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Integrating a Writing Component into a Collegiate-level Drawing Course

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ABSTRACT

Integrating a Writing Component into a Collegiate-level Drawing Course

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This study describes the integration of writing exercises into a college-level drawing course. The written exercises encouraged students to think metaphorically about and reflect on the technical processes of drawing, as well as the personal meanings which underlie the expressive side to their drawing. Through participant observation, this study describes how novice drawers' use of this written component enhanced students' understanding of the drawing process within the art studio classroom. This study attempts to prove that a teaching approach which consciously links both visual and verbal languages can be helpful to some students in the art studio. What is important is that by bringing the written word into the drawing classroom, students were given a means of expanding their thinking about the products and the process of their drawing activities. By making students more aware of the visual and verbal processes involved in the drawing studio, by helping to illuminate the possible meanings underlying their work, and by allowing them to understand the story of their drawing experiences, the written word became a vital tool in this drawing curriculum. For these students, drawing became not only a means of capturing the students' perceptions of the observed world, but also a means of furthering their reflection of, and creating meaning out of those perceptions.

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"Drawing diagrams experience. It is a transposition and a solidification of the mind's perceptions. In its own way drawing is a means to knowledge". - Edward Hill (1966), *The Language of Drawing*.

"The cinema and other visual arts can do more immediate justice to the visible world, but cannot match the power of language to mean". -David Lodge (1990), *"Narration with Words"*.

Chapter 1

Statement of the Problem

At first glance the two ideas cited above might seem irreconcilable. The first, claims that drawing is almost a language unto itself -a language which allows us to diagram our experience of the world. The second thought posits rather that it is the verbal language, and not necessarily a visually dominant idiom which is paramount in giving meaning to our world. Are the statements inconsistent, incongruous? My belief is no, the statements can be reconciled. Both language systems, or rather both the visual and verbal modes of thought, provide a pathway for understanding and the creation of meaning within our everyday experience (Paivio, 1991)(John-Steiner,1987). Thought which is truly integrative and creative is produced by bringing together each of these modes of thinking within a formal learning environment (Eldridge,1990)(John-Steiner, 1987)(Sinatra,1986)(Olson,1992). At its core, this study shows how the two

ideas cited above can be reconciled by looking at the experiences of beginning drawing students in the studio classroom.

In my experience as an art educator at the college and university level, I have observed that drawing students in the art classroom are from the outset taught the fundamentals of good visual design. We as art educators, in essence, teach students to make *good* pictures, however, we infrequently encourage an understanding of *why* these students are making their art. Rarely do we allow these students a mechanism to understand the *content* underlying their own imagery. As a result, the instructors of these art classrooms end up dealing primarily with the exterior trappings of the student's visual image. While talk about the students' art work is often encouraged -this through the studio critique- seldom is verbalization encouraged about the art-making process itself. As such, the studio critique often involves an around-the-room discussion of many of the students' drawings -much of this discussion centering on the formal design properties of each of the drawings under scrutiny. Seldom, in this teacher-led discussion, is an emphasis placed on either the young artists' decision-making processes, or the expressive intentions underlying the student's drawing efforts. And, given the format of the group critique, any analysis of the students' drawing efforts remains entirely verbal. Significantly, the written word in art classrooms is largely neglected (Olson,1992). Rarely in these educational contexts are students asked to write, either about a particular image they may be creating, or about their own ongoing creative activity in the art studio. What transpires instead in these art classrooms, is an emphasis placed on artistic technique and the formal properties of an art work, to the neglect of the student's intent underlying their

artistic creations (Olson,1992) (Wilson,1988).

In my experience as a teacher, beginning art students' first steps in a typical studio classroom are tentative ones. Art-making is a domain of endeavor all of us seem to remember, a distant childhood field-of-play where carefree gestures and intense concentration often produced marvelously satisfying results. Yet somehow in our adult world, this field-of-play remains a mysterious, confounding, and often intangible one -a field fraught with difficulties and frustrations as we struggle to make good pictures. In the art studio, an adult learner's initial steps are often part of a somewhat halting journey along a path toward discovering what the process of art-making might be about.

From the outset, students in the drawing studio classroom are expected to focus almost exclusively on the mastery of the visual language of art. They are, in effect, taught that the formal design principles -elements such as: line, shape, texture, and volume are to the visual language what consonants, vowels, nouns, and verbs are to the verbal language. They are taught that these design elements, and their implementation through basic design principles such as: rhythm, repetition, symmetrical and asymmetrical balance etc., are the linguistic building blocks crucial to a mastery of visual communication. What underlies these educational practices, and what seems to be implied by these ideas, is the assumption that this visual language will be used to communicate - that the visual language will be used to express one's ideas.

Typically, as students begin their drawing classes, initial exercises in *line* take the form of simple mark-making explorations, as students gain experience with the respective technical and expressive possibilities of the different

materials at hand (i.e. charcoal, graphite, conté). For instance, students may be asked to write their names with each of these new media. They may then examine how the line drawn in charcoal physically differs in appearance from that of the medium of conté, or graphite. Explorations may then include an examination of different qualities of line, often involving its speed and its weight. This entails the observation of how the speed with which a line is drawn, and how the amount of pressure applied in the application of the drawing medium, affects its appearance on the drawing surface.

Line may then be used to begin to explore how the observed contour of a still-life object, such as a fruit or bone, may be described on the page before the student. Faithful reproduction of the observed object is paramount in the student's mind at this point, and spatial dilemmas are often encountered by the student. "How can I get that edge to appear closer than that one?" or, "How can I get that shape to look as if its in front of the other one?", are questions typically asked at this stage, as students grapple with attempting to realistically portray a three-dimensional object on the two-dimensional drawing surface before them.

In later weeks, students are given more complex still-life subjects to be drawn from direct observation. Notions of basic compositional design as it is reflected in the physical division of the flat surface of the page are introduced. Central to this idea, is the concept of the positive and negative spaces of the page (Edwards,1979). At the root of this concept is the recognition of the relationship of the *positive* figure or object to be drawn, to the remaining *negative* background of the paper's surface. This idea is key in terms of the student's understanding and acknowledgement of the two-dimensional nature of the paper's design surface. This may sound self-evident, but the realization

and comprehension of this essential point is crucial, for at the core of drawing and painting is the fundamental quandary: the struggle to reconcile the depiction of a three-dimensional object on a two-dimensional surface. The understanding of the inherent flatness of the paper, and the fact that a design composition can be built out of the inter-locking positive and negative shapes, as in a jig-saw puzzle, is perhaps the most basic and the most difficult challenge for many art students. (It is indeed a tricky visual concept, and some students key in right away while others require more time, yet it is a stage which is extremely valuable in terms of a student developing an understanding of basic composition when looking at art works.) Later, students are introduced to concepts of symmetrical and asymmetrical balance, rhythm, and repetition as they relate to increasingly more complex compositional studies. Coupled with this, ideas about "zooming-in", or cropping the directly observed scene are often emphasized, as a means of both acknowledging the observed spatial relationships, as well as actively seeking out and selecting the student's own desired composition.

Often, after several weeks of practice, the human form is introduced as a subject of study through the use of live models. Here, students begin to explore the human body in terms of line (contour), mass (shading), and movement (gesture). This invariably is a much more challenging endeavor. For the student, the human body brings with it myriads of connotations, symbols, preconceptions and misconceptions. In short, it is a loaded 'object', a subject we think we know (we all have bodies!), yet an object exceedingly difficult to draw. Typically, this is why this subject matter is dealt with later rather than earlier in the drawing course, as the capturing of the human body particularly in

gesture drawing, requires a more sophisticated knowledge of many of the skills of observation acquired through the earlier drawing sessions.

Gradually, as students achieve greater competence in their basic drawing skills, they are shown that the fruits of their labor can indeed be the expression of an idea or feeling. This is the next big step. For, it is often at this point that it is suggested to them that *if* these basic design principles are observed, the resulting visual expression of one's idea(s), or one's visual self-expression, will be achieved. They are told that *if* these basic visual rules are used, a sound visual expression will follow.

In the latter part of such courses, students often begin to work more independently be it as part of assigned homework or on individual projects. At this point, the idea of working along a theme (or in series) is often introduced. Here, students are encouraged to select (or are given) a theme or subject matter with which they are asked to develop a drawing or series of drawings, keeping their subject in mind. This step usually requires more time, for the students having been given the tools to construct visual images must now find something *to say* with this newly acquired language. Just as the student writer having achieved some mastery of a basic and then more complex sentence structure might go on to create a story, the student artist is asked to create a more focused work or works along a basic theme. In my experience, most students step hesitatingly forward to meet this new challenge.

As the work from these theme-based explorations trickles in, something interesting often happens. The student's work is frequently looked at by the instructor on a technical level, i.e. did the student meet the demands of the assignment's technical objectives? Was the physical structure of the picture

resolved? Was the drawing compositionally sound? Does the picture indeed 'work'? Even in situations where an in-class group studio critique is utilized by the teacher, the talk often centers on the quality of the line, the compositional balance, and the tonal shading of the picture(s). Again, the main preoccupation seems to be: has the student mastered or at least met the technical expectations of the course? (Barrett,1988). More often than not, especially at these beginning levels, this art-as-problem-solving supersedes any emphasis upon the student's choice of subject, thematic content, or own feeling about the work. As Janet Olson (1992) writes, art teachers judge drawings "much too narrowly, primarily by the dictates of aesthetics or in relation to how closely the drawing meets criteria such as advanced technical skill, realism, modeling, perspective and the like" (p.38).

In my experience as an art student and an art educator, this is typical of many drawing courses. The acquisition of technical skills proceeds along the path described above, allowing the student an understanding of the basic components of the visual language. Students are then told that the use of these basic components in the structuring of art work will help create works that express or communicate their ideas to the viewer. The implied message seems to be a recognition of the relative autonomous nature of the visual language. That is, that the visual language stands alone and is every bit as effective in the communication of ideas as the verbal. The message is often: you should be able to express visually, what you would otherwise say verbally (Olson,1992). The problem that arises out of this assumption is significant. First, if one believes the visual language to be truly autonomous, then it follows that there would be no need for it to express what might otherwise be said verbally. In this

situation, the art work would express something which is essentially unnameable. If this were the case however, the communicative aspect of art -the dialogue which goes on between the artist and viewer (even if the artist and viewer is the same person)- would be an entirely silent endeavor, with the images reaching the viewer in a sort of wordless communion. Many authors however downplay the existence of this wordless communion (John-Steiner, 1987)(Langer,1951)(Zurmuehlen, 1990). For these same authors, who maintain instead that the visual and verbal language systems operate in tandem, it seems that an unnecessary division has been cleaved between these two modes of thinking, by downplaying the importance of what the student has to *say* about his/ her picture. Again, the implied message in these art classrooms seems to be that the the student's drawing should 'do the talking'.

In this light , the self-expression which can underlie the students' drawing efforts, often risks becoming a little-acknowledged residue of studio activity, and the student's understanding of their own visual self-expression *as part* of their art-making process is, subsequently undervalued. Even in the best situations, when the process of art-making itself is prized by the professor -a situation wherein the mastery of the technical design elements *and* the desire to express one's ideas may be understood to be integral, co-existing components of the art-making activity- the content underlying the visual expression of a student's ideas, though acknowledged, is often only briefly discussed. Rarely is a conscious understanding of the content of the visual ideas expressed, the essentially communicative engine driving the art-making activity (Olson,1992) -the why *we do art* - ever emphasized . It is as if we have

forgotten that first and foremost the student is, or can be, a communicator through art. It is as though we have looked at a well constructed sentence, and having found all the verbs, nouns, adjectives, and conjunctions in the right places, but we have forgotten that there might actually be content or an underlying message to the sentence.

In my experience both as a student and art educator, students in the mad scramble for competency in this 'new' language's visual equivalent of phonics, are rarely engaged as to the *why* they have chosen a certain subject matter or *why* they felt the need to communicate their ideas visually. This approach focused on the mastery of design principles and techniques, to the neglect of a conscious understanding of the ideas expressed, is often evident in the studio classroom far beyond the beginner and intermediate levels of the college and university studio art classroom. It is the model to which I was exposed as a student, and is to a large extent, the model I see perpetuated in the colleges and universities where I have taught. In essence, what happens is that the comprehension of the role of form in the making of 'sound' pictures, is valued often to the exclusion of a conscious understanding of the content and the genesis of students' images.

Why is this? Why would we even consider teaching a course in art-making within the context of an educational institution, without at least an attempt at talking about, contextualizing, and understanding the relevance of the images produced? It seems obvious that an effective art education curriculum, amongst other things, should encourage students to develop, express, and evaluate ideas visually. Certainly, these goals would seem to be self-evident in any formal educational setting, be it the primary, secondary school, college, or

university. Equally, it seems obvious that to achieve real understanding, students must be able to recreate the knowledge contained in their curricula within their own personal and societal contexts (Barken,1955) (Zurmuehlen, 1990). As bell hooks (1994) writes in relation to the state of education in general, "students do want knowledge that is meaningful. They rightfully expect that my colleagues and I will not offer them information without addressing the connection between what they are learning and their overall life experiences" (p.19). Yet, the result in many of these studio settings, has been a curriculum that inadequately addresses a student's understanding and articulation of their own intentions underlying their artistic endeavors -the *why* they are making art, the *why* of any particular image. Even in studio critique situations -ideally an opportunity for students to voice their intentions- the focus on technical competence predominates. As Carol Wainio (1995) writes, "In continually privileging formal properties or conceptual strategies over the students' own interests and intentions as the sole basis for discussion in critiques, instructors risk merely talking to themselves through the medium of their students' work....The student's plaintive "but I didn't mean that" is brushed aside, because something more important is going on. We are looking at "art" and "art" has nothing to do with what is meant" (p.123). For the student, an alienation from the work produced, and above all an alienation from the studio art-making process often results. Wainio (1995) states, in reference to students faced with such practices in the studio classroom, that "some manage, others flounder, but I am not sure that such a cloistered model is the appropriate preparation for a world in which they must make informed choices" (p.122).

A Personal Resolution

As I have previously stated, this model of educational practice has largely been a part of my experience as a student and teacher at both the college and university levels, and from my earliest days in these educational institutions, I remember trying to address this curricular shortcoming in my art studio classrooms.

In my own art-making and teaching practice, I have begun to resolve this tenuous relationship between the work produced in the art studio and a more conscious understanding of its meaning or personal significance, through the creation of personal written texts. These texts are often comprised of no more than adjectives and adverbs, nouns and verbs -descriptors essentially- of my paintings, scrawled hastily into my sketch book. At times phrases emerge, but always the written word is in response to the visual image before me. These words seem to function as anchors of my thought process; momentarily freezing an idea, allowing for the idea's consideration, reevaluation, rejection or approval. The words while securing my thoughts, do not seem to restrict the image's meaning through a sort of labeling, but instead act as a kind of springboard, releasing other images in my mind, other words -a reservoir of potent imagery for the canvas in front of me. The relationship between these written words and my visual work seems to me to be quite clear. They are simply an attempt to solidify the meaning underlying the art work before me. In a nutshell, the written words help me to understand what my pictures are about and what they could be about. In retrospect, I now realize that this approach I developed, used writing as a strategy to address the curricular deficiency in the

studio classroom that I had experienced as a student. As a student, I had turned to writing when the formalist art-as-problem-solving approach fell short of clarifying many of the underlying meanings and intentions behind my art work. In effect, writing allowed me to make the link between the art I was making and its technical countenance and content as imagery, to the ongoing events and themes played out in my life and in the society around me. It allowed for an understanding of the significance of the work which went beyond the often limited verbalization process present in the studio critique situation (Barrett,1988)(Wainio,1995), to a more concrete yet flexible form of thought; one which could allow for a reevaluation and deepening of the personal significance held by these images -and this through the associative power of words. Writing allowed me a better understanding of what the self-expression underlying my studio art activity was about. As a consequence of this, I feel that writing in the studio art classroom can do much the same for the students I am now teaching.

To illustrate my own use of writing within this art-making context, let me briefly describe an educational experience I had as a student at the university level. During my undergraduate years, many of my initial classes in the art studio had followed the same pedagogical path cited earlier. I had proceeded from early experimentations with various media, on to drawing and painting from observation. While initially, a realistic representation of observed objects had seemed to be important to my professors, my fellow students and I had later been introduced to ideas pertaining to the flattening of pictorial space, abstraction, and simplification in design. Notions of the spatial, decorative and emotional use of color were also introduced. In short, once we had been given

all the tools deemed necessary in order to "make art that works', we were expected to use these tools creatively. This next step was in a sense sending us out on our own.... allowing us to say something with our newly found language. This usually meant finding a theme or subject matter, and developing a series of works with this subject in mind.

I had been struggling for some time with a large-scale series of paintings based on imagery derived from Abraham Zapruder's chance filming of the 1963 Kennedy assassination (fig.1). For some reason I had always been fascinated by the footage of this filmed event. Whether it was the dramatic subject matter, its physical look, the mythology surrounding Kennedy, or the historical significance of the assassination, I was never really sure. Gradually, through a myriad of drawings made from imagined reverse angles and overhead views, the presence of two figures began to appear more and more in my imagery. The figure of Jackie Kennedy and a lone security agent were singled out from all of Zapruder's frames. As these two intriguing figures matured on the canvas in front of me, my art activity suddenly hit a roadblock. No amount of formal analysis taught to me in my studio courses concerning the painting's composition, its colour scheme, relative values, or rhythm would help me advance in the work. I began to ask myself the question, " but what is this image's significance for me?" Why was I so fascinated by this subject, or the composition of these figures emerging on the canvas before me? Finding no answers, I began to write. At first, the writing consisted of simple descriptive words: nouns, adjectives, verbs, adverbs; then slowly, small poetic stream-of-consciousness phrases. In essence, I began to name what was before me.
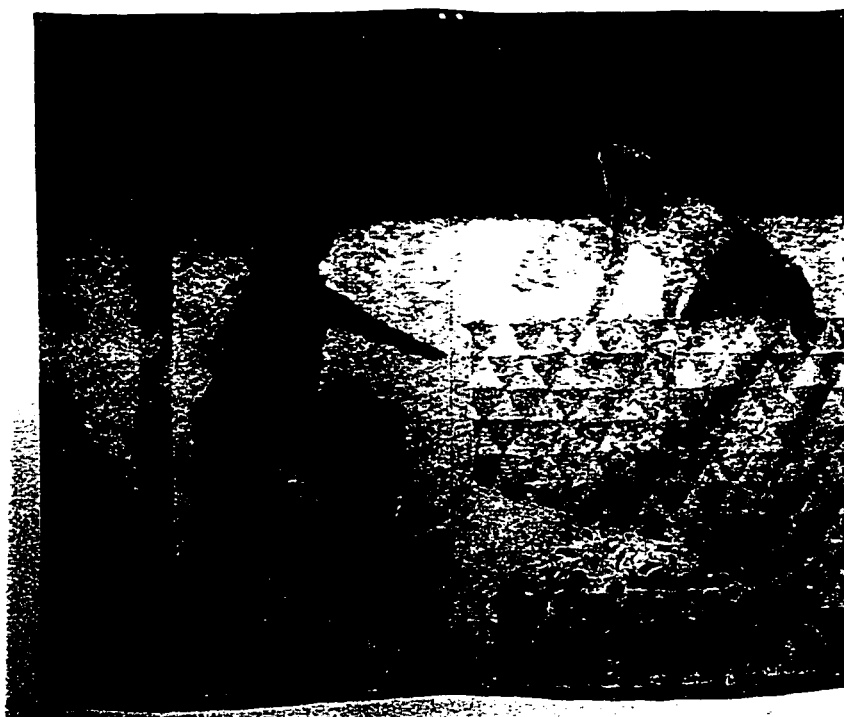
Fig.1

Romeo and Juliet 1963 III, 1989, acrylic on canvas, 195 x 200cm.

Suzanne Langer (1942) has stated, "The first thing we do with images is envisage a story" (p.145), while David Lodge (1990) posits that, "...narrative is one of the fundamental sense-making operations of the mind...it is our desire to find an intelligible order in life, and in our experience that is disorderly and unpredictable" (p.143). Intuitively, in order to better understand my envisaged story, I had turned to writing. Through writing I was able to physically create the narrative, *my* narrative... the *why* behind my making of this painting. I was able to name the elements at play on my canvas not only as forms, but as players in the narrative -to, in essence, create associations between the two figures and their field-of-play on the canvas, and this through the use of words (Zurmuehlen, 1990). The image and words before me begat a metaphor. The metaphor allowed me a deeper understanding of my changing stance toward the images on my canvas (Feinstein, 1982). The figure of Jackie Kennedy perched on the limousine's tail became a solitary Juliet on a balcony; the leaping security agent, a hesitant Romeo. The two figures isolated from the events became understood differently, in metaphorical terms, as a dramatic tragedy... a tragedy of Shakespearean proportions. On another metaphorical level, the crucial gap or distance between the Romeo and Juliet figures came to represent the essential gap, perhaps unbreachable and impenetrable, between man and woman. The security agent and Jackie became a more universal symbol of man and woman to my eyes. More specifically, what struck me was simply that space... that empty, yet physically apparent space which separates each one of us as human beings. Interestingly, what the figures had once represented had now been expanded metaphorically once again. All of these various levels of interpretation allowed the images in front of me to

become more personally significant, more personally meaningful, and they were arrived at through the help of the written word. Writing had allowed the potential meanings of this painting for me to be expanded and made more consciously apparent. This personal art-making experience illustrates how writing allowed me a deeper, more introspective understanding of my painting and how it thereby enhanced my own educational experience in the art studio.

Throughout my career as an artist, I have turned to writing in order to both help solidify and expand my understanding of just what my art-making process has been about. The written word, often by way of the metaphor, has enabled me a more profound insight into not only my art-making and its reference to the immediate art world, but also into its connection to my personal history, as well as to the history of the people, places and events which constitute the society around me.

It is this positive, integral connection between writing and image-making that provides a key assumption underlying this thesis: that through the linking of image and word, through the encouragement of metaphoric thought, and through the creation of personal texts about their work and their lives, students might come to some contextual understanding for the images they produce in the studio (Alejandro,1994)(Eldridge,1990)(Gay,1988)(Olson,1992)(Rico,1989). Whether the written work be in the form of metaphoric associations, short essays, a point-form listing of ideas, or even poetic in nature, the written word may nevertheless aid students in a more conscious understanding of their work and their own creative process inside the art classroom.

Chapter 2

Review of Literature

In this section, I wish to establish through the literature how the image and word operate in tandem by way of the metaphor, and how through metaphoric thought and writing, students in the art studio may discover another way to understand the content underlying their visual imagery.

I will look at some of the authors who have dealt with the perceptual and cognitive aspects of visual and verbal modes of thinking (Arnheim,1966,1969, 1986) (Paivio,1971,1990, 1991) (John-Steiner,1987), in order to explain how both these systems of thought function cooperatively and are of particular importance to the art studio classroom. I will then give particular attention to the role of metaphor as a fundamental 'bridging' component of both of these modes of thought (Arnheim,1969)(Bruner,1962)(Eldridge,1990) (Feinstein, 1982)(Langer,1942,1957)(Ortony,1975)(Perkins, 1981); serving several functions: a) as a gateway to abstract thought, b) as a key element in the transformation and communication of ideas, and c) as a facilitator in the development of more personal, insightful understanding. Finally, I will look at the role of the written word in the art classroom, as a means of completing the shift -from visualization to verbalization processes to the written word- a shift that strengthens a student's understanding of the content underlying their studio art activities (Ernst,1994,1996) (Gay,1988) (Hubbard,1993,1996)(Morgan,1998)

(Murdick;Grinstead,1992) (Olson,1992)(Sinatra,1986).

Connections Between the Visual and Verbal Modes of Thinking

We first encounter speculation about the relationship of the mental image to the word, or the association between visual and verbal mental operations, in early Greek writing. One of the earliest manifestations of this idea was first presented in Plato's "wax tablet" model, wherein human perceptions and thoughts were thought to be impressed onto the mind as images might be upon a blank tablet of wax (Paivio, 1971, p.2). These images would be remembered as long as the image retained its impression upon the surface of the block of wax. Around 500 B.C., the Greek poet Simonides offered to us the idea that, "words are the images of things" (Paivio,1971, p.2). In this view, mental images locked away in the mind as memory could be evoked through stimuli, namely words, with which these memories had once been associated. The associative link between the memory image and its stimulus as word is worth noting. Here the dormant mental image brought forth by the word, was thought to connect with other images in a sort of 'association of ideas', thus becoming thought proper (Paivio,1971, p.2). In this view, a word may conjure up an image from past experience, and through association conjure up further images, ideas, and further thought.

This associative relationship, between mental image and its stimulus word, can be found in a simple everyday personal experience. If I am asked for the directions to my home, depending on my present location, it is unlikely

that I will have memorized an appropriately accurate response. My tendency then, albeit very quickly, is to first visualize my present position in relation to my home, then envision the prospective route... naming each corner, each turn and landmark in my mind, and to finally communicate these directions as best I can. Although the original question as an initial stimulus, as well as my response may be communicated verbally, my ability to accurately respond depends upon the interplay of the visual imagery aroused and brought forth by the word. The landmarks marking the path to my home -recalled as images-seem to stand for something concrete from past experience, and are named using words. Thus, before I can explain the path to my home, it seems I must first mentally re-envision the route.

For many authors all human perception, memory, association, thought and meaning, is rooted in mental imagery, and it is this associative relationship between mental image and word, which had been predominate in Western thought up until the early part of the twentieth century (Paivio,1971). Early in this century however, this view was attacked by some behavioral psychologists who rejected the importance of mental images in terms of thinking, seeing them as simply ghosts -phantoms without functional significance (Paivio,1971, p.3). Through clinical experimentation, these behavioral psychologists concluded that mental images in the form of memory and thought were unreliable and thus suspect due to their inaccuracy and highly subjective nature. Just as a witness to a crime may have trouble identifying the perpetrator -images of the past event having been selectively embellished in one's mind- mental images were believed to be somewhat less than objective. The prevailing idea among these behaviorists was that verbal recollections of remembered events were simply

learned responses which had occurred at the time of the incident, and had been reawakened by cues once part of the original experience. Even if thought was part of these learned responses, the primary process of memory was verbal, a sort of talking to oneself; mental images had very little to say (Paivio,1971, p.3). As Paivio (1971) writes, " This is one of the classical behavioristic arguments-imagery is subjective and inferential, words are objective and manageable" (p.5). Finding words to be far easier to handle than the ephemeral nature of mental images, the behaviorist's laboratory sought an empirical objectivity, one which would seem to be counter-intuitive in regards to personal experience. As the example of supplying directions to one's house demonstrates, verbal learned responses and their successful recollection are unlikely to operate *without* the stimulus of visual images. As Paivio (1971) points out, contrary to these behavioristic theories subsequent researchers found verbal memory to be just as inaccurate (p.6). In fact, whether or not something is accurately recalled has little bearing on the event's significance in terms of its perceived meaning for the individual in question. Two individuals accurately recalling the same event may construct entirely different meanings for the said event. It would seem then, at least in part, that meaning is made individually and subjectively, as a function amongst other things of past experience and not in accordance with any one objective reality. Paivio (1971) writes of the later revivification of the mental image-word relationship, "it is not surprising to find the concept of imagery reappearing essentially in its pristine form but with its respectability enhanced by a behavioristic cloak (p.6). For later behavioral psychologists like B.F.Skinner, visual imagery would be referred to as a conditioned sensation or a conditioned seeing (Paivio,1971, p.6).

For the Gestalt psychologist Rudolf Arnheim (1969), cognition is comprised of "all of the mental operations involved in the receiving, storing and processing of information: *sensory perception*, memory, thinking, learning" (p.13) (italics added). In fact, in advocating the primacy of visualization and mental imagery in the cognitive processes, Arnheim posits that *thinking itself* is mostly a *visual* process. He writes, "I see no way of withholding the name of "thinking" from what goes on in perception. No thought processes seem to exist that cannot be found to operate, at least in principle, in perception. Visual perception is thinking" (1969, p.14).

While underlining the contention that perception is indeed visual thought, Arnheim (1969) wishes to bury the view that perception is somehow a lower order thought process. He contends rather that the cognitive operations called thinking have as a basic component, perception itself. These thought operations consist of: exploration, active selection, simplification, abstraction, analysis and synthesis, correction, comparison, problem solving, and placing in context, to name but a few (1969, p.13). Arnheim sees an intelligence within perception, a perception that is not passive by nature, but active and selective in its design (1969, p.19). Other authors add to this that perception is not separable from judging, nor are acts of imagining separable from the creation of intellectual concepts (Beittel,1973)(John-Steiner,1987)(Steiner,1982). Significantly then, it would seem that *seeing is thinking*. In this light, art students actively engaged in an art-making process in the studio classroom are actively engaged in visual thought. They are, however, engaged in another language system as well.

Allan Paivio (1991) proposes that the productive work of either a creative

writer, scientist, or artist involves the continual interplay of two symbolic systems: one expressed as imagery and the other as language. These two systems are mutually supportive; each system contributing independent informational content and mental skills that permit cooperative attacks on the problems we encounter on a daily basis. The two systems (visual and verbal), while qualitatively different, are advantageous to different components of the same task by "providing two ways of remembering, two paths to an idea, rather than one " (1991, p.268). Most importantly, neither the image nor the word normally act as independent processes, but instead are in constant interaction (Paivio,1971, p.32). In the art studio classroom, the drawing student grappling with the necessity of portraying a three-dimensional still-life onto the surface of a page, is engaged in a constant verbal interplay with the visual questioning stimulated by their perceptions. The student seems to ask, "That smooth, rounded edge of the apple appears to overlap, to be in front of, the rough, ceramic bowl... now how can I show that?". The student perceives the scene at hand, perceives the relationship of objects named: apple and bowl, and embarks upon the task of its reproduction through the act of drawing. The visual stimuli of the apple and bowl, their respective shapes, their spatial relationships, as well as the student's verbal response -the naming of the objects- work in tandem.

For some authors such as Arnheim (1969), words are of secondary importance, ranking behind perception in relation to the thought process -the role of language tending to be an "essentially conservative and stabilizing" factor (p.244). In his book Visual Thinking , Arnheim (1969) posits the existence of two types of perceptual thinking: an intuitive and an intellectual

cognition. Roughly speaking, Arnheim views intuitive cognition as being the perception of the whole image, resulting from the interaction of its constituent components. The perception of shape, size, color, discernment of spatial relationships, and even productive problem solving is accomplished through this intuitive cognition. Intellectual cognition on the other hand, operates through the identification of the various components which make up the perceived image. An observer uses intellectual cognition to describe each shape, ascertain each color, and essentially "prepare a list of all of these elements" (1969, p.234). For Arnheim, the former cognitive processes operate within a continuous, holistic, perceptual field; whereas the latter cognitive processes operate in a linear succession. This contributes to the notions put forth by Suzanne Langer (1942)(1957) concerning the linearity of language, who imaginatively describes language as words or concepts strung together as clothes upon a line. This view of language's linearity is also supported by Paivio (1991) who writes: "visual imagery organizes our memory information in a synchronous fashion whereas the linguistic code stores information sequentially" (p.268). For Arnheim (1969), this linear limitation constrains the role of language to one which merely assists the mind in preserving intellectual concepts attained through more intuitive processes. The main function of language then, for Arnheim, remains one which is subservient to the overall dominance of mental images. Despite Arnheim's clear nod to the strength of the visual mode of knowing, he does acknowledge the integral relation between image and word: "One cannot take pictures or pieces of pictures and put them together to produce new statements as easily as one can combine words. Pictorial montages show their seams whereas the images produced by

words fuse into unified wholes... the shapes of verbal language are tooled for the mass evocation of images" (1969, p.253).

The cooperative relationship between visual and verbal modes of thought is also posited by the author Vera John-Steiner (1987), though for John-Steiner, the verbal mode of thinking plays a much more integrative role. In her work , Notebooks of the Mind (1987), John-Steiner explores the creativity of thinking as it exists in the lives of visual artists, musicians, writers and scientists. By means of extensive interviews with these artists and scientists, John-Steiner examines how truly creative thought incorporates this interplay between both the visual and the verbal language systems. While drawing much from Rudolf Arnheim's views on the primacy of visualization, John-Steiner also affords a much more critical role to verbalization in the thought process. Building on the ideas of Hannah Arendt, the author contrasts Arnheim's theories with the notion of whether indeed any speechless thought can exist at all (1987, p.211). Instead, John-Steiner maintains that the creative thinker is continually operating between both visual and verbal fields, moving from perception to verbalization (primarily as inner speech) and back to perception or visualization, and that in essence, these modes of thought are inseparable. It is worth noting that John-Steiner differentiates inner speech as a dynamic, inherently associative and creative force, with that of external language used for communication. She writes, "language has multiple functions and forms, some of which are more suited for discovery and others more suited for the construction and maintenance of shared experiences, beliefs, and knowledge" (1987, p.139). For John-Steiner, inner speech is simply that -an internal dialogue of shifting associations and meanings (1987, p.34) and might be seen

in the art studio in terms of a student's self-querying about the colour, shape, texture, and spatial relationship of the apple and the bowl; while according to John-Steiner, an external language used for communication may be more aptly characterized in terms of Arnheim's view of its 'conservative and stabilizing' qualities (1987, p.139).

What is crucial for John-Steiner is this process of synthesis between visual and verbal fields -the key component of creative thought. In John-Steiner's view, which in essence fuses both Arnheim's and Arendt's theories, words lend to thinking the structural help required while operating in a visual field, allowing artists and scientists alike the ability to pull together images and ideas, "facts and fragments, which have previously been apprehended by them as separated by time and space, into an integrated work" (1987, p.77).

Visual and Verbal Modes of Thinking: connections in the classroom

The inter-dependence of visual and verbal modes of thought is especially evident in creative sites such as the art classroom. In Studio Art: Praxis,Symbol,Presence (1990), Marilyn Zurmuehlen describes the art experience perhaps at its most elemental state.

As a young child first encounters an art activity or art experience, they do so free of the weight of expectations brought to the same activity by adults. Nevertheless, this first creative urge -this initial step towards the art experience- remains with many of us throughout our creative adult lives. In a chapter entitled, 'First the Making, then the Naming', Zurmuehlen (1990) describes a

situation where a young child unhesitatingly begins a painting, smearing a painted orange stripe across the page. The child subsequently questioned about the results by an onlooking parent, responds that it is: "orange". "Yes orange, but an orange what?", the parent continues. "It's an orange wall", comes the response (p.1). Zurmuehlen maintains that for the child, " a) Marks represent something other than their physical appearance. b) What they represent is intended by their maker. c) What is shared between maker and viewer is this intended representation. *d) Verbal language elucidates the meaning of what is represented*" (1990, p.1)(italics added). In fact, according to the Russian psychologist Vygotsky (1962) not only does this verbal language clarify the meaning of what is drawn, but for a young child, drawing itself is a graphic representation of speech (p.112). For Vygotsky the child "unburdens his repository of memory in drawing" (p.112), and because the young child produces art in a decidedly symbolic form rather than naturalistic representations sought after by adult learners, Vygotsky (1978) maintains that the child uses drawing as a natural extension of his / her mode of speech- in a sense to tell a story.

In the case of the adult student this verbalization in the art studio- this telling of a story- remains everpresent. The adult learner in the art classroom situation is in constant dialogue with the visual problem at hand. Their story might be seen as one of process and involves the considerations made from the initial mark-making, through to the time spent looking and evaluating the previous thirty minutes of work. In this situation we see the art student verbally 'walking' themself through the process at hand, asking questions along the way. How does this colour feel next to that one? Does this line look right?

Should it be longer? Is this object really in front of this one? These significant questions, whether as inner speech (Olson, 1992)(John-Steiner,1987) (Vygotsky,1962) or elicited externally by teachers and fellow students, help to clarify the student's intentions, and to focus the mind on the problem at hand.

Other authors underline the inter-dependence between the visual and verbal languages in terms of creative problem solving -feeling that creativity itself may involve an ability to transform, or juxtapose one form of experience (i.e. a mathematical problem), into another form (i.e. a visual image), and then translate the idea into a communicable form, be it drawing, music, or words (Eldridge,1990) (Korzenik,1977)(Perkins,1981) (Root Bernstein,1985) (Schön,1983,1985).

In The Reflective Practitioner, the author Donald Schön (1983) examines the thought processes involved in creative problem solving, focusing primarily on architecture students and their methods of grappling with design problems. In describing how student designers work, Schön writes of the drawing and talking which go on in the design studio as parallel ways of designing -both these activities essentially being part of the language of designing itself (1983, p.80). While Schön (1983) deals with how designers work in the studio, I feel his words, echoing Zurmuehlen, could equally be applied to the studio art classroom: "The designer makes his moves in a language of designing which combines drawing and speaking, he also uses words to name elements of design, to describe the consequences and implications of his moves and to reappreciate the situation" (1983, p.95).

In the same manner, the student active in the art classroom moves back and forth between visual thought and the structural help provided by words.

Whether this verbalization process takes the form of an inner speech to one's self- what Vygotsky has called " a dynamic, shifting, unstable thing" as the student confronts the visual problem at hand (1978, p. 89), or it takes the form of external speech active in a studio critique between fellow students and the teacher, the student's experience in the art studio involves a continual interplay between these visual and verbal languages.

The Role of Metaphor in Visual and Verbal Experience

In this next section, I will examine the role of the metaphor as a fundamental component of both the visual and verbal modes of thinking, one which enables abstract thought, the transformation of ideas, and facilitates the communication of these ideas (Arnheim,1966)(Eldridge, 1990)(Feinstein, 1982)(Langer,1957)(Ortony, 1975)(Paivio,1971,1991). My purpose in this examination is with an eye to encouraging metaphoric thought as a means of fostering both visual and verbal modes of thinking within a drawing curriculum -this in order to help provide students with more insightful understanding of the work they produce in the drawing studio. In so doing, students' experiences within the drawing studio may go beyond the often formalist art-as-problem-solving activities focused solely on technique, which were described in the opening chapter, and move towards an understanding of the drawing activity as a meaningful expressive practice.

Suzanne Langer (1957), in Problems of Art, provides a useful definition

for metaphor. She writes, "A metaphor is not language, it is an idea expressed by language, an idea that in its turn functions as a symbol to express some thing" (p.23). Langer posits that unlike verbal language, the metaphor is not discursive or linear by nature, nor does it make a specific statement about the idea it conveys. Rather, the metaphor forces us to imaginatively reconceive the very idea itself . "Language has words and phrases only for familiar notions" (1957, p.24), therefore any new experiences must inevitably be mediated by the wordless insight provided by metaphorical symbols. For Langer (1957), the very abstractions of language which reign over our everyday speech and much of our thought, are due to the use of metaphor.

This view is similarly developed by Rudolf Arnheim. Arnheim (1969) theorizes that the phrases and figures of speech commonly used in everyday language have at their roots metaphorical symbols which have helped structure the language itself. He writes, "The notion of depth of thought is derived from physical depth; what is more, depth is not merely a convenient metaphor to describe the mental phenomenon but the only possible way of even conceiving of that notion" (1969, p.232). Arnheim (1969) maintains that the figurative qualities of all theoretical speech are due to the visual nature of metaphorical thought . As evidenced by, whether one's mind 'wanders', or whether we are 'in over our heads'; whether our views are 'far apart', or whether we 'come to the point', the pervasiveness of the metaphor, and the mental imagery it evokes in our language, is clear.

Arnheim (1966) further confirms the metaphor's important role in the mind's linking of the perceptual (sensory observation) with the intellectual, as well as in the creation of meaning in our cognitive processes. In his view, the

metaphor connects two or more heterogeneous segments of reality, by allowing discordant aspects to retreat and common ones to come forth, distilling from "reality-situations the deeper, underlying aspects of life" (1966, p.279). Arnheim maintains that, "metaphors could not be so elementary and widespread a property of languages...if...looking into a gorge did not inevitably involve the universal qualities of depth, darkness, and penetration -qualities that permit us to discuss abstractions in words" (1966, p.243).

Allan Paivio (1971) confirms these ideas, while underlining the proficiency of metaphoric imagery as a mediator of verbal associations. Paivio (1971) contends that, "The ubiquity of metaphor in natural language suggests that the discovery of images as effective mediators of associative learning, even with abstract words, may not be so strange or exceptional as was initially assumed by the research concerned with the problem" (p.475). In fact, we may summize that metaphorical expression lies at the root of both visual and verbal modes of thinking, and is according to Langer (1957), at the basis for perhaps our greatest mental achievement: abstract thought.

In both systems, metaphors enable us to connect things perceived concretely (visually) with those arrived at intellectually. In short, the metaphorical expression possible in both ways of knowing, allows us to go beyond sensory observation towards the twist of insight achieved by the connecting of objects, ideas, and events not immediately observable. The associative and connotative value of metaphoric thought allows for these new connections -for new meanings- to be established. According to Ortony (1975), metaphor precipitates this through three main features: the ability to express the inexpressible, the compactness of the metaphor itself, and its inherent

vividness.

For Ortony (1975), metaphor allows for the expression of many aspects of daily experience which would otherwise be unnameable. It is the inability of literal language to effectively convey the sense of a situation, which Ortony sees as the metaphor's advantage. Take the phrase: "the thought slipped my mind like a cat in the night", or perhaps more simply: "the thought evaded me", or "the thought went away". Ortony (1975) writes, "Thoughts only come and go and evade in a metaphorical sense -we have no literal language for talking about what thoughts do...the continuous nature of experience precludes the possibility of having distinctions in word meanings capable of capturing every conceivable detail one might wish to convey" (p.49). Where literal language cannot concisely express, metaphorical expression satisfies this need.

The compactness of metaphor according to Ortony (1975), allows for a concise representation of the generalized features or concepts of one subject or situation to be transferred to another. As with Arnheim's (1966) example of looking into the darkness of a gorge, the qualities inherent in the chasm may be transferred to an individual's experiencing of: a very long tunnel, the gaping maw of a beast, or even the uncertainty and trepidation involving a future event. The power of the metaphor's compactness lies in its paradoxically expansive nature in relation to possible interpretations or meanings. As Ortony (1975) explains, the compactness of the metaphor precludes the filling in of details of any given situation, which is done more slowly and selectively, through emphasis by the one who is perceiving. In this situation, the individual and their selective 'connecting-of-the-dots' in relation to a given experience, thereby creates more personal, unique, and insightful meaning. Paradoxically then,

metaphorical expression, compactly and concisely expresses in a *generalized* way, permitting individual interpretation of experience, and thus unique meaning for the individual. In this light, metaphorical expression may be seen as both universal and individual.

The vividness of metaphor, arises out of its ability to evoke sensory and visual images which more closely approximate the memory of perceived experience itself (Feinstein, 1982). Metaphor, because it is not linked to literal language or literal meaning, enables one's sensory, emotional, and cognitive systems to be engaged, "allowing the most relevant experiential information to be transferred not only in rich and vivid detail, but in toto." (Feinstein, 1982, p.49)

Hermine Feinstein (1982) builds on the ideas of Ortony (1975, 1979) and specifically of Langer (1957) concerning the ability of metaphor to convey experiential information. The author claims that "metaphor, an essential process and product of thought, is central to the construction of meaning, *and that art, as a truly developed product of thought, is metaphor*" (Feinstein, 1982, p.48)(italics added). For Feinstein, art-as-metaphor momentarily freezes fleeting experiential information, allowing for its contemplation and re-contemplation and making it available for the construction of meaning. The author maintains that in both visual and verbal modes of thinking the metaphor "is a potent stimulus for generating associations and tapping new, different, or deeper levels of meaning" (1982, p.50). For example, the viewer who is able to read an art work both literally and metaphorically has more avenues open to them for understanding the significance of the said art work. Feinstein (1982) states, "the more meaning we can construct from transactions with the environment, the broader our reality base" (p.51). Metaphorical expression

permits this expansion.

Thus, for the artist and art student alike the linking of the immediate observable world with the objects, people, and events of one's life -be they of past, present, or imagined future- is crucial in terms of elevating the art-making experience above simply the mastery of technical exercises. The associative connections created by metaphorical thought allows for these new, different, and deeper levels of personal meaning to be created. Indeed, our desire to discern some of the deeper underlying aspects of life may be fundamental, and metaphorical expression may be its principle pathway.

D.N. Perkins (1981) suggests that metaphor arises out of both pattern recognition and contrary recognition (what a thing is not), and that it is not an act of perception alone. For Perkins, metaphor is an act of mind and eye and a deliberate effort in "coming to see as. " (1981, p.84) Thus, the attempt to see a person's profile in a mountain's rugged terrain, can be an insightful step towards the creative act. Or, as in the reframing of a design problem, metaphorical thought can provide the insightful leap which leads to discovery and invention. In this light, the metaphor is a purposeful attempt at linking both similar and dissimilar things.

The art student, for example, in attempting to resolve a drawing of a doorway, may come to think of the doorway as more than a simple physical construct. The doorway may come to be seen symbolically, as a passageway, an entry point, or perhaps as an exit. Recalling a similar doorway from their past, the student through metaphoric thought, may begin to see the doorway on a different intellectual level. The connotational power of the metaphor may thus allow for the significance of the physical representation of the doorway to

change and / or to expand. Symbolically, the doorway may represent a passageway for new experiences lived, or a period of life left behind. What is important is that through the metaphor the significance of the doorway, and thus the significance of the *drawing process* as an art activity, is expanded. In this sense, metaphorical expression is a driving force behind creativity, a force that Arnheim identifies as uncovering the deeper underlying aspects of life, "and for whose sake alone art creates images of reality" (Arnheim,1966, p.279).

In terms of the communication of ideas, the metaphor in the art-making process is equally important. In A Search for Metaphor: Steps Toward a Philosophy of Rhetoric for Art Education , Nixon Borah (1980) writes that the creation of an imagined ideal audience is the "prerequisite for anything becoming art" (p.123). Borah (1980) writes that while composing in either the visual or verbal languages, the creator uses the productive insight provided by the metaphor, to meet the demands of, and then persuade an imagined ideal, silent partner -be it a fellow student, teacher, (or one might assume the self)- to enter the work and thus one's thoughts. The communication of one's idea, one's story, is thus established through the shared insight provided by the metaphor's evocation of universally perceived qualities (Arnheim,1966) (Cohen,1979)(Eldridge,1990).

For Ted Cohen (1979), the communicative aspect of metaphorical thought in either visual or verbal languages, involves a sort of transaction between the maker and the audience. In this transaction, the creator of the metaphor issues a kind of concealed invitation while the receiver expends a special effort to decipher the message, engaging himself in order to penetrate and explore the message, attempting to grasp its non-literal significance (1979,

p.6). Thus for Cohen, this transaction becomes an intimate dance between the maker and receiver of the message, a desire for communication which becomes "something more than a routine act of understanding" (1979, p.7). The transaction is a deliberate one and acknowledges the existence of a community through a shared understanding, as the maker and appreciator of the metaphor are drawn closer together (1979, p.6).

Richard Shiff (1979) affirms this idea stating that "the metaphoric bridge itself may be considered the act of genius, and the entry into new areas of knowledge its consequence", as the truth of an individual's experience passes to an existing public world (1979, p.106). For Shiff, the experience of any individual must be connected with his outside world or society, and the power of the metaphor enables this experiential information to be communicated.

Artists construct form in whatever medium so as to create meaning not only for themselves but for others as well. (Borah,1980) As Diana Korzenik (1977) writes, the adult artist in their work "inevitably rejoins and maintains contact with his audience by internally anticipating his effect on a viewer, by seeking a way to salvage his private meanings so that they can become accessible to others" (1977, p.205). Whether the image soothes or provokes the audience, it has its power because it operates in a community capable of entering into the world of its shared and open-ended meanings. There may be no one right interpretation or meaning to any given artist's work. What seems crucial though, as Feinstein (1982) points out , is " the power of metaphor in its potential to further our understanding of the meaning of experience, which in turn defines reality. In art and language, metaphor forces us to look beyond the literal, to generate associations and go to new, different, or deeper levels of

meaning " (1982, p.45). I believe that it is these individual, yet shared levels of meaning, which can reinvigorate the art studio classroom fallen into the routine of technical, problem-solving exercises.

The Use of Metaphorical Thinking in the Classroom

In educational settings, metaphoric thought has been used to help make learning more meaningful. Carol Jeffers (1996), in an art methods class for pre-service and in-service elementary teachers, describes using the metaphorical power of art works in an attempt to both gain and deepen insights into the art teachers' own lives, their views on art, and as well as their own world views (1996, p.6). In asking teachers to choose a work of art which was meaningful to them, Jeffers (1996) encourages a metaphoric understanding of the artwork, and then advocates the development of a metaphoric relationship between each teacher and the artwork they have chosen. By looking closely at this developing relationship, Jeffers (1996) noted that teachers not only transferred attributes or particularities of their lives and experiences to the art works, but also transferred attributes of the art works to their own lives and experiences. The teachers "entered into reciprocal, reflexive relationships with their metaphors (art works)" (p.11), through which they talked of more insightful understanding and different perspectives of both the art works, as well as their lived experience. For Jeffers, "these teachers became participants in living relationships with the works", allowing for a deeper understanding of the artwork on both a social and personal level (p.11).

In "Daedalus and Icarus Within:The Literature/ Art/ Writing Connection ",

Gabriele Lusser Rico (1989) uses metaphorical thinking as part of a teaching strategy to connect the Arts. In her undergraduate humanities courses, Rico allows students to connect literature, history, philosophy, science and the arts through the use of dominant metaphors, as well as visual and verbal 'thought-logs' applied to the era and subject under study. For example: in dealing with Egyptian art in an art history class, an exercise involving the metaphoric interpretation of 'line' might be used. Line, in relation to the period under study may refer to the stiff or static representations in Egyptian art, or may represent the hierarchy of its society, or perhaps even the angularity of its pyramids. The 'thought-logs' or metaphoric clusters, integrate both visual and verbal language systems, that stimulate pattern recognition, create new intuitive associations, and allow students the facility to generate " responses they (students) would not otherwise generate" (1989, p.18). These exercises foster a way for students to " learn contextually...enabling learners to pattern their knowing, to make it personally meaningful, to render it useful and retrievable" (1989, p.16).

This kind of deliberate use of the metaphor to yoke together both similar and dissimilar things in anticipation of greater understanding and communication, is of considerable relevance to the art studio. If we see the metaphor as: a facilitator in the generation of meaning in both the visual and verbal modes of thinking (Arnheim,1966)(Langer,1957); as a facilitator of creative pathways to understanding and learning (Feinstein,1982) (Jeffers,1996) (Ortony,1975) (Rico,1989); and, as others have pointed out, a provider of paths to creative invention through the communication of one's visual and verbal stories (Borah,1980) (Cohen,1979) (Perkins,1981) (Samples,1976), then through its cultivation as a natural bridge between both

modes of thought may provide the art student with a step towards a more complete personal understanding of their own creativity in the art classroom.

Suzanne Langer (1942) has written that, "if ritual (experience) is the cradle of language, metaphor is the law of its life. It is the force that is essentially relational, intellectual, forever showing up new abstractable forms in reality..." (p.141). Metaphorical expression lying in the process of *coming to see as* (Perkins,1981), can permit students in the art studio a more conscious understanding of their art-making, by allowing their images and art-making activities to be seen as connected to their lives and interests, rather than being simply the mastery of technical exercises. As Hermine Feinstein (1982) eloquently states, "The power of metaphor lies in its potential to further our understanding of the meaning of experience, which in turn defines reality. In art and language, metaphor urges us to look beyond the literal, to generate associations and to tap new, different, or deeper levels of meaning. The metaphoric process reorganizes and vivifies; it paradoxically condenses and expands; it synthesizes often disparate meanings" (p.52).

As in my previous example of the Romeo and Juliet painting (fig.1), the idiosyncratic meaning of this artwork for myself as an artist, was enlarged significantly once a purposeful attempt was made to look beyond the literalness of its initial subject matter. My belief, based on my experiences as an artist and art educator, is that one way in which a student may be made more conscious of this more expansive understanding of the artistic process, is through the encouragement of metaphorical expression. An effective means of achieving a deeper understanding of this kind of expression is through the use of exercises involving the written word.

The Written Word and the Metaphor

Authors suggest that written literacy relies upon the learning acquired through the two prior codings of visualization and verbalization (Ong,1982) (Sinatra,1986) (Vygotsky,1962), and that reading and writing, seen as the first basic skills in our society, occur early in the school framework and thus provide the basis for all subsequent book learning (Sinatra,1986). As a result, *reading and writing*, in conjunction with *speaking and listening*, provide the bulk of the basic skills deemed necessary in most of our educative process (Olson,1992) (Sinatra,1986). (Certainly many of us remember receiving a report card from primary school with a letter grade indicating success or problems in any of the four aforementioned categories!) It seems odd then that the teaching of art in an educational setting such as a college or university would, to such a great extent, eschew the written word's potential for aiding in a greater understanding of the personal and societal context in which the art is produced. The reason, in part, is that art specialists in the schools, colleges and universities have been for the most part, educated as artist-then-teachers. As such, an educational model based on the professional artist and the studio experience has prevailed. Ideas about the understanding of creativity, cultural heritage, and the interpretation of art works specifically in the studio have, to an extent, given way to the teaching of art-making techniques (Efland,1988)(Olson,1992).

For Richard Sinatra (1986) visual literacy as well as the verbal literacies, both *oral* and written, are really part of one communicative loop. In a similar way to Arnheim (1966,1969) and Langer (1957), Sinatra contends that

language is the natural extension of symbolic thought -a thought which forms the mental schemata of a visually literate person. In fact, Sinatra(1986) refers to the interplay between the visual and verbal language systems as a sort of two-way traffic. He writes: "visual literacy can sharpen the language used in the oral and written literacies while the verbal literacies can interface directly with how we perceive visual experience" (1986, p.18). This direct linking of writing to the visualization and verbalization processes is significant for this study, for it is not the individual particular written words themselves which are important, but rather the act of writing itself.

Neil Postman (1985) in examining the importance of writing, comments that the written word is not merely an echo of a speaking voice, but is rather another kind of voice altogether. Postman maintains that through the momentary freezing of the ephemeral qualities of verbal speech, writing allows for a revision, a rethinking, a reevaluation of one's ideas allowing one " to see one's utterances" rather than only hear them (1985, p.13). For Walter Ong (1982), the act of writing itself has transformed human consciousness, forcing onto it a more deliberate structure, a structure which demands precision because it allows the written text to live autonomously from its author, in a way that verbal utterances with their inherent intonations and gestures do not . For Ong (1982), the act of writing requires a certain reflective selectivity- a selection on the part of the writer which makes it possible to eliminate inconsistencies, and which necessarily sharpens analysis- something which an orally managed language is not noted for (pg.104). For Max Van Manen (1997) the act of writing by its very nature encourages a certain reflection and circumspection. Van Manen feels that writing at once distances us from what we know yet

paradoxically unites us more closely with this prior knowledge. He writes that writing "decontextualizes thought from practice and yet returns us to praxis", it (writing) "abstracts our experience of the world, yet it also concretizes our understanding" (1997,pg.128). Thus for both Ong (1982) and Van Manen (1997), the act of writing helps to shape our thought imposing on it a structure which necessitates reflective discrimination and precision.

In terms of this study, for the art student writing in the studio, *precision* in writing, at least the sense of clear, concise communication to outside readers, is not required. What is important however, is that the writing be considered as a representation of a student's utterance, and that it be an exercise in an "exquisite circumspection" (Ong,1982,p.104), an exercise which may draw forth further visual images, and fuel further words. In effect, the writing exercises should aid in the expansion of thought. In discussing the written word's role in stimulating memory and thus visual imagery, the author and literary critic Northrup Frye explains that, " the written word is far more powerful than simply a reminder; it recreates the past in the present, and gives us not the familiar remembered thing, but the glittering intensity of the summoned-up hallucination" (1982,p.227). This more imagery-laden view of the written word is indeed relevant with respect to what transpires when a student writes in the art studio. The act of writing, by fixing the student's utterances, their visual and verbal design considerations, and their recollections, facilitates in the generation of further visual and verbal thinking about the drawing process. By helping to unite visual and verbal thinking, the act of writing aids in the analysis, reevaluation and subsequent transformation and metaphorical expansion of these ideas. As in Sinatra's (1986) idea of the two-way traffic

which exists between visual and verbal languages, the act of writing can inform how we perceive visual experience.

Other authors confirm that the process of writing can allow for the connotational power of words to create new meaning, new images in the mind -images which in turn bring forth more words, more connotations. The author David Lodge (1990) has spoken of this close relationship of image to word. He writes: " In literary narrative, every seeing is a saying -what is visually perceived is mediated to us through the non-visual (i.e. non-iconic) medium of words" (pg.147). Lodge (1990) suggests that underlying the tightly bound association between image and word, is an omnipresent form of troping or figurative expression, a metaphor if you will. A trope is a figurative expression which involves a non-logical way of referring to something, which at once may defamiliarize it, yet which at the same time vivifies and emotionally charges the subject beyond a literal interpretation (1990, p.150). Historically, metaphor metonymy, and synedoche, have been considered master tropes. Lodge explains how the use of tropes revitalizes and figuratively transforms literal language. A sentence such as 'Ships crossed the sea', might also be phrased as, ' Keels ploughed the deep' (1990, p.151). Here a metaphor has been created by unifying two dissimilar, yet paradoxically similar things. The ships' progression through the water has been purposively seen as a plough's movement through the earth. The substitution of *keels* for *ships* is a synecdoche -a part of a thing standing for its whole; while the substitution of *deep* for *sea* is a metonym - an attribute standing for the thing itself (1990,p.151). Lodge (1990) contends that language is enriched through the use of the metaphor, by its generation of additional meaning through a process

of connotation, and by its interaction with other tropes. While Lodge trumpets the importance of words, it is hard not to acknowledge their roots in what Arnheim (1969) might call the primacy of visualization. The imagistic transformation of 'ships crossed the sea' to 'keels ploughed the deep' would seem to be rather hollow, if not impossible, without some semblance of an accompanying visual experience on which to base it. What is crucial for our purposes is that image and word work together and are in fact probably inseparable (John-Steiner,1987). As in the idea of the ancient Simonides cited earlier, "words are the images of things" (Paivio,1971, p.2) -thusly image provokes word, word invokes image, and so forth. For Lodge (1990) however, the power of language lies in its multilayered relational and connotational qualities. He writes, "The cinema, and other visual arts, can do more immediate justice to the visible world, but cannot match the power of language to mean" (p.153). Thus it is in the power residing in the written word's ability to help capture our visual experiences, our utterances, our metaphorical meanings - allowing for their reconsideration and expansion- that its importance to the art studio classroom is surely evident.

Putting It Together: the written word and metaphor in the classroom

Recently some authors have dealt with the integration of the written word within an art classroom, as a means of making artists better, more confident writers. For Sarah Eldridge (1990), a professor of English at the university level, the goal was to examine the similar creative processes which visual

artists and writers employ in their respective crafts through a writing course designed for artists. These procedural similarities -in terms of the observation, abstraction, and transformation of ideas- were found to be consistently the result of the linkages between visual and verbal language systems. In her study, Eldridge (1990) attempted to show how visual arts students, in recognizing and respecting the structural similarities between the creative writing and studio art-making processes, might see themselves as more confident, and thus better writers.

Ann Alejandro (1994) has done similar fieldwork with grade-school students. Alejandro thoroughly integrates the use of visual arts 'prompts' into her reading and writing classes. These prompts, consisting of reproductions of paintings and sculptures, help to stimulate a more poetic and imaginative use of language in students' creative writing. Without necessarily a thorough understanding of literary theory -the definition of metaphor and other tropes, her students vividly interspersed their writing with creative metaphor. Alejandro (1994) writes," That immersion in art can parallel and enhance immersion in text: when we read and write, we use the same critical thinking and decision-making brain power that we use when we paint or respond to paintings (p.13).

Rico's (1989) work with metaphoric thought-logs (previously cited), actively engages students in a visual-verbal-written metaphoric play, allowing students to become active participants as creators of meaning in their educative process. These written thought-logs have been heralded by other authors as invaluable tools, allowing students a more personal engagement in their learning, simultaneously helping to focus and expand their thoughts on a given problem (Commander,Smith, 1996) (Gay, 1988).

Other authors have more closely examined the use of the written word in a studio art setting with an eye to enhancing the more visually-dominant learning experience which exists in the art classroom. Janet Olson (1992), in her book: Envisioning Writing: Toward an Integration of Drawing and Writing, sets out to show how the linking of visual composing and verbal composing may be extremely beneficial to both art educator and language arts teacher alike. Olson contends, as does Eldridge (1990), that the visual and verbal modes of expression have a great many characteristics in common and their integration into the school curriculum in general, in terms of drawing and writing, greatly enhances the learning possibilities of all students. Within a grade school setting, Olson (1992) puts forth a curriculum which consciously links visual and verbal processes through activities called 'narrative-drawing' and 'envisioned-writing'. Olson contends that there are two types of learners: visual learners and verbal learners. While the verbal learner is for the most part better served by the language-oriented educational system around them, the visual learner's potential is often ignored. Olson sees the need for a more integrated curriculum which would be beneficial to both types of learners. She writes, "Language need not and should not be separated from its initial visual component (1992, p.6). The author concedes that in reality, children are both visual and verbal learners to varying degrees, and that "pictures provide additional information to words for the the visual learner, and words provide additional information to pictures for the verbal learner. One informs the other" (1992, p.51).

While Olson (1992) deals primarily with grade school children, this observation certainly can be applied to the adult learner. Pamela Gay (1988)

has written about the use of writing in the art studio as a means of getting students to think more about the creative process and products of a painting course as well as their own artistic development. As a writing teacher, Gay (1988) acted as a "teaching participant" (p.35) with a group of first year undergraduate painting students. In this painting course, Gay introduced a series of writing exercises designed to complement the commonly more visually-dominant studio curriculum. These exercises were designed to stimulate creativity through the associative qualities of the written word. Thought-logs (Gay,1988)(Rico,1993)(Commander; Smith,1996), and 'critique guides' used as reflective thought-prompts allowed students to examine their creative visual art compositions in a more in-depth and personally self-reflective way (Gay,1988). According to Gay, "students did not see writing as an intrusion but as a means for helping them develop as artists" (p. 49). Perhaps most significantly, Gay's students seemed to make different, deeper levels of connections between what they were producing in the studio, and its personal significance for them. Gay (1988) concludes, "they were using writing as a way to carry on a dialogue, as a way of making meanings for themselves and communicating to other interested artists" (p.49).

According to the authors Murdick and Grinstead (1992), despite the popularity of recent trends in using writing across the curriculum, very little work has been done on writing's use in studio art classes. These authors have proposed the use of dialogue journals as a way to integrate writing assignments into art classes at the college level. The students' use of these journals give both student and teacher a means of reflecting upon technical difficulties, as well as a more profound "access to the student's mind", one which only a

journal may provide (1992, p.61). For Murdick and Grinstead: "Our growing belief (is) that journals contribute to an effective intellectualizing about the process of drawing" (1992, p.60).

Recently teacher-researchers Karen Ernst (1994,1996) and Ruth Hubbard (1993,1996) have written about their experiences of integrating writing in art classrooms for school-age children. Their findings were that writing in the art classroom naturally facilitates the working together of visual and verbal languages resulting in students' thinking more creatively; creating fuller, more insightful meaning for themselves. Bates and Shohet (1993) have recently questioned whether a narrative written component to the art classroom might provide a balance to the more formalistic approaches typically encountered in the modern art studio classroom.

At the root of all of these classroom endeavors was the realization of the importance of the written word in adding another dimension to the creative experience in the art classroom. The written word in the art studio does aid in the conscious realization and expansion of students' own narratives, and in the construction of personal meaning (Bates;Shohet,1993) (Ernst,1994,1996) (Gay,1988)(Hubbard,1996,1993)(Morgan,1998)(Murdick;Grinstead,1992) (Olson,1992)(Rico,1993) (Weigl,1980).

This fact is especially relevant when one considers that the teaching of art occurs within the broader context of a general educational institution. Janet Olson (1992) writes, "Art educators need to broaden their perspective to include a genuine concern for the total education of the visual learner. If language arts has been guilty of overemphasizing words as a method of instruction, the visual arts have been guilty of not emphasizing words enough"

(p.2). Invoking the ideas of Edmund Feldman, Olson continues, "In order to cope with the world, you have to be able to translate from one language to another -from or to a visual language, a kinetic language, an aural language. You have to be able to translate what you see into what you say and do" (1992, p.2).

Summation and a Teaching Experience

It is clear that students learning to draw in the art classroom are actively engaged in the use of both visual and verbal modes of thinking. Whether they are grappling with the difficulties involved in the learning of new drawing techniques, or in the conceptualization involved in different observational strategies, students are continuously 'walking themselves' verbally through the difficult drawing tasks at hand (Schön,1985) (Zurmuehlen,1990). Significantly, for students in the art studio, both the visual and verbal modes of thinking, while maintaining distinct characteristics, have been posited to work *in tandem* in the production of truly integrative thought (Arnheim,1969)(Bruner,1986)(John-Steiner,1987)(Langer,1957) (Paivio,1991).

Metaphor has been shown to be a fundamental component of both the visual and verbal modes of thinking. Acting as an intrinsic bridge between both systems of thought, metaphor permits us to link perceived experience with abstract or intellectual concepts, and facilitates in the comprehension of this thought as meaning (Arnheim,1969)(Bruner,1986)(Feinstein,1982)(John-Steiner,1987)(Langer,1957)(Ortony, 1975)(Paivio,1991). In the art classroom,

metaphor aids in the creative transformation of ideas, and the comprehension and communication of these ideas to either the art makers themselves or to an anticipated audience (Borah,1980) (Cohen,1979)(Korzenik,1977)(Perkins, 1981)(Shiff,1979). As such, the encouragement of this metaphorical bridge between visual and verbal modes of thinking in the art classroom, can be very beneficial in terms of permitting students a more complete understanding of the material under study (Rico,1989).

The written word has also been shown to aid in enhancing the learning environment of the art classroom. Writing, seen as an extension of the visual and verbal modes of thinking, allows for a temporary 'freezing' of our ideas allowing for their intellectual reevaluation (Ong,1982)(Postman,1985) (Sinatra,1986)(Van Manen,1997)(Weigl,1980). Thus, students using writing in the art classroom, have a means of reflecting both about their experiences, about their creative process, and the art work that they produce (Bates;Shohet,1993)(Ernst,1994,1996)(Gay,1988)(Hubbard,1996,1993) (Morgan,1998)(Murdick;Grinstead,1992)(Olson,1992).

Based on this literature, as well as my own experience as an artist and art educator, it is my belief that a teaching approach in the art classroom which attempts to consciously unite both the visual and verbal modes of thought, through the encouragement of metaphorical thinking and writing, can only be beneficial. In so doing, we enhance a student's understanding of both the art work they produce, as well as their experience of the creative process of art-making itself (Bates;Shohet;1993)(Eldridge,1990)(Ernst,1994,1996)(Gay,1988) (Hubbard,1996,1993) (Morgan,1998)(Murdick;Grinstead,1992)(Olson,1992).

As an art educator I have taught a college/ university level introductory

drawing course many times. Each time I have run into problems in the linking of the more technical aspects of the course to a real understanding of the expressive side of drawing. Throughout the fifteen weeks of the semester I would guide the students through lessons designed to allow them to see better and to translate what was seen into the drawn form. Throughout, during personal and group critiques, I emphasized the expressive possibilities of line, of composition, and of form. In the final weeks of the course, I would ask students to develop a project idea along a theme of their own choosing using their newly found drawing skills -in essence, to use this opportunity to visually express, to visually communicate something with their art. Quite often this suggestion was met with bewilderment. "Express what?", they would ask. "I don't know what you mean. I can't do that." Looking back, I realized that I had taught students the technical skills needed to draw and to verbalize about the expressive possibilities of line and form, but I had not given them a means of understanding that their own art might be used to express an idea. Despite the fact the students had mastered the jargon of the critique (Wainio,1996) they did not seem cognizant of the personal significance which may underlie their art work. Their artwork was seen as the result of 'creative skill', but I had not taught students to view their drawing as a conveyor of ideas...a medium through which meaning might be created.

Beginning drawing students *do* need to learn basic drawing skills, but their novice status need not preclude an understanding of the more expressive side to art-making. Students need to see that their artwork can have a personal significance which goes beyond the art classroom still-life. Marilyn Zurmuehlen (1990) writes, "if artistic causality, idiosyncratic meaning and intentional

symbolization are essential conditions for making art, narrative means by which individuals realize their stories of art, then reflection, is the crucial key in establishing these essentials for each art maker, for the shared objectives of an art classroom, and for their contribution to the collective stories of our culture" (p.64). The students I teach will not necessarily become professional artists, although some might. Nevertheless, the art studio should provide them with a means of understanding not only how to make art, but an understanding of the content underlying their imagery and how it may relate to the world around them.

Chapter Three presents the procedures used in the teaching of a drawing course designed to link both visual and verbal language systems through exercises which encouraged the use of metaphoric thinking and writing. The chapter presents the overall intent of the teaching inquiry as well as the methods used in the collecting of data used in this study.

Chapter 3

Procedure

This chapter describes the procedures involved in a pedagogical inquiry which examined the incorporation of a writing component into a college-level drawing class. It describes the overall intent of the research, as well as the methods used in the collection and analysis of the data produced in the study.

Despite possible connotations of the phrase used in the preceding paragraph - "the collection and analysis of the data produced in this study"- this study does not seek to scientifically generalize its findings to any, or all populations of drawing students. This study is decidedly a qualitative inquiry. In discussing the research centered on the study of schools and classrooms, Eisner (1991) has used the term qualitative inquiry to describe a field-focused research in which the researcher as a participant assumes an active voice and seeks to narratively reveal and then insightfully account "for what they have given account of " (pg.35). The role of the teacher-researcher in this light is one who seeks to understand, report, and theorize on "the particular individuals, actions, policies, and events" (Patterson,Shannon, 1993, pg.8) which constitute their teaching practice and their classroom. What my study attempts to do is through qualitative inquiry, describe, examine and interpret the unique situations involved in one drawing curriculum with the hope of helping to inform further pedagogical practice. In such an approach the teacher-researcher does

this through an ongoing reflective inquiry which has as its aim the *action* necessary to help enhance their students' learning (Hubbard,Power,1993) (Patterson, Shannon,1993)(Van Manen,1997). This action research necessarily involves the personal engagement of the teacher-researcher in what Van Manen calls a "pedagogic thoughtfulness" in regards to his /her students (1997,pg.154). In this light then, this study can also be considered action research. Critics of action-based research have argued that such researchers lack an objective distance from their informants in order to bring the necessary rigor to their work. Teacher-researchers become in the eyes of these critics imperfect researchers (Hubbard,Power, 1993)(McFarland, Stansell, 1993). However it is precisely this involvement with one's students, grounded in one's personal experiences of, and reflection about the phenomenon encountered in the learning environment, which makes this approach so useful in a practical sense for other teachers and educational theorists alike (Eisner,1991)(Hubbard,Power, 1993)(McFarland, Stansell,1993)(Van Manen, 1997). Because teachers bring to the research situation a depth of awareness of their research sites, the curriculum, their students, and their communities, the insight obtained through this awareness often outreaches any that outside researchers may bring to the same situation (Hubbard,Power, 1993). For Van Manen (1997) the very strength of an action-oriented research is in the intimacy which develops between the research and life experience, and that the inquiry becomes not "top-down,expert, or contract research" but one which "is done *by* rather than *for* the people" (pg.156).

My teaching approach in this course was based on my own experiences as a student and as a teacher dealing with what I perceived as curricular

shortcomings in the art studio classroom. In this study, I sought to introduce a written exercise component into a drawing classroom, as a means of encouraging the students to think metaphorically -thereby cultivating the productive thought brought about through the conscious integration of both the visual and verbal modes of thinking. Above all however, through this approach I sought to enhance the learning environment for these beginning drawing students.

Sarah Eldridge (1990) has described research involving her role as teacher /researcher in a writing course designed for visual artists. Through her study, Eldridge sought to introduce visual artists to the procedural similarities involved in the creative process of both visual and written composition. By examining these similarities, students came to see writing as a means for critical inquiry and as a result came to see themselves as better, more confident writers. In a similar fashion, yet focused on students in the drawing studio, my teaching strategy attempted to integrate the visual and verbal modes of thinking in order to lead students to a more complete understanding of both the technical, as well as the self-expressive aspects of their drawing activities. In essence, using writing exercises which encouraged metaphoric thinking -a major component of both visual and verbal thought, the students, through the associative and connotational qualities of the word, enhanced their understanding of the drawing process. What underlay this pedagogical strategy was the intuition that metaphoric thought and writing may enrich the visualization and the often limited formal verbalization processes already present in the drawing classroom. As Gay (1988) has emphasized in her work,

the integration of written thought-logs into an undergraduate painting course permitted students to examine their creative endeavors in a more self-reflective manner. Gay's (1988) and Rico's (1993) use of written thought-logs as reflective thought-prompts for their students inspired my use of similar devices in order to stimulate metaphoric thinking in the drawing students. I hoped that the encouragement of metaphoric thinking in the drawing class and its expression through the written word would permit a concrete, yet paradoxically more flexible form of thought , one which would allow for a reevaluation and deepening of the students' personal understanding and thus the personal meaning of their drawing activities. Whether the students' writing was in the form of poetic personal notations, weekly responses to classroom exercises, or playful word associations, the writing helped to enhance students' comprehension of the drawing curriculum material as well as provide an ongoing source for the students' continued creativity in the art studio. As Olson (1992) and Hubbard and Ernst (1996) have similarly found with studies of grade school children, a combined visual and verbal approach enriches the learning environment by providing a natural pathway for acquisition of knowledge-allowing one mode of knowing to inform the other.

The Course

The nature of this pedagogical inquiry involved the teaching of drawing basics within a studio course comprised of fifteen weekly, three-hour classroom sessions. The course entitled: Composition Design, was taught in the Fall of

1998, at Champlain College -a Sherbrooke-area institution-, to 24 incoming students enrolled in the Fine Arts program. It is important to note that Champlain College is not an art school. It is a pre-university general education institution designed to provide students with a better idea of what they would like to pursue as a career.

Typically participants in these courses range from 17 to 25 years of age. The students in the Fine Arts program are for the most part still in the formative stages of their professional development. In fact, while many students may have a leaning towards the arts, in general, few are completely sure of their career goals. Some aspire to become professional artists, designers and illustrators, some architects, and some art educators. There are students on the other hand who are really only testing the waters of the art studio, and may choose other career paths altogether.

As this study was concerned with the integration of written components into a studio art setting (see summary of session exercises, fig.2), the specific objectives as summarized from the drawing course syllabus (Appendix B) are as follows:

1. That students perceive and record accurately elements of the external world

   a) by the use of basic compositional and design elements in their drawing

   b) by demonstrating an understanding of the properties, techniques and uses of various media

Class	In-Class Activity	Homework Assignment
Week 1	Introduction of concepts. pre-instruction drawing	'thought-cluster' on pre-instruction drawing
Week 2	Blind contour drawing	Blind contour drawing of hand. 'thought-cluster' on drawing exercise
Week 3	Positive /negative space drawing exercises	Negative space drawings of chairs. 'thought-cluster' on drawing activity
Week 4	Positive /negative space drawing of still-life objects. compositional concepts	Written text given to students as 'prompt' for drawn imagery
Week 5	Value studies, 'shading away'	Written text given to students as 'prompt' for drawn imagery
Week 6	Still-life drawing integrating learning acquired thus far	Written text given to students as 'prompt' for drawn imagery
Week 7	Gesture drawing with model	Written text found by students as 'prompt' for drawn imagery
Week 8	Model drawing integrating learning acquired thus far	Written text found by students as 'prompt' for drawn imagery
Week 9	Complex still-life. zooming-in	'thought-cluster' on in-class drawing activity
Week 10	Group project. abstraction	'thought-cluster' on in-class drawing activity
Week 11	Complex still-life. zooming-in finding hidden structure	'thought-clusters' on in-class drawing activity
Week 12	Objects of significance	'thought-cluster' on in-class drawing activity
Week 13	Still-life. dramatic lighting compositional strategies	'thought-cluster' on in-class drawing activity,preparation for final project
Week 14.15	Final end of term project	'thought-cluster' and written word integration

Fig.2- Summary of session exercises

produced (Beittel,1973) (Burgess,1984)(Hubbard, Powell,1993). Thus, examples of students' visual and written documents, representing common problems and strengths, will be discussed as they emerged out of the homework and in-class exercises, along with discussion of the weekly student feedback, and the researcher's pedagogical observations. Discussion of mid-session interviews will be done as they occurred in week seven. Similarly, discussion of the post-session interviews will be done in week fifteen.

The data collected was examined using a constant comparison method (Glaser,Strauss,1967) (Hubbard,Powell, 1993), wherein relevant categories and concepts emerging out of the accumulated data were continually refined and modified with an eye to examining the following two questions:

What evidence is there of the effect of metaphoric thought and writing on students' understanding of the technical aspects to drawing?

What has been the impact of metaphoric thought and writing on the students' understanding of the personal meaning which can underlie the content of their imagery?

The Collection Instruments:

The data was collected through four main instruments:

1. Student volunteers' weekly visual and written work

2. Student volunteers' weekly written responses to each homework activity

3. The researcher's pedagogical journal

4. Mid-session and post-session interviews with student volunteers

Student Volunteers

In accordance with the guidelines of Concordia University's Human Research Ethics Committee, volunteers from the drawing class were asked to take part in the field-based research. Volunteers were free at all times to end their participation in the study and were advised that in no way would participation influence grading in the course (see consent form- Appendix A).

Visual and Written Exercises:

The collected data was generated through five main homework exercises designed to integrate visual and verbal modes of thinking by way of the written word. These exercises also had the goal of encouraging metaphoric thought centered around both the products and process of the students' drawing activities, thereby expanding students' ideas (Arnheim,1969)(Ortony, 1975) (Feinstein, 1982)(Rico,1989), and creating further thought and new meaning through the written word (Gay,1988) (Lodge,1990) (Eldridge,1990) (Olson, 1992). The five exercises in the order of their implementation were:

a) Written 'thought-clusters' based on initial drawing activities (weeks 1 to 4)

b) Drawings centered on a written text given to students (weeks 5 to 7)

c) Drawings centered on written texts 'found' by students (weeks 8 and 9)

d) Written texts created by students based on their drawing activities (weeks 10 to 13)

e) A final end-of-term project based on a theme/subject of a student's choosing (weeks 14 and 15)

As much of the in-class work was devoted to drawing from observation exercises and the discussion of the previous week's work done at home (see course description in Chapter 4), the written curricular component was often integrated in the form of homework assignments. It was hoped that in this way the written component might act as a self-reflective tool for these beginning drawing students, complimenting the drawing activity (Eldridge,1990) (Gay,1988)(Murdick; Grinstead, 1992) (Sinatra,1986)(Van Manen,1997).

Volunteers' Weekly Responses

All the students, as well as each of the volunteers, were asked to give separate, weekly written responses to each homework assignment wherein the student might clarify for the teacher/ researcher any problems, insights,or ideas they may be having concerning any of the in-class or homework activities. These often brief responses were designed as immediate weekly sources of feedback revealing the effectiveness of the teaching methods, as well as a possible bias check with regards to any interpretations drawn by the

researcher's examining students' ongoing visual and written work. As Hubbard and Ernst (1996), Morgan (1998), and Murdick and Grinstead (1992) have found, students' writing in the art classroom often provides teachers with a valuable glimpse into the students' understanding of the material being covered. It became clear to me that these written homework responses also provided students with an important means for self-reflection. As a result, these responses proved to be invaluable sources of insight and clarification for the researcher, as categories and concepts emerged during the analysis of the students' visual and written documents (Hubbard;Power,1993). These weekly responses also aided me in formulating more meaningful questions, which would be posed to students in both interview sessions.

Researcher's Pedagogical Journal

The researcher's pedagogical journal was an instrument used to record any teaching observations concerning students' participation, progress, and personal commentary throughout the course, as well as my own participant-observer reflections on the progress of the classroom sessions, as well as the effectiveness of the exercises being implemented. By categorizing these notes into methodological, field, theoretical, and personal sub-categories (Hubbard, Power,1993), I was able to reconstruct a clearer overall picture of what transpired during the drawing sessions. My observations were not limited to student volunteers, but directed to the class as a whole. As weekly analysis gave way to end-of-semester analysis, emergent conceptual categories

concerning volunteers' visual and written work as it related to the two research questions were developed through the use of this data (Hubbard, Power,1993).

Mid-Session and Post-Session Interviews

Questions were designed to shed light on the students' perceptions and understanding of the course, guided by the data which emerged from the volunteers' homework, the researcher's journal, as well as the weekly student feedback. These interview questions were devised in order to examine the students' understanding of both the technical and self-expressive aspects of the drawing course. I conducted these tape recorded interviews with student volunteers individually in the presence of their semester' work to date. Transcripts of each interview were later provided to the respective student as a means of ensuring the accuracy and intended meaning of what had been said. The results of the transcribed interviews were examined, and as common themes emerged, these thematic categories were grouped together to facilitate analysis (Hitchcock,Hughes,1989)(Hubbard, Power,1993). Following Eldridge's model (1990), I asked student volunteers during the mid-session interviews about what aspects they liked of the course. I did not want to lead students into a specific discussion of the written component of the course, preferring to let student comments and perceptions guide my view of what indeed was the written word's effect , if any, on students' understanding of the drawing process. Further questions had been prepared based on the preliminary categories and concepts which had emerged out of the data

accumulated through student drawings, written work to date, as well as from the researcher's pedagogical observations. Some of the categories grouped together: 1) students' tendencies to use the drawing class's technical terminology within their 'thought-clusters' and written responses - an indication of the act of writing's role in reinforcing an understanding of these concepts; 2) the linking of this terminology to other processes on a metaphorical level - indicating an expansion of their understanding of these concepts through relational means; 3) any visual evidence in students' drawings of the integration of these technical concepts and their metaphorical expansion; 4) the linking of drawing works and activities to past experience through influence of the written exercises; 5) the utilization of affective expressions in relation to their drawing activities, such as, "it made me feel", "I wanted to express" etc. - thus indicating an acknowledgement of a more expressive side to the drawing activity; 6) and any metaphorical connections made concerning the drawing activity, subject matter and other influences outside of the classroom. My intent underlying these interview questions was to examine the effects of the written component on students' understanding of technical and self-expressive aspects to the drawing course -this with an eye to answering the two research questions cited above.

The General Design of the Course

In order to stimulate and integrate conscious visual / verbal connections in students' thinking, the initial written components of the course took the form

of in-class and homework exercises exploring the use of metaphoric 'thought-logs' (Rico,1989) or 'word clusters' (Gay,1988) (fig.3). These 'thought-logs' (hereon known as 'thought-clusters') were inspired by images, objects, and written work which I presented to students during the course of the semester, as well as by the students' own visual work . I introduced students to these 'thought-clusters' early on in the course, coinciding with the earliest exercises in visualization, and as I presented students with the basic drawing studio terminology. This 'thought-clustering' was crucial for not only did it stimulate connections between visual and verbal systems, it did so by way of metaphoric associations (Rico,1989) (Gay,1988). As a teacher, the acquisition of these thinking skills at the outset was important, for it became part of a student's entire drawing process -another tool at the student's disposal. It is important to note that the use of these 'thought-clusters' was not a one-time thing. They became part of our studio repertoire for the rest of the semester, as students were given increasingly more complex and challenging tasks.

In subsequent weeks, as part of homework assignments, I introduced students to the idea of interpreting through drawing a descriptive and / or poetic text given to them by the teacher / researcher, in order to build on these visual / verbal connections. By thought-clustering their ideas centered on this given text, students developed new imagistic associations which provided leaping off points towards further visual imagery. The shift towards visual work produced through the inspiration and stimulation derived from the written word was significant. In my experience, many art students at this level understandably lack the adeptness and the self-confidence needed when they are asked to express themselves visually through drawing. When confronted with the idea of

self-expression, many hesitate then balk at the idea of expressing feelings, or ideas through imagery stating: "I don't *have* any ideas" or "I can't *see* any imagery" (Researcher's journal, 15/10/97). Thus, in this teaching situation, the written word acted as a prompt and as a source for visual images, by providing what Olson (1992) has described as a 'jumping- off' point -in effect, addressing any reticence the beginning drawers might have towards simply 'leaping in' and expressing their own visual ideas.

Classroom discussion of in-class work and all homework done throughout the semester centered both on the technical aspects of drawing, i.e. pictorial organization, design etc., as well as on the students' expressive *intent* underlying their drawing interpretations. Each week following this discussion, students wrote a brief written commentary about the previous week's homework exercise. This was in order to allow me to address any pedagogical problems arising from the assignment. This weekly feedback provided me with invaluable data regarding each student's understanding of the course content, their personal progress or problems within the course, as well as by providing a bias check on any interpretations I had drawn with regards to the effectiveness of the previous week's exercise(s) .

In later sessions, I asked students to actively seek out a written passage such as: a newspaper article, a favorite passage from a novel, or a poem, and to interpret their 'found' texts visually. Students were also asked to write a short passage about how they came to choose their texts. With this exercise, my intention was that students invest *themselves* in the choice of their own found texts, rather than have a text imposed on them. They were to choose a text, interpret and develop it visually, and then explain the resulting

image(s) through a short written passage. I found this exercise to be crucial for it provided students -through the choice of their *own* text- with a means for better understanding their resulting visual image, the creative process involved in its development, and perhaps most crucially, ideas for future visual work to come. This gradual immersion of students into the idea that the written word is useful in the art studio is important. Again, in my experience, asking students to simply interpret any given written text visually without any practice at consciously linking image and word beforehand, has often left the students bewildered or indifferent. Just as students must acquire certain visualization and specific drawing skills (i.e. contour drawing) before they are able to actually use these skills creatively, so it is with this approach using the written word.

During the latter part of the semester, I encouraged students to create their own texts based on either the drawing activity at hand, or create written texts based on objects having a particular significance for them. I then asked students to visually interpret these texts and their objects through drawing. It was suggested that these texts could be poetic in nature, or descriptive personal jottings in reaction to their objects. I also pointed out that the texts might be centered on the drawing process itself. By this point in time, the 'thought-clustering' was beginning to be seen as a useful tool in the generation of these ideas, and as such, its use was seen by the students as a natural accompaniment to their drawing activities.

As part of a final two week in-class \ homework assignment, students worked on projects based on a theme of their own choosing. Here, writing as a means of fostering new, creative, insight was encouraged. Again, by this point

in the semester, it was hoped that writing within the drawing environment was viewed as a valuable and creative tool by providing students with a better understanding of how their art might be used to express an idea.

In summary, five main exercises designed to integrate the written word within a drawing environment were used. The exercises, in order of implementation, were:

a) students' drawing activities in conjunction with written thought-clusters

b) a students' visual interpretations through drawing of a presented written text

c) a students' visual interpretations through drawing of a student's found text

d) the development of students' visual images in conjunction with of their own written words

e) a final end of semester personal drawing project (see chapter 5 for results)

My goal in this action research was to record and observe the application of this teaching approach, and to analyze, and critically evaluate the results (Cohen and Manion,1989)(Burgess, 1984). The following chapter provides a description of this teaching approach -an approach which strove to consciously link visual and verbal thought processes through the integration a written component into a drawing class curriculum, as a means of better addressing both the technical and self-expressive aspects of drawing.

CHAPTER 4

The Design of the Course

This chapter presents the description of a drawing course which sought to incorporate the writing component described above into a fairly standard drawing curriculum (see Appendix B). While an emphasis was maintained on the students' ability to draw from the world observed around them, the student's use of the drawing medium as a means for self-expression was another important goal of the course. The course, in essence, explored how in studio art instruction, the encouragement of metaphoric thinking and writing can permit students a better understanding of the technical and self-expressive sides to drawing, as well as the personal meaning which may underlie the content of their imagery.

The class was taught to 24 fine arts students at Champlain College, Lennoxville, Quebec. The students ranged from approximately 17 to 25 years of age and were for the most part second and third generation Canadians. The majority had English as their mother tongue while a great many of these students were functionally bilingual in French. The class consisted of fourteen women and ten men.

The Weekly Sessions:

Week 1   After distributing and then reading the syllabus together, we first discussed basic terminology, the art materials students would need, and then the general goals of the course. I explained to students that a major goal of the course was to allow them to become better drawers through exercises in visualization, as well as exercises designed to give them the technical skills that would permit them to record their perceptions through the medium of drawing. I emphasized that another goal of the course was to allow them to communicate through their drawings, if only to themselves -in other words to express something with their drawing. I mentioned that a written component to the course would be present, primarily as homework, which would hopefully facilitate this expression of ideas. Almost immediately one student asked, semi-alarmed, about this 'writing business' (Researcher's journal, 25/08/98). I tried to alleviate her fears stating that for the purposes of this course there was no one right way of writing (i.e. essay form) but that many forms of writing or personal notation would be permitted. This was not a writing course and spelling and punctuation were of lesser importance than they would be in an English course. In short, the written component would be required, but not evaluated (Gay,1988). This seemed to quell some of their worries. At this point, I explained to the class my parallel research intentions and asked for any volunteers willing to participate in one or two interview sessions. I assured them that volunteers would be anonymous and that they would be treated no differently in terms of the course evaluation. Any extra work would be kept to a minimum for those participating, but the work would be seen as extra-curricular.

I asked that any student who thought they might be interested to see me after class (see Chapter 5).

In order to assess the students' existing art skills, I gave the students a 'before' drawing task (Edwards,1979). The exercise, an often difficult portrait study of a drawing partner, allows me to see where the student is at in terms of their drawing skill, and also offers the student a barometer of where they have entered the class as a drawer, and how their drawing has improved upon exiting the class, some fifteen weeks later. Being the first session, the students had very little drawing material. So, after about a half hour of drawing, I began to introduce to the students exercises involving the written word, as well as the idea of 'thought-clustering'. In a very simple way, I suggested how certain things because of their inherent similarities may symbolically stand for other things (metaphor), and how even attributes of certain things may come to stand for the original idea or object (synecdoche)(Lodge,1990). In short, I suggested how our mind naturally associates objects and events around us, and that a goal of this course would be to encourage this sort of associative thinking. I next gave them an example of 'thought-clustering' (Rico,1989)(Gay,1988) (Fig. 3). With this example, I hoped to show students how this sort of thinking was really easy, and even natural, if only we made a conscious effort to employ it. As a group we then tried a 'thought-clustering' exercise around the word 'snow'. Students for the most part immediately grasped this concept. Words associated with 'snow' issued forth: "white", "winter", "cold", "blizzard", "wind", "Christmas", "vacation". These words were written on the blackboard (Researcher's journal, 25/08/98). This initial step was encouraging. Students in this very simple word association exercise did not seem to be intimidated in the least. They willingly
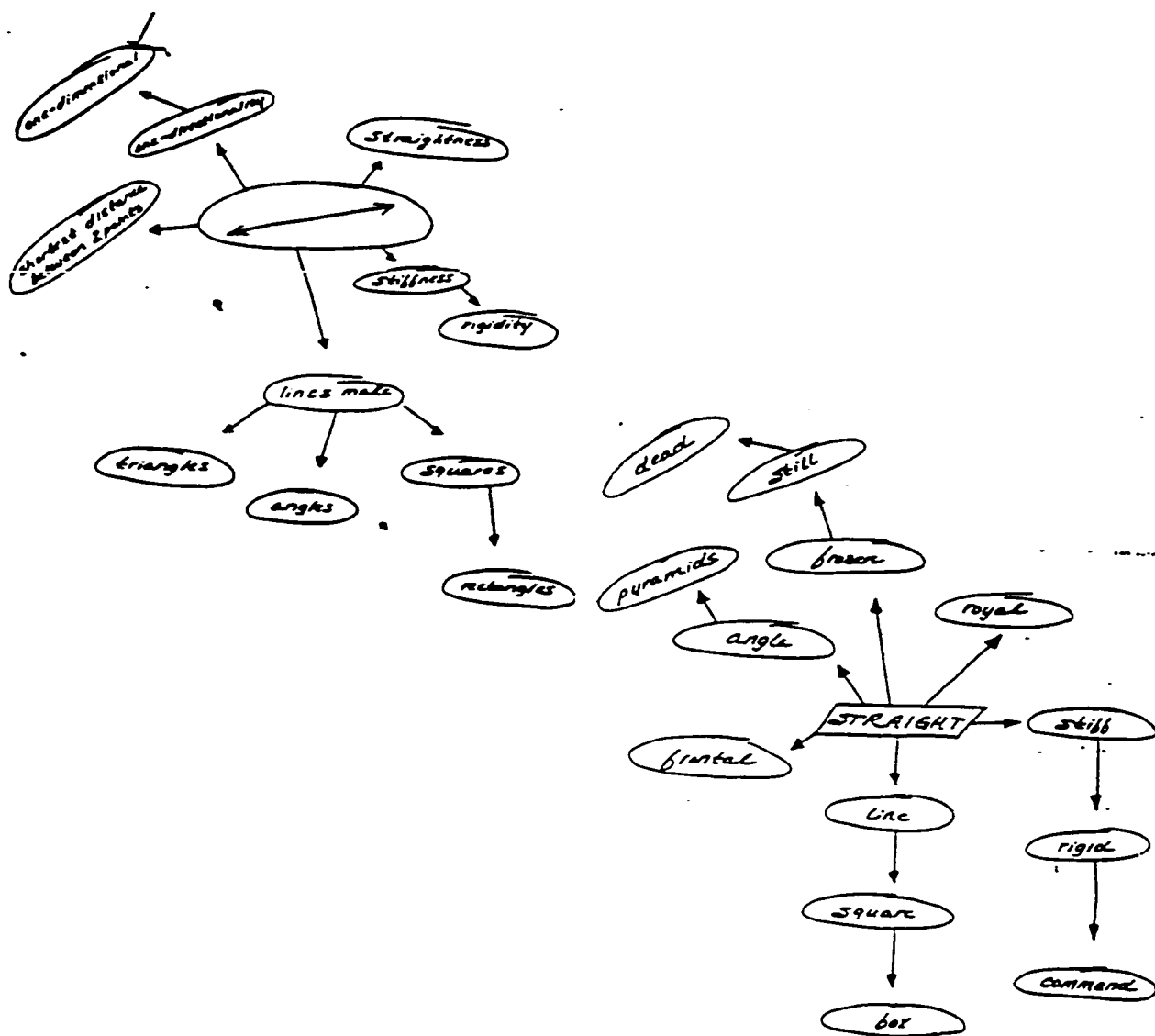
Fig.3

Example of 'thought-clustering'

shouted out their associations, and were quite pleased with their connections.

After reminding students to get all their materials for the next session, I asked that students think about what went on in class and that as part of their homework, they should practice some 'thought-clustering' around the portrait drawing they had just created. I mentioned that we would discuss their results next session. After class, seven interested students out of the class of twenty-four came forward to volunteer their time for the research (see Chapter 5).

Week 2

At the outset of the second session, I proposed that we look at and discuss the previous week's homework. The results were both encouraging and surprising. Everyone had made an attempt at the 'thought-clustering' centered around their portraits. Although some showed signs of last minute preparation, (I had seen some students hastily completing their homework before class) for the most part students had really tried to reflect on their drawings. Surprisingly however, the 'thought-clusters' had remained very descriptive. Words emerging out of their exercise were typically descriptors like: "face", "nose", "big", "head","hairy", "eyes", "narrow", "brown" and so forth. However, several students (including two of my volunteers) had made other associations. "Head" had been linked to"circle", as well as to "center", "brain", and "mind". The word "eyes" had been linked to "opening", "mirrors","reflection", and even "difficult", referring to, as the particular student clarified, the drawing frustrations which he had felt (Researcher's journal, 1/09/98). What was

important was that students overall reacted quite positively to this initial linking of the image and word. While most students had tended to describe their portraits, some had begun to associate more abstract qualities to the portraits depicted. Even the association of "difficult" to the image / word: "eyes", was significant, for it seemed to show the student reflecting upon the difficulties of the drawing process itself. I reiterated how words used in these 'thought-clusters' might go beyond mere descriptions towards things which may symbolically stand for other things.

We then turned to drawing. I introduced exercises designed to examine line qualities, line speed, and line weight, and initiated exercises in contour drawing were initiated. Next, I introduced the concept of pure contour (Edwards,1979) or blind contour exercises, wherein the student's hand and eye are taught to work together while the student refrains from looking at the drawing page. These techniques were painstakingly practiced by the students. Finally, I proposed the idea of a modified contour drawing, wherein students using the developing visualization skills involved with their blind contour exercise, could now attentively 'correct' their contour drawings as they worked.

At the end of the class, I presented students with a homework assignment involving both a blind and then modified contour drawing of one's own hand. I asked students to reflect about what went on while they were doing their homework assignments, and to again perform some "thought-clustering" on their reflections. By presenting this homework demand in such a manner: the drawing activity in the form of a contour drawing and then the 'thought-clustering' centered on their reflections of this activity, I hoped that students might think more about not only the physical descriptions of their drawing

products, but about their drawing process as well.

Week 3

Discussion of the homework commenced hesitantly (Researcher's journal,8/09/98). It was as if students were now unsure as to whether they had completed their homework correctly. My asking for the 'thought-clusters' to go beyond just descriptions, seemed to have thrown some students for a loop. Many of the 'thought-clusters' spread out on the floor had centrally placed words such as: "blind contour" or "drawing". Radiating out of these central words were words like: "shaky", "scratchy", "tremble" and "crooked". Some students had described their drawn object by writing, "my hand", or "hand" ; and other similarly descriptive words, while others had used words in relating their hand to, "gnarled", "old", and "claw". Still others commented on their experience of the blind contour drawing exercise with words such as: "lost", "mazes", "hard", "twisting and turning", and "weird". The general demeanor of the group seemed to be an uneasy one (Researcher's journal, 8/09/98). Students then voiced their concern that they weren't sure if they were 'doing this right' (Researcher's journal, 8/09/98). I attempted to assuage their trepidations. "Gnarled" was no better than "crooked" just different. "Weird" and "twisting and turning" were great responses if that is what you were feeling while doing the drawings. All responses were valid because they were individual interpretations, individual perceptions. The goal was not to have uniformly similar responses but rather word and image associations that each student came to independently. What was important was that each student who was

going through this drawing process, had their own feelings, their own perceptions about the often difficult process at hand. Again, there was no one right way to express those impressions. I asked them to even feel free to make crazy, irrational associations if they wanted. I asked them to feel free to be intuitive. This seemed to relax them.

As we started the class, students were introduced to the rather difficult concept of positive and negative spaces (Edwards,1979). This basic design concept is fundamental to understanding composition, or how a drawing is physically composed upon the page. It is intensely simple once you are able to mentally visualize the trick. The trick involves seeing the object to be drawn from the outside in, and seeing how the outside of the object, relates to the physical boundaries of the page. Some students grasp it immediately, others struggle. But once the skill is learned, it is rarely forgotten. The tension felt by those struggling, and the elation felt by those grasping the concept, would be good fodder for the "thought-clustering" exercise. For homework, I asked that students do a series of negative space drawings of chairs in their home. I also asked that they 'cluster' some ideas about these drawings.

Week 4

The drawing exercises this session were designed to build on the positive and negative space skills acquired from the previous week's work. Having started from single object studies of a chair, students were now asked to compose increasingly complex arrangements of still-life objects. These objects

were to be rendered as seen from the student's own vantage point in the room. This often becomes quite difficult, as objects must be seen and rendered not in isolation, but in relation to one another on the picture surface. Here, questions of overlapping objects, objects receding into space, 'cropping' an image, or 'zooming-in' in order to more creatively compose the subject, become the technical objectives. Students are invariably challenged by these more formal picture-making exercises.

The students' homework, consisting of negative space drawings of their chairs and accompanying 'thought-clusters', were fascinating. First, with the exception of two or three students who were still struggling with the concept, most students had grasped the idea of constructing a chair using its negative spaces or 'holes' as a starting point. Some of the chosen chairs had been relatively simple, i.e. an upholstered armchair- relatively round with no real 'holes' through it. Others had been quite complex- a rattan rocking chair replete with negative spaces! Importantly, all students had begun to visualize how an object could be drawn from the outside in. Second, their 'clustering' had revealed some interesting surprises. While initially some students' written work had remained quite descriptive; the central word 'chair' giving way to such words as 'wood', 'legs', 'brown', 'seat' and 'back', other associations had also been made by these students like, 'cushy', 'comfort', 'rest', 'home', 'stiff', 'possessions', 'room', and ' my place'. Other students had associated 'grandmother', 'peace', 'childhood' and 'the cottage' to their drawn chairs. Through our discussion, I found that students were beginning to make associations through their 'thought-clusters' to things not immediately observable. Their chairs were objects to be drawn, but they were much more

than that. They often had significant personal associations that went beyond their physical characteristics i.e. 'wood', 'hard' or 'legs'. The chairs could represent a concept such as *comfort* which in turn could mean *home* . They might stand for, or evoke a memory. As one student stated, "It was my Grandmother's chair. I miss her. She lived with us 'till she died" (Researcher's journal,15/09/98). Another student explained how their chair, in effect, was synonymous with the summer cottage -a cherished place of peace. For one student, the represented chair *was* childhood. Discussion of this homework seemed fruitful, as students who had initially remained fairly descriptive in their 'clusters', had now begun to expand their associations.

With the ensuing homework assignments, the next stage in the integration of a written component to the studio curriculum was initiated. My idea was to provide students with a written, descriptive passage as a prompt towards the creation of some drawn visual imagery. The purpose of this prompt was to ease students towards the idea of using writing as an initiator of visual imagery. In my experience, asking students at this early stage to simply express something with their drawing, even along a theme of their own choosing, often leaves students confused and frustrated. By providing a written prompt, the students would have a thematic direction, as well as a written text to use as a springboard. I asked the students to read the text, and to keep in mind the previous work we had done in terms of contour line, positive and negative spaces, as well as our 'thought-clustering', and to interpret through drawing whatever came to their minds after reading the following passage:

"As the plane descends, you view the patchwork of farm fields and rural roads below. As you look below , you can see the different patterns of crop rows, grassy fields, and outcroppings of trees."

Week 5

This stage of integrating writing was perhaps the most difficult. Having just been given the initial keys to the visual language, students are then asked to 'say' something with this language. Suddenly they must express something. However, it is here that the written prompt, in my experience, aids the student faced with the daunting vastness of the empty drawing page.

As we looked at the homework exercises, it seemed as though students had begun to, at least initially, use the written word as a tool towards creating their visual ideas in the drawn form. Approximately three-quarters of them presented 'thought-clusters' alongside the visual work inspired by the text which was given to them. As we discussed the works, these students showed that they had either taken key words from the text (i.e. 'plane', 'rural', 'patchwork', or 'patterns'), and expanded on them through 'thought-clustering'; or had in some cases, expanded their thoughts based on an overall impression of the text (i.e. 'height' , 'flight'). As one student put it, the 'thought-clusters' had been used to "improve" their drawings (Researcher's journal,22/09/98). Students who had not presented their 'clusters', stated in various ways that they had believed the 'thought-clusters' to be part of a "separate" exercise, or "hadn't really thought about them" (Researcher's journal, 22/09/98). Discussion of this homework assignment tended to center on what the text had 'meant', or what students had

'seen' in the text. Some students stated that they had tried to depict what the written text had literally "said", while others talked of trying to achieve a "feeling" or "impression" of what it would feel like to be up "that high" (Researcher's journal, 22/09/98). The visual work ranged greatly, from quite literal descriptions of rural town plans seen from a high vantage point, to more traditional landscapes depictions with distant mountains and clouds, to even a highly patterned and textured abstraction reminiscent of a patchwork quilt, with only the tip of a airplane wing visible. On a technical level, I was very encouraged to see that almost every student had filled their page with drawing. I had emphasized this filling-of-the-page compositional approach, in conjunction with the negative space exercises, and it seemed that students had not forgotten this technical skill in their more creative picture making. As well, in almost every drawing, the use of a carefully studied, sensitive, contour line had been used. Students on the whole seemed very positive with their works and with this exercise in general. There had been some confusion and some worries voiced about whether they were doing the exercises correctly, i.e. "Is this what you wanted?" (Researcher's journal,22/09/98). I found myself reiterating that no one means of interpretation was right, but that all of the drawings had been very sensitively rendered.

The in-class drawing in week five now centered on an introduction to value studies and shading. The students practiced an exercise I call 'shading-away'. In this exercise, the entire surface of the paper is covered in charcoal until a medium gray value is obtained. Students then use an eraser to lift-off or 'shade-away' the light falling on a still-life object, and a charcoal stick to add darker values to any of the areas which remain obscure. This exercise provides

students with immediately satisfactory results. By eliminating the white of the page, and replacing it with a smudged, medium gray drawing surface, students quickly learn to see the myriad of possible values which exist between white and black, and tend to be far more open to the mark-making involved in the act of shading.

For homework, I assigned the 'shading-away' exercise in conjunction with a written text supplied to the students. This time however my intention was to give the students a text, which through its imagery, suggested a certain type of space. In so doing, I hoped that students would further link the more technical exercises we were doing in class, with the expressive possibilities of drawing. I presented students with the following text and asked them to respond to it through drawing:

"On a bright sunny day imagine you have wandered along a forest path, and quite suddenly you realize that you have lost your way. All around you the tree branches are entwined, reaching skyward forming a dark, tightly-knit canopy. As you scan the scene before you, you realize, that at least temporarily, you are lost among this dense irregular maze of trees."

Week 6

My intentions in giving students this sort of text prompt were two-fold. First, I wanted them to continue to build on the central idea of how the written word might help trigger imagery in one's mind. Second, I wanted to see whether giving students a text which suggested a particular kind of space, for

instance a dark enclosed space, might elicit imagery that would effectively express this feeling. Would the students react to the text in this way, and would they use their technical skills of shading to express this darker place? The results were quite assuring. Every student had utilized their 'thought clustering' to further expand their ideas on the presented text. The words, 'forest', 'dark', 'leafy', 'cavern' were among many of the words appearing as central to their 'clusters'. Other words that had been gleaned from the text itself such as, 'entwined', had been expanded to, 'rope', 'strangle', 'claustrophobic', 'dark', and 'heavy'. The word 'maze', had given way to, 'lost', 'zig-zagging', 'puzzle', 'fear', 'darkness' and 'solution'. Overall, the students had also employed the shading techniques acquired in our previous session. The pictures on the whole were fairly dark, brooding compositions which seemed to be reflective of the general feeling of the text. Students talked of how this text had conjured up more sensations than the first text. "I could picture it more" and "the scene really gave me a feeling of being in dark woods", were two opinions typical of the group's general feeling (Researcher's journal,29/09/98). I saw this as very encouraging. Students with their newly acquired skills had quite readily depicted the sense, or feeling, that they had derived from the text. I also saw as clear indication of this text's influence, the fact that every student had used the 'thought-clustering' process, and had responded positively to the text in general. In our class discussion, phrases voiced by the students such as, "I could *picture* it more" and ""the *scene* gave me a feeling" , indicated that the written component was being used quite naturally by the students. It was as though the words were not impediments, but rather underlying, invisible generators of *pictures* , of *scenes* and of *imagery* for the students.

The in-class drawing this week was an integration of the exercises from previous weeks. The students would attempt to compose a fairly complex still-life combining their visualization skills, as well as the drawing techniques of contour line,and shading. This integration is important for it solidifies many of the fundamental skills in a review-like manner, before moving on to more complex drawings, often involving the human model.

Buoyed by my enthusiasm regarding the progress made by the students and their writing-inspired imagery, I decided to push beyond the relatively simple texts of the previous two classes. My idea was to provide the students with a text of a more poetic nature, one that while still fairly descriptive, might be a little more challenging to these college-level students. If they had reacted so well to text more suggestive of space, perhaps they would blossom with an excerpt from a text by William Faulkner. For homework, I asked students to make an interpretive drawing after reading the following text:

"The path runs straight as a plumb-line, worn smooth by feet and baked brick-hard by July, between the green rows of laid-by cotton, to the cottonhouse in the center of the field, where it turns and circles the cottonhouse at four soft right angles and goes on across the field again, worn so by feet in fading precision." (Faulkner,1930, p. 112)

Week 7

My intention had been to both stimulate and challenge students into creating imagery by way of a more complex text. Although not poetry per say,

my feeling was that the Faulkner text was much more image-laden than the rather simplistic texts I had already initiated. These more metaphoric, image-laden qualities which I had hoped would spur students on to greater feats of imagery and word (Olson,1992), had instead muddied the waters. This homework task did not go as well as expected. Whether it was the style of the writing, the rather long sentence structure, or the passage being out of context, many of the students had difficulty with the passage. "I didn't know what it meant", "I had to read it five times!", "What's this guy saying?", were comments heard during our discussion (Researcher's journal, 6/10/98). The text to my eyes, had remained fairly descriptive, but students struggled with its rendering. For the most part, the 'thought-clusters' had been rather weak in comparison with previous weeks. The drawings, although completed using the tools acquired in earlier classes, were similarly weak. It was as though, the students not being clear on the sense of the text, had invested much less of themselves in 'thought-clustering' and image-making. A few students however, did seem to 'see' something in the text. Words that emerged out of their 'thought-clusters' centered on words like, 'path', 'brick-hard', or 'cottonhouse', and then had been expanded into, 'the road', 'direction', 'way'; and 'heat', 'red', 'blood', 'sweat', 'slaves', 'south', and 'whites and blacks' (Researcher's journal, 6/10/98). We discussed these ideas, and found that these 'thought-clusters' had been done based on an overall feeling that the text had evoked. This approach was similar to what some of the students had done in week 6. Significantly, these students' drawings showed signs of more personal investment. I reminded the class that we were not necessarily after a literal translation of the text. I mentioned again the idea that something, be it an

object, or an idea, may stand metaphorically for something else. 'Brick-hard' may for one person stand for the color red, which may in turn be associated to blood, this to toil, or to slavery or to the south, and so forth. We then turned to this week's in-class drawing exercises.

With week 7, we began a new unit involving gesture drawing. Coupled with this, students were introduced to drawing from the live human model. This represents a real shift both in visualization and subject matter for students, and often results in a difficult and frustrating session. After the slow, deliberate drawing of the previous weeks' contour studies, gesture drawing requires students to be quite loose, intuitive, and free-flowing. Where contour drawing engages slow sensitive hand-eye coordination, where most of the movements are done in the wrist, gesture drawing necessitates a more unrestrained, full-arm motion, in order to capture the movement within the model's body. While the still-life is just that -still; the breathing human body is replete with muscular movement, twists, and soft angles. Thus, this shift for students is a difficult one. They are still using the visualization skills from earlier sessions, however they are using them on unfamiliar ground. It was a difficult session, and it had commenced with some difficulty regarding the homework.

I informed students that the next homework task was going to be different. Students were now to find a text on their own that they might interpret visually. The text could be from a newspaper clipping, a passage from a novel, a poem, or whatever source, from which the student would develop some drawing imagery. My intention was that the students, this time, invest *themselves* in the seeking out of a particular text -a written component wherein their own personal investment would be assured, and thus conducive to more personal

visual thought.

Week 8

Students' personal investment in the homework had been far more significant than in the previous week's assignment. By asking students to find their own text-as-prompt, it was almost inevitable that any student doing their homework would use some text which would at least initially evoke some sort of imagery for them. Several students had found poems, others had passages from favorite books, some had magazine clippings, and one student had a newspaper clipping. With the exception of three students, all the texts found by students appeared to have been expanded through 'thought-clustering'. I noticed that most of the poems and the passages taken from novels had been interpreted quite literally i.e. a tree was described in rich textural patterns of contour line, but had remained essentially a tree; a wild horse, drawn in repeated gestural lines creating the texture and movement of its muscles, similarly remained a horse. Very few had taken their central theme to represent something other than its original subject. As a result, the 'thought-clusters' to a large extent mirrored the descriptive qualities of the central subject of each text. The students confirmed this observation. During our discussion, many students explained that they felt that their texts and the drawings had to be "about something" (Researcher's journal,13/10/98). Thus, the wild horse poem was to be interpreted visually as a picture of wild horses. However, what was interesting was that the words used in their 'thought-clusters' to describe the

central subject of the wild horse: 'moving', 'running', 'wind', sweeping mane', had been all effectively expressed through the student's drawn gestural lines. Their drawings seemed to have been informed by the integration of the words and the images derived from their 'thought-clusters'.

Something interesting had also occurred with the students who had chosen the magazine and newspaper clippings. Their ideas had not originally been ignited by words, but by other *images* found in magazines and newspapers. In these cases, students explained that they were drawn first to a powerful image. Examples included a war scene, a rather horrific image of the suicide of a man leaping off a building, as well as an image of a starving child. The photographic image had drawn the students in, they had read the short text or blurb accompanying the clipping, and had 'thought-clustered' their ideas around both the image *and* the text. The war scene and its text had given forth words such as, 'Bosnia', 'genocide', 'death', 'blackness', 'cruelty', and 'horror'. The attempted suicide text and image had produced, 'death', 'pressure', 'anxiety', 'why?', 'flying', 'flight', 'bird', and 'freedom?'. The third example gave forth, 'hunger', 'poor', 'African', 'black and poor', 'white and rich', 'sadness' and 'horror'. The corresponding drawings created by the students had not been direct translations of the initial photos, but rather quite expressively drawn interpretations, which moved beyond optical reality into a more imaginative sphere. It seemed in these cases, that students had begun to see their drawings as more metaphorically rich. The linking of say, 'flying', 'bird', and 'freedom', to the leaping man, expressed the observed scene on a rather different metaphorical level.

Discussion of the homework, initiated by students this time, then followed (Researcher's journal,13/10/98). It focused on how their particular drawn interpretations "stood for" ideas such as "running like the wind", "genocide", "horror", or "cruelness (sic) of man" (Researcher's journal, 13/10/98). Significantly, students seemed to be teaching or showing *themselves* the expansive nature of metaphoric thought, and they seemed to be using the written word as a tool in this effort.

The in-class drawing activity of week 8 was another chance for the students to draw from the human figure. Thus the full session was devoted to a series of poses in which the student could experiment with various drawing strategies combining contour, gesture, and shading. These periods of drawing integration,wherein skills and experience accrued in previous weeks are practiced, play an extremely important role. Without this practice time, drawing can become simply an activity obsessed with the accumulation of techniques. Students while amassing these techniques, in my experience, are often left in the quandary of how, when, and why to use these technical skills. The putting-into-practice of these skills, through the encouraging guidance of the teacher, aids the student in finding their own way through the received knowledge. As with many activities, repetition is a necessary factor in its proficient practice. But once given the tools, it is experimentation that really enables the student to play and create with this knowledge. The written component added to this curriculum is designed to aid the student in the understanding of this expressive play.

In order to reinforce the personal investment with which students had shown in the homework of the previous session, the same 'found-text' exercise

was to be repeated for homework.

Week 9

The results of the homework exercise were very similar to those of the previous session. What was immediately noticeable however, was that more texts and images seemed to have been found in magazines and newspapers. Whether some students had sensed this to be the 'correct' route, given the general interest expressed by the class the previous session, or whether they saw it as simply an easier, more immediate source for imagery, or whether it was a genuine seeking-out of evocative imagery, is hard to determine. I had consciously tried not to favor the students who had used the magazine's and newspaper's more metaphoric interpretations, commenting instead on the overall strength of all the drawings submitted. What struck me was that a few of the works seemed almost pastiches of works submitted in the previous session. Mimicry is probably as inherent a trait of human nature as any other, and my feeling was that these students had picked up on the enthusiasm given over to several of the previous exercises and had adopted them as models without really internalizing the imagery. The results, in several cases, were fairly descriptive 'thought-clusters', coupled with quite illustrative interpretations of the photos. As these students talked about their works, they seemed less passionate and invested in their imagery, confirming my suspicions (Researcher's journal,20/10/98). This is entirely understandable. As a student is learning a new task, it is far easier to follow a model perceived as a 'correct'

one, than it is to rethink and recreate the model for oneself. However, my wish was for the students to seek out personally evocative texts, rather than 'do the exercise right'. Despite these few weaker examples, overall, the found-texts, 'thought-clusters' and drawn images continued to make links beyond the immediately observable phenomena of the printed word or photo. I realized that the next exercise integrating the written word would have to be different. I did not want students simply falling into a habit of mimicking what they felt was a way to win approval.

The drawing session focused on different compositional strategies. Through 'zooming-in' on or 'cropping' the now much more complicated still-life arrangement, students tried to personalize their compositions. On a technical level, the compositions became tighter, leaving less negative space, and creating more dynamic shapes exiting on all four sides of the drawing page. On an expressive level, the students' compositions differed greatly from one another, through the active selection of only part of the complex still-life. Students responded well to the idea of zooming-in, likening it to looking through a camera's viewfinder and taking a picture. The exercise integrated all of their drawing skills as well as the first visualization exercises in positive and negative spaces. The students now began to view their drawn shapes almost as the integrated, interlocking shapes of a jigsaw puzzle. My goal here was to move students slowly towards the idea of a more abstracted drawing.

With the homework assignment of this week, my intention was to shift the students slowly back to the practice of 'thought-clustering' in relation to a drawing activity, as in the earlier sessions. I did not want students to neglect the conscious acknowledgement of their own participation in the drawing process.

My intention in the forthcoming class was to pursue this 'thought-clustering-on-activity' as a means of further encouraging a conscious self-reflection on the students' drawing tasks. Thus, for this week's homework, I asked students to cluster their ideas on a zoomed-in composition of a small still-life which they might set up at home.

Week 10

The results of the homework were somewhat surprising. Many of the students' 'thought-clusters' were fairly straightforward descriptions of the still-life, while others had made word associations with the objects that had been drawn. My intention had been that the students focus more on their mental processes involving the visualization and selection of the point of view from which they had chosen to draw the still-life. While some students had followed this path, many more had focused primarily on the physical descriptions of their objects. As we discussed their work, some students voiced that they had not been clear as to what I 'wanted'. I realized that I had perhaps not been as explicit as I should have been. I explained that it was okay, and that in the upcoming class we would try to focus on the 'thought-clustering' *in relation to a drawing activity,* as we had done in the earliest sessions. I explained that our upcoming in-class work would provide them with an example.

The written component this week was different than the exercises of the previous four weeks. Desiring that students genuinely think about their place in the drawing process, by way of the written component , my idea in this session

was to have students 'thought-cluster' their ideas around the very exercises they were attempting. In other words, students would reflect upon their in-class activities and respond to them through the written word. Beginning first with their idea 'clusters', students might then create a written passage, poem, or any other form of written response, in reaction to the different drawing exercises presented to them this session.

In the previous class, I had begun to ease students towards the idea of a more abstracted drawing. My objective was for students to see that beginning from an observable reality, their visual ideas could be creatively transformed for both a design and an expressive purpose. I explained that much in the same way their ideas put down in a written form might be transformed and expanded through 'though-clustering', their drawings might also undergo this creative expansion. This week each student was given a black and white laser photocopy approximately 6" x 4" in dimension. Each photocopy represented one zoomed-in section of a much larger image. The image was of one of Michelangelo's delphic oracles from the Sisteen Chapel ceiling. The students were not permitted to see the entire image. The task was to as accurately as possible, using the medium of soft charcoal, attempt to transcribe what appeared before them on the photocopied sections. At the end of class each student's 30" x24" drawing sheet would be laid in place next to their neighbor's, thus reconstructing this 'mystery' image. Each of the cropped and photocopied sections was, upon first glance, an abstract conglomeration of distinct values, strange textures, and rhythmical lines. This non-objectivity was important, for it forced the students to encounter their drawing free of any preconceptions as to what the forms in the drawing should resemble. Freed

from any representational associations, students commenced their drawings. The students would use their shading and mark-making techniques, positive and negative visualization skills, as well as contour and gesture know-how, in order to accurately transcribe this virtually abstract drawing. This exercise allows students to see that even in apparent abstraction, there exists significant form which must be respected. As a group exercise, it also promotes positive class collaboration and cooperation amongst students, as they check with their neighbors to ensure that their drawn forms are exiting the page at the correct points -the ultimate goal of the exercise being the cohesive reassemblage of the original image- each section rendered in the student's own line. Students responded very well to this exercise resulting in quite a raucous, yet focused class. After nine weeks of individual effort, the group approach seemed to be an appreciated change of pace.

At the end of class, I asked students to respond to this activity through 'thought-clusters' and written texts, much in the same way as they had previously responded to the exercises we had done at beginning of the semester -exercises which had focused on contour, and positive and negative space. Surprisingly, there was little reluctance or hesitation on the students' part. This was a real shifting of gears! No longer were students to respond to a found or assigned text -a text which stood outside their own creation; instead, they were being asked to respond in writing to their own experience. My intention was to encourage more self-reflection in regards to the drawing exercise, by returning students to the practice of 'thought-clustering in relation to the drawing activity. In so doing, my hope was to re-expose these now 'more' experienced drawing students to the idea that the written text could now come

from within, and be in reference to their own experience. In essence, I wished to ease students towards the idea of drawing as a more self-reflective practice. Surprisingly, given the slight setback of the previous week, there seemed to be little resistance among the students in regards to this exercise. Students were told that their words might remain in the form of 'thought-clusters', or that they might write their impressions of this art activity in any means they wished. What was important, was that they focus on how they were feeling during the exercise, what they were thinking about either the drawings themselves, or about their impressions of the in-class drawing activity.

Week 11

At the outset, it appeared that students had responded remarkably well to the change of focus, from an external text, to the generation of their own words based on their activities. They had been very willing to do the homework. Students had reflected on the previous week's activity and had used their 'thought-clusters' as a means of capturing their ideas. Although the in-class activity itself had been fairly complex, and almost demanded a step-by-step linear description, many students focused on their impressions of the exercise. In one instance, central words such as 'lost', gave way to 'darkness', 'rough', 'twisting', 'black', 'bubbly', 'muscles?', 'leg', 'Michelangelo', 'amazing', 'huge' and 'great', as the student moved from describing the mystery surrounding their initial photocopy, through to the art activity itself, then on to its realization and final group devoilement. Other students seemed to focus on their impressions

of the general disposition of the classroom and their place in it. The word, 'chaos', became 'anxious, 'weird', 'confusion', 'dark', 'shading', 'textures', 'wow!', and 'cool'. A few students, after having clustered their ideas, wrote short personal descriptions of their impressions. These first person narratives explained more fully their feelings of initial indecision, followed by the eventual play with the charcoal medium, and finally, described the group project's 'coming together'. In our discussion, students voiced how they had found it interesting that something so abstract could eventually become something recognizable. A few mentioned that they even admired their own, abstracted, sectioned-drawings, as seen "separately from the big one" (Researcher's journal, 3/11/98).

This week's in-class drawing exercises centered on the extreme zooming-in on a collection of still-life objects I had brought into the classroom. Students were told that they could choose one object, and through the compositional strategy of close-cropping (zooming-in), attempt to draw the object in such a way as to bring out its hidden structure. We discussed how, in a similar way, the artist Georgia O'Keeffe had seemingly revealed the hidden structures of flowers. It was suggested that students were to transform their object through this zooming-in and mark-making exercise. The objects included: animal bones, pieces of driftwood, a chrome kettle, a plumber's pipe and pipe wrench, amongst many other things. Given the drawing paper I presented to students, their drawings were to be fairly large in scale (approx. 30" x24") and done in charcoal. As a means of expanding on their thoughts, students were asked to cluster their ideas around the main objects in their composition, before they commenced their drawing.

For homework, students were asked to add to their initial 'thought-clusters' if they deemed necessary, and to respond, in writing, to either the drawings they had done, and/or to the drawing process itself . Students were asked to keep in mind that just as their objects were being transformed through the drawing process, their ideas might be transformed as well through the process of writing. My hope was that students would continue to use the written word not only to describe and transform their objects, but as a means of reflecting about the process of drawing, and that through the power of image and word, associations might be made beyond those of the immediately observed still-life. In addition to the homework assigned, students were also asked to bring in an object that was of significance to them. It might be a photograph, a small sculpture, a charm, even a natural object, i.e. a leaf - anything so long as it had some personal meaning for them. Students were also told that these objects would be the focus of the next drawing lesson, and thus should choose their objects accordingly. It was suggested to students that they should also be able to see something of interest in its form, something which they might like to pursue through drawing.

Week 12

As we looked at the homework, a wonderful diversity in student approaches immediately became evident. Students had created insightful 'thought-clusters' and written reactions to their objects. Because many of the still-life objects chosen by the students had been different, and had been

observed from its own particular vantage point, there had not been the same problem of mimicking other students' work, as we had seen in week 9. Students had rather sought out the unique structure of each object and created some very interesting drawings, which in some cases, completely transformed their observed objects. These drawings had been accompanied by insightful written thoughts. In one case, the cow skull had been close-cropped and was rendered quite beautifully, its forms becoming (as with O'Keeffe), almost flower-like. In the accompanying 'thought-cluster', the central word, 'skull' had become, 'death', 'falling apart', 'drooping', 'wilting', 'flower', 'smell' and 'springtime'. The word, 'pipe wrench' had been transformed to, 'clamp', 'screws', 'metal arm', 'arm', 'hand', 'mechanical hand', and 'android'. Again, some students had gone beyond the clustering and had created short written descriptions including metaphorical allusions. A metal pipe had become a metallic tunnel leading underground, while the weave of a basket had been likened to a bird nest and the intricacies of a spider's web. Through discussions, students voiced their pleasure at this more imaginative approach.

As our attention turned to the in-class drawing activity of this week, I mentioned to students that before starting, they might cluster some ideas or impressions around the objects of personal significance which they had brought in, or, simply might jot down any words that came to mind. My intention was that the formal 'thought-clustering' and writing take place more as a self-reflective activity -an activity which would help make conscious any of the personal associations underlying these 'important' objects. In terms of the drawing, I suggested that students approach their objects in a similar way to the drawings of the previous exercise. Composition was still very important, and by zooming-

in on the still-life objects, they might avoid the common pitfall of drawing a tiny, centrally-placed object, floating weakly on an empty page. They began in earnest, and continued drawing their objects throughout the class. Some students concentrated primarily on the drawing component, while others attempted to go back and forth between the drawing and the writing. I mentioned to the students that in the next class, we would look at the drawings of their objects, and accompanying written words.

Week 13

By this point in the semester, my aim was that students might see the written word as simply another tool in the art studio. Through a step-by-step approach of gradually easing students towards the idea of using metaphoric thought and writing to help fix then transform their ideas, I hoped that students would become more cognizant of their creative process. I assumed that it would be only natural then, that in a drawing and writing exercise which incorporated the use of personal objects, the students would respond in a more personal and self-reflective way.

The students' objects consisted of a variety of things. Photographs of people and places -both recent and from childhood, as well as an African sculpture, lucky charms, a toy, driftwood, and a stone, were among the objects students brought in to draw. The students' written accompaniments were equally rich and varied. Some students had created insightful 'thought-clusters'. A few had composed short poems inspired by their visual creations,

while others had written short passages, reflecting on what their object had meant to them. Through our discussions, students generally voiced their approval at being 'allowed' to draw their own objects (Researcher's journal, 24/11/98), though a few students, who had attempted both the drawing and writing activities simultaneously, had experienced some difficulty. "It was like the drawing kept changing", one student remarked, referring to how their written words affected the direction of their drawing process (Researcher's journal, 24/11/98) (see Chapter 5).

In terms of the in-class drawing exercises, week 13 would be a summation week of sorts. Because the next two sessions would be given over to students' individual projects, students in this session were given their last complex still-life. The dramatically lit arrangement, consisting of glass jars, drapery, boxes, a human skeleton, and the like, provided the students with ample challenging possibilities. Students were told that they were free to compose their drawings based on the scene before them, using any and all of the artistic tools at their disposal. The entire class would center on this still-life, and students could complete one, two, or several compositions working at the pace they desired.

By the end of class, students had produced some remarkable drawings. A few had focused exclusively on skeletal studies, capturing the intricate meanderings of the bones, while others, quite without prompting, had zoomed-in on sections, discovering the design possibilities hidden inside the inter-related structures of the objects. The drawings, for the most part, were well considered, balanced, and sensitively rendered. Surprisingly, a full third of the students had, somewhere on their pages, scrawled accompanying words. Most

of the words were simply descriptors: a skeletal study had, 'bony', 'twisting', and 'rigid', written across the bottom of the page. But a close-cropped image of the drapery had more metaphorical associations suggested by the accompanying words, 'cavernous', 'dark', 'moody', and 'mountain'. It now seemed, that the students seemed to be making their thoughts concrete, not only visually through drawing, but through writing as well.

Students had been reminded throughout the semester of the final, two-week project. This project was now at hand. Students could develop any subject they desired. Any idea or image they had perhaps always wanted to pursue, could now be realized in the final two weeks of the course. The drawing might be a portrait, a landscape, further skeletal studies, an idea or concept for a product design -anything at all. Students might use any media they desired, including the use of paint, in order to bring color to their works. Rather than continually impose subject matter on students, the objective in this final exercise was to have the students generate and develop their own ideas. A written component was requested as part of this final assignment. It was suggested to the students that the written word might help guide their ideas on their chosen subject. This written component, again, could take any form whatsoever. Students were told that they would have the next class in its entirety, half of their final class, and any homework time they needed, to devote to the project. We would look at their work at the end of the final class.

Week 14

Students arrived in class having already done a great deal of the preparatory work. Subjects had basically been chosen, and materials with which they would work had also been considered. The entire class was spent working out, arranging and rearranging their ideas. As I moved around the room from student to student, almost every drawer had begun to 'thought-cluster' their ideas around their central subject. A student working on a drawing from a photograph of their house,had created an elaborate chain of ideas linking their house to the idea of 'shelter', to 'home', to 'childhood', 'place', 'center', 'past', 'parents', 'warmth' etc. Another student had chosen to deal with the concept of time, and had begun an equally elaborate linking of visual and verbal ideas through her 'thought-clusters', while someone else had chosen a theme based on the idea of human cruelty to animals. Some students, on the other hand, had begun with words. Texts included a childhood rhyme, and even a recipe for chocolate cookies! As we discussed their process, I suggested to students that they remain open as to how their ideas, words, and drawings might transform. I asked them to remember how things might metaphorically represent other things. Trying to alleviate some of the difficulties from the previous session, I emphasized the point that a strong and well designed visual creation was still an important end goal of this drawing project, and that their work should attempt to reflect that. Students queried as to whether words might make up part of the final image. I responded yes, as long as the words also became integral parts of the composition. Discussion followed around the idea of how a word might look written in different ways, how it might visually

complement a drawing. This seemed to open possibilities up for the students.

Week 15

Students had again further developed their ideas as part of their home-work. Many of the projects had undergone radical changes in the past week. Many students had incorporated colour into their compositions. It was as if, after fourteen weeks of black and white drawing, they now leaped at the opportunity to use colour.

As I talked to students about their ongoing works, it was evident that many of them had grasped onto the idea of transformation. Their initial ideas, although still evident, had been greatly expanded from their original concepts. Much of this expansion seemed to have been through the use of their 'thought-clusters' (Researcher's journal, 1/12/98). Many had even used the idea of incorporating the written word into their final works. The final hour of the class was given over to a class discussion of the works. Each student had an opportunity to express his/her ideas about the drawings and about the process involved in its creation. Many students talked of how their ideas had been transformed, explaining how their images and words had 'become' something else in the end (Researcher's journal, 1/12/98). Some stated their appreciation for how they had become better drawers, while other students pointed out that they now realized their drawings could stand for 'something else' metaphorically (Researcher's journal, 1/12/98).

The written word's positive influence on the student's understanding of their drawing process on both a technical and expressive level had been the major impetus of the research. The students in my drawing classroom had shown an ability to not only render the directly observed object, but also make conscious and transform their ideas about their drawings, and their ideas about the drawing process. Through the metaphoric thought and written components of the course, students had learned to think differently about their drawings. They had seen that drawing could be a means of interpreting the world around them, through the creation of expressive and meaningful visual images. The following chapter presents the results of the student volunteers.

Chapter 5

Results of the Student Volunteers

At the beginning of week one, I had asked the students of the drawing class if any of them would be interested in volunteering to participate in this study (see Chapter 3). At the end of the first week, seven of the twenty-four students in the class had come forward, (see Chapter 4), and of those seven, only five of the students continued on with the study. One student dropped out of the Fine Arts program, while another student chose early on not to participate. Thus, the data collected represents the work of five student volunteers. This chapter describes the work of the students: Anna, Bob, Salma, Harlan, and Elsie.

The written component of the drawing class was based on five main exercises integrating both image and word. For example, weeks 1 through 4 dealt with the implementation of exercises which introducing students to the 'thought-cluster'. The aim of these exercises was to encourage metaphoric thinking, and the exercises were often focused on either the in-class, or homework drawing activities. Weeks 5 through 7 dealt with exercises wherein students were given a written text, and asked to interpret this text visually

through their drawings. Weeks 8 and 9 involved exercises that encouraged students to find their own written texts and then interpret them visually. Weeks 10 through 13 shifted the focus back toward 'thought-clustering' in relation to the drawing activity, as a means of further encouraging the students' self-reflection. Weeks 14 and 15 dealt with the students' involvement with a personal end-of-term project.

As stated, the drawing course was structured around these five main exercises integrating image and word (see Chapter 4), and as such, the description of the results reflecting the semester's work of *each* of the student volunteers, will follow the chronological implementation of these five units. As well, discussion of the interview sessions will be included according to when as they occurred during the semester, in this case, after weeks 7 and 15.

The first week's drawing had commenced with what Edwards (1979) calls a pre-instruction drawing. The purpose of such an assignment is for both student and teacher to gauge the student's drawing experience prior to the instruction which will take place during the session. It allows both student and teacher a means of looking at the improvement made within the course, as students often enter the course with varying degrees of drawing experience. Towards the end of the semester, these drawings can then be looked at and compared with the student's more recent production, allowing students a very graphic idea of the progress they have made.

Anna:

Exercise a) The 'thought-cluster'-Classes 1 through 4

Anna was a young woman, 20 years of age, a little older than most of her classmates. She had decided to return to college to continue her studies. Anna had shown, in her pre-instruction drawing, that she had brought considerable drawing ability with her to the classroom. Her portrait study of her in-class drawing partner showed a strong use of contour line, and well-observed shading (Fig.4). Her sense of proportion and placement of the image on the page indicated that she had probably been introduced to some prior formal drawing instruction (Researcher's journal,25/08/98). This was confirmed through an informal discussion with the student, in which Anna explained that she had attended an area high school where art instruction had been highly favored (Researcher's journal,1/09/98).

The concept of 'thought-clustering' (Gay,1988)(Rico,1989), introduced in these early classes, was grasped immediately by Anna. Her initial 'thought-clusters' quickly moved beyond the level of descriptors to more symbolic concepts. The word 'head' seemed to quickly transform to words such as: 'circle', 'center', 'mind', and 'spirit'. When clustering her ideas around the drawing activities, such as the blind and modified contours of week two, Anna also showed a tendency to reflect upon the drawing process itself. An example of this was with the, at times, rather disorienting blind contour exercise of week 2. This activity had been summarized by Anna with clustered words and ideas such as: 'twisting', 'meandering', 'mazes', 'labyrinth', 'bewildered', and

Fig.4

Anna's pre-instruction drawing

'strangely lost' (Researcher's journal,8/09/98). Later in week 4, Anna, confronted with the concept of positive and negative spaces, showed a tendency to quickly use these terms within her clustering of ideas. The concept of 'positive /negative' became: 'opposites', 'empty / full', 'void', 'negative edges' and so forth (Researcher's journal,15/09/98). In many such instances, Anna showed early on in the drawing course, a predilection towards the use metaphoric thought through her 'thought-clusters', as well as an ability to reflect upon the activity of drawing itself.

Her weekly written responses to the homework exercises also confirmed these observations. Often, her responses were extended paragraphs of ten to fifteen lines describing her drawing process, and her state of mind while engaged in the homework. The vocabulary used in these homework responses was also generally more sophisticated and complex than many of her classmates. Anna seemed to possess higher-than-average visual and verbal skills (Researcher's journal,8/09/98). According to Olson (1992), this sort of student can benefit from a visual-narrative approach to learning, the student often rising to the challenge of any task or assignment integrating the visual and verbal systems. Anna seemed to fit this description.

Anna's ease, both in integrating the written word with her understanding of the technical aspects of the course, and in the more metaphoric transformation of her ideas, as well as her tendency towards self-reflection, seemed to show that Anna would continue to respond positively to this teaching approach.

<u>Exercise b) Written text given to students -Classes 5 through 7</u>

Anna responded very well to the exercises involving a presented written text. There seemed to be very little hesitation regarding this leap toward responding to the written word through drawing. Significantly, all three of the texts given as exercises, had been expanded by Anna through 'thought-clustering'.

With the exercise in week 5, Anna had read the text, and initially clustered her ideas around the word 'plane'. As she explained, she later used the overall *impression* that the text had given her to again cluster some ideas, " I wanted to get what it would feel like to be up that high" (Researcher's journal, 22/09/98). The drawn result was a very textural, nearly abstract drawing depicting the patterned rows of crops as seen from a high vantage point.

Similarly, with the second text given in week 6, Anna responded primarily through an overall impression of the scene which had been evoked by the text. Her drawing was a dark, energetically drawn image of what appeared to be twisted, coiled tree limbs and roots seen from extremely close-in. Again, the drawing was highly textural. Words that had been keyed through her 'thought-clustering' were: 'dark', 'blackness', 'gothic', 'gnarly', 'the hobbit', and 'tolkein' (Researcher's journal,29/09/98). Clearly Anna was associating this text and the overall impression it had made on her with sensations and memories derived from other literary texts and, one might argue, 'lived' experience (Arnheim,1966) (Bruner,1986).

With the final exercise of this unit in week 7, Anna expressed that she had had some difficulty. "It was a lot harder. It was like the author's writing was

really obscure or something. I had a harder time seeing a picture in my mind"

(Researcher's journal,6/10/98). In this instance, Anna had keyed in on the

compound word 'brick-hard' from the passage, and had associated, 'red',

'blood', and 'sweat' to it. In response to these words, her drawing had

incorporated the color red using conté crayon. This time, the drawing had

become almost entirely abstract. "I tried to get a feeling like I did last week. It

was just harder", she remarked (Researcher's journal, 06/10/98).

Anna 's weekly written responses to the homework assignments enabled

me to better understand her manner of dealing with these texts. I had not

expected students, this early on, to 'thought-cluster' their ideas around an

impression of the text , but rather around individual words. I was pleasantly

surprised, however, as Anna's written responses indicated to me that she was

consciously integrating many of the technical ideas covered in class -contour

line, gesture, and shading exercises- into her drawing. All three of her drawings

had shown elements of our in-class drawing exercises, and her written

responses confirmed this conscious integration (Researcher's journal, 6-

20/10/98).

In terms of the mid-session interviews, Anna's view of the written

component to the course was very positive (See Appendix C). She spoke of her

desire to continue drawing from her imagination, a situation which she claimed

was aided by the written component. It was clear that despite the difficulties

experienced with the exercise in week 7, Anna was reacting well to the written

curricular component. Her drawings were strong, and she had begun to see

that her drawing work might involve a means of communicating a feeling or

sensation. Through the mid-term discussion with Anna in the presence of her

works, Anna showed that she had begun to integrate the technical aspects of the drawing course with an understanding of how these technical tools might be used to express an idea.

Exercise c) -Written text 'found' by students- Classes 8 and 9

My intention with this exercise was to alleviate some of the difficulties experienced by the students in week 7, and to get students to invest more time in their visual imagery by dedicating themselves in the choosing of their written texts. Anna seemed to have little difficulty with the investment of time in the exercise.

The results were surprising. Anna had chosen a newspaper clipping consisting of a photograph and accompanying short text dealing with a dramatic suicide. The picture was of a man leaping headlong off a building. While I had mentioned to students that any written source might be chosen, and had specifically mentioned newspaper clippings, I had not anticipated the 'twist' which Anna (and a couple of other students) had brought to the exercise. It became clear, through classroom discussion, that Anna had first been visually drawn to the dramatic photo; had then read it's accompanying caption, and then had clustered her ideas first around the photo and then the caption. With this exercise, I had originally intended that the students be inspired initially by words, then an image mentally associated with these words- not the reverse. However, what this result showed to me was the remarkable, close, seemingly natural, and often seamless interconnectedness of image and word (John-

Steiner,1987)(Lodge,1990)(Paivio,1991) (Sinatra,1986). Anna had quite naturally been drawn to the powerful photo as an initiator of thought. She had then read the text, and expanded her ideas through 'thought-clustering' around the associations and connotations driven by *both* image and text. Her 'thought-clusters' and written responses indicated that she began by asking 'why?' this suicide had occurred (Researcher's journal, 13/10/98). Through this expansion of her thoughts, Anna had eventually begun to see this unfortunate man, as having achieved in his suicide leap, a measure of, 'freedom' and 'flight'. Anna had subsequently mentally metamorphosed the man into a 'bird' (Fig. 5). This metaphorical association, and its resulting remarkable trans-formation, allowed Anna to develop a different understanding in regard to significance of the tragic event. In her response she wrote, "I saw the picture and read the story, and as I began to put my thoughts down, the man sort of changed towards a bird. So it seemed that he was really flying free, not dead!" (Researcher's journal,13/10/98). Her accompanying visual imagery was of a drawing depicting this figure in mid-flight, with wings of an angelic nature emerging from his back. For Anna, it certainly seemed that the inter-connectedness of the original image and text, as well as her own words and mental imagery, had travailed together in the creation of an evocative image. Through discussion of this work, and a couple of similarly expanded ideas and drawings, it was clear that Anna's (as well as other students') understanding of a more metaphorical thought process related to the drawing activity, seemed to have changed (Researcher's journal, 13/10/98). Students began to see that something observed might also have different, imaginative, personal meanings either attached to it, or created around it. The creation of different and personal

Fig.5

Anna's Drawing of Week 8

insight within the drawing process had been a key goal of both my teaching and research.

Exercise d)- Students' own written texts- Classes 10 through 13

Anna continued to show a tendency towards introspection regarding much of her drawing activities. All of her work in the semester, to differing degrees, had shown an inclination towards a certain self-analysis of her experience within the class (Researcher's journal, 20/10/98). The results of her homework exercises involving her own written texts, quite naturally, were no different.

As the class switched back to the 'thought-clustering' in relation to an activity exercise of week 10, Anna responded by developing her written ideas based primarily on her first hand perceptions of the in-class drawing exercise, which in this case, was centered on abstraction. In both her 'thought-cluster' and weekly response, Anna described her perception of how the exercise had affected her as follows, "At first I felt a little lost. I mean there was no structure there was only a little xeroxed paper. But then I saw the lines and then the forms and the black and whites, the shades. The more I worked at it the more I wasn't lost anymore" (Researcher's journal,27/10/98). For Anna, who continued to exhibit quite high visual and verbal skills, this integration of a written component to a visual art curriculum seemed to naturally fit with her own mode of learning (Olson,1992). She incorporated class terminology into her written work, expanding it metaphorically, and continued to establish links between her

experiences in the drawing studio and her 'lived' experience outside of the classroom.

In week 11, Anna had focused on the zoomed-in composition of the cow skull. Her clustered ideas had likened the closely-cropped object to 'death', to a flower (à la Georgia O'Keeffe), to 'wilting', 'drooping', 'smell', 'springtime', 'growth' and this, in turn, to 'fall', and once again to 'death' (Researcher's journal,3/11/98). Her weekly response talked of this cow skull coming to symbolize the cyclical nature of life and of the seasons. She wrote: "It's amazing I hadn't thought about it before, but it makes sense. The skull is all these things. On the surface its just a skull but if you enter into it then it becomes other things too" (Researcher's journal, 3/11/98).

In week 12, Anna brought into class a small African sculpture of a seated man, as her significant object . Her ideas and visual work explored the figure's 'edges and planes', its 'cubist' qualities (she made links to art history and Pablo Picasso), as well, its possible use in imagined 'magic-rituals'. She wrote in her response of her fascination with the object's "expressive, mysterious look", and that it reminded her of 'Picasso's painting', a painting style she admired (Researcher's journal,10/11/98). Anna also explained to the class that she had tried to depict the light captured by the figure's planes to make it look more roughly sculpted and 'primitive' rather than polished. She stated that she preferred this 'primitive-type look' as it was more expressive (Researcher's journal, 10/11/98).

It certainly now seemed that, coupled with Anna's propensity for self-reflection and introspection, the written word, was aiding Anna in the establishment of new associations and personal insight in the drawing

activities. Writing seemed to help her enter into the drawing process both literally, in terms of a solidification of her comprehension of the technical process, as well as figuratively, in terms of her understanding of the more expressive possibilities of drawing, and the possible personal meanings underlying not only the objects being drawn, but the drawing activity itself.

Exercise e)- Final end-of-term personal project- Classes 14 to 15

Anna had chosen 'man's cruelty to animals' as her thematic concept. To her credit, Anna had done extensive 'thought-clustering' around her theme in preparation for her project. Partly at my suggestion, and partly as she realized the vastness of her theme, Anna further developed her written and visual ideas through a series of 'thought-clusters' and thumbnail sketches. As in previous exercises, along with both her strong visual and verbal skills, came a high degree of personal motivation and dedication to the project. While other students were also admittedly motivated, Anna had shown this enthusiasm throughout all of the drawing classes during the semester (Researcher's journal,24/11/98). As I watched her ideas develop through classes 14 and 15, I was struck by how well she had managed to focus her ideas through her 'thought-clusters', and owing to the power of the metaphor, paradoxically expand on them (Feinstein,1982)(John-Steiner,1987). Beginning with a fairly vast subject, she slowly began to narrow her visual and verbal imagery down to a point where it would be more manageable in terms of a specific art work. As she thought about the conceptual problem at hand, key words in her clustered ideas began to develop from, 'cruelty to animals' to, 'hunting', 'slaughter', 'zoo',

'prisoners', 'inhumanity', 'un-human', 'beasts', and 'we are the beasts' (Researcher's journal,24/11/98). Numerous small, visual ideas were worked out in sketches, as Anna struggled with how to concisely represent such a theme. At one point during this process, Anna discovered and copied a written passage from a poem (the source of which she had not identified). The passage read, "the savages are upon me and I feel my flesh burn beneath the teeth of their indifference" (Researcher's journal,24/11/98). As she clustered her ideas around this passage, Anna gradually began to view the text as though it might be expressed from an animal's point of view. Tying this passage in with her previously 'clustered' idea -'we are the beasts', she explained to me, "I thought what if we were the savages to the animal?" (Researcher's journal,24/11/98). From this insightful leap of imagination, Anna further developed her visual and verbal ideas. Humanity, or inhumanity as it were, would be symbolized by a hand. The animal's prisoner status was literally depicted as a caged animal might exist at a zoo. Her idea-clustering around the passage also brought forth the idea of fire or flame. As the verbal and visual ideas developed in her sketches, Anna decided to merge all of these metaphorical symbols into one composition. The hand, the caged animal, and the flame would all be brought into her drawing effort. Significantly, the written passage, which had invoked much of this further thought and imagery, would also be incorporated. Anna expressed to me that she did not want the passage to be the title of the drawing. She asked, "what if I wrote it all around the drawing?" "Like a frame?", I inquired (Researcher's journal,1/12/98). Anna went forward with this idea, writing and rewriting her passage using different handwritten scripts. The result was a powerful drawing which incorporated her

found written passage. It was a drawing that I feel very effectively symbolized her original theme (Fig.6).

During the post-session interviews (see Appendix D), Anna again remarked how she had viewed the written component of the course as being significant to her learning. She voiced how the writing activity had been an aid in self-reflection, as well as how the 'thought-clusters' had allowed her to expand her thinking. She, in effect, had begun to see drawing and writing as 'parallel'.

In my opinion, Anna's work clearly represented the power of the written word in helping to evoke mental imagery, and in transforming, focusing and expanding that imagery, into the creation of a new understanding. Anna's work was indeed an extraordinary example of the successful interrelation of visual imagery and the written word in the drawing studio.
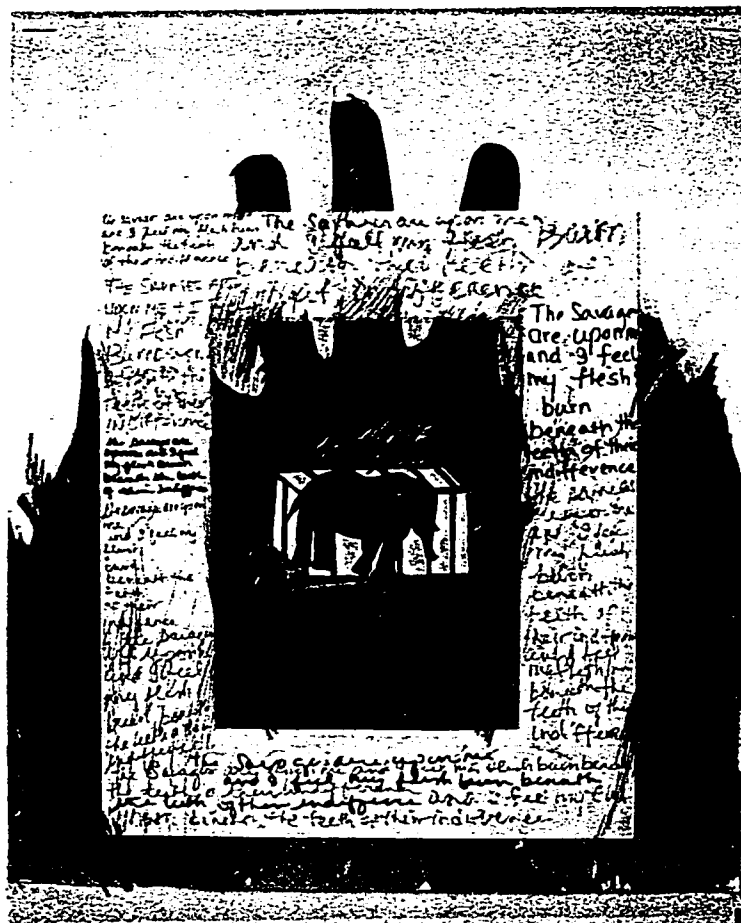
Fig.6

Anna's final project

Bob:

Exercise a) The 'thought-cluster' -Classes 1 through 4

Bob was 18 years old. Of all the student volunteers, Bob had the least drawing experience. His first in-class drawing showed that Bob drew almost exclusively from memory. In fact, as Bob drew his in-class partner he rarely looked at his subject. After a quick glance, Bob would turn almost completely around to his drawing easel and record what he thought he had observed (Researcher's journal,25/08/98). Despite my insistence to the class that this was a non-competitive activity, Bob later confided to me of the disappointment he felt in comparing his efforts with those of other students in the class (Researcher's journal, 1/09/98) (Fig.7).

The 'thought-cluster' activities of the initial weeks proved to be somewhat difficult for this student. Initial results were relatively brief, superficial descript- ions of the physically drawn objects. Bob's 'thought-clusters', based on our first drawing exercise, yielded the central word, 'head' which gave way to, 'eyes', 'mouth', 'ears', 'hair', etc. Ideas clustered around the blind contour drawing activity of week 2 yielded, 'fingers', 'long', and 'rinkles' (sic).

Bob's written responses to the homework activity were equally brief. In them, he often expressed uncertainty about what he was supposed to be writing. He would describe or paraphrase the drawing homework instructions, or at times, express his frustration with a particular technical point encountered within the exercises. "How can I draw without looking at my book?", was Bob's response to the blind contour drawing (Researcher's journal,8/09/98). Bob's

Fig.7

Bob's pre-instruction drawing

vocabulary in these responses seemed to be a little less developed than many of his classmates. In many ways, Bob's level of drawing and verbal skills indicated that his progress in the course would be more challenging. (Olson, 1992)

Although, by week 3, Bob's drawing was improving. I could see significant progress in terms of his observational skills, hand-eye coordination, contour drawing and perception of positive and negative space relationships. However, I could discern little effect of the writing exercises on his understanding of the technical or self-expressive aspects of the course (Researcher's journal, 1/09/98, 8/09/98).

Exercise b) Written text given to students -Classes 5 through 7

Bob's adaptation to these exercises was not as smooth as many of the other students in the class. To his credit, Bob did continue to cluster his ideas around the given texts. However, his clustered ideas remained quite descriptive in nature.

With the first of the exercises Bob clustered his ideas around the word 'plane'. The words, '747', 'jet', 'flying', 'aircraft', 'clouds', and 'sky' came forth. His drawn interpretation of the written text was correspondingly of a jet aircraft seen partially from beneath surrounded by a few cumulonimbus clouds. On a technical level however, the drawing had been rendered in a much improved, more sensitive line which now filled the drawing page, indicating that the in-class drawing exercises had been understood by Bob and integrated into

his homework activities. Much of the class discussion in week 5 had centered on whether there was a 'right way' of interpreting these texts, and whether students had to interpret what the texts actually "said" (Researcher's journal, 22/09/98). As a result of this discourse, Bob's effort in the following week seemed to be much freer (Researcher's journal,29/09/98).

In week 6, Bob had clustered his ideas regarding the given text around the words, 'forest path', and 'maze of trees'. Words emanating from these initiators seemed far more image-laden than the previous week's efforts. The words, 'Dark', 'green', 'shadowiy'(sic); and 'trap', 'puzzle', 'frightning'(sic), 'lost', and 'strange' had emerged from Bob's 'thought-clustering'. As well, his drawing efforts showed that rather than simply illustrating the scene as he had done in week 5, Bob had tried to get some of the imagery and feelings evoked by his clustered ideas integrated within his drawing. His imagery involved a scene depicting a dark enclosed space, wherein pine branches seemed to almost blot out the sky overhead. Bob had incorporated the shading technique introduced in the previous class, and in keeping with his subject, his drawing was also quite dark in tone. The scene was rendered as if through the viewer's eyes. Bob seemed very pleased with his efforts and stated this in his weekly homework response.

The exercise of week 7 however, provided some difficulty for Bob. In his homework response, Bob stated, "I didn't know what you meant with this one. I kept reading it and reading it, but I still didn't know what to do." Like many of the students in the class, Bob had found this text difficult to interpret.

During the mid-session interview, Bob expressed that he had been having great difficulty with the written component to the drawing course (see

Appendix C). While he felt that his drawings had improved, he did not really understand the purpose of the written component. Bob did mention though, that he was pleased by the results of his homework exercise from week 6, and that this was related to "the words you gave us" (Researcher's journal, 6/10/98). Overall, however, up to this point in the course, Bob had struggled with this added written component in the drawing curriculum. On a positive note, Bob also indicated that his intention was to "keep trying" (Researcher's journal, 6/10/98).

Exercise c) -Written text 'found' by students- Classes 8 and 9

With the exercises involving the student's own 'found' text, Bob had come up with some interesting results. In week 8, he had chosen the words to a popular song written by Tom Waits, and done a drawing based on his ideas inspired by the lyrics. Bob first clustered his ideas around the song's words which described a train moving through a downtown inner-city neighborhood and then produced a rather imaginative drawing (Fig.8). Undeterred by the difficulties encountered in the previous week, Bob seemed to have picked up where he had left off in week 6. His clustered ideas, although remaining fairly descriptive in nature, began to evoke a sense of place, a sense of the scene which was the subject of the song. Although one cannot deny the influence of the actual music and sung lyrics as contributing factors in the evocation of the imagery, Bob had turned to the *written* lyric accompanying the music as
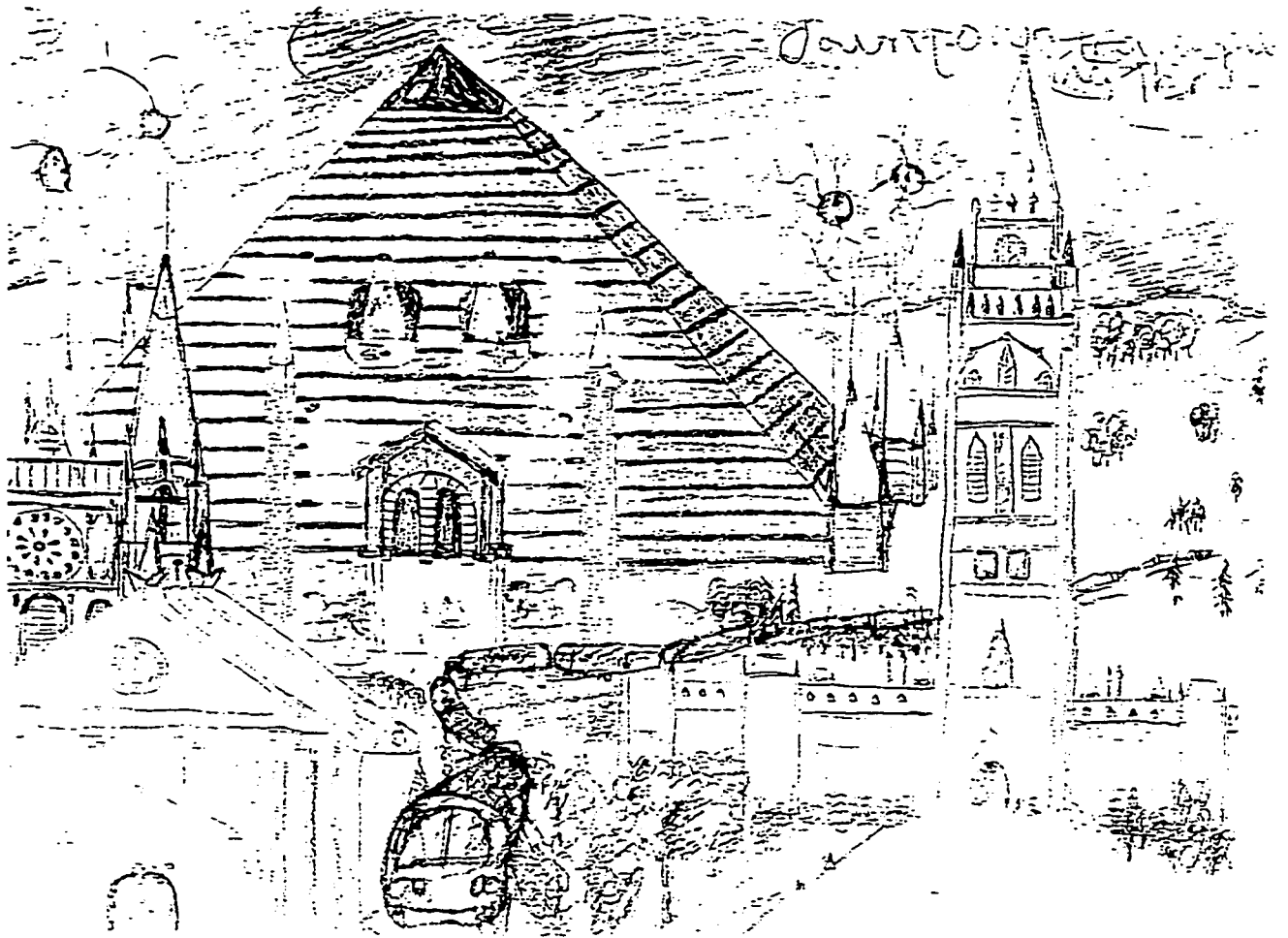
Fig.8

Bob's drawing of Week 8

another source of inspiration. This was evidenced by Bob's weekly written response, as well as by the drawing itself. Possibly taking his cue from another student's (Salma) earlier efforts (Researcher's journal,13/10/98), Bob had written part of the song lyric on the top corner of his drawing page. The result was quite a successfully composed nighttime cityscape of a train passing through a neighborhood. While not denying the obvious impetus of chosen subject, namely the song recording itself, Bob had expanded the song's ideas through a 'thought-cluster', which to Bob, seemed to evoke qualities relating to the nighttime scene. It was evident that Bob had used his written words to fix his thoughts and to evoke further imagery -imagery which would later fuel his drawn image.

Bob's work in week 9, like many of the students in the class, appeared to suffer from a desire to 'do the exercise right' (Researcher's journal,20/10/98). It seemed that many students had picked up on the notion that a newspaper image and caption was 'good', and the results, unfortunately were rather much weaker copies or illustrations from both magazine and newspaper sources. Bob's work was among these efforts.

While still valuable, in that these students had reacted to a visual stimulus, attached words to their imagery, and then produced some drawings, the level of the students' personal involvement with their imagery seemed much less pronounced. This was confirmed through a class discussion, wherein students related having made no leaps of imaginative discovery (Researcher's journal,20/10/98). As a teacher, I had to keep in mind that the purpose of the written component to the course was, in essence, to expand the student's thinking in relation to both their subject matter and drawing process. Students

simply mimicking the work of others, skip the essential step of personal involvement, namely the creative thought centered on their subject, and thus students miss out on the development of any real personal insight. In this way, I came to realize once again that it is not the physical written word within the exercise which holds the key, but rather the written word's use within the creative or metaphorical process of thinking (Researcher's journal,20/10/98). The individual student's involvement with the word, in other words, the mental associations and leaps of insight made on an individual level, is important in the creation of personal meaning.

Exercise d)- Students' own written texts- Classes 10 through 13

Bob's reaction to the exercise of week 10 was, happily, one which showed him beginning to examine his own experience of the drawing activity. While Bob had not shown the same degree of introspection as Anna, the results of week 10 did nevertheless show some positive signs of influence from the written component, particularly in regards to the expansion of his thought. In both the 'thought-cluster' and his weekly written response, Bob had begun to examine his journey through, the at-times, bewildering in-class exercise in abstraction. In his written response to the exercise, Bob described how he had tried to find the positive and negative shapes within his photo-copied section of the group project (see Chapter 3). He wrote, "I looked for the edges of the shapes. I tried to find out what I was drawing. It wasn't anything but it was something. It was forms and things so I just took it piece by piece"

(Researcher's journal, 27/10/98). His clustered ideas had also revealed a string of thoughts leading from, 'abstracion'(sic), to 'nothing', to 'edges', 'shapes', 'positive / negative pieces', 'shading', 'patterns' and 'abstrac (sic) drawing'. It seemed that Bob had begun to mentally map out the path he had taken through the exercise. While not necessarily exhibiting metaphorical insight in his writing, it was clear that in using the technical terminology of the course, Bob was utilizing the written component as a means of reconstructing his own mental pathway through the exercise. This making concrete of one's internal thoughts and decisions concerning the drawing process -a process made, in-part, possible through the writing activity- most assuredly would have been by-passed by Bob, had not the written component been added to the course. If anything, this example demonstrates that the written component both reinforces an understanding of the technical side to drawing, *as well as* provides a means of reconstructing the thought process used in creating a drawing.

In the class of week 11, Bob had zoomed-in on a section of the still-life, consisting of a large ceramic coffee mug, an inverted wooden box, and some drapery. His drawing had been rendered using a mixture of the shading-away and contour line technique. Again, his writing activities exhibited evidence of the mental mapping involved in his process of the drawing. In his homework response, Bob wrote of his decision to make "the box go off the page" (Researcher's journal,3/11/98) in order to focus primarily on the mug and part of the drapery. He explained how he had used contour line in order to depict the flowing nature of the folds in the drapery. He also wrote of his struggle in trying to portray the oblique opening of the coffee mug as seen from his particular vantage point. " I couldn't get the top right. That was hard trying to

make it look like a hole." (Researcher's journal, 3/11/98) In essence, Bob was creating a narrative accompaniment to his drawing efforts. An accompaniment, once again, which made concrete (Postman,1985)(Ong, 1982) his experience within the drawing process.

In week 13, Bob's object of significance had been a toy car which he had had in childhood. Once again, his ideas had been expanded through the clustering activity, but this time, given the importance of the object, Bob had also begun to examine the object's significance for him. The car had been linked to: '7 years old', 'favorite toy', 'blue', 'rounded fenders', 'playing', 'kids', 'small', 'giant', 'giant looking in', and 'me looking in' (Researcher's journal, 17/11/98). Bob's in-class drawing became the visual embodiment of this string of 'clustered' ideas. In a most imaginative way, Bob's drawing depicted this toy car, both zoomed-in on, and seen from the back. Peering in through the front windshield was a giant face, presumably Bob's, filling the windshield. In the bottom corner of the drawing were the words, 'a giant looking in'. During the discussion, Bob explained to the class his idea of drawing the car as if it were life-size, and being held by a giant. He expressed his satisfaction with the results, as did many of the class (Researcher's journal,17/11/98).

Through these exercises, Bob had shown that he had begun to integrate the writing component as a means not only of examining his experience of the drawing process, but also as a prime means of generating his ideas for the drawing itself. By stringing his ideas together in the 'thought-cluster' as they emerged, Bob demonstrated part of his ongoing visual and verbal reasoning at work, as he contemplated his forthcoming drawing. I could almost see the imaginative leap in the association created between the word, 'small', and its

counterpart and opposite, 'giant', reflected in Bob's drawing. For someone who had had such difficulty with the written component at the outset of the course, this small step forward had indeed been encouraging.

Exercise e)- Final end-of-term personal projects- Classes 14 to 15

Bob's search for a subject for his personal project was somewhat more problematic. Given free reign, students are often initially at a loss as to what they might visually explore through their drawing. It is often far easier to be nudged along by the teacher rather than to look within oneself for inspiration. My hope had been that by incorporating metaphorical and creative thinking strategies into this drawing course, the students might be better enabled to find subject matter more personally relevant to them. Nevertheless, I suggested to Bob that he might revisit a theme that may have come up during the semester, perhaps a subject or approach he had previously enjoyed exploring. Bob seemed to heed this gentle urging. His theme or topic would be an illustrative account of a child's nursery rhyme. Bob explained to me informally, that given his satisfaction with his project of week 13 involving the 'significant' object, he had decided to continue to deal with themes from his childhood (Researcher's journal,24/11/98). His chosen rhyme was a popular verse, and one that he vividly remembered . Thus, with this as his topic, Bob commenced the 'thought-clustering' of his ideas. The nursery rhyme consisted of four separate verses. Initially, Bob struggled with the idea of illustrating these four verses independently, producing in effect, four drawings. This seemed, however,

unsatisfactory to Bob (Researcher's journal,24/11/98), and as we talked about the problem, the idea came up about either finding one image to summarize the entire rhyme, or establishing a separate image for each verse, and then working these images into one complete composition. Bob decided on the latter approach. He then sought to cluster his ideas around each of the four verses, narrowing his focus to find one image which might symbolize the action in each stanza. This proved to be quite fruitful. Through the words and ideas associated with the rhyme, Bob developed a central image for each verse which would summarize its action. Bob also felt that the poem should be an integral part of his final drawing (Researcher's journal, 24/11/98). While the drawing continued to visually reflect the four-verse structure of the rhyme, it also quite effectively integrated the text itself, through Bob's writing of the poem above, over, and around his drawn forms. The rhyme, in effect, meandered through the four images, physically linking the images and words, acting as a bridge between each of the separate stanza-images (Fig.9).

While this drawing had made no real metaphorical allusions, nor did it apparently generate any profound personal insight, I believe that Bob had profited from the written component of the exercises of the drawing curriculum. Through writing, many of the course's technical terms and concepts had been reinforced. This was evidenced by the vast improvement in Bob's drawing, as well as his apparent comprehension and use of these terms in many of our discussions.
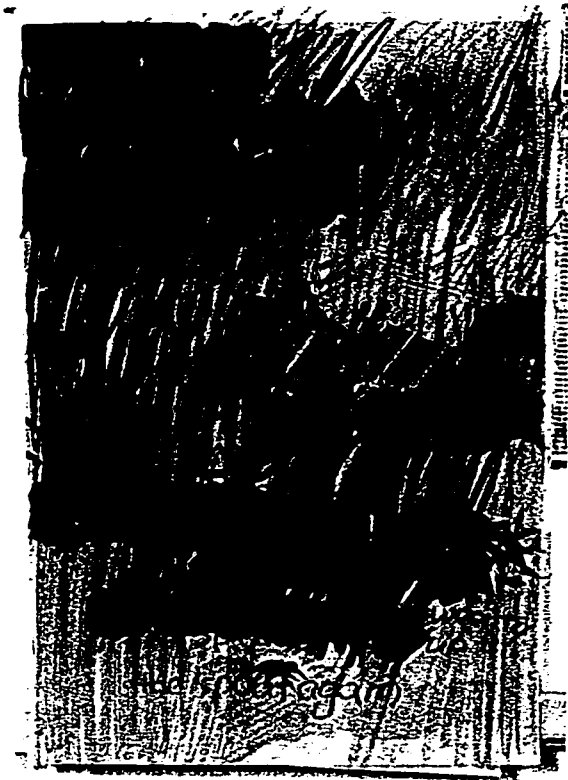
Fig.9

Bob's final project

In the post-session interview, Bob reiterated his ambivalence toward the significance of the written component to the course. While a certain number of his projects were cited by Bob as being successful, i.e. the drawings came out as he had imagined them beforehand, Bob still mentioned his ongoing difficulty of using words with his drawings. However, he did acknowledge that the writing activity had allowed him to "think of other stuff", particularly in reference to his childhood (see Appendix D). Most importantly however, Bob mentioned that he now felt much more confident as a drawer. I believe that Bob had begun to see the possibility that drawing might be a viable pathway for self-reflection and self-expression. His final project of weeks 14 and 15, had also incorporated childhood memories, a source he had chosen to revisit from thoughts previously developed in the exercise of week 12. While his learning of the technical skills of drawing was important and encouraging, I think that Bob had also been introduced to drawing as a valuable medium for the expression and development of his ideas.

Salma:

Exercise a) The 'thought-cluster' -Classes 1 through 4

Salma was 18 years old. She had shown through her pre-instruction drawing, that she too had had considerable drawing experience prior to the class (Fig. 10). Her drawing partner had been rather sensitively rendered in

Fig.10

Salma's pre-instruction drawing

contour line with minimal attention to shading. The line which Salma used showed quite an astute attention to the line weight -the lightness and darkness of the line- resulting in a well-observed (and well-received by many in the class) representation of her drawing partner.

The initial 'thought-cluster' exercises of weeks 1 to 4 proved more difficult for Salma, as was reflected in the comments of her written homework responses. The 'thought-clusters' themselves were quite brief and descriptive. Her weekly written responses to homework were equally brief (Researcher's journal,15/09/98). Although it had been stressed that spelling and punctuation were unimportant in terms of the writing for this course, it was impossible not to notice the apparent difficulty which Salma had in these two areas (Researcher's journal, 1/09/98, 8/09/98). Her written responses informed me that she enjoyed the drawing part of the class, but had difficulty "using words" (Researcher's journal,8/09/98). In one weekly response, she simply stated "I can't think of any words to right (sic)" (Researcher's journal,1/09/98). Her drawing, on the other hand, progressed well. Salma showed an eagerness and zeal in all of her in-class assignments.

In week 4, something interesting occurred. Salma, in clustering her ideas around the positive and negative spaces of a homework assignment, involving the drawing of a chair, created associations between the chair that she had drawn and some events and people in her life. In our classroom discussion, she explained that the rocking chair had made her think of her grandmother, her childhood, and her feeling of the loss in her life given the recent death of her grandmother (Researcher's journal,15/09/98). Salma described this loss as a, "hole in my life" (Researcher's journal, 15/09/98).

"Like the empty holes in the drawings", offered another student, referring in particular to the negative space exercise (Researcher's journal, 15/09/98). Salma and others agreed. Salma had had an insight. In Salma's case, the 'thought-cluster' had helped reveal a personal insight surrounding the loss she had felt with the death of her grandmother -this through the associations created in the writing down of her 'clustered' ideas. Although the association made between the positive / negative holes in the drawing and the "hole" in Salma's life was seemingly attained through verbal means -through the classroom discussion- I believe the attainment of the link between the drawn chair and the cherished relative, and then the achieving of a personal insight or meaning, shows the efficacy of the 'thought-clustering' exercise in terms of encouraging metaphoric thought. (Gay,1988) (Rico,1989) This tiny breakthrough involving the linking of one's art work to subjective insightful meaning was encouraging. Furthermore, on a technical level, a surprise association had been made between the technical terminology (positive/negative spaces) of the drawing exercise and this personal insight. This was an encouraging example of how these writing exercises in a drawing environment might allow for a deeper understanding of the drawing activity.

Exercise b) Written text given to students -Classes 5 through 7

Salma's interpretation of the text given to students in week 5 involved a view from above the airplane as it flew over farmers' fields below (Fig.11). It had been quite beautifully rendered in a soft contour line, and as most of the
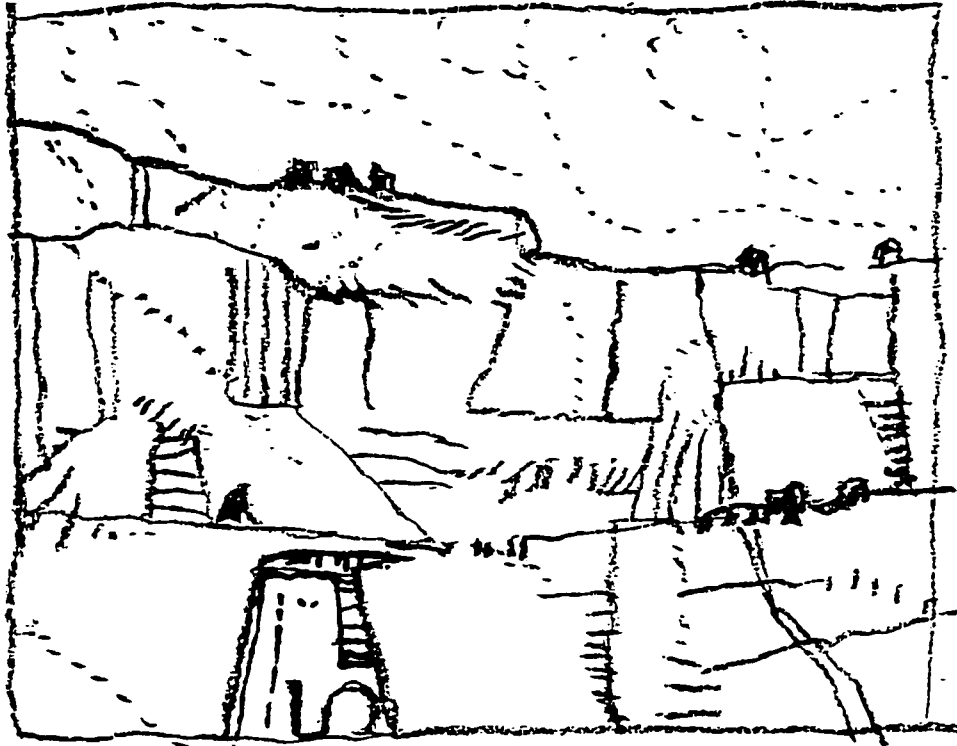
Fig.11

Salma's drawing of Week 5

students had done, the image filled the drawing page. Salma had not clustered her ideas as we had been doing in class, but as she explained, before she had started drawing her image, she wrote the words which she had mentally clustered, directly onto her drawing page. As a result, the words, 'flying', 'height', 'bird's eye view', 'looking down', appeared in small characters across the top of her drawing.

The text of week 6 was equally evocative for Salma, and she had again clustered her ideas directly onto the drawing surface. (This practice evidently inspired other students for in subsequent weeks more examples of this would emerge.) The words, 'leafy', 'jungle', 'tropical, 'savage' , and 'lost', appeared over her drawing effort, which depicted a dark, jungle-like forest, replete with huge tropical-looking leaves and a tiny female figure seen from the front, standing amidst the towering trees. Salma wrote in her weekly homework response, that she now felt, "it was easier to use words" (Researcher's journal, 29/09/98). She further explained, that she now knew what I meant when I said that words could stand for something else. Salma was beginning to realize that the words were not necessarily intended to be taken literally, and then illustrated, but the words might be viewed rather as initiators of imagery, an imagery which might develop through further word associations. In the first four sessions, Salma had been quite tentative, even fearful of using words in examining her own imagery. Through the last two exercises of weeks 5 and 6, she had seen that words coming associatively to her mind, might be used as jumping-off points for further imagery (Lodge,1990) (Olson, 1992).

Interestingly, with the exercise of week 7, Salma did not seem to encounter the same difficulties as many of the other students. Instead, she had

seemed to focus on the words, 'cotton' and 'cottonhouse', and as she explained to the class, had associated these to, 'slaves', 'whites and blacks', 'slavery', and 'the south' -words which again appeared across the top of her drawing. Her drawing itself was a portrait study of a African man with an air of pathos. She informed us that it had been drawn from her imagination. I was quite struck that someone who initially had had such difficulty with attributing words to her drawings, now had responded so well to an exercise that had been quite difficult for many students. In this case, I believe that the key for Salma was in treating the words not as solid and concrete, but rather as flexible image-laden things. Because Salma perceived the words as flexible, they could be bent, manipulated, and stretched for Salma's expressive purposes. This fact demonstrates the paradoxical nature of the written word. While it makes concrete and fixes our utterances (Postman,1985)(Ong, 1982), it can simultaneously revivify and expand imagery in our mind (Lodge, 1990).

The mid-session interview confirmed Salma's warming to the written component of the course. While initially, she had been quite nervous in regards to how the words might be used -spelling and punctuation were a real worry for her- Salma had come to see the written words as image-laden aids which helped her to 'picture things' (see Appendix C).

Exercise c) -Written text 'found' by students- Classes 8 and 9

In response to the exercise of week 8, Salma had found a poem about wild horses and had developed her 'thought-clusters' and drawing around this

central subject. In looking at her work, it was evident that Salma had used her 'thought-clustering' in the expansion of her ideas about this poem. The central subject of the wild horses had become, 'moving', 'running', 'sweeping mane', and 'wind', all images while not explicitly stated in the poem, had certainly been invoked by the words of its author. Salma's drawing was a gestural study of a horse rearing on its hind quarters, surrounded by what appeared to be a furious wind. She stated to the class that she remembered seeing a similar image somewhere in her art history book, and had liked it so much she wanted to use it because it, "reminded her of the poem" (Researcher's journal,6/10/98). I recognized the image as being derived from a Eugene Delacroix sketch. Salma's version however, had been quite different from the original . Her horse was a small centrally-placed figure and was drawn in a broad gestural manner. Considerable attention had been placed on the quality and character of the line throughout the composition, making for quite a successful picture (Fig.12). In her written response, Salma talked of trying to achieve a storm-like effect surrounding the horse with the gestural techniques we had learned, "I couldn't use the contour lines they were too slow. I wanted the feeling of that wind, so I used more gesture" (Researcher's journal,6/10/98). Here, Salma was linking both her technical understanding of a particular exercise, with an attempt at the visual evocation of mood or feeling inspired by her chosen poem. This, again, was positive evidence of the written component to the course and its effect on the student's understanding of the drawing process. The technical acquisition of skills was being linked with both the means and the method for the expression of an idea.

Week 9 brought with it more positive results as seen in Salma's work.

Fig.12

Salma's drawing of week 8

Salma had decided to reinvestigate her original image and text involving the wild horse. In this revised work, Salma had further employed 'thought-clustering' to expand her ideas and impressions of the poem. The words 'muscles', 'power', and 'strength' now appeared in her 'clusters'. Significantly, the image itself had changed somewhat, particularly in terms of its composition. The small centrally-placed horse, had been zoomed-in on and now occupied the entire page, its hind quarters and mane running off the edges of the drawing surface. The same strong gestural approach had been employed. Salma explained in her response to the exercise, that she had tried this zooming-in or 'cropping' in order to make, "the negative spaces littler. That way I can focus in on the muscles more and show its strength better" (Researcher's journal, 13/10/98). Here, Salma was again connecting the more technical aspects of the course with an understanding of how to employ these techniques in the expression of an idea -an idea generated through the inspiration derived from the written word.

Exercise d)- Students' own written texts- Classes 10 through 13

Salma's efforts in week 10 showed her both examining her experience of the technical approach to the drawing, as well as a more expressive aspiration for her drawings. Her 'thought-cluster' based on the in-class drawing activity dealt with, 'abstraction', 'darkness', 'serpent lines', 'squiggly', 'soft like', and 'scaly', as she observed the qualities of the small photocopy in front of her. Her weekly response to the exercise provided more of the sort of mental

mapping evident in Bob's work. Salma wrote, "As I'm looking at the square I was seeing just abstraction and then lines and forms appeared. Then I noticed some textures and more lines. All of a sudden it looked like a snake or an arm but it was upside down. It was a person's arm I thought coming out of the darkness. I checked with Piérre (a neighbor in the group project) and it was an arm. From then I tried to show the soft muscles in shading" (Researcher's journal,27/10/98). Salma, in her written response, clearly appeared to walk herself through the visual and verbal thinking which underlay her decisions. Not unlike Arnheim's (1969) ideas regarding the primacy of the visualization experience, an experience which may then be supported by words; or of Perkins' (1981) notion of the purposeful attempt to perceive recognizable shapes within a cloud, Salma, through her written response, seemed to show how the arm she had observed emerged from the dark abstract environs of the photocopied square in front of her. The verbalized words had supported her visual searching (John-Steiner,1987) and the act of writing had made her thought process that much more explicit.

In week 11, Salma had also focused in on the cow skull. I had noticed and recorded that, increasingly, Salma had begun to work in close proximity to Anna (Researcher's journal,13-27/10/98). Their proximity within the class indicated an ease and understanding which they had concerning each other's work and work methods, and it became apparent that they mutually and positively influenced one another. Salma had also chosen the skull as the predominant subject of her drawing. Her clustered ideas and drawing approach, however, differed greatly from Anna's. Salma's clustered ideas had brought forth words such as, 'skull' , 'surface', 'broken', 'fractured', 'cracking',

'splits', 'crevisses (sic), 'valleys' and 'rivers'. She explained in her written response to the exercise, that as she zoomed-in on the cow skull, she began to look at its fissured surface, eventually beginning to see within it geological features, as seen from high above. The 'cracks' and 'splits' of the skull's surface had associatively become meandering river valleys and ravines. Her drawn image played on this different view of the cow skull, zooming-in on its deeply ravined and scarred surface.

In week 12, Salma's object of personal significance, and her resulting drawing and clustered ideas, continued on this metaphorical tack. Salma had brought into class a piece of driftwood which she had found the previous summer. Given what seems to be the natural tendency for humans to want to 'see' other forms in a piece of driftwood, mirroring the shape-in-a-cloud analogy (Perkins,1981), the driftwood was thus an object ripe for metaphorical expansion. Salma initiated this expansion through her written 'thought-clustering'. The driftwood seemed to maintain its association with the 'sea' and the 'beach', becoming through the 'thought-cluster' the head and neck of a 'bird', a 'loon', and then, 'natural forms', 'nature's forms', 'curving', 'peace' and 'calm'. Salma explained in her written response, that as she looked at the driftwood and wrote down her thoughts, the words made her cognizant of other associations. "As I was writing it made me picture where I found the piece of wood and about how beautiful and peaceful it was there. It made me think about my summer and other times I had on the beach" (Researcher's journal, 17/11/98). In my opinion, Salma with the aid of the writing exercises had been made more conscious of the transformative act which had transpired through the act of drawing her significant object. Through writing, she had made the

metaphorical transformation of her object explicit, and expanded her view of the object's qualities and personal significance, moving from its resemblance to the head of a bird, to seeing it as embodying 'nature's forms' and finally representing for her, 'peace' and 'calm'. Significantly, Salma had, through these associations, come to recall this piece of wood as being a part of a recent cherished memory. The written component of the curriculum seemed to be fulfilling its intended purpose.

Exercise e)- Final end-of-term personal projects- Classes 14 to 15

Salma had chosen to do a self-portrait as her thematic project. As in her exercise of week 12-13, which had involved the metaphorically transformed driftwood, the self-portrait might also be seen as a subject lending itself to a degree of transformative introspection and self-reflection. Salma had certainly exhibited this tendency towards introspection in her approach to many of the previous exercises. As she began clustering her ideas around the word 'me', she expressed that she did not want her drawing to be merely transcribed from a photograph, "like a grad photo", as she put it (Researcher's journal,24/11/98). Rather, as she later explained in her written response, she had wanted to, "get at some feelings underneath" (Researcher's journal, 24/11/98). Her clustered ideas showed the direction of her thinking, from initial adjectives describing her physical characteristics, to words which seemed to describe an examination of a more interior, emotional side of herself. As we informally discussed her ongoing clustered ideas and sketches, we discussed the idea of different

emotional states. Salma talked of her earlier exercise, wherein she had discussed the loss she had felt with the death of her grandmother -a feeling invoked by the drawing, thinking, and writing about her grandmother's chair. Salma seemed to use this moment of insight as a point of departure regarding the clustering of her ideas on the self-portrait (Researcher's journal, 24/11/98). Just as Bob and a few other students had done, Salma had revisited the thoughts surrounding an earlier exercise, and used them as a source for further inquiry. This had initially surprised me, for I had not expected that students would elaborate their ideas based on a previous theme that they may have worked on. The fact that some students were proceeding in this manner further emphasized the importance of acknowledging the continuity of a student's learning during the session as a whole. The memories, which I believe had been brought to light with the aid of the written exercises (in some cases from exercises at the beginning of the semester), were now being revisited as sources for further thought, and further visual imagery. Clearly, something substantial and lasting had been introduced to the students, for they now felt the desire to reexamine their initial ideas. While this tendency had been something completely unanticipated, I was pleased by what the earlier exercises incorporating writing had seeded. Salma continued with her clustered ideas and small preparatory sketches. Her final work was a finely drawn self-portrait done in white conté, on black paper. The close-cropped drawing depicted Salma's face, seen frontally from forehead to chin, and was placed slightly off-center on the dark surface. Beside her face on the right side of the composition, Salma had written the word, 'empty'. The rather expressionless face juxtaposed with this word gave the entire scene an air of

sadness (Fig.13). In her written response, Salma wrote, "I wanted to get at some feelings underneath. When I thought of my grandmother before I remembered feeling terrible. Then later I thought of the word 'empty' and it seemed to feel right" (Researcher's journal,1/12/98). Salma, as Anna had done, had produced a strongly expressive drawing which undoubtedly had immense personal significance for her. The written component of the drawing course had assuredly aided Salma in attaining, maintaining, and rendering this personal insight. This was confirmed during the post-session interviews. Salma spoke of how the written component of the course had allowed her to think differently about her drawing activity. She spoke of how the memories of her grand-mother, of the transformed driftwood, and the cow skull, had been initiated through the "way of thinking" made possible by the 'thought-cluster' and writing exercises (see Appendix G).
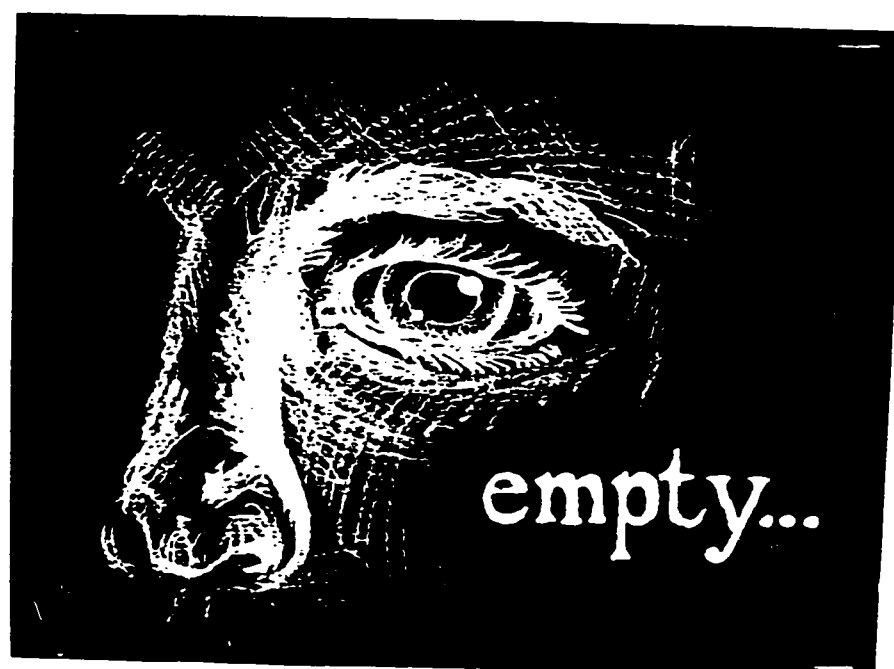
Fig.13

Salma's final project

Harlan:

Exercise a) The 'thought-cluster' -Classes 1 through 4

Harlan was 19 years old, and proved to be like Anna: quite proficient in both visual and verbal skills. His first drawing was a painstakingly rendered representation of his drawing partner, reflecting a sense of light falling on his subject through his use of careful shading (Fig.14). Harlan always intently observed his subject, working in a very deliberate, slow, and calculating manner- much different than Anna's quicker, seemingly more intuitive approach (Researcher's journal, 15/09/98,22/09/98).

In a similar fashion to his drawing style, Harlan's 'thought-clusters' seemed to be more direct, linear, and descriptive, rather than associative. An example of this was the exercise involving the contour studies of the hand of week 3. Harlan's 'thought-cluster' began with the initial word, 'hand', to 'fingers', to 'digits', to 'numbers', to 'calculating', to 'zero / one', to 'on / off' (see Appendix H). Harlan, in the weekly homework response, clearly explained his thought processes in constructing both his clustered ideas, as well as his drawings. In one instance in week 3, he described how he imagined his drawing hand recording the little contour ridges of his other hand-as-model, as a seismograph records the least little tremor in the earth's crust (Researcher's journal,8/09/98). It seemed that Harlan, through the metaphoric thought encouraged by his written 'thought-clusters', was viewing his drawing activities in a more expansive manner. His hand, and its inherent qualities, had had been likened to the functioning of a computer, and in another scenario, the
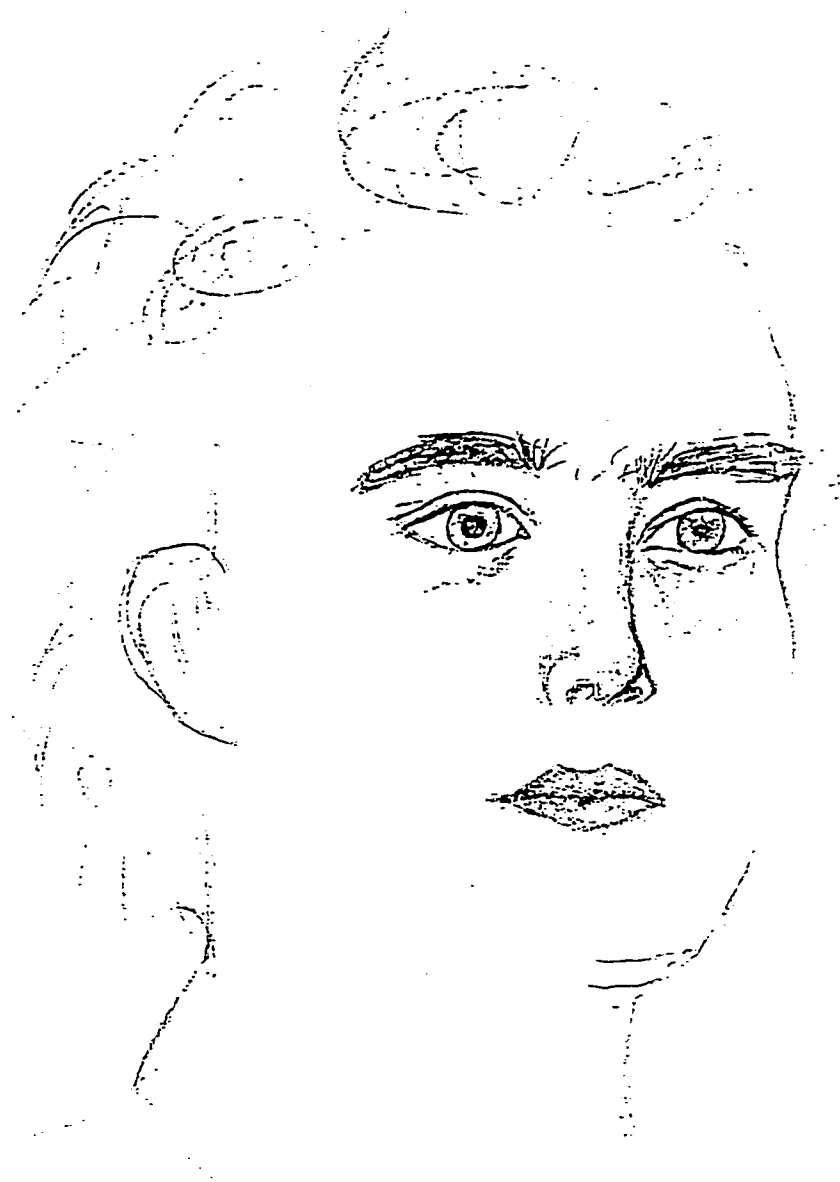
Fig.14

Harlan's pre-instruction drawing

contour drawing process itself had been likened to the sensitivity of a seismographic needle. In metaphorically reframing his drawing activities, Harlan was gaining new insight and understanding into the characteristics which underlie the drawing process itself. This was indeed encouraging, for it is here that real learning is taking place.

Getting Harlan to attempt new and different drawing skills was a little more problematic (Researcher's journal,1/09/98). Often, Harlan seemed to resist the idea of trying new exercises like the visualization skills involved in the positive and negative space drawings. In response to these homework and in-class exercises Harlan said, "I don't want to change my style" (Researcher's journal,8/09/98). Despite this resistance, Harlan's drawing seemed to improve, especially in regards to the quality of the line as evidenced in his contour drawing studies. In terms of the technical aspects of the course, Harlan readily adopted much of the terminology used in class and incorporated it into his 'thought-clusters' and weekly responses. I observed that many of the associations or metaphoric leaps of insight between the drawn objects and the drawing processes through weeks 1 to 4, characteristically for Harlan, remained on a fairly logical, linear level (Researcher's journal,8-15/09/98). His hand had become fingers, then counting, then computing; while the quality of the blind contour line as elicited by the movement of his pencil, had been likened to a seismographic needle. These associations were important, for it showed how the 'thought-clustering' exercises gave me an insight into each student's individual thinking 'style'. This enabled me to establish ideas as to how to better approach the student in new learning situations.

Exercise b) Written text given to students -Classes 5 through 7

Harlan's visual interpretation of the text of week 5, was to draw a bird's-eye-view of the rolling hills of a landscape. In many ways, it was a traditional landscape with a high horizon line, what appeared to be distant towns, and strongly delineated farmers' fields rolling off into the distance. Harlan had clustered his ideas around the overall scene depicted in the original text. What was significant, was that among the adjectives used to describe the scene, Harlan had also written the words, 'Kingscroft', 'flying', and 'Thomas'. Harlan explained that Kingscroft represented the small village where he was from, and that his uncle Thomas had on occasion taken him flying in his small Cessna. He explained to the class that the text had reminded him of those evening flights, and that he had tried to capture that feeling of, "being above everything else" (Researcher's journal, 22/09/98). Harlan's linking of his drawing work to this 'lived' event is significant. Part of the rationale of this course was to provide students with a means of connecting their drawing activities to things of importance in their lives. By making the course more than simply the acquisition of skills, I hoped that students would see the more self-expressive possibilities to drawing, all the while learning its techniques. In his weekly homework response, Harlan reiterated the importance of the memory of his flying experiences, and how they had been revived by the homework exercise.

Harlan's other visual efforts, in response to the texts, were also carefully studied drawings. In week 7, Harlan's illustrated the Faulkner text by drawing a small wooden shack (seen again from a bird's eye view) encircled by road, and surrounded by crop-laden fields. In his 'thought-clustering', Harlan had also

made reference, as had Salma, to slavery and the south.

In the mid-session interview, Harlan initially downplayed the significance of the writing component of the course. While he found it interesting he thought that the writing was, "not what I wanted" (see Appendix C). Harlan explained that he was quite focused on a certain style of drawing -i.e. comic book animation- but that the drawing from observation exercises of the class were helping him become a better drawer. Significantly, Harlan did mention that the written text of week 5 had elicited memories of his hometown -something he found to be "useful" (Researcher's journal,22/09/98).

Exercise c) -Written text 'found' by students- Classes 8 and 9

Harlan's efforts of weeks 8 and 9 revolved around the visual interpretation of a passage taken from the popular horror fiction writer Stephen King. He had clustered his ideas around the described scene, and used these ideas to further fuel his drawing. While his clustered words remained quite descriptive ('gloomy', 'dark', 'foreboding', 'terror-full' (sic) etc.) his drawing employed the shading-away technique of the previous session, resulting in a dark, dramatically lit drawing which effectively evoked his descriptive words. During our classroom discussion of the homework, much of the talk had centered on how something might symbolically stand for another thing. As a result, in the exercise of the following week, Harlan seemed to employ a more metaphorical approach (Researcher's journal,20/10/98). He had used a similar written source as a subject, choosing a different horror book by the same

author. This time the passage described the physical characteristics of the central antagonist. Harlan's 'thought-clusters' however, seemed to go quite a bit beyond what was being described in the rather short passage (Researcher's journal,20/10/98). In our classroom discussion, Harlan reasoned that, indeed, he had used an impression of the character derived from a complete reading of the text. Through 'clustering' this central antagonist had become, 'death itself', 'the grim reaper', 'blackness', 'the dark one' and so forth. Harlan's resulting drawing was an expressive portrait of this rather horrific character, accomplished in charcoal and using the shading away technique. His written response to the exercise indicated that he had seen this character as synonymous with these ideas brought forth through 'clustering', and that he thought the author had intended to make his character, "this way, so that he is more than an individual. He's scarier, more powerful" (Researcher's journal, 20/10/98). It seemed that Harlan had clustered his ideas centered on his chosen text, and had produced a more metaphorical and expanded view of this central antagonist. Visually, Harlan's drawing efforts seemed to satisfy this reasoning, for, rather than simply translating the original text into the drawn form, his picture presented a figure with macabre attributes above and beyond the rather limited description of the passage. Harlan's picture seemed to reflect this expanded, "scarier, more powerful" character. Harlan commented that he was quite pleased with his results (Researcher's journal,20/10/98).

Exercise d)- Students' own written texts- Classes 10 through 13

Harlan's 'thought-clusters', and written response of week 10, focused

primarily on the techniques he had employed throughout the course. For Harlan, who had exhibited some resistance to exercises which seemed somehow not to be directly connected to his conception of drawing from observation, the exercise in abstraction must have initially seemed somewhat bewildering. His exercise response confirmed this, stating, " I didn't see what was useful at first in the photocopied square. I mean there wasn't anything real on it " (Researcher's journal,27/10/98). However, his clustered ideas and written response did reflect a step-by-step approach to his drawing, using the class terminology, and explaining its relation to the techniques he had employed in achieving a fairly strong drawn section of the group project. "When it all came together it was really neat. Everyone's style was so different but the image looked great " (Researcher's journal,27/10/98), was how Harlan's written response finished, indicating at least some satisfaction attained from the exercise.

In week 11, Harlan had focused on a section of the still-life which had at its center a length of copper plumbing pipe, complete with elbow joint. In his 'thought-cluster', Harlan had immediately made the connection between the joint in the pipe, and the human arm. From there, his ideas had developed to, 'mechanical arm', 'metal hand', 'robot' and 'android', 'metal world', and 'heavy metal'. In his drawing, Harlan had graphically demonstrated this associative transformation. The pipe, which initially had occupied a small section of his drawing, suddenly grew in importance. As I watched Harlan's drawing develop over the course of the class, the pipe became a metal appendage of some imagined, robotic humanoid. Harlan continued to add to his picture until the entire background space became filled with variations of the observed

plumbing pipe. In so doing, he had imaginatively created an entire supporting metallic world. At the beginning of the exercise, the students had been given the option of adding to their clustered ideas after having completed their drawings. However, Harlan did not alter his original 'thought-cluster'. In his weekly written feedback, Harlan explained that by focusing in on the pipe, he had come to the conclusion, "why not make a whole world out of the same pipe?" (Researcher's journal,10/11/98). This imaginative departure, although surprising, was indeed encouraging. I had originally intended that by zooming-in on an object, students might discover qualities and properties of the existing object , qualities which had not been noticed in an initial scan of the scene. I had not , however, considered the creation of a new, wholly imagined scenario for the transformed object! In fact, what Harlan had accomplished was entirely logical, given the exercise and a rereading of his 'thought-cluster'. Apparently, almost as an afterthought, Harlan had later scrawled the words, 'heavy metal world', across the bottom of his drawing. I subsequently asked Harlan about his 'title'. I wanted to know whether his titling of the drawing had been so directly affected by his 'thought-clustering exercise'. I thought it improbable that his clustered ideas, which served to expand Harlan's thinking, would be followed in such a direct and linear manner, in relation to his drawn representation. To this questioning, Harlan replied that he had clustered his ideas around the metal pipe and had kept them, "close by so I could keep using them" (Researcher's journal, 10/11/98). He explained that he had not thought of the final picture before hand, but that in the end, the words used as a title, seemed to "fit" (Researcher's journal, 10/11/98). This is an interesting example of how the written word had been used by Harlan to expand and solidify his

thoughts on the subject, as well as acting as an important influence in the creation of his drawing. Had the written words 'cemented in' Harlan's thoughts, predetermining or fixing graphic representation of his "heavy metal world"? It appears, according to Harlan, not to have had that direct an influence. Rather, the written words, after having given Harlan an imaginative direction, remained present yet in the background, informing his visual activity.

Significantly, Harlan's object of the final exercise of this unit had been a photo of himself, with his uncle and his uncle's airplane. Harlan explained that he had revisited this subject matter because the exercise of week 4 had jogged memories which he had forgotten (Researcher's journal,10/11/98). His ideas in the written response spoke of hometown memories, of flying with his uncle, and a sense of place -namely the rolling hills of the eastern townships of Quebec. The resulting drawing was a rather accurate and sensitive copy of the photograph, depicting the two figures standing by the airplane.

Exercise e)- Final end-of-term personal projects- Classes 14 to 15

In his final project, Harlan had chosen to deal with the idea of 'memories'. He had chosen the word, 'memories', and had done much of his preliminary 'thought-clustering' around this subject. His final image proved to be quite an ambitious undertaking. Harlan had, through his clustered ideas, linked the idea of memory to the recent past -namely to his high school years and the lives of many of his graduating class. In his image, Harlan had photocopied and cut out all of the graduating photos of his classmates and arranged them until they formed the rough shape of a bushy, well-leaved tree. Above the tree, Harlan

had written the names of all his classmates. The names of those who had been his closest friends were circled in blue chalk. As Harlan later explained, these blue elongated ovals were also meant to be seen as cloud-like shapes (Researcher's journal, 1/12/98). Beneath the tree and its roughly drawn trunk was the word 'memories', written over and over in various scripts, symbolizing the tree's root system (Fig.15). Harlan told the class that he had placed the memories as the roots of the tree because that was how he visualized the past. He later wrote in his weekly response, " that's how I see the past as moving upwards from the roots towards the top branches, like a tree grows" (Researcher's journal, 1/12/98).

In the post-session interview, Harlan expressed his satisfaction at the new skills he had learned during the semester. He also mentioned that the writing component had helped him come to ideas he, "wouldn't have thought of otherwise" (see Appendix D). Harlan acknowledged that his works which had dealt with the central idea of memory, had indeed been triggered by the text given to students in week 3. This was encouraging. For even with a student such as Harlan, who had initially shown much resistance to both the written word and any new drawing skill, an approach which integrated drawing and writing, in the end was positively received. Harlan's remarkably imaginative composition of the final week, was something which probably would never have been attained from an exercise involving just drawing from observation. As has been mentioned previously, I had begun to realize that the written component to the course was allowing me, as well as the students, to see the pattern of their ideas emerging out of a sort of mental mapping. As these ideas came forth, it became clear that the different personal meanings which underlie their

Fig.15

Harlan's final project

subject matter was being expanded, made tangible, and explicit through their writing activities. This was fueling visual ideas which could be used in future drawings. As Harlan himself acknowledged in the post-session interview, his final project was, in a sense, influenced by revisiting the memories which were evoked by an exercise in a previous class. As his recollections of airplane flights with his uncle over his hometown had influenced his other drawings, these remembrances had similarly triggered memories of his high school years. Harlan had come a long way from the student who had initially resisted many of the more self-expressive aspects to the drawing course. Through the written component, Harlan had developed a self-reflective awareness of what his drawing activities might be about.

Elsie:

Exercise a) The 'thought-cluster' -Classes 1 through 4

Elsie was 17 years old. Elsie's initial drawing exhibited a skill and experience level more like Bob's, than any of the other three volunteers. Her drawing had been a full-frontal portrait of her drawing partner- the head rather oval and egg-like, eyes close together, and the hair as a series of linear striations encircling the face (Fig.16). Very little attention had been paid to shading. Elsie while a little disappointed with the results, confided to me that drawing faces was "really difficult". But as she reasoned that was why she was here, "to learn" (Researcher's journal,25/08/98). She then explained that her

Fig.16

Elsie's pre-instruction drawing

desire was to become an illustrator or graphic designer.

Elsie's drawing improved remarkably in the first four weeks, considering her initial lack of drawing experience. Her approach to the written homework component of weeks 1 to 4 was unhesitating. She immediately began incorporating the course terminology into her 'thought-clusters', and in these 'clusters' Elsie often went beyond the physical description of the objects and the drawing process, to a more symbolic, metaphoric level of thought. An example of this was in the clustering of her ideas around the blind contour exercise of week 2. Her centrally placed word, 'hand', became 'blind-contour', then 'twisting and turning', 'contour maps', 'hiking the trail', 'elevations', 'valleys', 'disappearing', and finally, 'lost'. When Elsie was asked about whether the final two words of her cluster referred to getting lost on a hiking trail or in the activity of the blind contour drawing, she responded, "both I guess. I guess I thought they were kinda the same" (Researcher's journal,8/09/98). Her weekly homework responses exhibited a similar tendency to examine her own 'walk' through the drawing process itself. In these responses, she commented frequently -as had Anna and to an extent Harlan- on her state of mind during the activity. For example, in regards to the exercises on negative spaces she wrote, "I feel as though I'm not sure where to look. Where does the negative end and the positive start. Then all of a sudden it just pops up, it's right there" (Researcher's journal, 15/09/98).

By associating the technical drawing class terminology, such as 'blind contour' with 'contour map', and then with, 'hiking the trail', I felt that Elsie was demonstrating the creative interplay between the visual and verbal language systems that the writing exercises were designed to accomplish. She seemed

to be linking her direct visual experiences in the classroom with word associations, and with 'lived' experiences outside of the classroom. In essence, Elsie seemed to be linking her direct experience of the contour drawing activity, with her past experiences of hiking, and the reading of maps. As her eye surveyed the terrain of her hand, Elsie had likened the activity to the experience of hiking. These associations had been made through metaphoric thought, which was encouraged and made explicit through the written 'thought-clusters' and homework responses.

Exercise b) Written text given to students -Classes 5 through 7

Elsie's work in the weeks 5 through 7 showed signs of the positive influence of the written component. Her drawing from observation skills were improving, and her weekly written responses indicated that she had a favorable view of the writing component of the course.

Her drawing of week 6 had been particularly satisfying for her (Researcher's journal,29/09/98). Her depiction, in response to the text of this week, had been of a small figure facing what appeared to be a towering forest of trees (Fig.17). The drawing page had been completely filled with these trees giving the space a decidedly claustrophobic feel. Elsie's 'thought-clusters' had correspondingly mentioned this claustrophobic element, the words, 'forest maze', had given way to, 'dark', 'closed-in', 'claustrophobic', 'smother', 'no breath', 'scared', 'anxious' and 'trapped'. In her written response to the exercise, Elsie had commented on her satisfaction with her homework

Fig.17

Elsie's drawing of week 6

assignment, inspired by the written text. In part she stated, "the words made me picture the scene, so I could draw it" (Researcher's journal,29/10/98). In essence, I believe Elsie was responding favorably to the written component, because the words acted as a stimulus for mental imagery. The written text , in essence, was providing a jumping-off point, where many of the students might imaginatively begin to compose their pictures according to their own visualization of the text. There was no one *right* way of interpreting the text, and as a result, a student's individual 'vision' of the written text was what was valued.

With the exercise of week 7, Elsie was among the students who experienced some difficulty. She wrote in her weekly response, "that this writing really didn't place me in the situation. It was more describing somewhere, so it was harder to draw" (Researcher's journal,6/10/98). This invaluable feedback provided a key clue as to why many of the students had had so much difficulty. My intention had been to give students a more poetic, image-laden text, with the goal of freeing them from the often perceived necessity to descriptively illustrate the scene. However, just the opposite seemed to have happened. The words of the presented text, in many instances, seemed almost to have paralyzed some students (Researcher's journal, 6/10/98). What I discovered, through Elsie's comments, was that the previous two texts which had been given to students, had involved a narrative first-person account of the experience of a scene -in short a description of a scene. These two texts invited students to imagine themselves seeing this scene, to imagine themselves being in this sort of space. The third text, however, the 'more poetic image-laden' text, had been taken out of its context from within a

novel. It had been much more poetically descriptive, and as a result, its narrative had been perceived by many students as either vague, disjointed, or disconnected from their immediate experience. Any literary text by its nature must involve some transfer of experience on the part of the reader in order to understand it (Lodge,1990), and it was clear that many students, either at this point in the course, or at this point in their understanding, had not been able to place themselves within the text. That is, the students had not made the mental leap of experiencing the poetic action within the text for themselves. Elsie's written comments helped me to clarify some of the difficulties which many of the students had experienced with the exercise of week 7.

During the mid-session interview, Elsie commented favorably on the role that writing had played thus far in the course (see Appendix C). She acknowledged that she was not a "very good drawer", but that the writing component of the course allowed her to better "picture" her subject, so that she could draw it. Elsie's drawing from observation skills had improved immensely in the first seven weeks. She had also shown that she had begun to expand her thoughts and understanding of the technical components of the course, of the drawing process itself, and its more expressive possibilities.

Exercise c) -Written text 'found' by students- Classes 8 and 9

With the exercise of week 8, Elsie had chosen a passage from a favorite author, and had elaborated her ideas using her 'thought-clustering' skills. Elsie showed little reluctance towards the use of words, whether in her

clustering or weekly responses. This made me realize something important. As students become more at ease with their 'thought-clusters', as evidenced by their on-going use, the 'clustering' exercise itself becomes an exercise in the creation of students' own written texts. While these 'texts' are not always grammatically 'correct', the clustered ideas become, in many instances, tiny markers -signaling points along a pathway of visual and verbal thought. These 'clustered ideas' as well as being a mental mapping of sorts, also become fundamental components in the building of personal narratives around the student's experience of the drawing process itself. An example of this was Elsie's effort in week 8. Her drawing work had been in reaction to a written passage describing some grazing zebras. Her elaborate 'thought-clustering' centered on this subject brought forth words which while initially further described the scene, later seemed to describe her imagined experience of being *within* the scene herself. Words such as, 'Africa', 'grassland, 'hills', gave way to, 'open spaces', 'heat', 'hot dry air', 'wonder', and 'wonderful' (Researcher's journal,13/10/98). In her weekly response, Elsie explained that her process had involved mentally picturing the scene described in the text, and then, " I try to write what it made me feel. Then I try to draw my feelings for the scene" (Researcher's journal,13/10/98). Through an informal discussion with her, I found that while not necessarily drawing her feelings (i.e. 'wonder' or 'joy'), she seemed to allow the feelings or sensations evoked by words and resulting mental images to inform her drawing process. Elsie's drawing had been produced by way of the written text, as an initiator of mental images, and these mental images, then leading to further words (i.e. 'thought-clusters'), which in turn lead to further imaginative visual and verbal associations.

Exercise d)- Students' own written texts- Classes 10 through 13

In the exercise of week 10, Elsie had not entirely focused on her own individual progress through the exercise, but rather on the general goings-on in the class during the group project. Through her clustered ideas and feedback response, she commented on the demeanor of her fellow students during the rather raucous class session. It was as if what had fascinated Elsie was this shift from our usually more introspective, individual classroom exercises, to the cooperative group effort which had involved far more running about and more social exchanges. Her elaborate clustered ideas commenced with the words, 'photocopies', 'strange abstract', and moved to words such as, 'chaos', 'anxious, 'weird', 'confusion', 'dark', 'shading', 'textures', 'wow!', and 'cool', 'out of control', 'noises', 'hustle and bustle', 'lost?', 'coming together', 'broken pieces', 'Michelangelo', and 'masterpiece' (Researcher's journal,3/11/98). In essence, Elsie had created a written narrative focused on her experience of the rather boisterous classroom activity. In her weekly written response, she explained that what had impressed her was how everyone, rather than working on individual works, had suddenly become cooperative, noisily moving around the classroom, while working on this giant drawing (Researcher's journal, 3/11/98). In this very different approach to the 'thought-cluster' and response exercise, I was pleasantly surprised at how Elsie's thoughts had been fixed upon her experience of the classroom in general. As I had observed in Harlan's work, the written component of the course seemed to be involved in the making concrete of the student's own individual, creative thought process, and, as a result, there were no limits to the surprises that might emerge.

Elsie's drawing of week 11 isolated an old, oil burning storm lamp from amid the still-life objects in front of her. Her initial clustered ideas centered on the lamp, began fairly descriptively but quickly moved towards word associations and a more metaphorical viewing of the lamp. The word, 'light' associatively became, 'dark', 'darkness', ' light beacon', and 'lighthouse' (Researcher's journal, 10/11/98). As I made my way around the room during the drawing session Elsie asked, "Can I make it into a lighthouse?" (Researcher's journal,10/11/98). Again, as I had observed in Harlan's drawing efforts, Elsie used her clustered ideas to think more metaphorically and associatively about her chosen object. She had mentally transformed her object, from the observed lamp of the classroom still-life, into an imagined lighthouse. Her final drawing imaginatively depicted a scene including such a lighthouse, high atop a cliff beside the sea. Unlike Harlan however, Elsie did return to her initial 'thought-cluster' and add three new words to it, 'source of light', 'safety', and 'hope?'(Researcher's journal, 10/11/98). In her written response, she described that she simply began to see the observed oil lamp sitting atop the wooden box, as thought it were a lighthouse perched atop a bluff, "I thought I could just make a scene out of it, to illustrate my ideas" (Researcher's journal,10/11/98). It was evident that Elsie, through the help of the 'thought-cluster', had metaphorically transformed her initial object. Subsequently, after the completion of her drawing, Elsie returned to her clustered ideas, further expanding her thoughts, viewing this oil lamp-now-lighthouse as a beacon of hope. This imaginative play with the observed object, creating insight beyond the immediately observed still-life, was beginning to address the questions which had driven this research.

Elsie's work of week 12 proved to be equally insightful, yet more problematic, concerning the integration of the written component. Despite my intention that the integration of the written word, either as clustered ideas or written responses, be done separately from the drawing -as self-reflective activity- some students attempted to combine the activities, periodically writing as they would draw. Elsie was one of these students.

Elsie's personally significant object had been a tiny, metallic, lucky charm of sorts. As we looked at the finished exercises, Elsie reported to me that she had experienced some difficulty with this exercise, "It was like the drawing kept changing" (Researcher's journal,17/11/98). She explained that she had written words down on a paper beside her as she was drawing her object, and that she had great difficulty in "finishing" her drawing (Researcher's journal, 17/11/98). Other students had reported similar experiences (Researcher's journal, 17/11/98.). While, in Elsie's case, the chosen object might have had some bearing on this difficulty -the charm had been immensely small in size, making a minute analysis of it exceedingly difficult- the words themselves might have been at the root of the impasse. With one's attention focused on the act of drawing, it is extremely hard to be thinking in words -and vice versa. My own experience as an artist had shown this to be quite difficult. My intention with this exercise had been that the students use their writing as part of a self-reflective activity -either before drawing, or in the contemplation of one's finished work. While the visual and verbal language systems can be complementary cognitive modes for increased understanding in a learning situation (John-Steiner, 1987), an attempt to balance the two modes of thinking as focused concurrent activities can be exceedingly difficult (Sinatra, 1986). In

essence, while one mode of knowing definitely informs the other (Olson,1992) (John-Steiner,1987), to use a metaphor, it is exceedingly difficult trying to play two instruments at once. I believe that Elsie, and a few other students, had encountered problems in trying to *simultaneously* balance these two literacies.

Exercise e)- Final end-of-term personal projects- Classes 14 to 15

With her end-of-term project, Elsie did not seem to encounter the same problems that she had faced in weeks 12 and 13. She reported that she had clustered her ideas separately from the drawing activity this time, clustering them both before and after she had done the drawing (Researcher's journal,1/12/98). Elsie's theme for her end-of-term project was, 'time'. Her ideas had centered on many notions dealing with this rather vast topic, but Elsie, through her 'thought-clusters', began to focus her ideas on subjective associations of this theme. The subject, "Time" had given way to, 'the past', 'the future', 'time flies', 'wrong paths', 'right paths', 'regrets', 'hope', and 'where do I go?'. As I watched Elsie draw, she seemed to lay aside her initial clustered ideas, concentrating on finding the right visual images to express her thoughts (Researcher's journal, 1/12/98). In her weekly response she reported, " this time I used my thought-clusters as a beginning for my drawing. I went back to them though but I didn't let them hold on to me like before. I tried to illustrate an overall picture of what time was meaning for me. I think it is a good illustration." (Researcher's journal,1/12/98) Her final drawing (Fig.18) was indeed a very sound visual expression of the ideas she had developed around her concept of

Fig.18

Elsie's final project

'time'. Many visual depictions, of the words found in her clustered ideas, could be discerned in her elaborate composition. This indicated Elsie's apparent ongoing ease with the verbalization process. While she had laid her clustered ideas aside during the actual drawing of her image, the associative power of the word for this student, was evidenced in her sometimes literal translation of her written thoughts into the drawing. The words, 'Time flies' of her 'thought-cluster' became the depicted bird. The word 'regrets' became the crying person; and, 'where do I go?', seemed to be depicted in the figure exiting through a doorway. While Elsie had not entered the class with drawing skills as developed as many of her classmates, she did seem to have above average verbal skills. Olson (1992) writes that such students may often bypass the arts in favor of other fields which are more receptive of their verbal acuity. Elsie had shown however, a drive towards becoming an illustrator and had progressed very well in the course. I would concur with her own assessment of her project. It really was a good illustration!

In the post-session interview, Elsie spoke of appreciating the written component of the course as a means of allowing her to think differently about her process of learning to draw. The 'thought-clusters', in particular, were singled out by Elsie as particularly effective in allowing her, "to see differently" (Researcher's journal,1/12/98)(see Appendix D). Given her high verbal skills, I think Elsie had appreciated holding on to something that she was quite good at (verbalization), while learning a skill which was quite new and often bewildering.

All of the volunteers participating in this study had reacted extremely well to the written component of the course. The 'thought-cluster' exercises, which

had encouraged metaphorical thinking, had been well received and adopted by most of the students of the class as a means of reflecting on their drawing activities. While some initial difficulties had been encountered, in terms of the use of the written word in certain exercises, most of the volunteers had come to acknowledge that the 'thought-clusters' usefulness in terms of broadening their understanding of both the content of the course material, as well as their own experience of the process of drawing. The work of Anna, Bob, Salma, Harlan and Elsie, as well as that of most of their classmates, had shown to me that the metaphorical thought and writing which I had strove to integrate within the drawing environment had been beneficial in regards to the students' growing understanding of what drawing might be about. The following chapter presents a discussion of the results obtained from the five student volunteers.

CHAPTER 6

Discussion of Results

This chapter summarizes and synthesizes the results presented in the preceding case studies of the five student volunteers, as well as the descriptions of the course content presented in Chapter 4.

The discussion first deals with the interplay between the visual and verbal modes of knowing present in the art classroom. Next, we examine the role metaphoric thinking and the impact of the 'thought-cluster' exercises on the curriculum. We then look at the role of the written word in the drawing course and its impact on the students' understanding of the drawing process. Finally, we discuss some problems arising, as well as some possible revisions to the study.

The Visual and Verbal Modes of Knowing: One Informs the Other

The purpose of this course *was* to teach developing artists to observe and to record their observations accurately through drawing (see course syllabus Appendix B). As in many drawing courses, students in this class were engaged in exercises involving intense visualization designed to sharpen their

perceptions as a means of creating well-observed graphic representations. This visualization, as visual thought (Arnheim,1969), encouraged students to explore their observed objects and to compare, analyze, correct, simplify, abstract and selectively synthesize their observations into drawn compositions. As such, this course put a premium on the students' developing of the visual mode of knowing.

Another goal of this course however was that students come to understand their drawing activities as more than simply the mastery of technical exercises. Students were encouraged to see their drawings as vehicles for the expression of visual ideas. As well, students were encouraged to understand that their drawings in conjunction with their drawing practice, should have meaningful connections to their lives. In effect, through this course it was hoped that students would come to view the drawing *process* as a meaningful pathway to self-expression. At the outset of this paper two citations, one from Edward Hill (1966) and the other from David Lodge (1990), were juxtaposed. Hill's ideas asserted that drawing, as a representation of the mind's perceptions, allows us to diagram our experience of the world. Lodge on the other hand, posited that while the visual idiom is important, it is *language* which predominates in giving meaning to our world. In a sense this study was an attempt to reconcile these two statements -to, in effect, see how one form of knowing informs the other. To this end, this drawing course placed an emphasis on the *verbal* mode of knowing as well as the visual.

The mutually supportive interplay between the visual and verbal modes of knowing has been shown to be a natural way in which artists work in the

studio (John-Steiner, 1987)(Paivio,1991)(Schön,1983,1985).   As the

class volunteers encountered the various drawing exercises, what seemed to

occur was a seamless shifting from the visualization processes involved in the

perception, comparison, analysis, and synthesis of the observed scene before

them, to the verbalization involved in the naming, ordering and intellectualizing

about the developing drawing compositions.   While this to and fro between

visual and verbal modes of knowing has been hypothesized by a number of

authors (John-Steiner,1987)(Paivio,1991) (Schön,1983,1985) (Sinatra,1986),

it is hard to observe.   However, the written component to the course, whether it

was in the form of the 'thought-clusters' or in the weekly written responses to the

drawing exercises, afforded me an insight into this subtle dynamic. Through

these written exercises I was able to observe the volunteers thought processes,

at least in part, as they visually and verbally walked themselves through the

drawing tasks at hand (Researcher's journal,15/09/98, 29/09/98). (This will be

discussed in more detail in the next section). In fact, by its very nature, the

written component of the course ensured that the students would complete a

transition from the visualization and verbalization processes involved in the act

of drawing, through to the next step of recording their verbalizations by way of

the written word.   In this way, the written word mirrored the way most of our

formal in-school learning takes place, acting as a natural extension of the visual

and verbal modes of knowing (Sinatra,1986)(Vygotsky,1978).   It is clear that

students *are* used to writing down their ideas, they are just not used to doing it

in the art studio. What I wanted to examine in this study was the use of writing

as a means for students to think about the products and process of their

drawing, and in so doing, encourage the kind of visual and verbal

thought which John-Steiner (1987) has called truly integrative and creative.

A good example of the intimate relationship between the visual and verbal modes of knowing came to light through Anna's work in week 8. With the exercise of this week, I intended that students invest themselves in the 'discovery' of a written text. Centered on this text, they would expand their visual and verbal ideas through 'thought-clustering', and then create some visual imagery through drawing. My intention was that students would come to see the written word as an initiator of visual imagery, through a text which they themselves would seek out. I hoped to build on earlier exercises where students had created drawings inspired by imagery evoked by written passages which had been given to them. In the exercise, Anna quite intuitively expanded her thoughts around an evocative image from a newspaper, and its accompanying caption. When I asked her about her work she reported that she was *first* attracted to the image, had then read the caption, and finally developed her clustered ideas around a 'reading' of both the image and the caption (Researcher's journal, 13/10/98). My intention with the exercise was that the students react to a written text *first*, develop their visual and verbal impressions through 'thought-clusters', and then translate these ideas into their visual imagery in the form of a drawing. Anna's approach however had been somewhat different. Essentially, she explained to me that she had inadvertently been drawn first to the photographic image, and then used her 'thought-clusters' focused on the information and insight gained from *both* the image and words. The result was quite a powerful drawing (Researcher's journal, 13/10/198I). By observing and talking to Anna, this incident reminded me of the overwhelming power and primacy of the visual image (Arnheim,

1969), and its closely interconnected and symbiotic relationship with the word. Inevitably, we are visual creatures and as such are drawn to powerful visual images. Words however naturally mediate our perceptions lending to them a structure which helps us to order our visual experience. Anna, in reacting to the photographic image and then its caption, merely mirrored this natural progression between our modes of knowing. Drawn to the compelling image, she developed visual and verbal associations which were supplemented by a reading of the photograph's accompanying caption. Through discussions with Anna, and by looking at her evocative drawn interpretation of her chosen photograph and text, I observed that Anna had demonstrated an example of what John-Steiner (1985) sees as truly integrative, creative thinking: an ability to move continually and easily between both visual and verbal fields. The fact that she did this so adeptly is perhaps due in part to her relatively high visual and verbal skills which I had observed early on in the course (Researcher's journal,8/09/98). However as Olson (1992) points out, even students with low visual and verbal skills will benefit from an approach which consciously strives to integrate both modes of knowing. It is clear that students in the drawing studio who are encouraged to develop an awareness of the visual and verbal shifting involved in their drawing process are provided with a means for a deeper understanding of their creative activities. In the creation of her drawn image, Anna showed the mutually sustaining possibilities of integrating image and word in the art classroom -following what Paivio calls, "two paths to an idea, rather than one" (1991, p.268). Significantly, through discussion and a reading of her homework response, it became clear to me that in developing her visual and verbal ideas about the newspaper photo, its caption, her

participation in the act of drawing, as well as the drawing itself, Anna came to understand her creative process on another level.

In essence, the visual and verbal modes of knowing represent two ways of knowing. What is important is that these two ways of knowing do not operate independently, but are for all practical purposes, parallel processes and inextricably intertwined. Our visual perceptions naturally give rise to the language we use, while the language we use can directly support our visual experience of the world (Sinatra,1986). Throughout the drawing course as the student volunteers listened to my instructions, they developed visual and verbal concepts for the ideas I was presenting -ideas such as: 'contour edges', 'negative spaces' and 'gesture drawing', amongst many others. What was understood by the students first in verbal terms, was then reinforced by corresponding visual components, and vice versa. In short, in the drawing classroom one mode of knowing naturally informs the other. By integrating a written component to the usually more visually dominant learning environment of the drawing classroom, the two modes of knowing and their mutually sustaining nature became, importantly, all the more explicit, for myself and the students alike. The students were learning to draw, however they were also learning to name, order, reflect upon, and make meaning of their experience of the drawing process.

This teaching approach sought to encourage the creative interplay which naturally exists between the visual and verbal modes of knowing. By way of a writing component, this creative thought and reflection about the drawing activity was made more consciously apparent for the students. In post-session interviews four of the five volunteers explicitly stated that they felt the writing

exercises had helped them to understand their drawing activities on a technical level, though a fifth volunteer remained somewhat noncommittal about its effect in this regard. In terms of the writing activity's supportive role in the generation and expression of visual ideas, all five volunteers expressed positive views of the written component to the course. The written word's usefulness was in helping to foster an awareness in students' minds of the visual and verbal shifting involved in the drawing process, and in so doing, the written component helped the volunteers to think about the subject matter and themes they were developing in their drawings. Significantly, the students readily adopted the written component to the course. When a pedagogical tool becomes, in students' minds, a useful fixture of the course- in essence, *a good way of learning* , its continued employment by them is assured. The students' ongoing use of the written 'thought-clusters', even when developing their ideas for their personal end-of-term projects, was encouraging in this regard. Students themselves turned to the written component in order to help them understand their visual and verbal querying, and in essence, to help them develop their ideas.

Through this drawing course I not only taught these students to become better draughtspersons, I encouraged them to think in a creative and integrative manner by making them aware of the potential of the visual and verbal associative play involved in drawing. A key factor in stimulating this associative play between the visual and verbal modes of knowing was through the fostering of metaphoric thought.

The Role of Metaphoric Thinking and the 'Thought-Cluster'

Metaphor has been considered as the fundamental bridging component of both modes of knowing (Arnheim,1966)(Feinstein,1982)(John-Steiner,1987) (Ortony,1975) (Paivio,1971). It allows us to connect visual ideas with concepts which have been developed through verbal means. As well, because metaphor is not linked to literal language, it promotes an associative 'interplay' between image and word, one which more closely approximates the continuous nature of our lived experience (Feinstein,1982) (Ortony,1975).

When students think metaphorically they are encouraged to look beyond the literal. They are encouraged to vividly associate, using both visual and verbal means, objects, ideas, and events with those which are not immediately being observed. In making these diverse links, the path is thus cleared for the student to generate new, different, insightful, and deeper levels of meaning from their experiences. I found that students in the drawing classroom who are encouraged to think metaphorically will connect their drawings and their process of drawing to their experiences outside of the classroom, and as Arnheim (1966) and Feinstein (1992) propose, it is through this transferring of experience that we construct meaning. Thus, through metaphorical connection and the transferring of experience, students can construct personal meaning from their drawing exercises. In this way, the students' learning becomes more personally significant. By the end of the course, Anna ,Bob, Salma, Harlan and Elsie, demonstrated that they were making links between their work in the drawing studio and their lives and experiences outside of the classroom. Through metaphorical thinking these students began to view their new-found

drawing skills as a viable means for the expression of these experiences, for the expression of these ideas. As a drawing teacher this is all that one can ask for. If students have become more accomplished, confident draughtspersons *and* they have come to view drawing as an effective pathway for the expression and communication of their ideas, then we have pointed them in the right direction. The metaphor, which unites both the visual and verbal modes of knowing, creating sound, integrative, creative and insightful thought, was important in this regard. The manner in which I sought to initiate this way of thinking in the classroom was through the 'thought-cluster' exercise (Gay,1988) (Rico,1989).

The 'thought-clusters', played two important roles in the drawing course throughout the entire semester. First, the 'thought-clusters' provided a direct link between the visual and verbal modes of knowing. Drawing courses traditionally have placed an emphasis on the visual mode of knowing. However in this class, the 'thought-cluster' exercises by their very nature necessitated a conscious verbalization of the drawing process on behalf of the students. Throughout the semester, I asked students to focus their 'thought-clustering' on the still-life objects they were drawing, on their written texts, and on the process of drawing itself. The 'thought-clusters' required that students record their visual and verbal thinking in written form. In this way, the 'thought-clusters' would become a means of capturing the students' visual and verbal considerations involved in the process of conceiving, completing and evaluating their drawings. Thus, the 'thought-clusters' served in a formal way to implant the written word firmly into the drawing curriculum as a pedagogical tool. In short, the students were introduced to the idea of writing in the drawing classroom *by way* of the 'thought-clusters'. In previous more informal attempts at integrating

a written component into a drawing curriculum I observed that some students often exhibited a great reticence in regards to writing in the drawing studio. Students in these earlier attempts often saw writing as synonymous with the laborious task of crafting an essay. These students (who after all were in a drawing class and not in an English class) found a more descriptive form of writing to be difficult to combine with their drawing work. Their reactions were often along the lines of: "I don't know what to write about". They simply did not see the link between their drawing activities and the written word. My approach in this study was different. Students were encouraged to see the link between image and word through the use of the 'thought-clusters'. They were encouraged to see how writing, this time in a 'thought-cluster form', might enable them to concisely capture their visual and verbal associations, their feelings, and their sensations. As a result, the students responded positively to the exercise's succinct and associative nature. This was evidenced by the students' enthusiastic and ongoing use of the 'thought-cluster', as well as by their mid- and post-session comments concerning these exercises.

Second, through the cultivation of the concept of the 'thought-cluster' as a generator of visual and verbal associations, the 'thought-clusters' became initiators of metaphoric thinking for the students. The metaphor is a natural bridge between the two modes of knowing, and as such, its cultivation in the classroom facilitated a more integrative, creative, and insightful thought -a form of thinking which was centered on the students' experience of the drawing course. My findings indicate that the 'thought-cluster' exercises helped students to expand their ideas regarding the technical aspects of the drawing process, as well as their reflections on the subject matter of their drawings. The

realization of this metaphorical thought was important in terms of allowing students to experience the process of drawing as something more than simply an exercise in the attainment of technical skills.

As the cases of Harlan and Elsie reveal, the 'thought-cluster' exercises which focused on specific drawing strategies such as the blind contour drawing, yielded different and expanded understandings of the particular exercise for each of the students (Researcher's journal,8/09/98). In Harlan's case, his experience of the blind contour drawing activity, was likened to his eye and hand uniting in the form of seismographic needle, sensitively recording each perturbation, each bump along the surface of his drawn object. For Elsie, the same exercise yielded an impression of the experience of hiking mountainous trails and the reading of a contour map, as she observed and drew the small wrinkles and creases on her hand. In each example, the associative thought provoked by the 'thought-clusters' shows how the students reframed the technical drawing problems. In so doing, the blind contour exercise was, by way of the 'thought-cluster', metaphorically linked either to 'lived' or imagined experiences. For the students this created an enhanced and expanded understanding of the concept of a contour drawing. This is significant, for as the students reframed their drawing exercises in terms which were meaningful for themselves, they came to better understand the content of their curriculum within the context of their own experiences. It is in this way that the act of drawing becomes more personally meaningful, and subsequently, better understood.

In other cases, the metaphorical transformation of the subjects that were being drawn was initiated by the 'thought-clustering' exercises. For Anna, the

photograph of the leaping man of week 8 (Fig.4), and the cow skull of the still-life of week 11, were both metaphorically expanded through 'thought-clustering'. These objects came to be understood in quite a different manner than when first observed. The objects were understood symbolically as standing for other objects, other concepts. Thus, the meaning of these drawn objects and the meaning of the drawing process for Anna was expanded by way of her metaphorical 'reading' of the drawing's subject matter. In another interesting example, the piece of driftwood of week 12 took on many significant personal meanings for Salma. As reflected in her 'thought-clusters', the driftwood was linked to imagined objects associated with its form and then became synonymous for Salma with the peaceful memory of a recent experience. This example reveals that through the 'thought-clustering' centered on her chosen subject matter, Salma metaphorically expanded and then made conscious the underlying import of her personally significant object. In this way, drawing became more than simply choosing the 'correct' composition, or the 'correct' employment of the medium. The object being drawn and Salma's process of drawing were unified into one creative and expressive act. In this sense, Salma's act of drawing became more personally significant.

Often the associative nature of the metaphorical thinking inspired by the 'thought-clusters' permitted students valuable personal insights. In one case, Salma linked a drawing of a rocking chair to memories of her recently deceased grandmother. The 'thought-cluster' exercise used in this teaching approach prompted the student to connect her drawing exercise to this sad and powerful memory. In making these sorts of connections a student brings to the classroom a rich variety of experience which not only benefits the student, but also

benefits the classroom as a whole. Students will learn from each others' experiences and they will learn the richness of linking their drawing activities, and the objects and events of their lives.

In fact, I observed that through the students' written work as well as through their verbal commentary, metaphorical thinking, by way of the 'thought-clusters', became a *style* of thinking for the class. It became a way of seeing, a way of saying. For example: During this same classroom session one student suggested a metaphorical association between Salma's stated feeling of personal loss, and the negative 'holes' in her drawing. Salma pondered this shared insight and found it appropriate (Researcher's journal, 15/09/98). What is significant in this example is that as students make these metaphoric connections, they make their learning more meaningful. They share their experiences and come to see that the knowledge that they acquire in the drawing studio can be used to communicate their ideas. When students realize this, drawing becomes a medium through which their ideas and their understanding of their experiences can be developed and then shared with an outside audience. Salma's insights, as well as those of her classmates, acquired by way of the metaphor and the 'thought-clusters', had most certainly made her drawing exercise more meaningful, more personally relevant.

As a teacher, these 'thought-clusters' also provided me with a mental map of the students thought processes, particularly when the students encountered either the specific technical drawing exercises of the course, or the objects and texts of personal significance which they had selected. As Langer (1957) and Paivio (1991) have theorized, verbal language strings concepts together like clothes upon a line. In a similar fashion, the written 'thought-

clusters' often seemed to graphically chart out the individual student's image and word associations (see Appendices E- I). The teacher benefits from the insight derived from this mental mapping of the student's thought process, by not only being able to better determine the *level* of the student's understanding of classroom work, but by also having a greater insight into the individual student's own learning *style*. Students reveal their understanding through the word associations they create. While a word association or metaphor may reveal profound understanding, it may also reveal that a student is having difficulty grasping a fundamental concept. For instance, when learning to do 'negative space' drawings, a student who invokes a metaphor relating to only the 'positive space' objects being drawn, reveals that he / she may be struggling with either the concept of visualizing 'negative' space, or perhaps even the idea of contour drawing. The metaphor in this scenario indicates poor understanding of a subtle, yet crucial concept necessary for the student's progress. It was in this way, through the 'thought-clusters', that I was able to determine early on that Bob's synthesis of many of the concepts we had explored in class was weak. Because these 'thought-clusters' were in the written form, I was also able to determine that his writing skills were weaker than many of the other students in the class. (Researcher's journal,15/09/98). As a result, I was able to help Bob in subsequent courses by rephrasing or reviewing such concepts, or by giving him more specific homework exercises targeted to the concepts we were developing. In the case of Harlan, through the 'thought-clusters', I was able to determine that his thinking style was very direct, linear, and logical (Researcher's journal, 8/09/98). This observation helped to inform later strategies I developed for helping Harlan understand difficult material. For

instance, Harlan's metaphors were often straightforward and scientifically oriented- dealing with computer analogies, or associations made between technical instruments. Thus, when explaining troublesome points to Harlan on an individual basis, I invoked images from the same domains in order to meet the student on his level of understanding. In effect, the 'thought-clusters' allowed me to see the level at which both Harlan and Bob were functioning. In Bob's case, the 'thought-clusters' would eventually also reveal the tremendous progress that he had made by the end of the course. In looking at Bob's clustered ideas, by week 13, I was able to quite graphically see an improvement in his understanding and utilization of his drawing from observation skills (Researcher's journal, 17/11/98). As well, as a function of this mental mapping, I observed his ability to consciously transform his thoughts about his personally significant object -his toy car, and then his effective use of this expanded thinking towards his own intended, expressive purposes as seen in his finished drawing. Importantly, through the 'thought-clusters' focused on many of his drawing projects, I observed that Bob began to reflect on his drawing activities, and in so doing, he began to apply his newfound drawing skills towards a more conscious and effective expression of his ideas (Researcher's journal, 17/11/98).

Significantly, by the end of the course, it appeared that all five of the students had begun to make similar insightful connections through the exercises using 'thought-clustering'. Anna used the written thought-clusters to think more metaphorically about the objects she was drawing, she began to think about her place in the drawing process itself, and formed new associations around the terminology of the course. Likewise, Harlan and Elsie

also began to make metaphoric associations with the objects they drew, while also forming new imaginative links between the drawing activity, its terminology, and other very different processes. In Salma's case, the 'thought-clustering' helped reveal a meaningful personal insight involving a class exercise and the significance of her drawn object. Only Bob experienced initial difficulty in integrating the metaphoric 'thought-clusters', and the written word into his drawing process. Due, perhaps in part to his apparently low visual and verbal skills, Bob's adaptation to the 'thought-cluster' exercises was slow. I feel that students faced with what is already a daunting task such as learning to draw, might initially seem overwhelmed when confronted with another challenging activity. According to Olson (1992), integrating language with the visual component of the learning environment, should nonetheless be beneficial to students such as Bob, for it allows these students to expand both their visual and verbal 'vocabularies' -in effect, encouraging students to practice using one mode of knowing to inform the other.

Despite some of the difficulties encountered in introducing this 'thought-clustering' exercise into the drawing curriculum, its role was integral in permitting students to mentally transform their thinking about objects being drawn, the drawing process itself, and the written texts they encountered. The 'thought-clusters' and the metaphoric reflection they stimulated were also crucial in allowing students to attain personal insight into their lives inside and outside of the classroom. As a consequence of this, I consider that the 'cluster' activities were key factors in the development of these students as young artists. Even with students like Bob, who seemed to possess low visual and verbal skills, the 'thought-clusters' exercises were beneficial. They helped to direct his

thinking towards a non-literal reflection, and through the 'thought-clusters' Bob was encouraged to connect his drawing practice with other experiences. For Bob, the 'thought-clusters' became a way of expanding his ideas, and drawing became a means of expressing those ideas. As some authors have previously found (Gay,1988)(Rico,1989), the written 'thought-clusters' helped students generate new metaphoric associations, allowing them to expand their understanding of the concepts being learned. As evidenced in the work of all of the volunteers in this study, these 'idea clusters' stimulated thought and enabled students to expand and associate their immediate in-class experience to other 'lived' experiences, inspiring them to more words, more visual imagery, and a meaningful and personal understanding of the techniques and self-expressive possibilities underlying the act of drawing.

The Visual and Verbal Modes, Metaphoric Thought, and the Role of the Written Word

In my experience, beginning drawing students in a typical curriculum inevitably observe and analyze using both visual *and* verbal concepts. They then translate these ideas first to the drawn form, and at times, relate their ideas verbally during a classroom critique. The verbalization used during a classroom critique is solicited by the instructor and often encourages an analysis of the technique or composition used in the particular drawing exercise. Occasionally in a critique a student may be asked what they were trying to express with their drawing. However, even on these rare occasions,

the commentary which is required remains one which is exclusively verbal. Often, the student gropes futilely for the impetus underlying his/her drawing, and then all too briefly, the classroom talk shifts to the next student.

Given such ineffective use of language, the role played by the written word in this drawing class is significant. The act of writing down one's thoughts, of making concrete one's utterances (Postman, 1985) allows for the thought process to become what Ong has called an "exercise in an exquisite circumspection" (1982, p.104). For in order to translate their thoughts into the written form, drawing students must further clarify for *themselves* the nature of the visual and verbal considerations with which they were involved. This visual and verbal decision-making is often barely conscious. However, students who are asked to write about their drawings or their drawing practice are required to reflect in a more deliberate manner upon what exactly occurred during their activity. They must consider what it was, or in some cases, what it was not, that made them choose a specific technique, a medium, a specific composition, or a particular subject. Thus, students in this study who wrote as part of their course work were required to make their visual and verbal querying more explicit, more apparent to themselves. While the written component to the course was not primarily intended as a means for the communication of students' ideas to an audience, some studies have shown that the use of writing may also benefit artistic development (Eldridge, 1990). However, the main function of the written word in this study was to make the students self-aware of their participation as young draughtspersons, by encouraging them to more closely reflect upon their experience of the act of drawing.

The written word was formally introduced into the drawing curriculum

through the metaphor-inspiring 'thought-clusters'. Now, it is clear that metaphoric thinking can occur without the use of *written* 'thought-clusters'. We certainly can freely associate things perceived visually with both similar and dissimilar objects and events from our experience, and express these metaphorically transformed ideas verbally either to ourselves, or to others. In this sense, the metaphorical thinking which was encouraged in the course could have remained essentially a mental activity. However, without the *written* 'thought-clusters', the associations made via the metaphor-inspiring mental exercise, while vivid, would have had no lasting effect. As Ortony (1975) suggests, the images and thought associations might have ephemerally drifted off and have 'escaped one's mind'. Essentially, the written word fixed the students' creative associations and personal insights in place. The mental metaphorical transformations of Anna's observed cow skull of week 11, or Elsie's oil lamp of the same week, were first recorded by way of the written word, allowing their authors a chance to revisit, reconsider and reevaluate their relevance. These metaphorical associations then served to inform new 'readings' of the observed objects replete with new insights, and new meanings.

By encouraging students to reflect on their drawing experiences the written word also provided an important means of creating a narrative accompaniment to the course for many of the volunteers. As many teacher / researchers have suggested (Bates;Shohet,1993) (Ernst,1994,1996) (Gay,1988)(Hubbard,1993,1996)(Murdick;Grinstead,1992)(Olson,1992) (Zurmuehlen,1990) all art educators should seek a narrative means by which students make sense of their experiences in the art studio. By focusing the

students' reflection on their process of drawing, both on the specific exercise at hand, as well as the expressive intent underlying their creations, I found that the writing component was useful in terms of allowing students to construct their narratives. Bob's efforts of week 11 are a good example. In this session, Bob's 'thought-cluster' and written homework response revealed step-by-step his decision-making process in the completion of his drawing of the still-life. His writing recounted his initial perceptions as well as his struggles in trying to capture the three-dimensional objects before him on the surface of his page. In essence, it was Bob's *story* of that particular drawing. His visual and verbal querying, his intellectualization about the spatial dilemma involved in composing his objects on the page, all became part of Bob's written narrative. It is clear that this narrative helped Bob to collect, organize, and sequence his act of drawing. Writing helped him to reinforce and reassess his ideas about how he had accomplished his picture. It helped him to make sense of the drawing process proper.

Through narrative, the volunteers' would revisit certain themes which had emerged during their reflections about earlier drawing exercises. On many occasions, in response to the exercises of the initial weeks, volunteers who had developed their ideas through drawing, the 'thought-clusters', and written homework responses, would revisit these ideas in later exercises. These ideas often involved connections of a personal nature. An example of this was Harlan who revisited his childhood experiences of flying with his uncle. These recollections had initially emerged through Harlan's 'thought-clusters' focused on the written text given to students in week 4. In week 13, Harlan again dealt with this theme through his written 'thought-clusters', his written homework

response, and his drawn depiction of himself and his uncle in front of their airplane. Significantly, as a theme for his final end-of-term project, Harlan also chose to base his work on his recollections of his uncle, of flying in an airplane, of his hometown, of his childhood. These memories were summoned up by the visual and verbal associations linked with the written text of an early exercise. As Harlan continued to reflect on these ideas, his 'thought-clusters' served to fix his recollections and allowed these memories to be vividly re-created in the present. Harlan then developed these reminiscences further in other drawing projects through continued reflection and reconsideration. Through writing about his significant objects, his memories, his drawing process, it became clear to me that Harlan had begun to create an important narrative about his experience as a young draughtsperson in the classroom.

Beittel (1973) and Zurmuehlen (1990) state that, impelled by the artistic urge itself, artists strive to express and understand the idiosyncratic, or if you will, personal meaning in their works. In this study, I observed that the act of writing in the drawing classroom permitted students to record their impressions of the drawing process, and thus allowed them to narratively construct and develop personal meaning from their drawing activities. While Beittel (1973) suggests that an artist's creation is an intentional symbolization, and as such, represents some equivalent of the idiosyncratic meaning which was the impetus for their work, I would suggest that through the ongoing reflection of the artist, the idiosyncratic meaning of a work is also developed after the work has been completed. Personal meaning develops through time, as the artist reads the picture, bringing to it memories of past experience, newly imagined scenarios, new associations and new metaphoric connotations. Personal meaning

deepens through this ongoing reflection. In essence, by telling himself / herself the story of the drawing, the artist further develops the personal significance of the picture. The act of writing captures one's reflections of the drawing process, reflections of not only the initial impulse for the drawing, but also of the visual and verbal reasoning involved in its execution, as well as of the imaginative metaphorical associations which arise during the course of the activity. As Bob had done with his 'thought-clusters' and his drawing focused on the toy car; or as Anna,Salma, and Harlan had accomplished in metaphorically transforming their still-life objects; or again, as shown in the revisitation of personal themes by a number of the volunteers, the reflection inspired by the act of writing (Van Manen,1997) and manifested in the *story* of the students' drawings, shows how the idiosyncratic meaning of the artists' creations were expanded. A specific example of this is Elsie's drawing effort of week 13, which showed her imaginatively transforming the oil lamp of the still-life scene before her into a lighthouse sitting high atop a cliff. After the completion of the drawing, Elsie further expanded her ideas through writing focused on the drawing of the transformed lamp by using the words: 'source of light' and 'hope?'(Researcher's journal,10/11/98). Clearly, Elsie's reading of her now metamorphosed lamp was expanded through her reflection centered on her finished drawing, and as a result, the lighthouse came to be seen as an imagined source of hope. Metaphorical thought and the act of writing made this imaginative narrative tangible and explicit for Elsie, and expanded the personal meaning of her drawing. In so doing, Elsie also came to view drawing itself as a means for the expression of ideas -an activity wherein valuable insight might be attained and shared with others (Researcher's journal, 17/11/98). As Zurmuehlen (1990)

has intimated, the narrative means by which individuals come to understand their artistic impulses, their creations, and the meaning underlying their work is crucial in allowing the young artist to more fully understand their creative process. The written component to the drawing course introduced my students to these narrative means.

Revisions and Conclusions

Langer (1957) has talked of a work of art as being a non-discursive presentational or prime symbol. For her, such symbols are understood only through the meaning of their whole and not through an additive analysis of their constituent parts. In a similar vein, Feinstein (1982) has posited that art as a truly developed product of thought *is* itself a metaphor, a metaphor which permits us to capture and create meaning out of the fleeting experience of our lives. It has also been shown that much of our thought involves the continual interplay between two modes of knowing- a visual and a verbal (John-Steiner,1987) (Paivio,1971,1990,1991) (Sinatra,1986), and that in the art studio this visual and verbal 'to and fro' is especially evident (Eldridge,1990) (Olson,1992) (Schön,1983,1985) (Zurmuehlen,1990). In fact, in describing the creative process involved when young children draw, Zurmuehlen (1990) has stated that verbal language helps to elucidate the meaning of what is represented in the drawn form. It is clear then that while a work of art may be more than the sum of its constituent parts, it does not stand autonomously apart from the language we use to name, analyze, synthesize and intellectualize

about our process of creating the art work. Verbal language helps to elucidate the meaning of the observations and decisions made during our drawing experience, and the written word as an extension of this visual and verbal interplay (Sinatra,1986)(Van Manen,1997)(Vygotsky,1962) helps to fix, clarify, elaborate, and communicate these thoughts.

It is in this light, that metaphorical thought *and* the written word combined to become a valuable self-reflective tool in this drawing course. By using this tool, students were able to think about their learning experiences in the classroom and connect this knowledge to their experiences outside of the classroom. They were able to make not only their visual and verbal questioning of the drawing exercise at hand more apparent, but the developing idiosyncratic meaning of their drawing efforts as well. Murdick and Grinstead (1992) have stated that incorporating a writing component in the art studio can provide teachers with a more profound access to their students' minds. I agree, however I would add to this that the act of writing in the drawing studio encourages self-reflection and allows the students *themselves* a more explicit understanding of their own artistic decisions and feelings about their creative activities. This self-reflection permits students to reinvestigate, reinterpret, reevaluate and reinforce their ideas about what *it is* to draw.

The students in this study were for the most part beginning drawing students enrolled in a college-level Fine Arts program. Their novice status made them, in my opinion among the most challenging subjects for the integration of a written component to the drawing studio. As beginning students, they grappled with attaining an understanding of the basics of drawing, its terminology and techniques, as well as coming to terms with the

elements of the visual language of art itself- an already daunting task. They were then faced with linking this incubating awareness with the metaphorical thought and self-reflection involved in the written exercises. As an instructor attempting to integrate a written component into a drawing course I was aware of the added difficulties involved in this balancing act, especially for beginning drawing students. In light of the problems which arose in week 7, I learned that I should avoid vague, poetic texts which may inhibit the novice drawers from 'experiencing' the text first-hand, and that may even 'turn them off' the idea that words might actually help their development as artists. I suspect that students at the intermediate and advanced levels who already have a sound understanding of the basic principles of drawing and visual language design, would be better candidates for using more poetic texts as part of this visual and verbal integrative approach. For these more advanced students, the rather simple texts given to the beginning drawers as prompts in weeks 5 through 7, might be replaced with writing exercises that continue the practice of 'thought-clustering' on the students' experience of the drawing process itself. In my experience as a drawing teacher, I have found that with more mature students at the undergraduate levels, there is less need for me to extol the virtues of self-reflection. For students at these more advanced levels, the process of art-making is often seen as one which, in part, is fueled by the self-reflective insight attained by looking within. These students are often searching for another means of understanding their artistic productions. In these situations, exercises designed to encourage metaphoric thinking and self-reflection by way of the written word, can provide a means of further developing their visual work, as well as making them more sound integrative thinkers.

At this point the reader may ask, that if one wanted the students involved in this research to think about the meaning underlying their expressive drawing efforts, then why not simply *begin* with exercises focused on their objects of personal significance- as self-reflective 'prompts'? My response is that given my previous, more informal attempts at integrating metaphoric thought and writing into a drawing curriculum, I feel this step-by-step approach was necessary in order to gradually ease these beginning drawing students towards this kind of self-reflection. One must remember that these novice drawers are struggling to attain basic drawing skills. At such a point asking them to express the *meaning* of their graphic efforts represents, for many of these students, an overwhelmingly intimidating prospect -one which can cause a stalemate of sorts in their development as young draughtspersons. By focusing their metaphorical thinking and writing on more 'neutral' and objective subject matter, beginning drawing students can gradually be eased into a more self-reflective mode.

Some difficulties with this curriculum approach came to light with the exercise of week 12. Significantly, these problems seemed to be directly linked to the closely inter-connected relationship between the image and word. In commenting on the exercise, Elsie explained to me that she had tried to cluster her ideas around her significant object at the *same time* as she had been drawing it. She explained that if an idea or association came to her *while* drawing her object, she would jot it down in her written 'thought-cluster'. She reported that her drawing "kept changing", and that as a result, she had great difficulty "finishing" her picture (Researcher's journal, 17/11/98). Significantly, some of the other students in the class also reported having similar problems.

Sinatra (1986) has suggested that artists, or even artists-in-training, during the course of their work often purposefully bypass verbal language to attain the information provided by non-verbal (visual) means. He contends that speaking or writing may even initially get in the way of visual composing. Sinatra however, does not negate the importance of the close relationship between visual and verbal languages in art-making, rather he believes that, "language can be used to explain the insight; to break the insight down into logical component parts so that the whole can be discussed and evaluated" (1986, p.30).

My findings indicate that the attempt to combine both drawing and writing involved in the exercise as essentially *concurrent* activities, was at the root of Elsie's, and some of the other students' difficulties in weeks 12 and 13. In fact, it seems possible that some of the problems encountered earlier in the course, for example, Salma's initial difficulties "using words" in her drawing process (Researcher's journal,8/09/98), might be traced to this attempt to concurrently draw -and as a precursor to writing, concurrently *name* , and metaphorically 'expand' objects being drawn. It may even be possible that Bob's problems combining the visual and verbal languages were the result of attempting to manage the 'thought-cluster' and drawing exercises at the same time. While other examples of students' work seemed to show a very close proximity in terms of the combination of the metaphor-inspiring 'thought-clusters' and the act of drawing, as evidenced in Anna's 'leaping man' drawing of week 8, my feeling now, is that in these cases the clustering of ideas had gone on quite separately and independently from the actual drawing itself. Certainly as seen in the case of Bob, by weeks 11 and 12 he had come to use

his 'thought-clusters' as far more of a self-reflective exercise -occurring both before and after his drawing activity (Researcher's journal,3/11/98).

As a result of these observations, I suggest that the writing activity is best used either as an activity prior to visual exploration, or as a means of 'thinking around' the completed drawing projects.   As viewed in Elsie's problems with the exercise of week 12 (p. 168), attempts to combine the writing and drawing as concurrent activities seem to have caused difficulties as the student grappled with shifting between the differing modes of thought.   Despite the visual and verbal interplay which exists in creative settings like the drawing studio (John-Steiner, 1987)(Paivio,1991)(Schön 1983,1985), verbalization either in the form of speaking-out-loud, or as extended into the written form, may initially get in the way of the important non-verbal composing involved in the primary act of perception.   As such, the important role of writing in this art studio context, may best reside in terms of helping the student to explain, evaluate, reconsider, and reframe the technical and self-expressive qualities of a his / her drawing efforts. Unfortunately, whether or not Bob's difficulties, and those of some of the other students', were in fact rooted in the concurrent use of drawing and writing, remains a question which I was unable to completely address in this study. Further research needs to be done regarding how the written word may be used in the art studio classroom, to deepen a student's understanding of their process, without hindering their visual composing.   Such research might look at how the word paradoxically fixes our thoughts, yet remains flexible enough to conjure up further images.   It occurs to me now that the answer must lie partly in what Sinatra (1986) has seen as the two-way traffic between the visual and verbal fields. (I find this analogy, however, to be somewhat linear. Perhaps a

more appropriate metaphor would be one invoking an amorphous ebb and flow between the image, the spoken word, and its written counterpart.) Another possible path for research may reside in one which further examines the differentiation between what Vygotsky (1962)(1978) and John-Steiner (1987) have identified as an essentially associative inner speech and a more conservative and stable external speech used in the communication of ideas to others. Are the acts of naming 'out-loud' and writing essentially and irrevocably conservative in nature? Need they always be? Is it this conservative and stabilizing character which creates the impasse when used concurrently with the act of drawing? Perhaps further research might develop strategies for curriculum tools involving writing in the art studio which would maintain the associative and fluid qualities of inner speech (John-Steiner,1987) (Vygotsky, 1978), with the critical self-reflective potential of the act of writing (Van Manen,1997).

As evidenced by the problems which came to light through Elsie's struggles in week 12, the relationship between image and word is indeed a complex one. One wonders: What *exactly* goes on in one's mind when one observes a scene, or, when one imagines a scene? How *exactly* does the word mediate the visual processing in the student's mind? How *exactly* does the written word or text further mediate this knowledge? Are these processes universally similar, or inherently individual? It is possible that continued research within the field of cognitive psychology will help to answer these compelling questions -though one wonders if in fact they are completely answerable. As Jerome Bruner has commented in regards to how we make meaning of the written text " we know precious little about the reader-in-the-text

as a psychological process" (1986, pg.5).

What is important however is that by bringing the written word into the drawing classroom, students were given a means of expanding their thinking about the products and the process of their drawing activities. By making students more aware of the visual and verbal processes involved in the drawing studio, by helping to illuminate the possible meanings underlying their work, and by allowing them to understand the story of their drawing experiences, the written word became a vital tool in this drawing curriculum. In this way, drawing became not only a means of capturing the students' perceptions of the observed world, but also a means of furthering their reflection of, and creating meaning out of those perceptions. As such, the ultimate goal of this action research was the enhancement of the learning environment for the students in the drawing classroom. As Van Manen (1997) suggests, research of this nature is not an empirical analytical science and so does not seek to generate scientific generalizations or to "problem solve" (pg.23). It is instead interested in "meaning questions" -questions which seek the meaning and significance of some phenomena (pg.23). How can metaphoric thought and writing help drawing students in the classroom? How does this teaching approach help to enhance the drawing students' understanding of what drawing can be about? How can students be made conscious of the meaning underlying their creative acts? For Van Manen these meaning questions cannot be solved or 'closed down', however, they can be more deeply understood in order that future action be better informed, leading to the thoughtfulness and tact necessary for a more fully engaged pedagogy (1997,pg.23). Importantly, this study and its underlying questions are grounded in lived experience. On one level, the inquiry is

grounded in my experience of the curricular shortcomings of my own formal artistic education and my attempts at addressing these problems as a teacher. On another level, this study is based in the experiences of the students in my drawing classroom. It is based on their struggles and triumphs as the students found their way through the creative act of drawing via the writing exercises. Van Manen (1997) has commented that the act of writing mediates reflection and action and makes "demonstrable our ability to see" (pg.130). Just as writing encouraged my students' reflection and insight into their drawing process, so too has this study -as a *form* of writing (Van Manen, 1997)- informed and deepened my understanding of my own pedagogical practice. When one teaches one often operates in an intuitive, albeit reflective mode. The pedagogical considerations and strategies undertaken in the classroom, and the questions arising from the results of these strategies, are mentally noted and then stored in a reservoir of teaching experience. However, when one examines and *writes* about the experience of teaching, the considerations, strategies, results and questions arising from the teaching practice are subjected to a critical reflection which the act of writing necessitates (Ong,1982) (Postman,1985)(Van Manen,1997). It is in this way that this pedagogical research mirrors the students' own thoughtfulness, reflection, and insight, achieved by way of the act of writing. The act of writing about my pedagogy has made me reflect upon the process of teaching and it has allowed me to see it in a more critical manner. It has inevitably made me a better educator. Similarly, the act of writing in the drawing environment has helped my students to better understand their own creative process.

Bibliography

<u>References</u>

Alejandro.Ann. (1994) "Like Happy Dreams- Integrating Visual Arts, Writing, and Reading", Language Arts, Vol.71.

Arnheim.Rudolph.(1986).New Essays on the Psychology of Art. Los Angeles and Berkeley.University of California Press.

Arnheim,Rudolph.(1966) Toward a Psychology of Art. Los Angeles and Berkeley.University of California Press.

Arnheim,Rudolph. (1969). Visual Thinking. Los Angeles and Berkeley.University of California Press.

Barkan.Manuel.(1955).A Foundation for Art Education. Los Angeles and Berkeley.Ronald Press Company.

Barrett.Terry.(1988).A Comparison of the Goals of Studio Professors Conducting Critiques and Art Education Goals for Teaching Criticism. Studies in Art Education.30 (1) 22-27.

Bates,Catherine;Shohet,Linda. (1993).Drawing: A Link to Literacy.The Centre for Literacy of Quebec.

Beittel.Kenneth.(1973) Alternatives for Art Education Research.Inquiry into the Making of Art. Iowa. WM.C.Brown Publishers.

Borah.Nixon Lee.(1980) "A Search for Metaphor: steps toward a philosophy of Rhetoric for Art Education,(unpublished doctoral dissertation), Claremont Graduate School.

Bruner.Jerome.(1986).Actual Minds, Possible Worlds. Massachusetts.MA. Harvard University Press.

Bruner.Jerome.(1962). On Knowing: Essays for the Left Hand. Massachusetts.MA.Harvard University Press.

Burgess.Robert (ed.).(1984). The Research Process in Educational Settings: Ten Case Studies. Bristol.PA.Falmer Press.

Cohen. Louis, and Manion.Lawrence.(1980).Research Methods in Education. London.Croom Helm.

Cohen.Ted.(1979) "Metaphor and the Cultivation of Intimacy". On Metaphor. Ed.Sheldon Sacks. Chicago.University of Chicago Press.

Commander,Nannette;Smith,Brenda. "Learning Logs:A tool for cognitive monitoring",Journal of Adolescent & Adult Literacy,39,(6),pp446-453.

Delamont.Sara. (1992). Field Work in Educational Settings:Methods, Pitfalls and Perspectives. Bristol.PA. Falmer Press.

Detmers.William R.,(1980) "A Conceptual Model for Curriculum Planning and Evaluation in the Visual Arts", Studies in Art Education, 21,(2)pp.57-66.

Efland. Arthur. (1988). "How Art Became a Discipline: Looking at Our Recent History",Studies in Art Education, 29, 3, pg.262-274.

Eldridge. Sarah Dennis. (1990). " Discovery by Design: A Writing Course for Visual Artists", (unpublished doctoral dissertation), Carnegie Mellon University.

Eisner.Elliot.W. (1991).The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice.New York.Macmillan Publishing.

Ernst.Karen.(1994). Picturing Learning:Artists and Writers in the Classroom.New Hampshire.Heinemann.

Ettinger. L.F.,Maitland-Gholson.J. (1990). "Text Analysis as a Guide for Research in Art Education",Studies in Art Education, 31,(2)pp.86-98.

Faulkner.William.(1930). As I Lay Dying.New York.Random House.

Feinstein. H., (1982). "Meaning and Visual Metaphor", Studies in Art Education,23 (2), 45-55.

Feldman.Edmund Burke. (1970). Becoming Human Through Art:Aesthetic Experience in the School. Englewood Cliffs,N.J.. Prentice Hall.

Feldman.Edmund Burke.(1973). The Teacher as Model Critic. Journal of Aesthetic Education. 7(1),50-57.

Fetterman.David (ed.) (1988). Qualitative Approaches to Evaluation in Education: The Silent Scientific Revolution.New York. Praeger.

Frye.Northrup.(1982).The Great Code: The Bible and Literature.New York.HBJ Publishers.

Gay.P. (1988). Using Writing to Develop Visual Artists: A Pedagogical Model for Collaborative Teaching and Learning. Issues in Writing. 1 (1), 39-49.

Goodman.Nelson.(1984).Of Mind and Other Matters.Cambridge.MA.Harvard University Press.

Hill,Edward.(1966).The Language of Drawing.New Jersey.Prentice Hall.

Hitchcock.G.,Hughes.D.(1989). Research and the Teacher: A Qualitative Introduction to School-based Research. New York.Routledge.

hooks. b.(1994). Teaching to Transgress.New York.Routledge.

Hubbard.R.S., Ernst.K.(eds.)(1996).New Entries:Learning by Writing and Drawing.New Hampshire.Heinemann.

Hubbard.R.S.,Power.B.M. (1993).The Art of Classroom Inquiry: A Handbook for Teacher-Researchers.New Hampshire.Heinemann.

Hughes.William.(1992). Critical Thinking: An Introduction to the Basic Skills. Peterborough,Ontario. Broadview Press.

Jeffers.Carol S. (1996)."Experiencing Art Through the Metaphor", Art Education, May.

John-Steiner.Vera.(1987).Notebooks of the Mind:Explorations of Thinking.New York.Harper and Row.

Korzenik.Diana.(1977). "Saying It With Pictures". In The Arts and Cognition. Baltimore,Md. Johns Hopkins University Press.

Langer.Suzanne K. (1957). Problems of Art, New York.Charles Scribner's Sons.

Langer.Suzanne K.(1942). Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art. Cambridge.MA.Harvard University Press.

Lodge.David.(1990).Narration with Words. in Images and Understanding:Thoughts about images:Ideas about Understanding:A Collection of Essays Based on a Rank Prize Funds International Symposium.Cambridge.MA.Cambridge University Press.

McFarland.K.,Stansell.J. (1993). "Historical Perspectives". In Teachers are Researchers:Reflection in Action. Patterson.Santa.Short.Smith. (Eds.). Delaware.International Reading Association.

Morgan.Helen.(1998). "Teaching the Creative Process: Using Artist's Notebooks in the Classroom". CSEA Journal. 29.(1).

Olson.Janet L. (1992). Envisioning Writing: Toward an Integration of Drawing and Writing.New Hampshire.Heinemann Educational Books.

Ong.Walter.(1982). Orality and Literacy.New York.Methuen.

Ortony. A., (1975) "Why Metaphors Are Necessary And Not Just Nice", Educational Theory. 25. (1). 45-53.

Ortony.A.(Ed.)(1979). Metaphor and Thought. London.Cambridge University Press.

Paivio.Allan.(1991).Images in Mind:The Evolution of a Theory.New York.Harvester Wheatsheaf.

Paivio,Allan.(1971) Imagery and Verbal Processes. New York.Holt,Reinhart & Winston.

Paivio,Allan. (1990). Mental Representations: A Dual Coding Approach. New York. Oxford University Press.

Patterson.L.,Santa.C.,Short.K.,Smith.K.(Eds.).(1993). Teachers Are Researchers: Reflection in Action.Delaware.International Reading Association.

Perkins.D.N.(1981) The Mind's Best Work.Cambridge.M.A.Harvard University Press.

Perkins.D.N. and Leondar.B. (Eds.).(1977). The Arts and Cognition. Baltimore. Md.Johns Hopkins University Press.

Postman.Neil.(1985).Amusing Ourselves to Death:Public Discourse in the Age of Show Business.New York.Penguin Books.

Rico.Gabriele Lusser.(1989). Daedalus and Icarus Within: The
    Literature/Art/Writing Connection.English Journal. March.14-23

Root-Bernstein.Robert.(1985). "Visual thinking: The Art of Imagining Reality".The
    Visual Arts and Sciences. American Philosophical Society.
    Philadelphia.

Rosengren.K.E.(Ed.) (1981).Advances in Content Analysis. Beverly
    Hills.CA.Sage Publications.

Russell.Crawford.(1982). "Content Analysis Scheme for Classroom Use',
    Art Education. January

Sacks.Sheldon (ed.)(1979). On Metaphor. Chicago.III.University of Chicago
    Press.

Samples.Bob.(1976). The Metaphoric Mind. Reading.MA. Addison-Wesley
    Publishing.

Schon.Donald.(1983). The Reflective Practitioner.New York. Basic Books.

Schon.Donald.(1985).The Design Studio:An Exploration of its Traditions and
    Potential.London.RIBA Publications.

Sinatra.Richard.(1986).Visual Literacy Connections to Thinking. Reading and
    Writing.Illinois.Charles C. Thomas.

Steiner.Wendy.(1982). The Colors of Rhetoric.Chicago.University of Chicago
    Press.

Van Manen.Max.(1997). Researching Lived Experience:Human Science for an
    Action Sensitive Pedagogy.London,Ontario.The Althouse Press.

Vygotsky.L.S. (1978).Mind in Society: The Development of Higher
    Psychological Processes. (M.Cole, V.John-
    Steiner,S.Scribner,E.Souberman, Ed.). Cambridge.MA.Harvard
    University Press.

Vygotsky.L.S.(1962). Thought and Language.Cambridge,MA.MIT Press.
    (Original work published 1934)

Wainio.Carol.(1995). Struggling with Modernism in the Academy.Canadian
    Review of Art Education:Issues and Research.21 (2).pp.119-126.

Wasson.R.F.,Stuhr.P.L.,Petrovich-Mwaniki.L.(1990).Teaching Art in the
     Multicultural Classroom: Six Position Statements.Studies in Art
     Education.31 (40.234-246.

Wilson.B. (1988). Art Education,Civilization and the 21st century: A
     Researcher's Reflections on the National Endowment for the Arts Report
     to Congress. Reston,VA.National Art Education Association.

Weigl.Egon.(1980). "The Written Word Is More Than Reading and Writing",The
     Reading Teacher. v.33. (6). pp.652-657

Zurmuehlen.Marilyn.(1990).Studio Art,Praxis,Symbol,Presence.Virginia.
     National Art Education Association.

Appendix A: Student consent form

Consent Form

This form is to confirm that I, _____, agree to participate in a research study being conducted by Darren Millington, as part of the degree requirements for a doctorate in Art Education at Concordia University.

The purpose of the study is to examine whether the use of written text within a studio art (drawing) curriculum might help enhance the studio art learning environment.

I understand that my participation will include the regular completion of course work and homework assignments, as well as participation in informal and more formalized interview sessions wherein a tape recorder will be used. These interviews will be of relatively short duration and will be done in conjunction with your course work. The interviews will involve questions about how you came to create your work, your feelings about your work and the course.

I understand that I am free to withdraw my consent and discontinue my participation at any time without negative consequences. Grades given in this course will not be affected in any way whether one participates in this study or not.

My participation in this study will be entirely confidential. Data gained through this study in the form of written texts and visual images may be used within the doctoral dissertation and may or may not be published.

I have read the above description and readily consent to participate in this study.

Signature of Participant _____

Signature of Researcher _____

Date _____

Appendix B: Course syllabus

CHAMPLAIN REGIONAL COLLEGE
Lennoxville Campus

COURSE OUTLINE

DEPARTMENT: Fine Arts

COURSE: 511-101-91: Composition Design
INSTRUCTOR: Darren Millington

SEMESTER: Fall 1998

_____

DESCRIPTION:

The aim of this course is to develop students competency in the visual language through the elements and principles of drawing. The course is designed to increase the student's capacity to perceive and record accurately from the external world, as well as to creatively translate, abstract, and express these observations into the drawn form. In essence, this course hopes to teach students how to look, to see, and to communicate visually and creatively express themselves through their drawings.

COURSE OBJECTIVES:

The student should demonstrate an understanding of design concepts and their use through a series of drawing studio problems. Students should further develop strong hand-eye coordination and learn to use basic compositional and design elements in their drawings as well as demonstrate an understanding of the properties and uses of various media and the appropriate techniques for their use. A premium will be put on individual creativity, open-mindedness and class participation. Students should strive to open themselves up to the expressive possibilities of the drawing medium through experimentation and creative invention as well as through exercises designed to encourage metaphorical thinking.

CONTENT:

In this course the student will gain experience in the use of: charcoal, chalks, graphite, and drawing pencils; as well as in different approaches to drawing which will include: gesture drawing, contour drawing, modeled drawing, drawing the still-life, and the found object. In essence, we will look at the basic principles of composition and design in the form of drawing. A written component will also be emphasized where the student will interpret written texts visually through their drawings, as well as write about their own visual work.

MATERIALS

    Pencils: 2B, 4B, 6B
    Ruler
    Compressed Charcoal
    Eraser: Staedler white eraser, kneaded art gum
    Conte: black and colored
    Pencil Sharpener
    11" x 14" min. sketchbook
    Mayfair paper (many sheets)
    18"x24" newsprint pad
    bulldog clip

METHODOLOGY:

Practical demonstrations by the instructor using basic techniques and materials; individual instruction during group work; daily critiques of class work and assignments; and slide presentations will represent the means of how much of the course is taught.

EVALUATION:

You are responsible for keeping your work up to date. I will check each week to see if you are having difficulty and to offer any help that I can, but work will only be marked at mid-term and at the end of term. You will be marked according to the your own development throughout the course. A serious attitude, openness of mind, and above all a willingness to learn cannot but help in this development. Sound well-crafted and creative work will follow. The final evaluation of the portfolio allows you to present your work in the best possible state of completion and perfection. Attendance is mandatory. Your presence in the class ready and willing to work is of utmost importance not only for your own development, but for the group cohesion and dynamism of the class itself. Arriving at class completely unprepared for the day's work will constitute an absence.

Mid term marks will be based on the work assigned during the first five weeks.

Appendix C: Mid-term interviews / student responses

Writing Aspect of Course	Evaluative Comments on the Course

Anna:

"the writing part is really cool. I hadn't thought about putting them together (drawing and writing) but its not as hard as I thought now. Except for the last one." (exercise in week7)

"I really think my drawing has improved.I'm pretty confident with my contour now that was cool. But I like drawing from my imagination. It's more expressive! I hope we'll do more of that"

Bob:

"it's really hard. I can't really say I like it.I'm gonna keep trying though.I just don't always know what to say, er write"

"my drawing has really gotten way better. I like the exercises and the model drawing-that's tough! My second-to-last homework (week 6) was my best. I reallymade it feel what the words you gave us said. That one was good!"

Salma:

"I really didn't know what to do with the words at first. I was really nervous, it was like what do you want me to do? But then with the cluster things I just felt less weird about them (the words) They didn't seem so bad. they made me picture things."

"I'm really happy with it so far. All of the drawing is making me better. If I'm gonna be an artist I'm gonna need all these things.If you're an artist you have to And make people picture things.Like my airplane picture (week 6) it's not what the words said but it is sort of. It's kinda the same.It (the text) made me see the scene and tried to show it.

Writing Aspect of the Course	Evaluative Comments on the Course

Harlan:

"The words I thought were interesting but not what I wanted. But now I kinda think they're useful. Like when it made me think of my uncle and stuff. That was neat because then the text you gave us had a point."

"Yeah it's good. I mean I still like drawing comic characters but I think I'm getting a better base training with this drawing from observation stuff. It helps me do what I want to do. I know more about how to use a line or a composition to show something like anger or tension or something."

Elsie:

"the words just made me picture it so I could draw it. I enjoy the words because otherwise I wouldn't know where to begin."

"At the beginning I wasn't a very good drawer but I wanted to be better. I'm more confident now though and I know I'm getting better.Now I know I can get a sense of a scene -like my forest drawing(week 6) I got the idea of being claustrophobic right?Well that makes me feel good, that gives me more confidence. If you're going to be an illustrator you have to make people picture things."

Appendix D: Post-session interview / student responses

Technical and Expressive Aspects of the Course	Role of the Writing Activity

Anna:

"I think the course was really good for me. I knew how to draw before but now I know more techniques and how to use them. Like the zooming-in on the skull, how it became something else. I know more about how to use this sort of drawing or that sort of drawing."

"The thought-clusters definitely helped me come up with ideas I hadn't thought about before. They were cool. They made me think of things which were like drawing."

"I feel like I can come up with an idea and show it now."

"when we wrote about the homework then I really self-reflected, I mean then I thought about what my mind was doing in the drawing."

"I definitely think writing helped us -me. I hadn't ever thought of writing and drawing together but now it makes sense."

"when I wrote about the skull and it became 'spring' and life and then 'death' again -that was impressive."

Bob:

"I do feel better about how to draw. I think I improved a lot. Now I look at the edge of something and decide what line it is-a contour or a gesture line."

"it made me think about what I was thinking. I mean I could think about when I was a kid. That made think of the giant looking into the car."

"yeah I liked the 'giant' drawing. That one made me feel like it came out like I thought. And the 'lost in the woods' one. I guess that's what you mean by expressing my ideas?

"the writing part made me think of other stuff."

"I don't know. I can't really say. I had trouble sometimes. Sometimes it was good -when I did the 'giant' drawing and the 'rhyme' one I guess.'

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Technical and Expressive Aspects of the Course	Role of the Writing Activity

Salma:

"Yes I feel much more confident. I feel like I can draw anything now."

"For sure. It made me make ideas that seemed below the surface. You know like things that weren't there but really were. Like my object of significance - the bird head- or in the cow skull. The cluster ideas helped with that. That was a really neat way of thinking."

"Like in my project. I feel like I could express my feelings more you know? It's one thing to draw an old boot or something, but when you want to you know say something in your my grandmother. Then I wouldn't have use certain lines, or how you draw it on the

"Oh yeah. I could express my feelings better. If I hadn't wrote about myself maybe I wouldn't have thought about my grandmother. Then I wouldn't have thought about my feelings and then poof! no drawing."

"Yes. The writing we did did help. Yes it did. It made me think about the reason I was drawing in a certain way. I mean the way I was drawing. It made me think about why I was drawing. You know like why I wanted to be an artist.

"Yes the writing made me remember. things. It made me think about why I was being an artist, about how I was drawing certain things. It made me even remember the other classes and exercises."

Harlan:

"Yeah I suppose. I think I'm a better drawer now that's for sure. I always drew before but now I feel more like I have credentials. Now I can draw a bowl or a glass or a skeleton."

"Yeah I think writing helped me create some ideas I wouldn't have thought of otherwise. The android for example. That was totally strange how that came up. I thought about it using those idea things ('thought-clusters') and it just came up. They were quite good."

"I did enjoy how I could also draw from my imagination. The way I changed that metal pipe into the android. That was quite good."

"If you mean express my ideas then yeah the writing stuff helped me figure out what I was doing."

"The abstract drawing was a little strange. I mean I liked the results but it was a little strange for me. It was ok."

"When I started thinking about my hometown and my uncle and flying-I guess that was because of the writing I guess I'm sure it was because of the writing. It was because of that description you gave us. (week 3)

Technical and Expressive Aspects of the Course	Role of the Writing Activity

Elsie:

"No doubt about it. I am a better drawer now. It's not hard to beat."

"Writing did get me to see things differently. When my drawing of the lamp turned into the lighthouse beacon -that was because I thought differently, I mean I saw the light differently.That was because of the idea clusters because otherwise it might just have stayed a lamp."

"No I really believe that I can become an even better drawer. I feel that if you sit me down in front of something I can get it pretty closely now."

"Well yeah in the same way. I mean if you see something differently, then maybe you'll show it differently. So if writing made me see it differently then I guess it made me express it differently. Yeah without it(writing) I don't know if I would have seen a lighthouse there."

"Well in my last project I think I did a good job showing an idea of 'time'. And in my 'lighthouse' picture I 'm really proud of that one. I think I got the feeling of light and dark and hope."

"Yeah it did make me think about what I was doing. Although I had trouble with my object. (weeks12-13) I think it did make me self-reflect -about the abstract group thing, about the lamp and especially about my project on 'time'. I think that's important because if you want to do an illustration say for a magazine then you have to think about what your drawing says."
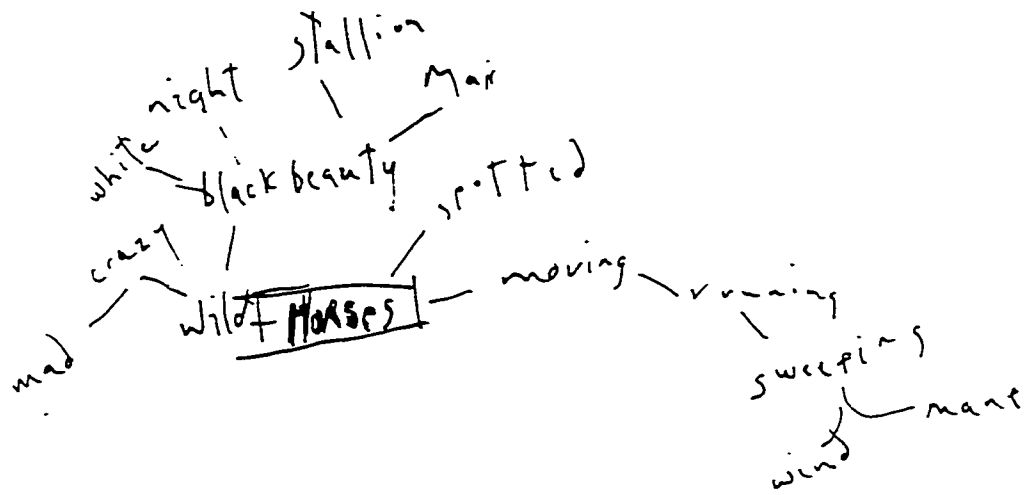
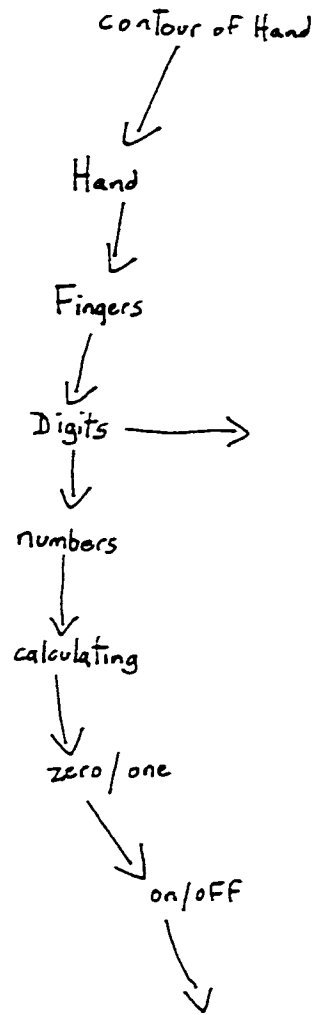Appendix E: Anna's 'thought-cluster' of week 14 and 15

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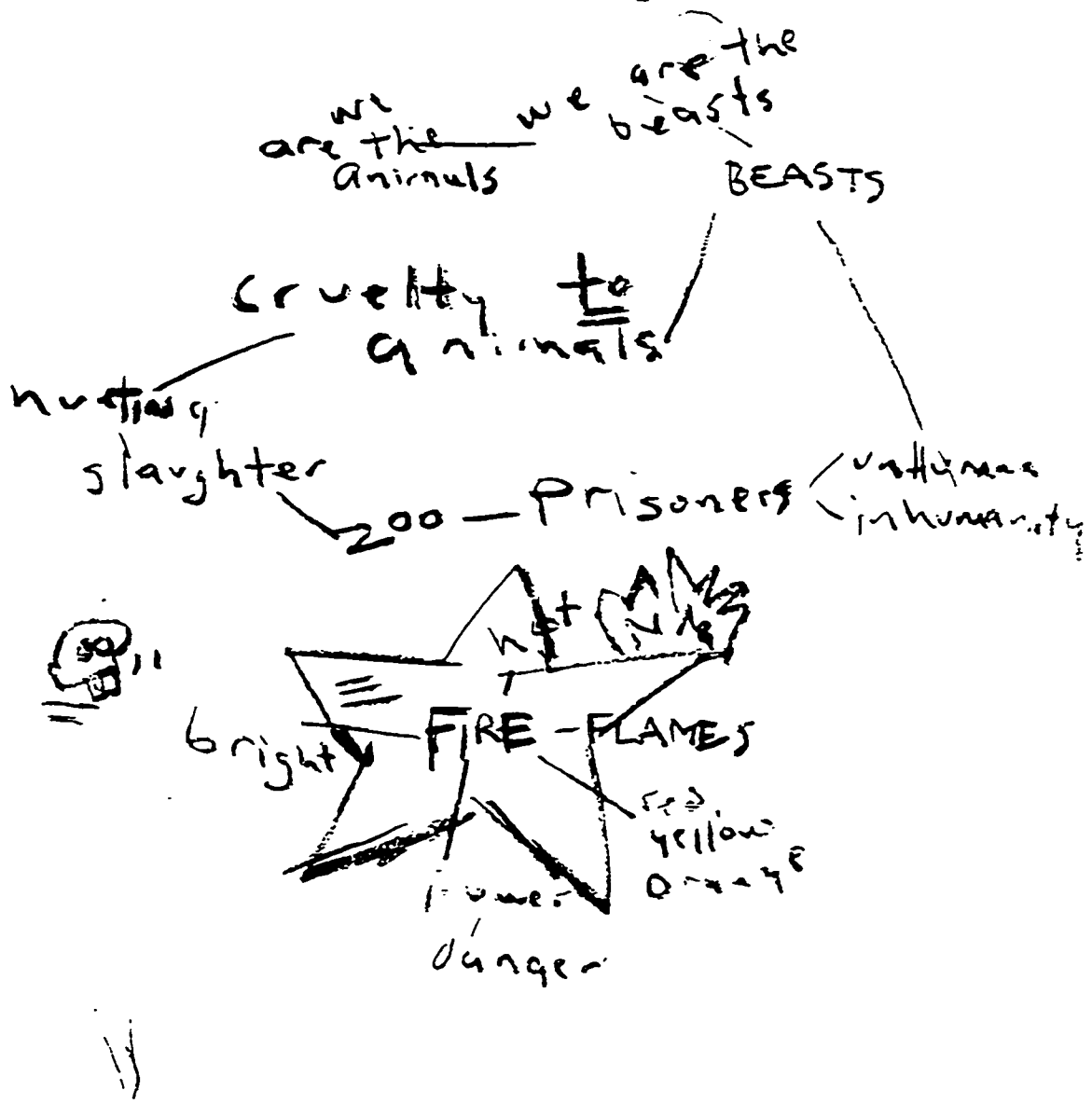
Appendix F: Bob's 'thought-cluster' of week 13
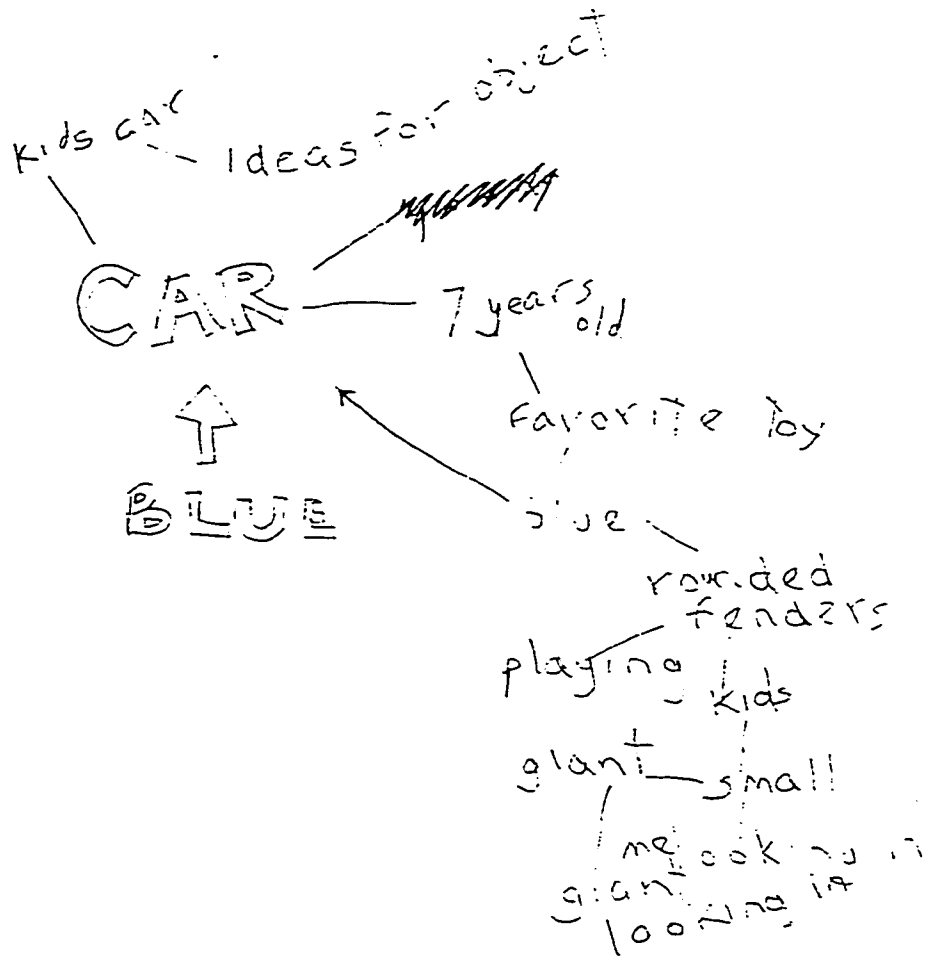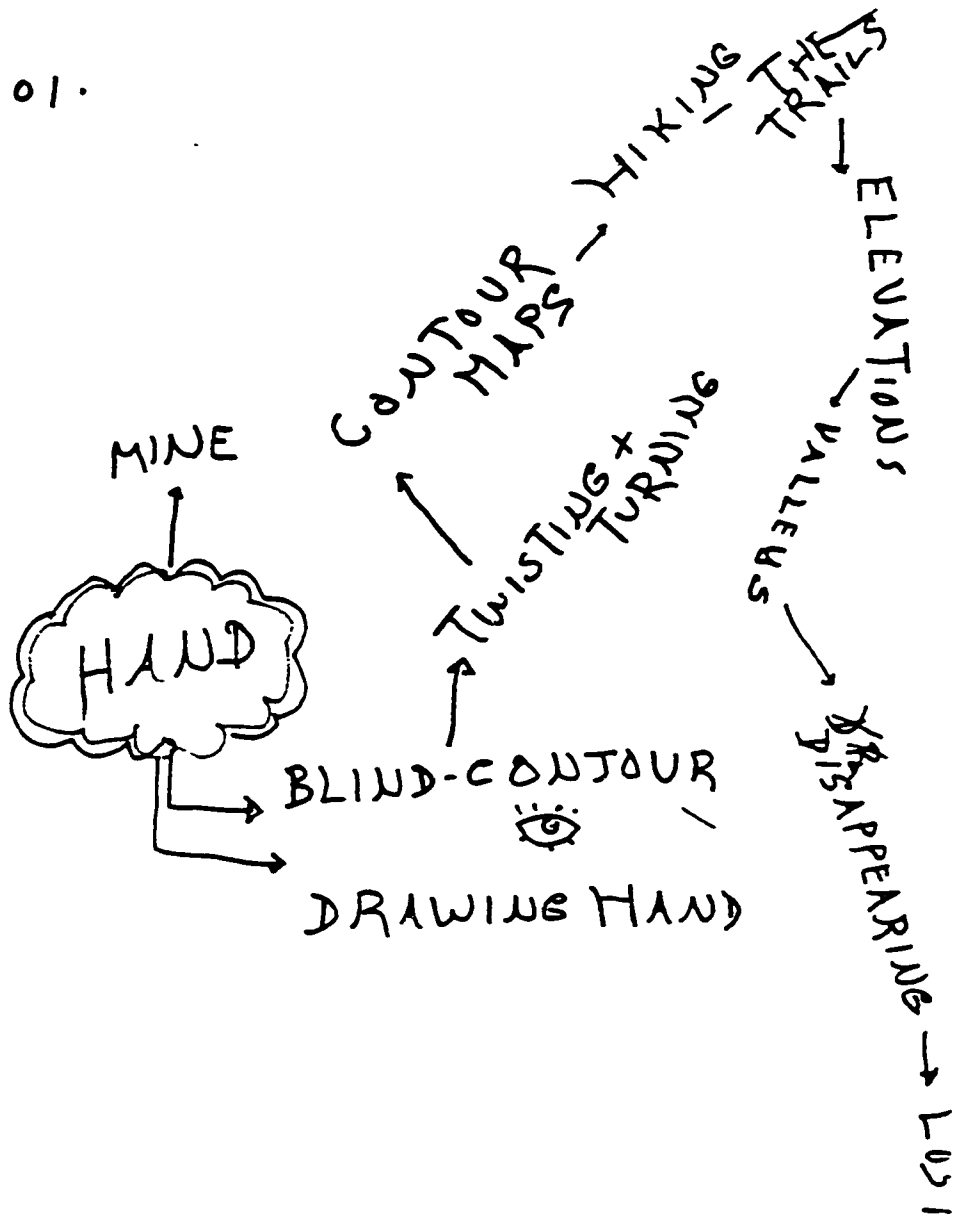
Appendix G: Salma's 'thought-cluster' of week 8

Appendix H: Harlan's 'thought-cluster' of week 3

contour of Hand

↓

Hand

↓

Fingers

↓

Digits ⟶

↓

numbers

↓

calculating

↓

zero / one

↘

on/off

↘

Appendix I: Elsie's 'thought-cluster' of week 3

SEPT 01.

CONTOUR MAPS → HIKING THE TRAILS

ELEVATIONS

VALLEYS

MINE

TWISTING + TURNING

HAND

BLIND-CONTOUR

DRAWING HAND

DISAPPEARING → LOST

Appendix J: Anna's homework response of week 8

This exercise was really cool. When I saw the picture in the newspaper I thought oh wow how tragic! It really caught my eye...then I started with my clustered ideas. I saw the picture and read the story and as I began to put my thoughts down, the man sort of changed towards a bird. So, it seemed that he was flying free, not dead! I just started to ask why this tragedy happened you know, why did he jump. Then he sort of changed to a bird.

Appendix K: Bob's homework response of week 8

[handwritten text, transcribed below]

to try and draw the objects I first started to look for the main objects. I desided (sic) it would be the box. Then it was going to go off the page because of the folds it was hard but I used the contour line to follow the folds. The other hard thing was the cofee (sic) cup. I couldn't get the top right. That was hard trying to make it look like a hole.

Appendix L: Salma's homework response of week 15

my self portrait

I really wanted not to be like we talked about- not like a grad photo. I wanted to get at some feelings underneath. When I Thought of my grandmother I remembered Feeling Terrible. Then later I Thought of the word empty and it seemed to feel right. I thought I would use the word empty beside my face. It seemed to Fit really

My self portrait

I really wanted not to be like we talked about...not like a grad photo. I wanted to get at some feelings underneath. When I thought of my grandmother I remembered feeling terrible. Then later I thought of the word empty and it seemed to feel right. I thought I would use the word empty beside my face. It really seemed to fit.

Appendix M: Harlan's homework response of week 3

08 / 1 / 98

~~~~~~~

[handwritten text]

08/1/98

As I was doing the blind contour drawing I was finding it quite difficult. I mean drawing without looking!!! But then I remembered a seismograph, the thing used to measure earthquakes and tremors. Well my eye was like a seismograph copying all the bumps of my hand. That way it was neat and I think that I got good results!!! I wasn't sure if we are allowed to look at our paper though!? Yes or no? Anyhow I think my hand ended up looking like a hand and that's amazing!

when I did this drawing it came to me, what if I make a Scene. I thought I could just make a scene out of it, to illustrate my ideas. That lamp could be a lighthouse ~~oft~~ (sorry!) on a cliff by the sea? Because you said we could change it I thought why not? It could be a source of light, a safe place right?

when I did this drawing it came to me. What if I make a scene. I thought I could just make a scene out of it, to illustrate my ideas. That lamp could be a lighthouse (sorry!) on a cliff by the sea? Because you said we could change it I thought why not? It could be a source of light, a safe place right?