner (Ed.), Fifty contemporary poets: The creative process. 1977; rpt. New York: Longman, 1978.
- Eisner, E. Cognition and curriculum: A a basis for deciding what to teach. New York: Longman, 1982.
- Elbow, P. Writing without teachers. New York: Oxford University Press, 1973.
- Emig, J. The composing process of twelfth graders. Urbana, Illinois: National Council of Teachers of English, 1971.
- . Children and metaphor. Research in the teaching of English, 1976, 6, 163-175.
- . Hand, eye, brain: Some "basics" in the writing process. In C. Cooper and L. Odell (Eds.), Research on composing: Points of departure. Urbana, Illinois: National Council of Teachers of English, 1978.
- . Inquiry paradigms weaknesses and writing. College Composition and Communication, 1982, 33, 64-75.
- Empson, W. The structure of complex words. New York: New Directions, 1951.
- Ericsson, K. A. and Simon, H. A. Verbal reports as data. Psychological Review, 1980, 87, 215-251.
- Faigley, L. and Witte, S. Analyzing revision. College Composition and Communication, 1981, 32, 400-414.
- Flower, L. and Hayes, J. Problem-solving strategies and the writing process. College English, December 1977, 39, 449-461.
- . A process model of composition. Carnegie Mellon University Technical Report, 1, 1979.
- . A cognitive process theory of writing. College Composition and Communication, 1981, 32, 365-387.
- . The cognition of discovery: Defining a rhetorical problem. College Composition and Communication, 1980, 31, 21-32.

- . The pregnant pause: An inquiry into the nature of planning. Research in the Teaching of English, 1981, 15, 229-243.
- Fraser, B. Reply to Paivio. In A. Ortony (Ed.), Metaphor and thought. Cambridge: Cambridge University Press, 1979.
- Gardner, H., Kircher, M., Winner, E. and Perkins, D. Children's metaphoric productions and preferences. Journal of Child Language, 1975, 2, 125-141.
- and Winner, E. Development of metaphoric competence: Implications for humanistic discipline. Critical Inquiry, 1978, 5, 123-141.
- Gerard, R. W. The biological basis of imagination. In B. Ghiselin (Ed.), The creative process: A symposium. Berkeley and Los Angeles: University of California Press, 1952.
- Ghiselin, B. The creative process: A symposium. Berkeley and Los Angeles: University of California Press, 1952.
- Glassner, B. J. Preliminary report: Hemispherical relationships in composing. Journal of Education, 1980, 162, 74-95.
- Graves, D. H. An examination of the writing processes of seven year old children. Research in the Teaching of English, 1974, 6, 227-241.
- . Research update: Where have all the teachers gone? Language Arts, 1981, 58, 492-497. (a)
- . Research update: Writing research for the eighties: What is needed. Language Arts, 1981, 58, 197-206. (b)
- Hall, D. The pleasure of poetry. New York: Harper and Row, 1971.
- Harding, D. W. The hinterland of thought. In L. C. Knights and B. Cottle (Eds.), Metaphor and symbol. London: Butterworth's Scientific Publications, 1960.
- Harris, R. Memory for literary metaphor. Bulletin of the Psychonomic Society, 1979, 13, 246-249.
- . Memory for metaphors. Journal of Psycholinguistic Research, 1976, 8, 61-71.

- , Lahey, M., and Marsalek, F. Metaphors and images: Ratings, reporting, and remembering. In R. Hoffman and R. Honeck (Eds.), Cognitive and figurative language. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.
- Hawkes, T. Metaphor. London: Methuen Inc., 1972.
- Hayes, J. R. and Flowers, L. S. Identifying the organization of the writing process. In W. Gregg and E. R. Steinberg (Eds.), Cognitive processes in writing. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.
- , Uncovering cognitive processes in writing: An introduction to protocol analysis. In P. Mosenthal (Ed.), Research on writing: Principles and methods. New York: Longman, 1983.
- Hoffman, R. Metaphor in science. In R. Honeck and R. Hoffman (Eds.), Cognition and figurative language. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.
- Honeck, R. and Hoffman, R. (Eds.). Cognition and figurative language. Hillsdale, New Jersey: Erlbaum, 1980.
- Howard, C. and Tracz, R. Contact: A textbook in applied communications. Englewood Cliffs, New Jersey: Prentice-Hall, 1979.
- Hume, A. Research on the composing process: A summary of the research. (ERIC Document Reproduction Service No. ED 222 925, 1981).
- Irnscher, W. Ways of writing. New York: McGraw-Hill Book Co., 1969.
- Jenkins, J. J. Context conditions meaning. Presented to Midwestern Psychological Association. Chicago, May 1977.
- Johnson, M. and Malgady, R. Some cognitive aspects of figurative language: Association and metaphor. Journal of Psycholinguistic Research, 1979, 8, 253-265.
- Kaplan, B. Some psychological methods for the investigation of expressive language. In H. Werner (Ed.), On expressive language. Worcester, Massachusetts: Clark University Press, 1955.
- Kennedy, X. L. and Kennedy, D. The bedford reader. New York: St. Martins Press, 1982.

- Kintsch, W. Notes on the structures of semantic memory. W. Donaldson and E. Tulving (Eds.), Organization of memory, New York: Academic Press, 1972.
- Kitch, S., Konek, C., and Majors, F. The source book: An inductive approach to composition. New York: Longman, 1981.
- Koch, K. Wishes, lies and dreams: Teaching children to write poetry. New York: Chelsea House, 1970.
- Koen, F. An introverbal explication of the nature of metaphor. Journal of Verbal Learning and Verbal Behavior, 1965, 4, 129-133.
- Koestler, A. The act of creation. New York: Macmillan, 1964.
- Kogan, N. A cognitive style approach to metaphoric thinking. In R. E. Snow, P. A. Federico, and W. E. Montague (Eds.), Aptitude, learning and instruction: Cognitive process analysis. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.
- , Connor, K., Gross, A., and Fava, D. Understanding visual metaphor: Developmental and individual differences. Monographs of the Society for Research in 1980 in Child Development.
- Kohler, W. Gestalt psychology. New York: Liveright, 1929.
- Kuhn, T. Metaphor in science. In A. Ortony (Ed.), Metaphor and thought. New York: Cambridge University Press, 1979.
- Kyle, R. Prewriting: Strategies for exploration and discovery. New York: Random House, 1972.
- and Lyons, J. The wrought response: Reading and writing about literature (2nd ed.). Encino, California: Dickinson Publishing Co., 1962.
- Langer, S. Philosophy in a new key. Cambridge, Massachusetts: Harvard University Press, 1942.
- Lowell, A. The process of making poetry. In B. Ghiselin (Ed.), The creative process: A symposium. Berkeley and Los Angeles: University of California Press, 1952.
- Matsushashi, A. Pausing and planning: The tempo of written discourse production. Research in the Teaching of English, 1981, 15, 113-134.

- Moffett, J. and Wagner, B. Student-centered language arts and reading, K-13: A handbook for teachers. Boston: Houghton Mifflin, 1983.
- Mosenthal, P., Tamor, L. and Walmsley, S. (Eds). Research on writing: Principles and methods. New York: Longman, 1983.
- and Spittle, K. B. Writing in real time: Is there any other way? Presented at CCCC, San Francisco, March 1980.
- Müller, M. Lectures on the science of language. Lecture VIII, No. 2. New York: Charles Scribners, 1871.
- Murray, D. Internal revision: A process of discovery. In C. Cooper and L. Odell, (Eds.), Research on composing: Points of departure. Urbana, Illinois: National Council of Teachers of English, 1978, 85-104.
- . Response of a laboratory rat--or, being protooled. College Composition and Communication, May 1983, 169-172.
- Murry, J. M. "Metaphor." In W. Shibbles (Ed.), Essay on metaphor. Whitewater, Wisconsin: The Language Press, 1972.
- Nisbett, R. and Wilson, T. Telling more than we can know: Verbal reports on mental processes. Psychological Review, May 1977, 84, 231-259.
- Ortony, A. (Ed.). Metaphor and thought. New York: Cambridge University Press, 1979.
- . Some psycholinguistic aspects of metaphor. In R. Honeck and R. Hoffman (Eds.), Cognition and figurative language. Hillsdale, New Jersey: Erlbaum, 1980.
- Osgood, C. E. The cognitive dynamics of synesthesia and metaphor. In R. Honeck and R. Hoffman (Eds.), Cognition and figurative language. Hillsdale, New Jersey: Erlbaum, 1980.
- . Method and theory in experimental psychology. New York: Oxford University Press, 1953.
- , Suci, G., and Tannenbaum, P. The measurement of meaning. Urbana: University of Illinois Press, 1957.
- Paivio, A. Imagery and verbal process. New York: Holt, Rinehart, and Winston, 1971.

- . Psychological processes on comprehension. In A. Ortony (Ed.), Metaphor and thought. New York: Cambridge University Press, 1979.
- Perl, S. Five writers writing: Case studies of the composing processes of unskilled college writers. Ph.D. dissertation, Coding the composing process, a non-linear model. Presented at CCCC. Minneapolis, Minn., 1979.
- . Understanding composing. College Composition and Communication, December 1980, 31, 366-369.
- Petrie, H. Metaphor and learning. In A. Ortony, Metaphor and thought. New York: Cambridge University Press, 1979.
- Piaget, J. Language and thought of the child (3rd ed.). New York: The Humanities Press, 1959.
- Pianko, S. A description of the composing processes of college freshman writers. Research in the Teaching of English, 1979, 13, 5-22.
- Pickens, J. D. and Pollio, H. R. Patterns of figurative language competence in adult speakers. Psychological Research, 1979, 40, 299-313.
- Plimpton, G. (Ed.). Writers at Work (2nd ed.). New York: Viking, 1981.
- Pollio, H. R. The psychology of symbolic activity. Reading, Massachusetts: Addison-Wesley, 1974.
- Pollio, M. R. and Pollio, H. R. Development of figurative language in school children. Journal of Psycholinguistic Research, 1974, 3, 185-201.
- Richards, I. A. The philosophy of rhetoric. New York: Oxford University Press, 1936.
- . The interaction of words. In A. Tate (Ed.), The language of poetry. Princeton, New Jersey: Princeton University Press, 1942.
- Rose, M. Writers block: The cognitive dimension. Carbondale and Edwardsville, Illinois: Southern Illinois University Press, 1984.

- Sawkins, M. W. What children say about writing. In W. T. Pelly and P. Finn (Eds.), The writing processes of students: Report to the first annual conference on language arts. Buffalo, New York: State University of New York, 1975.
- Schaefer, C. The similes test: A new measure of metaphorical thinking. Proceedings of the 78th American Psychological Association, 1970, 5, 1959-1970.
- Schön, D. Generative metaphor: A perspective on problem-setting in social policy. In A. Ortony (Ed.), Metaphor and thought. New York: Cambridge University Press, 1979.
- Scwartz, M. Two journeys through the writing process. College Composition and Communication, May 1983, 34, 188-201.
- Shibbles, W. Metaphor: An annotated bibliography and history. Whitewater, Wisconsin: The Language Press, 1971.
- An analysis of metaphor in the light of W. M. Urban's theories. The Hague: Mouton, 1971.
- Sommers, N. Revision strategies of student writers and experienced adult writers. College Composition and Communication, 1980, 31, 378-388.
- Spender, S. The making of a poem. In B. Ghiselin (Ed.), The creative process: A symposium. Berkeley and Los Angeles: University of California Press, 1952.
- Spurgeon, C. Shakespeare's imagery and what it tells us. Cambridge, England: Cambridge University Press, 1935.
- Stallard, C. K. An analysis of the writing behavior of good student writers. Research in the Teaching of English, 1974, 8, 206-218.
- Stewart, D. The authentic voice: Pre-writing approach to student writing. Dubuque, Iowa: William C. Brown Co., 1972.
- Stight, T. Educational uses of metaphor. In A. Ortony (Ed.), Metaphor and thought. New York: Cambridge University Press, 1979.
- Swartz, H., Flowers, L., and Hayes, J. Designing protocol studies of the writing process: An introduction. Presented at Research on Language Arts Workshop, NCTC Convention. November 1980.

- Tate, A. Narcissus as Narcissus. In B. Ghiselin, The creative process: A symposium. Berkeley: University of California Press, 1952.
- Thrall, W., Hibbard, A., and Holman, H. A handbook to literature. New York: The Odyssey Press, 1960.
- Tourangeau, R. Metaphor and cognitive structure. In D. Miall (Ed.), Metaphor: Problems and perspectives. Atlantic Highlands, New Jersey: Humanities Press, 1982.
- Turner, A. (Ed.). Fifty contemporary poets: The creative process. New York: Longman, 1977.
- Urban, W. Language and reality: The philosophy of language and the principles of symbolism. London: George Allen and Unwin, 1939.
- Van Bruggen, J. A. Factors affecting regularity of the flow of words during written composition. Journal of Experimental Education, 1946, 15, 133-155.
- Verbrugge, R. R. Transformations in knowing: A realist view of metaphor. In R. Honeck and R. Hoffman (Eds.), Cognition and figurative language. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.
- and McCarrell, N. S. Metaphoric comprehension: Studies in reminding and resembling. Cognitive Psychology, 1977, 7, 494-533.
- Vico, Giambattista. The new science. T. Bergin and M. Fisch, trans. Ithaca, New York: Cornell University Press, 1970.
- Vosniadou, S. and Ortony, A. The emergence of the literal-metaphorical-anomalous distinction in young children. (ERIC Document Reproduction Service No. ED 215 305, 1982).
- Watson, J. The double helix: A personal account of the discovery of the structure of DNA. G. Stent (Ed.). New York: W. W. Norton Co., 1980.
- Welleck, R. and Warren, A. Theory of literature. New York: Harvest Books, 1969.

- Werner, H. and Kaplan, E. The acquisition of word meanings.
Monographs of the Society of Research in Child Development,
1950, 15, No. 1.
- and Kaplan, B. Symbol formation. New York: Wiley,
1963.
- Wheelwright, P. E. Metaphor and reality. Bloomington, Indiana:
Indiana University Press, 1964.
- Winner, E. and Gardner, H. The development of metaphoric operations.
(ERIC Document Reproduction Service No. ED 207 079).
- and Gardner, H. The processing of metaphors and their
paraphrases in context. (ERIC Document Reproduction Service No.
ED 208 355).
- , McCarthy, M., and Gardner, H. The Ontogenesis of
metaphor. In R. Honeck and R. Hoffman (Eds.), Cognition and
figurative language. Hillsdale, New Jersey: Lawrence Erlbaum,
1980.
- Worf, B. L. Collected papers on metalinguistics. Washington, D. C.:
Foreign Service Institute, Department of State, 1954.
- Young, R., Becker, A., and Pike, K. Rhetoric: Discovery and change.
New York: Harcourt Brace Jovanovich, 1970.

APPENDIX

The Text of Pat's First Draft Description

Kitchen Inventions

1. We have all seen kitchen gadgets that had no apparent use
2. and if aliens saw them or if reactivated cave men encountered
3. them, they would have no idea what they were. How in the world
4. could a martian identify an egg slicer, an egg separator or a
5. spaghetti lifter? ¹ (They couldn't, no more than they would
6. realize the true worth of a potato peeler, cork screw or a metal
7. tea ball.) There seems to be no end of eye catching and useless
8. gimcracks, widgets and whatchamacallits, designed for visual
9. effect as opposed to efficiency.
10. ² (Salesmen have long earned an honest living) ³ (by offering
11. little metal miracles to unsuspecting housewives and the general
12. public.) ⁴ (All of these wonder workers are highly touted as the
13. last word in helping us to cope with reluctant cucumbers.
14. squishy tomatoes and sassy squash.) ⁵ (We blithely buy each and
15. every alleged work saver that comes on the market or thru the
16. mail.) And after they fail to produce the advertised results,
17. ⁶ (we put them in a drawer with their predecessors, where they
18. rest in permanent and unearned retirement, and where they will
19. stay until the next yard sale or until the will has been read.)
20. ⁷ (We really wonder how we ever survived) ⁸ (without the
21. beautiful blenders with eight forward gears and overdrive

22. reverse) (which mash, bash, rend, rip and tear everything from
 23. ice cubes to tennis shoes.) (How did we live without the magic
 24. slicer that makes tons of julienne fries, takes the tears out
 25. of onions, slices off bunions and rends asunder old love
 26. letters.) (How did we make daqaris without the aid of this
 27. electric whirling dervish?) (We would hate to think of having
 28. to jump on, or stomp ice cubes into powder in order to simply
 29. have an after dinner snort.) (We now own electric knife
 30. sharpeners that also put an edge on scissors, trim our toenails,
 31. polish our shoes, brush the dog and eat old mop strings.) These
 32. gadgets do require that we maintain a large supply of band aids,
 33. sterile gauze, iodine and other medical supplies, (because we
 34. are likely to catch our ties, fingers and other extremities in
 35. our automatic pickle slicers, olive dicers and apple corers.)
 36. (We are not satisfied to cut pizza with a knife because
 37. in crowd uses pizza cutters.) These gadgets are not as
 38. efficient as a solingen steel bladed paring knife but they are
 39. widely used for dissecting pizza because (they have absolutely no
 40. other purpose.) (Imagine the joy of the lucky lady who finds
 41. her very own chrome plated pizza cutter in her Xmas stocking.)
 42. What else does life have to offer for the person who has
 43. everything. (A box to put it in.)
 44. (No home would be complete without a kitchen full of the
 45. modern marvels for opening tin cans. These items of wizardry

46. come in all shapes and sizes.) ²⁰ (They whir, click, clank, and
47. scalp the top off of beans, hominy, tomato paste and mushroom
48. soup.) They are designed to self destruct after a short time so
49. that they can be replaced at higher cost ²¹ (and therefore they are
50. good for the economy.) ²² (They have so endeared themselves to us
51. that we find it hard to throw them away after they have worn
52. out. They have become our friends and members of the family.
53. They have served us long and faithfully and helped us grow fat
54. together. Have you hugged your can opener today?)

The Protocol of Pat's First Draft Description

1. Write the first draft of a descriptive essay on a person, place
 2. or object. (Pause) Um. Take an object. You notice I go for
 3. the third choice. Ok, the description of an object. Let me
 4. write that at the top of the paper cause I feel like that
 5. somewhere along here I'll be glancing back at this. The
 6. description of an object. Ok, the dictionary is an object. We
 7. could describe the dictionary which is an overly organized book
 8. about everything. Uh (pause). Let's see, we'll make a little
 9. list here. (Rattle of paper) (Breath) Dictionaries, um, wet
 10. dogs, ah (swat) (laughter). This crime's something--um, a day
 11. at the supermarket . . . not much super about markets anyway
 12. except the little piece of tape they . . . ah, cards (pause),
 13. belly dance (humming). Grooms, spare me, rainy day. You know
 14. what they're for--they're for sleep. No fault nap, oh, yes, you
 15. heard about that. Uh, let's see, naps, days, naps,
 16. firetrucks . . . um, too gaudy. (Pause with deep breath).
 17. Lists, list. We'll make a list. Procurred candy, more precious
 18. than vows. (Pause) Let's see, inventions, . . . kitchen
 19. inventions . . . kitchen gadgets, ok (rattle of paper and
 20. clearing of throat). Having landed with both feet in the middle
 21. of a mess, description of an object--kitchen inventions. Now we
 22. don't need to use any inventive technique to talk about kitchen
 23. inventions. Um huh! We're, we're gonna--this is group

24. therapy-- so we're gonna use we. Revolve. (Pause) Revolve. I
 25. like that. (Laughter) Says it all (laughter). We're accusing
 26. the entire world here. (Laughter) Unfounded allegations.
 27. (Laughter) We have all seen . . . we have all seen kitchen
 28. gadgets (pause) that had no apparent use whatsoever. (Pause) no
 29. apparent use. (Pause) and if alien beings saw them (pause) or
 30. if reactivated cavemen (pause) let me see, oh,
 31. there . . . reactivated cavemen encountered them, (pause) they
 32. would have no idea (pause) what (mumble) . . . kitchen gadgets
 33. that had no apparent use . . . cave men encountered . . . [¹So
 34. leaves a question, how in the world (pause) could a martian
 35. (pause with a deep sigh) martian identify an egg slicer.
 36. (Pause) . . . an egg slicer, an egg separator, (humming) an egg
 37. separator, or a spaghetti lifter? He couldn't. (Cough) No
 38. more than he could (pause) . . . No more than . . . (mumbling),
 39. (pause with a deep sigh) true. . . . (Mumbling) groups of
 40. three or four. Oh, what else is weird? Of course, a corkscrew
 41. is weird. (Pause) Think of something in the kitchen that is
 42. absolutely, absolutely handwerner turner, a two-pronged . . .
 43. Spatulas, they wouldn't, spatulas are but let's keep this in the
 44. realm of weird. (Pause, deep breath) spiral egg beaters, um.
 45. There are so many stupid things in the kitchen. (Pause) Hum,
 46. back in the corner again. Potato peeler, corkscrewer . . . pot
 47. holders, they're fairly simple . . . Think of some of the
 48. things in the drawer in the kitchen. Carrot peeler, potato

49. peeler the same thing. (Pause with deep sigh) Metal tea ball
50. (pause). Ok, (cough and hand rubbing) what else in the kitchen
51. gadgets had no apparent use. If aliens saw them or if
52. reactivated cavemen encountered them, they would have no idea
53. what they were. How in the world would a martian identify an
54. egg slicer, an egg separator, a spaghetti lifer? They couldn't,
55. no more than they could realize the true worth of a potato
56. peeler, cork screwer, and metal tea ball. Ooh, wheee! I'm glad
57. we said that. . . . goes on.] (Pause) There seems to be no
58. end. (Pause) Let's see, eyecatching. Useless gimcracks,
59. widgets. One of my favorite words is widgets. The widget is
60. hereby defined as anything that cannot described. (Snap) I
61. think there seems to be no end of eyecatching and useless
62. widgets and any proverbial whatchamacallit. So many people
63. wonder how to spell whatchamacallit? Well, now we're gonna
64. (pause) so you have it spelled. Designed (clearing of throat)
65. (mumbling) for visual effect as opposed, as opposed to (big
66. sigh) as opposed to what (pause) efficiency. . . . I'm not
67. talking loud enough. Hum! (Pause with few noises) There seems
68. to be no end to eyecatching uses, gimcracks, widgets, and
69. whatchamacallits as designed for visual effect as opposed to
70. efficient usage. Na--that is so (pause) repetitious. Why don't
71. we say efficiency. [Ok! ² So, salesmen, these are the people who
72. sell widgets. Salesmen have long made an honest living (pause,
73. clear throat) by offering little metal miracles. Now you got to

74. like them . . . (pause)] [to unsuspecting (pause) housewives.
75. Another reason is . . . housewives (pause) . . . um, um (pause)
76. . . . an honest living (laughter). Boy, question mark.
77. (Mumble, reread, growl)] [All of these (pause) gadgets do some,
78. all of these wonderworkers are highly touted (pause). The last
79. word (pause, with deep sigh) last word in helping us to cope
80. with reluctant cucumbers. Reluctant cucumbers, oh, I wonder
81. where that came from (laughter). How to build a sandwich
82. (laughter), reluctant cucumbers, ah, let's see (pause), squishy
83. tomatoes. Uh, tomato slicers, they're a lovely thing too.
84. Hacksaws in tandem. (Chuckle) . . . reluctant cucumbers,
85. squishy, you gotta have squishy tomatoes. Squishy tom-e-toes.
86. Squishy and (pause). Sassy cabbage, sassy, sassy carrots?
87. . . . squash. Cowards way out. Two s's, sassy squash. Pause
88. with little humming)] [We blithely buy these two b's, blithely
89. buy (pause) (rattle) each and every (crumple of paper) these
90. two e's, each and every (pause) . . . alleged worksaver.
91. (Pause) I'm on a roll here, gonna use two l's. That comes on
92. the market (pause) or through the mail. You're telegraphing
93. your thoughts here, let the reader get ahead of us. We have
94. dramatic irony at work here. (Cough) Ok, so let's go back and
95. make some sense out of this. All of these wonderworkers are
96. highly touted as the last word in helping us to cope with
97. reluctant cucumbers, squishy tomatoes, and sassy squash.

98. . . . squishy squash. (Laughter) Tough tomatoes and squishy
 99. squash. Let that be for the record that we could have done
 100. that and we wished to change it. We blithely buy each and
 101. every alleged worksaver that comes on the market or through the
 102. mail.] [And (pause) after they failed (laughter) to produce
 103. the advertised results (rattle of paper), we put them (pause) in
 104. the drawer with their predecessors. (Pause) We didn't spell
 105. that right, but I wouldn't worry about it. We put them in the
 106. drawer with their predecessors. Um huh. Where (pause) they
 107. rest in their permanent retirement. Permanent and unearned
 108. retirement. (Pause and sigh) And where (pause) they'll stay
 109. (pause) until the next yard sale (pause) or until the will will
 110. be read. I like that. That's cute. I get a kick out of giving
 111. the devil a shot in the arm. Freud, I hope you didn't hear
 112. that! Ok, (cough) the world's longest sentence.] Always
 113. wondered what (fast, rambling on, rereading) . . . reluctant
 114. cucumbers, squishy tomatoes, and sassy squash. . . . alleged
 115. worksaver that comes on the market or through the mail and after
 116. they fail to produce the advertised results we put them in a
 117. drawer with their predecessors where they rest in permanent and
 118. unearned retirement and where they will stay until the next
 119. yard sale or until the will will have been read. (Pause) Good!
 120. (Cough) Kitchen inventions. (Rattle of paper)] [We wonder, we
 121. really wonder if some day, (pause) we really wonder how we ever
 122. survived without the, without a beautiful blender.] [Quit

123. fooling around with the words and start with the sentence. It
 124. slices, it dices, it makes french fries, it makes millions of
 125. julienne fries, coleslaw (clear throat) has four in the floor.
 126. (Pause) Beautiful blenders with eight gears, eight forward
 127. gears, (pause and clear throat) overdrive gears, technicalities.
 128. Write technical terms and don't have to think. (Cough) That
 129. (laughter) is not exactly a true statement, is it? (Laughs,
 130. rereads, mumbles) Wonder . . . beautiful blenders and eight
 131. forward gears and an overdrive reverse (rattle)] [which mash,
 132. bash, (pause) rend, rip, and tear everything (pause) from --
 133. well, while we're on a roll -- from (chuckle) from ice cubes
 134. (laughter) -- it's one of those days -- to tennis shoes.]
 135. [(Pause) Um, um, (pause) how do you live (pause) without the
 136. magic slicer (pause) that makes thousands of julienne fries
 137. (chuckle). Wow, this, be this, that, this big, let's think big
 138. here! The magic slicer that makes tons (pause) of julienne
 139. fries. (Pause) What else does that thing do? Ah, makes tons
 140. of julienne fries, takes the tears out of onions, (pause with
 141. quiet humming) slices off our bunions, cures cancer (laughter),
 142. trims our toenails (laughter). Slices off bunions, I'm gonna
 143. leave that in there (laughter). We've got tennis shoes
 144. (laughter). Why can't we have bunions, slices off bunions
 145. (laughter and pause) and rends assunder old love letters.
 146. (Pause) Um, um, um, now that's weird. How did we live without
 147. the magic slicer that would make tons of julienne fries, takes

148. the tears out of onions, slices off bunions, and rends assunder
 149. old love letters. (Rattle and pause) Come here. (Rattle of
 150. paper and chuckle)] [How did we make daiquiries?
 151. Dai-qui-ries. Big (laughter) who cares. (Laughter) I don't
 152. . . . dacquaries. Um. Without the aid of this electric,
 153. whirling dervish, oh, million electric whirling dervish,]
 154. [(pause) you would hate to think what happened to . . . on the
 155. hand (pause). You would hate to think of having to jump up and
 156. down while ice cubes, (pause) jump on or stomp ice cubes into
 157. powder. Boy, those ice cubes are catching it today. (Pause)
 158. In order to simply have an (rattle have an (rattle of paper)
 159. . . . or after-dinner snort. (Noise) Emily Dickinson shows
 160. up here in an after-dinner snort. It's my draft; I (laughter)
 161. do what I want to. (Laughter and tearing of paper)] [Oh, is
 162. there anything that makes any sense at all back here that we
 163. can use for our springboard. Ah, maybe a pogo stick would
 164. suffice. (Chuckle) Maybe I'm grabbing at straws. How did we
 165. live without the magic slicer? Um, what else can we get.
 166. Knife sharpeners. Ah yes. Um hum, that's another handy, all
 167. purpose invention.] [(Growl) Um hum, . . . (Pause) I'm
 168. wondering how we got that whirling dervish. I think that comes
 169. from the paper I wrote on Afghanistan in the winter quarter,
 170. whirling dervish.] [(Mumbling) I was gonna do something about
 171. knife sharpeners. Question, should we make a separate
 172. paragraph on knife sharpeners, no. Hum um. (Pause and rattle

173. of paper) We now own electric knife sharpener, electric knife
 174. sharpeners, (pause) electric knife sharpeners that also put an
 175. edge on scissors, (pause) scissors, trim our toenails, polish
 176. our shoes, brush the dog, (pause) and eat old mop strings.]
 177. 14 [(Chuckle) All of which always (mumble, reread, pause). We're
 178. going somewhere with this band-aid idea. These gadgets do
 179. require that we maintain, a large supply of bandaids, sterile
 180. gauze, iodine, (pause) and a, . . . Now, do don't to oil a
 181. potato slicer. Now I guess you could. (Pause and sigh) . . .
 182. (Mumbling) Everything cost . . . (laughter). These gadgets
 183. do require a large supply of band-aids, sterile gauze, iodine,
 184. . . . (pause) . . . and other medical supplies. Because
 185. (pause) we're likely (pause) to catch ties, (pause) what else?
 186. Ears, nose. Wait until we get to toasters. (Clears throat) and
 187. other extremities (pause) in our automatic pickle slicers,
 188. (pause) automatic pickle slicers, olive dicers, and (pause with
 189. sigh) apple corers. (Pause) (Humming) . . . needed (mumble,
 190. reread). Hum! (Mumbling) Toasters. They're not useless
 191. gadgets. (Pause) The clock on the kitchen wall, the timer on
 192. the stove You open the oven and see how it's doing.
 193. (Pause) A ricer . . . a spring-loaded olive pitter
 194. (laughter). Can you just image black olives lined up all in a
 195. row and a spring-loaded gadget goes sp, sp, sp, sp, sp.
 196. (Pause) Let's see. (Rereads, mumbling) Got two different
 197. kinds of spaghetti lifters.] [I have got some real useless

198. things but (pause) . . . pizza cutter. Um. We are not
 199. satisfied to cut pizza with a knife (pause) because the incrowd
 200. uses pizza cutters. (Clear throat) Um, hum! . . . pizza
 201. cutter. (Pause)] . . . [Uh, these gadgets . . . gadgets are
 202. not as efficient as a solingen steel bladed (pause) paring
 203. knife. You gotta have solingen steel, no cheap Japanese
 204. imitations but solingen steel (pause). . . . Now there it is,
 205. but they are widely used for dissecting pizza (pause) because
 206. they have absolutely no other purpose. (Pause and humming)
 207. You do not use pizza cutters to trim linoleum. You simply
 208. don't, they, you use pizza cutters to cut pizza. Hell, they're
 209. not even good for cutting scrambled eggs. (Pause and clear
 210. throat) They're about as useless as . . . pizza cutters . . .
 211. back yard. Ah, see. (Stretching, mumble, reread) These
 212. gadgets . . . solid steel . . . they are, are widely used for
 213. dissecting pizza because they have absolutely no other purpose.]
 214. [Um hum! (Pause) Imagine the joy, imagine the joy of the
 215. lucky lady who finds her very own chrome-plated pizza cutter in
 216. her Xmas stocking (pause) overlooking . . . contemplative
 217. (cough) . . .] [(Mumbling) (Cough and clearing of throat)
 218. . . . (Mumbling) What else does life have to offer? (Pause)
 219. The, what else does life have to offer the person who has
 220. everything, the box to put it in. . . . the box to put it
 221. in.] [. . . (rattle) No home would be complete (pause)
 222. kitchen. No home would be complete without a kitchen full of

223. (pause and humming), kitchen full (pause) of the modern marvels
 224. for opening tin cans.] [(Pause) These, (pause) these items of
 225. wizardry (pause) come in all shapes and sizes. . . . That
 226. will get it. . . . (pause) They whirl, click, clack, clunk,
 227. . . . clack, clang. They whirl, click, clack, (pause) um, um,
 228. and scalp, scalped the top off of beans, hominy, tomato paste.
 229. (Pause) . . . tomato paste and mushroom soup.] [(Mumbling,
 230. rattle of paper) Maybe they are designed to self-destruct
 231. after a short time so they can be replaced at a higher cost.
 232. (Pause) . . . replaced. (Pause) . . . (mumbling) therefore,
 233. they are good for the economy.] [They have so endeared
 234. themselves to us that we find it hard to throw them away after
 235. they have worn out. (Pause) They have become (sigh) our
 236. friends and (pause) members of the family. (Pause) They have
 237. served us long and faithfully (pause) and helped us grow, grow
 238. fat together. (Sigh) Have you hugged your can opener today?]
 239. (Clears throat) (Laughter) No wonder . . . made it
 240. through. (Laughter and clearing of throat) That's 500 words.
 241. (Pause) Interviewer: Unplug it. (Laughter)

The Text of Pat's Second Draft Description

Kitchen Inventions

1. We have all seen kitchen gadgets that have no apparent use
2. and if aliens or reactivated cave men saw them, they would not
3. know what they we seeing. How in the world could a martian
4. identify an egg slicer, an egg separater or a spaghetti lifter?
5. ¹ (They couldn't, no more than they would realize the true worth
6. of a potato peeler, cork screw or a metal tea ball.) There
7. seems to be no end of eye-catching and useless gimcracks,
8. widgets and whatchamacallits, which are designed for visual
9. effect are opposed to efficiently.
10. ² (Salesmen have long earned an honest) ³ (living by offering
11. little and large metal miracles to unsuspecting housewives and
12. the gullible general public.) ⁴ (All of these wonder workers are
13. highly touted as the last word in helping us to cope with
14. reluctant cucumbers, sassy tomatos, squishy squash.) ⁵ (We
15. blithely buy each and every alleged work saver that comes on
16. the market or thru the mail) and after they fail to produce the
17. advertised results, ⁶ (we put them in a drawer with their
18. predcessors, where they rest in permanent and unearned
19. retirement, and where they will * stay until the next yard sale
20. or until the will has been read.)
21. ⁷ (We really wonder how we ever survived) ⁸ (without the
22. beautiful blenders with eight forward gears and overdrive

23. reverse) (which mash, bash, rend, rip and tear everything from
10
24. ice cubes to tennis shoes.) (How did we live without the magic
11
25. slicer that makes tons of julienne fries, takes the tears out
12
26. of onions, slices of bunions, and rends asunder old love
13
27. letters.) (How did we make daquaries without the aid of this
14
28. electric whirling dervish?) (We would hate to think of having
15
29. to jump on or stomp ice cubes into powder, in order to simply
16
30. have an after dinner snort.) (We now own electric knife
17
31. sharpeners that also put an edge on scissors, trim our toenails,
18
32. polish our shoes, brush the dog and eat old mop strings.) These
19
33. gadgets do require that we maintain a large supply of band aids,
20
34. sterile gauze, iodine and other medical supplies, (because we
21
35. are likely to catch our ties, fingers and other extremities in
22
36. our automatic pickle slicer, olive dicer, potato ricer and
23
37. canary plucker.)
24
38. (We are not satisfied to cut pizza with a knife because the
25
39. in crowd uses pizza cutters.) These gadgets are not as
26
40. efficient as a solingen steel bladed paring knife but they are
27
41. widely used for dissecting pizza because (they have absolutely no
28
42. other purpose or use.) (Imagine the joy of the lucky lady who
29
43. finds her very own chrome plated pizza cutter in her Xmas
30
44. stocking.) (What else does life have to offer for the person
31
45. who has everything except a box to put it in?)
32
46. (Certainly no home would be complete without a kitchen full
33
47. of the modern marvels for opening tin cans. These items of

48. wizardry come in all shapes and sizes.) ²⁰ (They whirl, click,
49. clank, and scalp the lids off beans, hominy, tomato paste and
50. mushroom soup.) They are designed to self destruct after a short
51. time so that they can be replaced at higher cost (²¹and therefore
52. they are good for the economy.*) (²²They have so endeared
53. themselves to us that we find it hard to throw them away after
54. they have worn out. They have become our friends and members of
55. the family. They have served us long and faithfully and helped
56. us grow fat together. Have you hugged your can opener today?)

The Protocol of Pat's Second Draft Description

1. Description of an object which was useless kitchen gadgets.
2. Let's see. We tried to think of other gadgets yesterday that we
3. consider useless or very limited in their use. Mostly they're
4. eyecatchers designed by the manufacturer to (pause) get you to
5. buy the thing. Sorta like fishing lures, they're not designed
6. for the fish, they're designed for the consumer. Um hum!
7. (Pause) No, no home would be complete without a kitchen full of
8. modern marvels for opening tin cans. Oh, we did pick on tin cans
9. and openers yesterday. Uh, good reason. Let's get to the front
10. end of this thing. (Cough) We wrote, we have seen, we have all
11. seen kitchen gadgets that had no apparent use and if aliens saw
12. them or reactivated cavemen encountered them, they would have no
13. idea what they were. There's probably some way to prove that.
14. (Sigh and cough) (Loud noise) So let's just start copying that
15. over and see what comes to us. We have all, oh yes we have, we
16. have all seen. This is the boring part. We are not thinking,
17. we're just writing, we have all seen kitchen gadgets that have no
18. apparent use, (pause) rather than had. (Pause) Um hum, and if
19. (pause) aliens (pause) came and saw them, aliens saw them or
20. reactivated cavemen--why don't we shorten that up. Aliens or
21. reactivated cavemen, (pause) men spelled m, saw them (humming and
22. pause), they would have no idea. Ok, but they were, the cavemen,
23. aliens, what is they? (Pause) A little . . . there, isn't it.

24. Let's see, they would have no idea what they were. I like that.

25. Let's see, (pause) they would not recognize them. They would not

26. recognize, they (pause and sigh) they would not get this far.

27. [(Cough) They would not understand the purpose, another purpose,

28. they would not um, (pause). Oh Lord. That paintbrush. (Sigh

29. and pause) They would not know them for what they are. (Mumble)

30. What they, what they were seeing. Oh, let me try that. This is

31. second draft. Let me ask a question. How in the world could a

32. martian identify an egg slicer, an egg separator, or a spaghetti

33. lifter? There is no, . . . thing in here, how in the world could

34. a martian, world, martian (noise, pause). Leave that in and

35. we'll let history tear that one apart. What did he mean when he

36. said that? (Light chuckle) How in the world (pause) could a

37. martian . . . but they're blind. Oh, ho (laughter). Let me see

38. if I can remember some of the other crazy gadgets. I looked in

39. the kitchen drawer this morning to see if there was anything in

40. there (pause) that would qualify (pause) as useless. And instead

41. I found that the only thing that looked even remotely useless was

42. a strainer with a busted handle. Why don't I throw that strainer

43. away? (Pause) (Singing) Always forgetting the strainer. How

44. many eighth grade students can spell spaghetti, class? (Pause)

45. Question mark. They couldn't. No more than any realize the true

46. worth of a potato peeler, cork screwer, or metal tea ball. Uh, I

47. love this metal tea ball. They're so cute, looks like it should

48. hang on the Christmas tree. I think I'll put my metal tea ball

49. on the Christmas tree. (Laughter) Ok, well they couldn't.
50. (Pause) . . . they could not. (Pause) than they would realize
51. the true worth of a potato peeler. Well, they might recognize
52. the true worth of the metal tea ball. (Laughter) They're not
53. worth a hoot. (Pause) . . . big a gadget. Only purists use tea
54. balls, and they mix their own tea.] . . . potato peeler, it's
55. really good for cleaning carrots up though, saves a lotta work.
56. Good enough for . . . little do-hickys out of carrots. Put them
57. in cold water and they curl up. (Chuckle) Have you ever seen a
58. little slice of carrot curl up in the fetal position? I thought
59. that would scratch the ballpoint pen. Ok. There seems to be no
60. end of eyecatching and useless gimcracks, widgets, and
61. whatchamacallits. (Cough) We're teaching the world how to spell
62. whatchamacallit, whatchamacallit. (Pause) There seems to be no
63. end (pause) of eyecatching, (pause) eyecatching. Let's look at
64. that literally. I don't want anyone to catch my eyes. They'd
65. probably scratch the cornea. (Pause) Useless gimcracks. They'd
66. make those Widgets come in four or five different sizes.
67. (Pause) Made by Texas Instruments (pause), gonna recall most of
68. them. Oh dear! Whatchamacallits. Don't like the spelling of
69. that: What-cha-ma-call. Anything with that many a's in it can't
70. be bad. (Pause and deep sighing) Let's put in "which are
71. designed," just all a little "which," which (pause) are designed
72. for visual effect. Um huh! There's one thing that needs to be,
73. it would be an improvement on carrot people by the way and would

74. be a big plastic screaming red handle. Cause the way those
75. things are made when you throw them in the drawer, they
76. disappear. They crawl under a spatula and you never find the
77. darn thing for a long [(pause) . . .period. . . . salesmen have
78. long earned an honest living] [by offering little metal miracles
79. to unsuspecting housewives and the gullible (pause) general
80. public, to unsuspecting general public. Um, um (pause) we're
81. generalizing. Let's get this other thing down first and we get
82. to the end of that we might (pause) have light suddenly come on.
83. We can improve on that, make it a little shorter, say the same
84. thing.] [Salesmen who have long earned (pause) unearned.
85. (Pause) I do not envy the poor salesman who depends on the whims
86. of the public to make a living.] [I need to do . . . (Pause)
87. Ok. Little and large. Cover no ground with that. Little and
88. large metal miracles. (Pause) Um, hum! Large . . . metal
89. miracles to unsuspecting (pause) housewives, and we do housewives
90. a favor, and the gullible general public (pause). Taking on a
91. little early. And gullible general public. They never change.
92. Mostly identified with the rest of the folks.] [All of these
93. wonderworkers are highly touted, are usually highly touted, as
94. the last word in helping us to cope with reluctant cucumbers.
95. Hum. I need a word that starts with a c that's an adjective to
96. describe a cucumber. (Pause) I'm gonna get to that one.
97. (Pause) Some of these wonderworkers (pause), I wonder if
98. wonderwoman has any kitchen gadgets. (Pause) Highly (pause)

99. . . . usual, highly touted. As a last word, as (pause) . . . I
 100. don't know about that. As a last word in convenience, maybe
 101. (pause with a sigh and cough), as a last word in aid . . .
 102. foreign money . . . Oh, well, let's do it. We'll leave
 103. "helping" in for the time being in interest of speed, (pause)
 104. helping us to cope with those darn cucumbers, (pause) with the
 105. concrete cucumber. No such thing a concrete cucumber. Um see,
 106. cumbersome cucumbers? That would be too big. Crafty cucumbers?
 107. That's overdoing it just a tad. Back to reluctant, reluctantly.
 108. (Pauses and hums) What are the things, what are the things that
 109. makes cucumbers reluctant is that they can hide under a leaf
 110. (pause) and swear they weren't there yesterday when you go back
 111. to the garden. Ah, squishy tomatoes, (rattle of paper) ah,
 112. squishy, say how about we reverse sassy tomatoes and squishy
 113. squash. Yeh, let's do that, live, live dangerously. (Pause)
 114. Sassy tomatoes (pause). There's really no (chuckle) rhyme or
 115. reason to change this except that if we're going to say squishy
 116. squash, something else, squishy squash.] [(Pause) Um huh. We
 117. buy about each and every alleged worksaver that comes on the
 118. market or through the mail] and after they fail to produce the
 119. advertised results [we put them in a drawer with their
 120. predecessors where they rest in permanent and unearned
 121. retirement, and this is the world's longest sentence, and where
 122. they will stay until the next yard sale or until the will will
 123. have been read. (Pause) I guess that says a whole lot about the

124. human condition, (pause) accidentally. Let's copy part of that
 125. sentence down until we hit (pause) hit a real winner of a word
 126. perhaps.] [We buy each and every alleged worksaver (pause and
 127. hum) oh, that comes on the market (pause). You don't find these
 128. things in your post office box. . . . what you find in your
 129. mailbox is a little slip that says, "Item too large." Then you
 130. have to go in and search through all that stuff that is thrown on
 131. the floor behind the counter . . . two or three times and then
 132. they get it. (Pause and deep breath)] After they fail to
 133. produce advertised results (pause) um, um, um, and they do
 134. advertise. I don't know why it is that when they put it on
 135. television, you have to send your check or money order to
 136. Atlanta, Georgia. They think that's the only place in the world
 137. you can buy things. Atlanta's getting a bad reputation. We're
 138. gonna put this thing in a drawer, but we can't put blenders in a
 139. drawer usually. Then again we can't make a sentence so (chuckle)
 140. hard. People fall asleep half way through the third comma.
 141. [. . . where (pause) like in a cemetery they rest. Maybe there
 142. should be a cemetery for retired kitchen gadgets? They have pet
 143. cemeteries. We could do that you know, if we have a loved
 144. spaghetti lifter that you want to hold a little ceremony for,
 145. perhaps we'll organize one. A team that comes around in a little
 146. hearse and with a little box (pause) silk-lined crate that'll
 147. haul off your old egg beater (pause). We'll carve a little
 148. tombstone R.I.P. which stands for Rest In Peace. (Pause)

149. Unearned retirement which we are talking about here now. And
 150. where (pause) they will stay. They better stay there. They get
 151. up and walk away (shudder). And they come up out of the drawers.
 152. . . . squeak in there, until the yard sale or until the will has
 153. been read. Can't you just imagine Aunt Minnie leaving you her
 154. favorite egg separator because she knows you'll take good care of
 155. it? Aunt Minnie can't run fast enough to give me her egg
 156. separator. (Clears throat) Ok! [⁷We really wonder how we ever
 157. survived] [⁸without the beautiful blenders with eight forward
 158. gears and overdrive reverse] [⁹that mash, bash, rend, rip and tear
 159. everything from ice cubes to tennis shoes. Cubes and shoes, I
 160. think that's why we put shoes. (Pause) Um huh, it gives it a
 161. certain flow at the end of there I suppose. Let us start if we
 162. really wonder (pause), tell you (laughter) purer words were never
 163. spoken.] [⁷We really wonder (pause) how did we ever (pause) how
 164. we ever survived (pause).] [⁸It makes you wonder what the state
 165. of the arts going to be thirty years from now. Maybe they'll
 166. have nuclear blenders. Um, hum or gas powered can openers, save
 167. electricity. I think they're beautiful, really beautiful.
 168. Certainly they are. Comes in nine shades of beige which is a
 169. non-color. There's a blend in . . . artistic and perfect in
 170. what they're doing. Eight forward gears. I'd rather have twelve
 171. forward gears. Then we'd be 75 percent correct in (pause) 60,
 172. 66, gears and overdrive, (cough) why do they have overdri-] [⁹ah,

173. the tough stuff like tennis shoes, ok. Gears and overdrive.
174. Reverse (pause) and most things can back up on top of the washing
175. machine provided they don't scratch the motor. Mash, bash. Did
176. you ever put a thing in the blender? That is the biggest mess, I
177. mean you have a soggy mulk, especially if it's So they
178. bash, rend, rip, and tear (cough) everything. Um! I wonder what
179. would happen if you put your billfold in the blender--credit card
180. souffle. Ice cubes to tennis shoes. Does have a certain ring to
181. it.] ¹⁰ [(Pause) How did we live without the magic slicer. Oh
182. yea, I like this one. How did we live (rip of paper) without the
183. magic slicer (chuckle and rattle). Um, hum, hum, I hope we can
184. improve on that. How did we (pause) live without using the word
185. survive yet, without the magic (pause) there ought to be another
186. adjective here, magic slicer. (Pause and deep sigh) Um, um, um.
187. What kind of slicer beside magic slicer? Two adjectives would be
188. nice here. Um, um, um. (Pause and hum) What about the monster
189. magic slicer? Uh (cough) magic slicer. If it's magic, it can
190. only have so many other adjectives in it. I mean, what's better
191. than magic? . . . (Pause) Tons of julienne fries, I think
192. would be sufficient. We could say make mountain, make mountains
193. of julienne fries. Tons of julienne fries. People can relate to
194. tons. (Pause) Especially if they're overweight. Julienne fries
195. and taking the tears out of an onion, that's a trick all by
196. itself. Large (pause) vacuum hose, attached to the vacuum
197. blender . . . blows the vapor from the onions out the back

198. window. The neighbors complaining. (Pause) Uh, let's, um huh.
 199. Slices off bunions and rends asunder (chuckle) and rends asunder
 200. (pause). I don't know where that came from, the marriage
 201. ceremony. Let no man put asunder. That's the relationship
 202. between the association of old love letters. Amazing how that
 203. works, isn't it? The mind does weird things.] [¹¹Let's see, how
 204. did we make dacquiries? I really believe the word dacquiries
 205. . . . How did we (pause) make dacquiries? (Hum) (Chuckle) We
 206. spelled it da-quar-ies, that's all right. (Pause) We'll pick
 207. that up on the third draft, without the aid of this electric
 208. whirling dervish. That we means have done . . . electric
 209. whirling dervish . . . (Pause) I feel confident that that would
 210. survive up to the fourth draft.] [¹²(Pause) We would hate to think
 211. that having to jump on or stomp ice cubes into powder in order to
 212. simply have an after-dinner snort. Of course we could take the
 213. sledge hammer. We would hate (pause) total, we would hate to
 214. think, we would hate to even think about it. Having to jump on
 215. (pause) or stomp ice cubes into powder or large chunks (cough and
 216. tearing of paper) of ice cubes. Ice cubes into powder in order,
 217. there is no order in any of this (chuckle). Um, to simply have
 218. an after-dinner snort. We now have . . . (noise) before dinner.
 219. An after dinner (pause) . . . guzzle . . . called snort. Why
 220. did I use snort? I had a logical explanation for it yesterday.
 221. Why snort, an after-dinner snort? Oh, yea, Emily Dickinson says
 222. it's ok. Use a shocking word. Most people are surprised by a

222. snort. A deer snorts in the wood that comes as a shock.] [Now
 223. ah, electric knife sharpeners. What else do we want? An
 224. electric knife sharpener most of the time is built in as part of
 225. a can opener. But there are those that are, battery operated
 226. pencil sharpeners, kids bring to class, aggravating me to death.
 227. In here where, where, where. Why don't they use a ballpoint pen
 228. like everyone else? Especially when they write something like a
 229. draft and you sit there erasing, erase, erase. Line through it
 230. and be over it. Electric knife sharpeners. (Pause) They'd be
 231. good for scissors, hacksaws. I've already said that . . . also
 232. said that put an edge on scissors, sharpeners and also (pause)
 233. put an edge. You see how we avoided using that word "sharpener."
 234. Put an edge. Ah, scissors. Trim our toenails. I really don't
 235. see me sticking my toes, but for the sake of being ridiculous,
 236. we'll leave it in there. Polish our shoes. Yea, but I suggest
 237. you start out slowly with old shoes. (Pause) . . . our shoes,
 238. old shoes. Now they do brush the dog. I put my dog in the knife
 239. sharpener this morning and he looks just great. Tail comes to a
 240. sudden point. (Cough) Dog didn't care much for it either, but
 241. I'm the boss. These old mop strings. Thinking about old mop
 242. strings because I need to fix the table leg, been putting that
 243. off, and once I get in the kitchen and open the table leg, I'm
 244. gonna have to clean the whole mess up. I guarantee you I'll find
 245. mop strings for a week.] [These gadgets do require that you
 246. maintain a large supply of band-aids, sterile gauze, iodine, and

247. other medical supplies because you're likely to catch your ties,
248. fingers, and other extremities in your automatic pickle slicer,
249. olive bashers, and apple corers. Um. (Pause) We're gonna do
250. something about apple corers. I don't think that's gonna make
251. it. Let's go back to these gadgets. (Pause) These gadgets do
252. (pause) require that we in our houses (pause) maintain (cough)
253. . . . maintain in our houses a large supply of band-aids, which I
254. am very short on right now. My daughter thinks she has to put a
255. band-aid over every mosquito bite. (Chuckle) She looks like the
256. walking wounded when she goes out. Iodine (pause) and other
257. medical supplies (pause) that come in form of (pause) ointments,
258. aspirin (chuckle). All under the heading of medical supplies.
259. Let's hear it for the useless . . . Because we are likely to
260. catch our ties. Well, most people don't run the kitchen with a
261. tie on. I used to. I was too busy to change clothes. For days,
261. catching ties. . . . Say ties. Fingers. We shall include the
262. fingers . . . Now we're in trouble with this one. We'd better
263. just not say anything, just simply write down the words "and
264. other extremities". (Pause) In our automatic pickle slicers
265. (pause). I don't think there is such a thing as an automatic
266. pickle slicer. Um, I guess there is too. . . . thing that just
267. falls apart, guess you have to take it apart. Olive dicer.
268. (Pause) Um, come on. We didn't have a word that rhymes here,
269. potato ricer, so now we've got automatic pickle slicer, olive
270. dicer, and potato ricer, and, let's get something really

271. ridiculous. Um! (Pause) What we need (cough) is a little
 272. airhammer (sound of airhammer) to get the old toothpaste off the
 273. handle. We need something silly. Ok, yea, we need pickle
 274. slicers, olive dicers, potato ricer, and (pause and cough) um!
 275. (Laughter) Thinking about a cat trimmer. (Laughter) That's
 276. . . . a cat trimmer. What's the opposite of cat! Canary. What
 277. about a canary plucker? (Laughter) Ok. Let's think to what
 278. extent a canary plucker. (Laughter) Yes. While the little
 279. sucker sits up there in the cage and molts, you just go ahead and
 280. pluck them all at one time and get it over with. And we got one
 281. mess to clean up. I can see me sweeping canary feathers for
 282. months at a time. Oh, dear! We'll take the "s" off of slicers
 283. and leave everything we're saving in.] [We're not satisfied!
 284. (Pause) Um, um, um. We're not satisfied. I tell you we are not
 285. either with those darn old pizza cutters. They are so silly.
 286. (Pause) I canvassed several (pause) people last night about the
 287. usages (pause) pizza cutters. Oddly enough, I got 100 percent
 288. agreement. (Pause) Knife does a lot better job. (Pause) Now
 289. why is that? Because it goes all the way through the crust. A
 290. pizza slicer puts a dent in the crust and you have to end up
 291. tearing it apart for the piece which you want which means that
 292. the cheese drips all over the place and if it's hot enough it
 293. gets on the finger and hurts. (Pause) My fingers are covered
 294. with burns from cheese that dripped off of pizza slices. I
 295. almost hospitalized myself one time in China. (Pause) I was

16

296. in bandages for weeks. (Cough)] [These gadgets are not as
 297. efficient as a solingen steel bladed paring knife but they are
 298. widely used for dissecting pizza because they have absolutely no
 299. other purpose. (Pause) Um huh. Ok, that's in reverse order
 300. somehow (pause) I think (pause), I think they would go better
 301. that way. (Pause, cough, and chuckle) I wish we could use, we
 302. could rearrange the sentence and have one of the words in the
 303. middle end it. I know I'm gonna leave the word "are" hanging out
 304. there to dry. Um, gadgets. (Pause) All these, how did I spell
 305. this and think these, these gadgets are not, and I mean are not
 306. (pause) . . . real heavy but not as efficient. Now we've used
 307. efficient twice and I'm not going to use that word anymore, if it
 308. kills me, I won't use it. It reminds me of a writer in the
 309. Roanoke Times, found a new word the other day and used it three
 310. times in the same column. I think all editors have died and gone
 311. to Valhalla. It seems they should have picked up on it. You
 312. believe the printed things. You'd think . . . believe in the
 313. brand solingen steel. People . . . appreciate that. But, we're
 314. still talking about pizza cutters now. They (pause) are widely
 315. used for dissecting, did we do that before? Uh, I thought maybe
 316. we used that word before. I see, we haven't . . . they can cram
 317. it in. Dissecting pizza because . . . you are so dumb you have
 318. to go back over and over crazy things. (Pause) Because they
 319. have absolutely no other purpose. No purpose, no use, (sigh) no
 320. purpose or use. That's really] [

17

[. . . Imagine the joy (chuckle

321. of the lucky lady who finds her very own chrome-plated pizza
322. cutter in her Christmas stocking. Now, she obviously got a large
323. stocking hung up in order to cram all those things into it. Or
324. she could stick it in there handle first. Let the beautiful disc
325. reflect the Christmas tree lights. Now there is a vivid picture
326. of a pizza cutter sticking out of a sock. I'd like to see a nice
327. Christmas tree with all kinds of lights on it, a big fat full
328. Christmas tree, and just across the room on the piano there's the
329. old pizza cutter sticking out of mom's stocking which is leaned
330. up against the music back of the piano. There's no place else
331. to, I wouldn't dare hang that thing up. It would probably burn
332. the ceiling up. Finds her very own chrome, chrome, we're gonna
333. run out of chrome one of these days. In about nineteen years the
334. world's chrome supply is gonna be depleted (pause) unless we find
335. some more. That's a scary thought. We're going to have to make
336. rubber bumpers. That's what we should have been doing a long
337. time ago. In her Christmas stocking. Of course, we could stick
338. it in a hunting boot but that wouldn't be the same. (Cough)]
339. [What else does life have to offer for the person who has
340. everything? Except a box to put it in. Ok, if we take out that
341. period and put it where the except is (pause). Uh, we could say
342. what else except the box to put it in. Umm, nah (cough), let's
343. not complicate our little plan here. What else does life have to
344. offer (pause) for the person, two persons, for . . . been . . .
345. that one for weeks, who has everything. I'm talking about

346. everything, from little steelies to shoot marbles with (pause)
 347. except a box to put it in.] [Um hum, (pause) um, hum. No home
 348. would be complete without a kitchen full of modern marvels for
 349. the . . . Certainly no home would be complete without a kitchen.
 350. Um hum (pause). I'm going to be very positive, not negative. No
 351. home would be . . . You wouldn't even qualify for food stamps
 352. . . . kitchen full. Now there must be in that kitchen a fine
 353. . . . types of can openers. (Growl) Um, huh. . . types of
 354. can opener, bottle opener, the modern marvels. Can openers have
 355. changed. They've got a new one out now that has several gears on
 356. it. It makes it a lot easier to turn the handle on the
 357. mechanical parts. I know the last round, opening tin cans. Now
 358. what else can you open with a can opener beside a tin can? There
 359. must be something else. We can do an appendectomy on the cat.
 360. (Pause and cough) Ah, we don't want to do that to the cat, not
 361. this week. These items of wizardry, ok, called mechanical
 362. marvels, items of wizardry, worksavers (pause). These items of
 363. wizardry (pause) now who was the wizard? Merlin initially. I
 364. don't know if we can work that in or not (ripping of paper).
 365. Some people exist reading modern comic books and never knew who
 366. he was to start with. Anyway, these items of wizardry come in
 367. all shapes and sizes. Now I think we decided yesterday that that
 368. could not be a statement. And yet again when I read this (pause)
 369. I need a little obvious . . . Um, um, um, shoot. . . . Do I
 370. feel like I need a sense of urgency about this. I'm getting

371. complacent without making changes like I should be. That's what
 372. you get for having went to sleep.] ²⁰ [They whirl, click, clank,
 373. and scalp the top off the beans, hominy, tomato paste, and
 374. mushroom soup. They scalp the lids, let's do the top because you
 375. can put a can in upside down, whatever, and it will still take
 376. that end off. If you just say the lid (pause), then they put the
 377. directions on the bottom. Um, when you have to turn it upside
 378. down, then you have to go digging through the trash cans to see
 379. what you're suppose to do with the darn thing. Do not boil.
 380. When you read that part as it foams over the side of the pot
 381. (pause) the lids off beans. Pork and beans, usually, hominy.
 382. (Chuckle) That sounded like a, let's hear it for grits. There's
 383. no thing as one grit, there's grits. Everybody knows that. We
 384. can fry grits (pause). Wonder who named the mushroom "mushroom"
 385. mushroom soup. The mushroom--that thing was named after where
 386. it's raised. But believe me, they don't grow in mush.] ²¹ [They're
 387. designed to self-destruct. Yes, they are. Just like our cars.
 388. The last payment, boom, it collapses in the driveway of old age.
 389. That's . . . designed to self-destruct. Yes. Our whole society
 390. is designed to self-destruct. That's as it should be. We keep
 391. changing so apparently (pause) we are here to do things about
 392. kitchen gadgetry. (Mumble, reread) self-destruct after a short
 393. time so they can be replaced. Now why would anybody want to make
 394. a lifetime can opener. They could only sell you one. (Pause)
 395. Replace at higher cost and therefore . . . Um, hum. That's good

396. for G.E. and Alcoa . . . predict a . . . it's good for the,
397. (pause) therefore, they are good for, I suppose they're good for
398. the economy. They are not too well received by our bank books.]
22
399. [They didn't have . . . ok. (Cough) They have so endeared
400. themselves to us, we find it hard to throw them away after they
401. have worn out. It's almost a repetition of what we were talking
402. about up here earlier. Ah. (Pause) We have them in permanent
403. and unearned retirement. And let's put a little gadget up here
404. beside them, let's put a little asterisk up here. (Paper rattle)
405. Um, hum, and down here we put another asterisk which would
406. indicate that we want to take a second look at that and maybe
407. incorporate. Let's see. (Pause) The phrase, they have become
408. our friends and members of the family. So, for organizational
409. purposes we might move this next sentence in behind until the
410. will has been read. We'll have to look at it. . . . They are
411. good for the economy. I like that. They have soon endeared
412. themselves to us. (Pause) They have inveigled their way into
413. our hearts. Um, hum, hum. They're talking about Gremlins, but
414. they don't mean cars. We find it hard to throw them away
415. (pause). It's not the physical act that we find hard. We can
416. toss those suckers in the trash can in a minute. Physically,
417. it's possible. Mentally, it is a drag. After they (pause) . . .
418. how did they ever suction to ourselves? We don't want to be
419. thrown away when we're worn out. Just goes to show you how
420. much we really love these things. They've become our friends and

421. members of the family. (Humming) Very few people name their can
422. opener Fred or George or Willie. It's . . . name your adopted
423. can opener something so everybody will know what we're talking
424. about. Don't call them no. 12 or size 18. Give them a real
425. name. Have a birthday party for your can opener. You could keep
426. a log of all the cans you opened, celebrate when it reaches its
427. one thousandth tin can. There should be some recognition for
428. faithful service. (Pause) We could do, but then again we see a
429. shift in what we started out to write. Here we are heaping
430. praise on something we truly think . . . us. (Pause) So when we
431. do the next shot at this, what we need to do is put the word
432. "seen" up here. We are growing fat together, yes we are. Let's
433. see. Have you hugged your can opener today? (Pause) Can opener
434. today. Question mark. Ok, now do we want to go on with this?
435. (Pause and cough) I mean do we have the nerve to go on with this
436. (laugh), probably a better word. (Crackle) And then again we
437. still have some tape left. Ok. We can live a . . . life now.
438. What else can we add to "Have you hugged your can opener today?"
439. I think that's a zinger. Ok. Do we rest on our laurels? Not
440. hardly. Those things have stickers. Um, um, I mean have you
441. ever laid down on laurels? That is painful . . . (cough) unless
442. you're wearing . . . or something. (Cough) Ok, kitchen gadgets.
443. When you hit a dead spot here, the shock of coming to the end of
444. it so quick I guess.]

The Discourse Based Interview of Pat's Description

I. What were you thinking or feeling before _____ came to your mind?

- (1) "Reluctant cucumbers." I remembered picking cucumbers yesterday, how you have to look for them hiding under the leaves.
- (2) "Where they rest in permanent and unearned retirement." You have to give life to the inanimate object, to have the reader look at them in a different way.
- (3) "Everything from ice cubes to tennis shoes." I remembered my son putting his deck shoes in the wash machine when he was little. He thought you could wash them like tennis shoes. I figured the next thing he would do is put his tennies in the blender. Also the sound of ice cubes and tennis shoes, I like it.
- (4) "Rends asunder old love letters." You used to have to tear old love letters up. I was thinking of things to tear up.
- (5) "Whirling dervish." I wrote a paper last quarter on the Afghanistanian whirling dervish. Zoroaster was the original. It was a dance. The word "whirl" I used earlier suggested it to me."
- (6) "Old mop strings." I was thinking about a table leg I have to repair in the kitchen and the floor I would have to mop afterwards.

- (7) No.
- (8) No.
- (9) "Our friends and members of our families." Sentiment for household belongings probably reflects feelings toward ourselves. We don't like to be thrown away when we're worn out.
- (10) "Canary plucker." I was thinking about that dog and the electric knife sharpener when I went into the band-aid bit. The dog led to the cat trimmer and the opposite of a cat is a canary.
- (11) No.
- V. Did you have a mental image in mind when you wrote _____?
- (1) "Reluctant cucumbers." Yes, picking cucumbers.
- (2) "Rest in retirement." I could see the little hearse, silk-lined crates, the tombstone, the ghost.
- (3) "Mash, bend, rend, rip and tear." I pictured the T.V. barker.
- (4) "Tons of fries, slices off bunions." Always. I pictured the heaps of fries, the bunions, the shredded letters.
- (5) "Whirling dervish." Yes, the dancer.
- (6) "Brush the dog." Yes, I pictured that dog with the pointed tail.
- (7) The "chrome plated pizza" cutter shining in those Christmas lights.

(8) "Scalp the lids." Always, but I rejected the spring-loaded olive pitter because I couldn't see it in my mind. It didn't work.

(9) I don't know.

(10) "Canary plucker." Oh yes, all those little feathers flying.

(11) I can't think of anything.

VI. Did you consciously search for a figure of speech when you wrote _____?

All responses negative.

VII. Do you have any tricks, gimmicks, or strategies to come up with something like _____?

(1) "Squishy squash." I look for sounds to repeat and sounds that sound like what they are.

(2) No.

(3) No.

(4) No.

(5) No.

(6) "Eat old mop strings." I try to fill in the blanks with all the things I can think of that are distasteful. I try to cover as wide a spectrum as possible, to be as far apart as I can get them. I want it to be outlandish. I started to include everything from iodine to prayer beads, but I decided I wanted to keep religion out. Some Catholic might read it and I don't want to hurt his feelings.

- (7) No.
- (8) "Whirl, click, clank and scalp." No, just the sounds of the words.
- (9) No.
- (10) "Canary plucker." Thinking of opposites and extremes, the most widely separated.
- (11) No.

IX. Did you associate _____ with anything else?

- (1) The reluctant cucumber reminded me of a paper I wrote for you last year on how to make a sandwich, which led to those squishy tomatoes.
- (2) No.
- (3) No.
- (4) I associated "rends asunder" with the marriage ceremony. "Let no man rend asunder," which was suggested by the love letters.
- (5) No.
- (6) No.
- (7) No.
- (8) No.
- (9) No.
- (10) No.
- (11) No.

The Follow-up Interview of Pat's Description

Question:

How do you create metaphor? Can you give me any information about what goes on in your mind when you generate a metaphor?

Answer:

It is completely spontaneous. They just come out of the pen. I don't know where they come from. I don't think about anything. When I start thinking I'm in trouble. Thinking is the last resort. They are just there. It is easy and natural. I do think in pictures in full color. Before I create a metaphor, I have the technicolor picture in my mind before I have the words. It is very visual. The words just happen. I think watching Disney cartoons has something to do with it. Never get too old to play, to fantasize. I see the picture, then search for the words. But when the writer plays with real knowledge and toys with that, there is so much more to draw from.

Table 1

Pat's Descriptive Essay

	Type	Reread	Image	Labor	Spontaneity
1. The true worth of a potato	irony	X	X	X	X
2. Salesmen have long earned	irony	X			X
3. Little and large metal miracles	irony				X
4. Wonderworkers . . . sassy squash	personification	X	X	X	
5. We blithely buy	irony	X			X
6. They rest in . . . retirement	personification	X	X	X	
7. We really wonder how	irony	X			X
8. Eight forward gears	metaphor/hyperbole	X	X		
9. Ice cubes and tennis shoes	hyperbole	X	X	X	
10. Rend assunder old love letters	hyperbole	X	X		
11. Whirling dervish	metaphor/personification	X	X		X
12. We would hate to have to think	irony		X	X	
13. Eat old mop strings	hyperbole	X	X	X	
14. Canary plucker	hyperbole	X	X	X	
15. The in crowd uses pizza cutters	irony	X			X
16. They have . . . no other purpose	irony				X
17. Chrome plated pizza cutter	metaphor	X	X		X
18. A box to put it in	irony		X		
19. Modern marvels for opening	irony				X
20. Scalp the top	personification	X	X	X	
21. Good for the economy	irony				X
22. Have you hugged your can opener	personification	X			X

Table 1 (continued)

	Edit	Free Association	Controlled Association	Draft	Reinforcement
1. The true worth of a potato	X		concepts, nouns, images	1	X
2. Salesmen have long earned				1	X
3. Little and large metal miracles				1	X
4. Wonderworkers . . . sassy squash	X	X	alliteration	2	X
5. We blithely buy				1	X
6. They rest in . . . retirement	X		alliteration	1	X
7. We really wonder how				1	
8. Eight forward gears	X	X	concepts, rhymes	1	X
9. Ice cubes and tennis shoes	X	X	sounds, concepts	1	X
10. Rend assunder old love letters		X	verbs	1	X
11. Whirling dervish				1	
12. We would hate to have to think	X			1	X
13. Eat old mop strings		X		1	X
14. Canary plucker		X	opposites, images	2	X
15. The in crowd uses pizza cutters			X	1	X
16. They have . . . no other purpose				1	
17. Chrome plated pizza cutter	X			1	
18. A box to put it in		X		1	X
19. Modern marvels for opening				1	
20. Scalp the top				2	X
21. Good for the economy				1	
22. Have you hugged your can opener				1	X

**The vita has been removed from
the scanned document**