A Scientific and Metaphoric Examination of the Creative Self: A Self Study of Creativity, the Creative Process, and Aesthetic Awareness

by

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Abstract

The following self-study examines the role of creativity, the creative process, and aesthetic awareness among the life of an artist. The study further examines the relationship between creativity generation and drawing. This self-study is motivated by three fundamental questions: How is creativity developed within an individual? How is creativity influenced? Can art production incite creative thinking? The research approach to this study suggests that a new generation of data collection including rich and descriptive narrative is warranted to gain a greater understanding of the human phenomena of creativity. Data collection includes a triangulation of three components: written biographical narratives of the artist's experiences, the completion of a self-portrait in graphite with an accompanied journal log of process analysis, and self-conducted interview. Each piece of data, are coded and analyzed for thematic relevance. The literature offers a descriptive account of the various existing theories of creativity, its relation to art making procedures, and the role of creativity in education. The findings represented within this study highlight the fundamental theories of creative development, cognition, process, and problem solving. The significance of this study exists within the contribution to advancing the understanding of creativity development and generation.

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List of Abbreviations

- DNA- Deoxyribonucleic Acid
- IQ- Intelligence Quotient
- S-STEP- Self-Study of Teacher Education Practices
- Big C- Big Creativity
- Little C- Little Creativity
- BFA- Bachelors of Fine Art
- MFA- Masters of Fine Art

Chapter 1

Introduction

Creativity

Creativity is a complex, vastly functioning, human phenomenon that presents itself in many forms, shades, and hues (Feist, 2010). The fascinatingly convoluted structure of what it means to create and to be creative; provides a great amount of intrigue and a need to better understand its origins. Feist (2010) stated, "In short, the qualities of creativity that are both fascinating and yet frustrating are its complexity and variability" (p. 113). The complex cognitive-structure of creativity is what makes it both a valuable accomplishment as well as an enigmatic process of our species. Koestler (1980) stated:

Creativity is the art of combining previously unrelated domains of knowledge in such a way that you get more out of the emergent whole than you put in. Each new synthesis, leads to the emergence of new patterns of relations, more complex cognitive structures on the higher levels of the mental hierarchy. (p. 344)

There are arguably few aspects of human cognition that are as complex and fascinating as creativity (Kaufman, Kornilov, Britol, Tan, & Grigorenko, 2010). Another intriguing component of creativity that makes it of great interest is its value to human existence and its contributions to daily function. Gabora and Kaufman (2010) stated, "Human creativity is unique in that it has completely transformed the planet we live on. We build skyscrapers, play breathtaking cello sonatas, send ourselves into space, and even decode our own DNA" (p. 279). Great creative accomplishments such as: Shakespeare's plays, Newton's calculus of gravity, and Einstein's theory of relativity, are all productions of creative ingenuity (Feist, 2010).

Creativity can also exist and affect our lives on a smaller scale. Moran (2010) stated, "Examples of creativity are ubiquitous" (p. 74). Examples of creativity exist all around us in many forms, from clever ideas, innovative products, and even social media sharing (Moran, 2010). Given the highly sought after nature of creative invention and its contributions to daily human function, the beginning sources of creativity are of great interest. Every living, breathing human being has the potential to think creatively and to create (Gzenda, 2011), but what exactly is creativity? Where does it come from and what influences it? According to Nietzsche and Kaufman (1995) the German philosopher Friedrich Nietzsche (1844-1900) once said about creativity, "One must still have chaos in oneself to be able to give birth to a dancing star" (p. 13). Our still-evolving understanding of creativity warrants further research of the universal human phenomenon of creative production (Gzenda, 2011).

Creativity Research

Historically, creative research has proven that creativity is of great interest as a multifaceted phenomenon requiring a multitude of approaches to understand it (Ward & Kolomyts, 2010). Runco and Albert (2010) stated, "Virtually every major twentieth-century psychologist, (e.g. Freud, Piaget, Rogers, Skinner) has taken creativity seriously and explored what it means to be creative" (p.5). The 1950 Presidential Address of J.P. Guilford to the American Psychological Association is a common marker of the beginning of modern creativity research (Sternberg, 2006). In this address, Guilford called upon psychologists to further investigate the phenomenon of creativity, particularly the relationship between creativity and learning (Smith & Smith, 2010). Guilford is probably best known today for his structure of the Intellect model of human ability (Guilford, 1985).

The phenomenon of creativity and its processes warrant a detailed and unique research approach to fully understand the dynamics of its origins (Eisner, 2002). Eisner (2002) stated:

For many, doing research in education required one to measure the phenomena investigated and then to apply statistical techniques to treat the quantified data. Research and measurement were like ham and eggs –an inseparable pair. What has happened is that young researchers, in particular, have felt limited by the requirement that phenomena be reduced to what is measurable. They have recognized that form influences meaning and that much of what needs to be understood and conveyed needs a narrative more than it needs a number. (p. 210)

Rich and descriptive narrative research, rather that quantified data, can offer a greater conceptual understanding of what creativity is and what it can accomplish as a cognitive function (Eisner, 2002). The complex phenomenon of creativity deserves research that pays specific attention to the individual's creative thought processes, detailed accounts of creative execution, and understanding of personal creative growth. To better understand creativity, a detailed account of the creative process itself must be thoroughly documented by the creator (Runco & Albert, 2010). Runco and Albert (2010) stated, in relation to analyzing creative compositions and breakthroughs, "What was laid before us is the possibility of research on creativity if we try to observe adaptations in controlled everyday conditions" (p. 12). Extensive study on the creative process has contributed greatly to the understanding of artistic creativity, this type of analysis offers insight into the artist's perceptual abilities, drawing skills, and his/her personal history and personality (Kozbelt & Seeley, 2007).

Creativity has been criticized as an intrapersonal matter, a manifestation of humanness that cannot be measured or analyzed and will forever remain a psychological curiosity. Feist

(2010) stated, "As a long-time creativity researcher, I often hear, especially from artists, that creativity is inherently unknowable, mysterious, and immeasurable" (p. 113). A perspicuous and better understanding of the creative process can generate a more precise understanding of the complex phenomenon of creativity (Barron, 1997). Barron (1997) stated, "The reason for looking at very clear examples of any process in nature is simply this: that the more unmistakable and more organized the specific case, the more it can reveal about the general phenomenon, specific knowledge transfers into an understanding of a process of one individual can reveal an understanding of the general phenomenon of creativity.

According to Runco and Albert (2010), creativity research from both the nineteenth and twentieth century have concentrated on five basic questions: "What is creativity? Who has creativity? What are the characteristics of creative people? Who should benefit from creativity? And can creativity be increased through conscious effort?" (p. 13). With regard to scientific analysis, the more important question is how to go about answering these questions (Runco & Albert, 2010). Mumford, Medeiros, and Partlow (2012), stated:

We need research examining how people appraise effective process execution and the types of errors they seek to manage during process execution. We need to know more about how knowledge structures are integrated in real-world creative problem-solving efforts, and the type of knowledge which is likely to prove especially valuable to people's creative problem-solving efforts.(p. 43)

According to Kozbelt, Beghetto, and Runco (2010), one key to advancing knowledge in the field of creativity is by incorporating different perspectives. Kozbelt et al. (2010) stated, "By doing so, they may discover areas of overlap between seemingly contested positions, which not only

advance the standing of their own theoretical perspectives, but also enrich our broader

knowledge of creativity" (p. 41).

Research Questions

The following research questions were used in this study: (1) How is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking?

Domain	Question	Data Collection	Analysis
Developmental Theories of Creativity	1. How is creativity developed within an individual?	PointsWritten aestheticnarratives- visualmemory/ Selfconducted interviews	Codebook- coded for thematic relevance
Cognitive Theories of Creativity	2. How is creativity influenced?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Stage & Componential Process Theories of Creativity/ Problem Finding Theories of Creativity	3. Can art production incite creative thinking?	Completed drawing accompanied by journal writing of creative process	Codebook- coded for thematic relevance

- How is creativity developed within an individual? This question focuses strictly on the developmental components to the artist's background and influence of early creative experiences. A series of reflections (narratives) from childhood that have sparked creative behavior are coded to identify similarity in experience and language.
- 2. How is creativity influenced? This question focuses on the internal and external factors that contribute to creative production. A series of self-conducted interviews highlight the interactions between the self and creativity, creative process, and aesthetic awareness. The interviews are coded in order to identify similarities in language.

3. Can art production incite creative thinking? This question is concerned with the generation of creativity and its relation to art-making. An on-going journal that reflects upon the creative process as the artist is engaged in visual creative production is coded to identify similarities in written form of thought processes that occur during production.

Advantages

One of the greatest assets to this form of creative inquiry is the component that the researcher has access to the subject's deepest creative ventures. The researcher is offered at all times the ultimate view of the subject's cognitive process of creativity. The self-study digs deep into the exact shifts of thinking throughout the creation of work and engagement in the creative process. Alternative representation has long been an attribute to self-study research (Pinnegar & Hamilton, 2009). Pinnegar and Hamilton (2009) stated, "From its earliest days researchers involved in self-study have used a variety of strategies based in the arts to represent the tensions of self in relation to other" (p. 128). Arts- based, self-study research provides an alternative view to examining experience (Pinnegar & Hamilton, 2009).

Limitations

Studying only one individual offers only one perspective to creative generation. One perspective with one specific make-up, both environmental and genetic, can only offer one view of personal history, understanding, and one individual process. Fundamental attribution error, Ross (1997), explains the individual's tendency to overemphasize internal dispositions rather than external dispositions. Another limitation is the component that creativity can be a highly subjective conquest and identifying what is deemed as creative can be a difficult declaration. Donnelly (2004) stated, "The creative work of one generation may be considered quaint or passé

by the next, only to be rediscovered and praised as creative by a future set of judges" (p. 162). According to Kaufman, Sergey, Kornilov, Bristol, Tan, and Grigorenko (2010):

But, nevertheless, one issue that is important to note in all these studies is the difficulty of deciding what is creative or who is creative and who is not- a problem that has plagued the field of creativity research since its inception. Because there is no standard to determine what is creative (and what is not), comparisons of results across studies using "creative" and "noncreative" participants, processes, and products become problematic and imprecise. (p. 219)

Lastly, the limit of time and finance is a clear limitation to developing a greater understanding to the development of creativity. Some of the best studies on creativity, study creative individuals over the course of several years or longer (Albert & Runco, 1999; Helson, 1999; Plucker 1999; Subotnik & Arnold, 1996), in order to gain the best insight into creative development, process maturation, and cognitive insight.

Purpose of the Study (Significance)

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. According to Locher (2010), "There is a long history of interest, which continues to this day, in the psychological connection between an artist's personal history and his or her resulting motives for creating an artwork, as well as its content and style" (p. 134). This self-study provides further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. Through the study of an artist's history, creative process, and artists insight, a clearer understanding of creativity and its relation to art making is made known. Geertz (1995) stated, "If you want to understand what a science is you should look in the

first instance not at its theories or its findings, and certainly not what its apologists say about it; you should look at what the practitioners of it do" (p. 73).

While the implications of this research study does not aspire to solve every mystery of creativity, The origins of creative thought are worth exploration and can in a small way inform how we learn. The intent of this study is to further illuminate how creative thought is born within an individual artist and to further explore the mental processes and structures that support creative behavior. Russ and Fiorelli (2010) stated, "How these processes crystallize and enable creative products to be formed is a challenging question for the field" (p. 233).

Creativity and the visual arts

One of the applications of this study was to provide insight into the connection between creative generation and art production. When considering creativity as an artful process, it is assumed that creativity is a sequence of cognitive operations that produces novel insights and compelling final products (Sternberg, Kaufman, & Pretz, 2002). The cognitive approach to creating something new and valuable is readily visible in the art- making process (Eisner, 2002). Eisner (2002) identified unique experimental qualities in the arts, and stated:

The arts, in all their manifestations, are close in attitude to play. Constraints on the imagination are loosened. In the arts, in the West at least, permission is provided to explore, indeed to surrender, to the impulsions the work sends to the maker, as well as those sent from the maker to the work. (p. 5)

The arts have been considered a catalyst to creative education, and the unique process of creating products of artistic work lends itself to the cognition of creative problem-solving (Eisner, 2002). Investigations of the actual working processes engaged in by visual artists as they produce work are quite few by comparison (Locher, 2010). Neuroscientists working within the emerging

discipline known as *neuro-aesthetics*; have just begun to investigate the brain mechanisms that assist in the production of visual work (Locher, 2010). Locher (2010) stated,

Making art draws on many brain areas, including those that carry out functions that contribute to visual creativity, to planning the structural organization of an artifact, and to the motor planning and drawing skills used to carry out the artistic production. In addition to these visuomotor processes, regions of the brain involved in the formation of symbolic and linguistic concepts, drives, and emotions are also involved in the artistic process. (p. 140)

Education and creativity

Another application of this study was to consider the value of teaching creativity and to further promote the understanding of creative generation. Insights into the creative process can help to enlighten educators as to what creativity is, where it comes from, and how it is best utilized. Teaching creativity is most easily accomplished by teaching through the arts (Eisner, 2002). According to the National Art Education Association (2002), "Learning the creative process through the arts strengthens problem- solving and critical- thinking skills, adding to overall academic achievement and school success" (p. 1). Visual art production can achieve a distinct learning behavior unique to the creative process (Eisner, 2002). The cognitive function of creation requires sophisticated and intellectual analysis of procedure by the individual (Eisner, 2002). Eisner (2002) stated, "I argue that many of the most complex and subtle forms of thinking take place when students have an opportunity either to work meaningfully on the creation of images-whether visual, choreographic, musical, literary, or poetic- or to scrutinize them appreciatively" (p. xii). Incorporation of the arts promotes creative thought and in turn guides the learner to consider multiple alternatives in problem solving (Eisner, 2002).

Although there seems to be a happy marriage between creativity and education, to a great extent, this is not the case (Makel, 2009). There is somewhat of a sorted relationship between creativity and education (Smith & Smith, 2010). Smith and Smith (2010) stated:

Creativity is, and historically has been, important in areas such as early childhood education and gifted and talented education. It has been important at certain times in education generally, most notably the 1960s and 1970s, and there is evidence that creativity is more influential in education in countries other than the United States, but fundamentally, the influence of creativity on education has been intermittent and irregular. (p. 251)

There are current efforts to rectify the dismissive approach to creativity in education, but the fact remains that creativity is simply not at the forefront of the educational debate (Smith & Smith, 2010). The arts can sometimes be categorized as an "extra" discipline, of less value than math and science. Phillips (2011) stated, "You don't find school reformers talking much about how we need to train more teachers in the arts, given the current obsession with science, math, technology and engineering"(p. 1). Eisner (2002) stated, "We want, especially in America today, a tough curriculum, something rigorous, a curriculum that challenges students to think and whose effects are visible in higher test scores, at best the arts are considered a minor part of this project" (p. xi).

Besides the educational push to concentrate primarily on math and science there is also a lack of training for teachers to effectively incorporate creative learning within their classrooms (Smith & Smith, 2010). Educators are attracted to the educational benefits that creativity can promote, but are often overwhelmed by how to correctly include this mode of thinking (Smith & Smith, 2010).

Definitions

Creativity

There is a basic understanding that creativity is the production of creative thought. Creative thought is the ability to produce something of great value. There is an emerging consensus among psychologists, that creativity is defined as a novel yet appropriate solution to a problem or response to a situation (Moran, 2010). Creativity also includes the proactive approach to devising, formulating, and framing problems themselves (Moran, 2010). According to Kaufman and Sternberg (2007):

Most definitions of creative ideas comprise three components; First, creative ideas must represent something different, new, or innovative. Second, creative ideas are of high quality. Third, creative ideas must also be appropriate to the task at hand or some redefinition of that task. (p. xiii)

Creative ideas are described as cognitive, and as a process accessible to anyone. Gnezda (2011) stated, "Creativity is a cognitive, emotional, and manipulative experience that is accessible to all people. Creativity is cognitive because it is about innovating and developing ideas while it occurs via specialized mental processes" (p. 47). Through creative experimentation the human mind can consider outcomes, invite ingenuity, and develop alternative answers to complex problems. In the following passage taken from *Creators on Creating* (Barron, 1997), the famous writer Henry Miller describes the conception of creative thought and the notion that every individual possesses the ability to create profound acts of creative ingenuity:

I sank slowly into a chair by the table and with a pencil I began to write. I described in simple words how it felt to take my mother's hand and walk across the sun-lit fields, how it felt to see Joey and Tony rushing towards me with arms wide open their faces beaming

with joy. I put one brick upon another like an honest brick layer. Something of a vertical nature was happening- not blades of grass shooting up but something structural, something planned. I didn't strain myself to finish it; I stopped when I had said all I could. I read it over quietly, what I had written. I was so moved that the tears came to my eyes. It wasn't something to show an editor: it was something to put away in a drawer, to keep as a reminder of natural processes, as a promise of fulfillment. Every day we slaughter our finest impulses. That is why we get a heart-ache when we read those lines written by the hand of a master and recognize them as our own, as the tender shoots which we stifled because we lacked the faith to believe in our own powers, our own criterion of truth and beauty. Every man, when he gets quiet, when he becomes desperately honest with himself, is capable of uttering profound truths. We all derive from the same source. There is no mystery about the origin of things. We are all part of creation, all kings, all poets, all musicians; we have only to open up, only to discover what is already there. It was revealed to me that I could say what I wanted to say- if I thought of nothing else, if I concentrated upon that exclusively- and if I were willing to bear the consequences which a pure act always involves. (p. 29)

The creative process

While researching the definition of creativity by interviewing academics in the creative arts disciplines, Morgan (2012) found that a strong conclusion emerged, Morgan (2012) stated, "Creativity is a process" (p. 6). Creativity as a process entails the sequence of cognitive operations that results in an end product, insight, or idea that is of some value (Sternberg, Kaufman, & Pretz, 2002). Barron provided insight into the creative process of

American author and poet Maya Angelou, one of the most renowned and influential voices of our time. Barron (1997) stated:

Creativity may be chaos, disorder, and the unexpected: yet there has to be a method to the madness, even a routine, at times. But nobody says the routine has to be ordinary. Here poet Maya Angelou gives us an example: she writes in hotel rooms all morning long with a yellow note pad and a glass of sherry. The editing's done at night: When I'm writing, none of anything I've said applies. When I'm writing, everything shuts down. I get up about five, take a shower and don't use the Floris-I don't want that sensual gratification. I get in my car and drive off to a hotel room: I can't write in my house, I take a hotel room and ask them to take everything off the walls so there's me, the Bible, *Roget's Thesaurus* and some good, dry sherry and I'm at work by 6:30. I write on the bed lying down- one elbow is darker than the other, really black from leaning on it- and I write in longhand on yellow pads. Once into it, all disbelief is suspended, it's beautiful. I hate to go, but I've set for myself 12:30 as the time to leave, because after that it's an indulgence, it becomes stuff I'm going to edit out anyway. (p. 131)

Angelou's analysis of the creative process provides distinct insight into the artist's motivation, and the personal journey of finding internal resolution. Each process is distinct and the experience varies with the artist and end creative product (Barron, 1997). Barron (1997) stated:

The lesson I had learned is one that everyone must learn who plunges into the creative process. It grips you in the depths of the self. You're certainly welcome to try to keep it superficial, but then you pay the cost of over-control. You lose, perhaps forever, the part of your experience that you're choosing not to have. (p. 3)

The procedural functions that occur during the creation of works of art act as a sort of therapy or comfort to the individual (Pollard, 2012). This procedure can also empower the individual to break free from expected habits and experiment with thoughts and manipulation (Pollard, 2012). The creative individual never lives in the habitual automatic function; these individuals are perpetually experimenting with process (Pollard, 2012).

Aesthetic awareness

Barron (1997) stated, in an interview with dancer Anna Halprin: "Creativity is stimulated only when the sense organs are brought to life" (p. 49). Our understanding of the visual world includes the sensory procedure of; seeing, hearing, feeling, tasting, and smelling. Interpreting the environment in which we live requires a qualitative approach to experiencing sights, sounds, tastes and smells (Eisner, 2002). Eisner (2002) suggested, "What is aesthetic depends at least in part on the way some feature of the phenomenal world is addressed" (p. xiv). Aesthetic awareness addresses the ability to not only become aware of sensory surroundings but, to become absorbed, fascinated, and enchanted with the phenomenon of aesthetic philosophy (Eisner, 2002). Possessing a sense of aesthetic awareness can provide an individual with the opportunity to intellectually dissect and define the environment in which they live (Eisner, 2002). Eisner (2002) stated:

To be able to create a form of experience that can be regarded as aesthetic requires a mind that animates our imaginative capacities and that promotes our ability to undergo emotionally pervaded experience. Perception is, in the end, a cognitive event. What we see is not simply a function of what we take from the world, but what we make of it. (p. xii)

The artist collects aesthetic information based on perceptions of experiences and offers the viewer an interpretation of that experience. The arts act as a catalyst to experiencing aesthetic measures (Eisner, 2002). Eisner (2002) stated, "The arts, invites the individual to attend to the qualities of sound, sight, taste, and touch, so that we experience them; what we are after in the arts is the ability to perceive things, not merely to recognize them" (p. 5). Aesthetic philosophy also notes that aesthetic awareness becomes of habitual nature to the artist, and the artist automatically sees the world through an aesthetic lens. Shklovsky (1990) stated, "If we examine the general laws of perception, we see that as it becomes habitual it also becomes automatic, so eventually all our skills and experiences function unconsciously, automatically" (p. 5).

Organization of the Study

The introduction provides navigation for the research questions, purposes, and unique vocabulary used in creative research. The literature review provides current areas of interest within the field of creative research as well as the concepts of creative generation. It also offers a greater understanding of the many entities that help define creative theory. The understandings of these theories are needed in order to support the arts based approach toward self-study design. The methods section provides a detailed analysis of the data collection process as well as the validity, reliability, and trustworthy application to self-study research. The findings presented within this study offers a detailed qualitative approach to understanding creativity, the creative process and aesthetic awareness as they exist within an individual artist. The organized accounts of each codebook created from the three forms of data collection; six written aesthetic narratives, ten pages of personal journal entries correlated to the completion of a graphite self-portrait, and four: thirty minute self-conducted interviews. The analyzed text consists of five complex tasks: 1. Presents discovered themes and subthemes. 2. Describes the core and peripheral elements of

themes. 3. Builds hierarchies of themes or codebooks. 4. Attached themes to chunks of actual text. 5. Links themes into theoretical models (Bernard & Ryan, 2010).

The primary assertions presented represent a deeper understanding and personal confirmation of the complex phenomenon of creativity. Through the writings of one creative individual, a greater conceptual understanding of creative generation, the creative process, and aesthetic awareness are made known.

Chapter 2

Literature Review

Introduction

The following literature review includes: Restatement of the research questions and purpose of the study, an Introduction to creativity and the history of creativity research, an outline of primary theories concerning creativity and their primary assertions, understanding the creative process and its link to intelligence, an analysis of aesthetics and its relation to the creative process, a neuro-scientific approach to understanding creativity, the beneficial implementation of creativity in education and its existing barriers, the current climate of creativity research and contemporary interests and debates in regards to creativity, self-study research and exploring creativity, and a summary of the literature review.

This literature review seeks to organize and discuss creativity research and its relation to the creative process and aesthetic awareness. Creativity is a vastly functioning, cognitive process of human phenomenon that enables the mind to conceive of what could be. This review of the literature is meant to provide both empirical and metaphoric perspectives that currently exist in regards to creativity and creativity research. Creativity research requires a rigorous approach to theory, process analysis, and neuroscience. Donnelly (1999) stated, "There is still no consensus within the literature as to whether creativity is located in a person, a product or a process. There is agreement, however, that creative work is both novel and valuable" (p.156).

Research Questions

The following research questions are considered in this study: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking?

Purpose of the Study (Significance)

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. According to Locher (2010), "There is a long history of interest, which continues to this day, in the psychological connection between an artist's personal history and his or her resulting motives for creating an artwork, as well as its content and style" (p. 134). This self -study seeks to provide further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. These theories are explored through the study of an artist's creative history, creative process, and aesthetic insight. Geertz (1995) stated, "If you want to understand what a science is you should look in the first instance not at its theories or its findings, and certainly not what its apologists say about it; you should look at what the practitioners of it do" (p. 73).

Creativity

Aristotle had much to say and write about creativity but, often grouped creativity into an exceptional form of genius and expression, and did not base this idea on any type of rigorous empirical evidence (Runco & Albert, 2010). The history of creative thought began with the recognition that research is the practical way to learn about and better understand the world around us. As the intellectual revolution known as the English Enlightenment began to gain momentum and solidify the importance of empirical investigation, the notion of freedom of thought (creativity) also began to gain recognition (Runco & Albert, 2010).

The awareness of actually researching the act of creativity came later. Even as late as the seventeenth and early eighteenth century, the study of human nature was not yet considered of serious investigation. The concept of creativity has had to find its own path independently from

the institutionalization and conceptualization of research (Runco & Albert, 2010). Major intellectual transformations had to take place within the field of scientific research before scientific concepts could be applied to the study of creativity. One such transformation; was the widely accepted scientific premise of natural law. The understanding of the natural human ability to think freely had to be scientifically developed before the formation of the awareness of what creativity was, and more importantly how it could be used, could be explored (Runco & Albert, 2010). Runco and Albert (2010) stated:

As it was, it took another 150 years after research was a recognized and widely encouraged institutional undertaking before the concept of creativity was sufficiently sculpted out of the many debates regarding the meaning and eventual separation of such competing ideas as imagination, originality, genius, talent, freedom, and individuality.

(p. 4)

The conceptualization of creativity arose from the arguments and discussions regarding basic human nature and the slight interest in how this could possibly be investigated with intellectual merit (Runco & Albert, 2010). Debate still exists, as to the most effective means of researching the phenomena of creativity and its complexities. Kaufman and Sternberg (2010) stated in regards to the complexities of creativity, "There are still debates, after more than six decades of intensive research, on how to measure, utilize, and improve it" (p. xiii).

Another historical component worth noting of creativity and how it has been conceptualized is the psychological view of existentialism. Existentialism is the psychological view that each individual subject is responsible for giving meaning to their own existence. In the case of creativity; it provides a greater meaning to why we might exist (to create) (Barron, 1997). Barron stated, "The very origin of existence is open to creative exploration, and the science of

this century has posed new questions, large and small- intriguing, challenging, important questions" (Barron, 1997, p. 2).

The process of creating something new and bringing an existence to a piece of visual work defines the ability to be authentic. Ellenberger (1995), existential psychologist and medical historian, defined authenticity as taking responsibility for one's own existence rather than following the crowd (p.118). Creativity is an attempt to unearth the mystery of the self and define the quality of being (Barron, 1997).

Theories of Creativity

Theories of creativity vary widely. The classification of creative theory and orientation are as abundant as creative perspectives. Kozbelt, Beghetto, and Runco (2010) stated:

This variation is partly due to the richness of the topic itself, which encompasses the subjective experience of the moment of a private, minor insight by an ordinary individual as well as the greatest achievements of human genius throughout our history. (p. 21)

Creative invention is a complex interaction of the person and environment and there are many variables, both innate and nurtured that contribute to a person's level of creativity (Russ & Fiorelli, 2010). Personality traits such as self-confidence, risk-taking, and openness to experience are also predominate traits among creative individuals (Russ and Fiorelli, 2010). Russ and Fiorelli (2010) stated, "Just as there is no one overarching theory of creativity, there is no one comprehensive theory of the development of creativity" (p. 233). In much of the literature there is a breakdown of creativity described by two terms "Big-C" and "Little-C" (Csikszentmihalyi, 1996, 1998; Richards, 2001; Stein, 1953). "Big-C" creativity refers to major contributions of creative acts, usually a result of total immersion in the area so that a new discovery can occur (Kozbelt et al., 2010). Some examples of "Big-C" creativity are Albert Einstein's creation of

mass-energy equation, Beethoven's Symphony No. 5, or Picasso's Guernica. "Little-C" describes those acts of creativity that occur on a daily basis, while novel, and useful, they make no major impact on society and culture.

Scientific and metaphoric orientation

Considering the multitude of creative theories, an initial exploration of two different sets of orientations is warranted. The creative orientations concerned throughout this study consist of both scientific and metaphoric perspectives. According to Kozbelt et al. (2010), "We define scientifically oriented theories as having an underlying goal of mapping the empirical reality of creative phenomena. In contrast: more metaphorically oriented theories attempt to provide alternative representations of creative phenomena" (p.21). Scientifically oriented theories of creativity seek traditional scientific evidence and objective truth while metaphoric theories offer a refreshing and creative means to new understandings and possibilities. Often in the case of researching creativity, strictly adhering to only researching what is observable can limit the conceptual scope on which the phenomena of creativity often operates. Kozbelt et al. (2010) stated:

The problem with an extreme empiricist position is perhaps best captured in T.H. Huxley's admonition, those who refuse to go beyond fact seldom get as far as fact. When extreme empiricism becomes the driving force in a field of study, the resulting research programs run the risk of drifting into a form of analytically rigorous journalism (chasing after and documenting phenomena), as opposed to mapping out potential, not yet experienced, possibilities. Einstein's breakthrough theoretical work on special relativity, for instance, would have been impossible if he had limited himself to the directly observable. (p. 22)

Although metaphorically oriented theories focus more on the hypothetical and imaginative possibilities of creativity, this form of inquiry requires a rigorous approach to data collection, analysis, and interpretation. Kozbelt et al. (2010) stated:

Of course, this doesn't mean that anything goes when it comes to more metaphorically oriented theories; otherwise they would run the risk of becoming nothing more than wild speculations and self-justifications. Metaphorically oriented theories are of maximal use when they balance speculations with agreed-upon methods of empirical exploration, peer review, and the postulation of theoretical propositions that are open to empirical inquiry, elaboration, and refinement. (p. 22)

These two orientations of both scientific and metaphoric research are not mutually exclusive. Research on creativity often explores both orientations as a means to developing the understanding of creativity.

The following theories; Cognitive, Developmental, Economic, Evolutionary (Darwinian), Problem Finding, Problem Solving and Expertise-Based, Psychometric, Stage and Componential Process, Systems, and lastly Typological, are highlighted in Table 1.

Table 1

Theory	Primary Assertions	Key Concepts	Major Studies &
			Examples
Cognitive	Ideational thought	Remote association	Mednick (1962)
	processes are	Divergent /convergent	Guilford (1968)
	foundational to	thinking	Finke, Ward, and
	creative persons and accomplishments.	Conceptual combination, expansion Metaphorical thinking	Smith (1992)

Summary of Theories of Creativity

Table 1

Continued

Theory	Primary Assertions	Key Concepts	Major Studies & Examples
Developmental	Creativity develops over time, mediated by an interaction of person and environment	Place and family structures Role of play Support during transitions Longitudinal process Multivariate influences	Helson (1999) Subotnik and Arnold (1996) Albert and Runco (1989)
Economic	Creative ideation and behavior is influenced by "market forces" and cost-benefit analyses.	Influence of macro- level factors Psychoeconomic perspective Markets of creativity Investment decisions	Rubenson and Runco (1992, 1995) Florida (2002) Sternberg and Lubart (1992,1995)
Evolutionary (Darwinian)	Eminent creativity results from the evolutionary-like processes of blind generation and selective retention.	Chance-configuration Blind generation of ideas Selective retention of ideas Equal-odds rule Social judgment and chance	Campbell (1960) Simonton (1988, 1997)
Problem Finding	Creative people proactively engage in a subjective and exploratory process of identifying problems to be solved.	Subjective creative processes Exploratory behaviors On-line discovery	Getzels and Csikszentmihalyi (1976) Runco (1994)
Problem Solving and Expertise-Based	Creative Solutions to ill-defined problems result from a rational process, which relies on general cognitive processes and domain expertise.	Ill-defined problems Cognitive, computational approach Expertise-based approaches	Ericsson (1999) Simon (1981, 1989) Weisberg (1999, 2006)

Table 1

Continued

Theory	Primary Assertions	Key Concepts	Major Studies & Examples
Psychometric	Creativity can be measured differentiating it from related constructs (IQ) and highlights its domain-specific nature.	Reliable and Valid measurement Discriminant validity Thresholds Domain specificity	Guilford (1968) Wallach and Kogan (1965)
Stage and Componential Process	Creative expression proceeds through a series of stages or components; the process can have linear and recursive elements.	Preparation stages Incubation and insight Verification and evaluation Component mechanisms	Wallas (1926) Runco and Chand (1995) Amabile (1999)
Systems	Creativity results from a complex system of interacting and interrelated factors.	Evolving systems Network of enterprises Collaborative creativity	Gruber (1981) Csikszentmihalyi (1988) Sawyer (2006)
Typological	Creators vary along key individual differences, which are related to both macro- and micro-level factors and can be classified via typologies.	Individual differences Categories of creators Seekers versus finders Integrate multiple levels of analysis	Galenson (2001, 2006) Kozbelt (2008)

Note. Adapted from "Theories of Creativity", by A. Kozbelt, R. A. Beghetto, and M. A. Runco, 2010, *The Cambridge Handbook of Creativity*, p. 27. J. C. Kaufman& R. J. Sternberg, (Eds.) New York, NY: Cambridge University Press. Copyright 2010.

Developmental theory

Developmental theory specifically helps us to understand the roots of creativity and suggests that we can learn much about creativity over time by studying the environment and habits of the creative person, particularly the environment they grew up in and the activities and sights they were exposed to. Key concepts among this theory include; place and family structures, role of play, support during transitions, longitudinal process, and multivariate influences. Developmental theory supports the replication of conducive, creative environments and the inclusion of creative thinking tasks within curriculum in order to instill creative opportunities and growth. We can learn from the background of a creative individual in a practical manner, to help influence the environment of the creative development of children and their creative potentials (Kozbelt, et al., 2010).

Studies involving the development of creative people offer insight into the surroundings that may cultivate creativity. Parents of creative children often exposed their children to diverse experiences and were in some way creative themselves and as a family displayed moderate amounts of independence (Albert & Runco, 1989). Parents of creative children remain aware of what their children are doing but, not overly restrictive (Albert & Runco, 1989). Independence is tied to the creative process, and allows children to develop autonomy and establish original and creative ideas (Kozbelt, et al., 2010). This concept is also closely related to the belief that when children are left to engage is self-initiated or pretend play, this can have a profound effect on the development of creativity in adulthood (Russ & Schafer, 2006). The relation between imaginative play and creativity contributes to our understanding of how the enjoyment we experience through play can lend itself to creative exploration (Pearson, Russ, & Cain Spannagel, 2008).

Although parents play an integral role in creative exposure and development, siblings also play a significant role in the creative development of a child (Gaynor & Runco, 1998). Studies of development focused on family structure suggested that such scenarios as birth order, ordinal position within the family, age interval between siblings, and number of siblings can relate strongly to the significance of creative development (Gaynor & Runco, 1998; Sulloway, 1996). Kozbelt, et al. (2010) stated:

Research on family structure has proven useful for constructing theories of creativity. For instance, consider the idea that middle children have certain developmental advantages. Sound evidence suggests that middle children are often rebellious and revolutionary, probably because they are raised in families where there are older, more capable siblings whose maturity earns them parental attention. Middle children therefore find alternative ways to get attention, often by rebelling against parental values and status quo and finding a unique niche. Rebellion may be within the context of the family, in one's thinking, or, during adulthood, in artistic or scientific revolutions. (p. 26)

Some of the most telling and powerful studies of creative development are longitudinal (the researcher is able to study the subjects development over a long period of time). One particular study by Albert and Runco (1999) followed a sample of exceptionally gifted boys for over twenty years. They found that during their childhoods, the truly gifted had the support and growth to make cognitive and emotional transitions, one from general to creative talent, and the other from capability to a motivational state that leads directly to actual performance and achievement (Albert & Runco, 1999). Studies like these reinforce developmental theories of creativity that take cognitive processes, motivation, affect, and personality each into account.

Stage and componential process theory

Stage and componential process theory suggests that creativity is directly related to the creative process. A number of models have been proposed that attempt to understand the structure and stages of this process (Getzels & Csikszentmihalyi, 1976; Gruber, 1981; Helmholtz, 1896; Runco, 1994). One of the most popular stage theories of creativity is the creativity stage model by Graham Wallas (1926). Wallas, an English social psychologist, constructed an insightful theory that outlines four stages of the creative process. The outline begins with the *preparation stage*; in this stage the individual gathers information and considers the problem. The next stage is the *incubation stage*; in this stage the individual lets the problem stew while considering multiple solutions. If the incubation stage is successful, the individual will have ascended to the third stage known as the *illumination stage*; In this stage, an idea or solution has made itself known to the individual (an ah-moment ensues). The last and final stage is known as the *verification stage*; in this stage the solution is applied to the problem and results are noted. Although this stage theory is one of the most well-known and popular outlines of creative stage theory, its linearity has been largely discredited (Kozbelt, et al., 2010). Kozbelt, et al. (2010) stated:

More recent models have acknowledged the likelihood of recursion, whereby an individual may cycle through the stages multiple times, in various combinations. For example, the individual may attempt to verify an idea but find it only partially adequate, and return to the preparation stage and start over. (p. 31)

Several recent models also suggest that the creative process is constructed from component mechanisms rather than stages. In these models a new tier of information is presented that recognizes pre-existing knowledge, prior known information, and intrinsic and extrinsic motivation that leads to new connections of creative influence. Amabile (1999), a well-known

creativity researcher, focused on the effects on creativity produced by evaluation, rewards, competition and constraints. As a result Amabile (1999) presented a componential model that includes three facets: domain-relevant skills (e.g., knowledge about the domain, technical skills), creativity-relevant skills (e.g., appropriate cognitive style, knowledge of heuristics for generating novel ideas), and task motivation (e.g., attitudes toward specific tasks, perceptions of one's motives). Kozbelt, et al. (2010) stated:

For Amabile, the first of these depends heavily on innate abilities and skills, whereas the second depends on training and experience. The third is a function of intrinsic motivation, absence of extrinsic constraints, and the individual's capacity to minimize the debilitating effects of constraints. (p. 31)

Cognitive theory

Cognitive psychologists recognize creativity as a mental process (Donnelly, 2004). Cognitive theories explore the notion that creative achievements have some basis in cognition and that creative individuals possess special cognitive abilities of abstract thinking. The cognitive ability to think abstractly allows an individual to come to a new or creative conclusion when high levels of connections occur (Donnelly, 2004). Kozbelt, et al. (2010) stated, "This kind of thinking has been called metaphoric logical, the idea being that something like "angry weather" is only comprehensible in a non-literal fashion" (p.32). Metaphoric logic requires an individual to use high levels of flexible perception and willingness to shift previous assumptions (Kozbelt, et al., 2010). Cognitive theories are primarily concerned with the thinking of the individual artist and the creative process as a mechanism to creative thought (Kozbelt, et al., 2010).

Because of the complex nature of human cognition, cognitive theories of creativity can vary widely. Each of these theories focuses on either universal capacities such as attention or memory, while others might focus on individual capacities such as divergent thinking tasks (Kozbelt, et al., 2010). The concepts of both divergent and convergent thinking are widely used in the study of creative cognition. Both divergent and convergent thinking can both be involved in the creative process. Kozbelt, et al. (2010) stated:

Divergent thinking occurs when ideas and associations move in varied directions, and as a result new and original ideas may be found. Convergent thinking, on the other hand, occurs when cognition is used to identify one correct or conventional answer. (p. 32)

One well respected theory states that creative actions stem from drawing associations. Mednick (1962), known for his significant contributions to the understanding of creative cognition, described how original ideas derive from a series of ideas chained together as one association to the next. Associations among ideas may be formed for a variety reasons; for instance, being functionally or even acoustically related (Mednick, 1962). Apparently some individuals tend to move quickly from obvious associates to more remote ones. In this view, more creative individuals tend to have flatter hierarchies of associations than less creative individuals; in other words, more creative people have many more strong associates for a given concept, rather than only a few, which is thought to provide greater scope for the activation of distant representations (Mednick, 1962).

Problem finding theory

Problem finding is mainly a theory of the creative process and the creative persons own unique creative goals. This theory brings the individuals motivations to preform creative acts to the forefront and highlights the exploratory nature of the creative individual. If a researcher is

more interested in the creators' subjective experience or their reasons for making art, problem finding is likely to be the more appealing framework to study for this level of understanding (Kozbelt, et al., 2010). Kozbelt, et al. (2010) stated:

The problem-finding view holds that the traditional problem- solving view is inadequate to explain how creators come to realize that a problem exists in the first place, and how they are motivated to proactively bring their subjective experience to understand the problem. (p. 34)

In a study by Getzels and Csikszentmihalyi (1976), researchers observed 31 college art students in an open-ended drawing activity, in which they arranged a set of objects and then drew from them. Getzels and Csiksszentmihalyi were particularly interested in the exploratory and motivational behaviors of the students when given the complex task. They found that the more creative students engaged in manipulating the objects and handling them more before completing the given task. Although this evidence exists, the exact nature of problem finding is difficult to discern.

Overview of remaining theories

Other theories worth noting on creativity which will not be focused on in this research study are as follows; Psychometric, Economic, Problem Solving and Expertise Based, Evolutionary (Darwinian), Typological, and Systems theories.

Psychometric theories are not concerned with the development, environment, motives or thinking of creative individuals. These theories are strictly concerned with the measurement of creativity and place value on the product rather than process of creative thought.

Economic theories are newly developed theories that draw from the understandings of economics. Kozbelt, et al. (2010) stated:

Economic theories also offer testable hypotheses about creative efforts. They predict, for instance, that larger groups will inhibit brainstorming because the costs of being different, and therefore original, are higher when the audience is large. They also predict that individuals with high levels of expertise will be less flexible about alternatives, at least those that challenge their own views, than individuals who have invested less into their careers or into a particular theory or method. (p. 30)

Theories based on problem solving, and expertise, emphasize the cognitive problem solving process and expert knowledge. This theory explores the cognitive psychology of the individual and their efforts in finding solutions to ill-defined problems. This theory also suggests that creativity typically emerges when an individual has immersed themselves in study of the problem and become an expert of the problems subject.

Evolutionary theories or Darwinian theories draw upon the ideas of evolutionary biology. This theory focuses on understanding the nature of creative achievements and has many psychological implications that state that the creator has little control over whether the idea or product is actually deemed; creative. This is in fact a social judgment. Kozbelt, et al. (2010) stated:

First, because of the sheer complexity of the creative process, creators should have little control over guiding the progress of their works; thus, it has been claimed that the creative process is replete with false starts and wild experiments. (p. 36)

Typological theories suggest that differences in personality types are an influential component to possessing creative ability. Often typological research on creativity consists of studying the individual characteristics of a variety of creators and their creative habits. Galeson

(2001, 2006), argued that there were two fundamental types of creators: those motivated by aesthetics and seek to experiment or seekers and those that conceptualize innovation or finders.

Systems theories consider creativity a complex system of interacting subcomponents that must be considered to create a rich and meaningful understanding of creativity (Gruber & Wallace, 1999). Systems theory includes a combination of different views taken from the previously discussed theories to construct a fully developed understanding of the creative person and product. This theory considers the understanding that every artist has a unique development, cognitive make-up or own personal process in regards to creativity.

The Creative Process

One popular measure of creativity throughout the literature is the observation of the creative process. Historically, the concept of studying the creative process is relatively new, with the exception of Leonardo da Vinci (*b* Anchiano, nr Vinci, 15 April 1452; *d* Amboise, nr Tours, 2 May 1519), there is no record or evidence that self-awareness of the creative process existed (Barron, 1997). Da Vinci, an Italian painter, sculptor, architect, designer, theorist, engineer, and scientist, was the founding father of what is now known as High Renaissance style and to this day generates and enormous influence among contemporary artists (Kemp, 2000). Kemp stated, "His writings on art helped establish the ideals of representation and expression that were to dominate European academics for the next 400 years" (p. 1). Da Vinci, also widely studied for his immense contributions to drawing, kept numerous notebooks of sketches, plans, and illustrations that outlined his understandings of creative thought and the inventive process (Kemp, 2000). Kemp (2000) stated, "Drawing became a form of visual thinking rather than merely functional means for the design of a picture" (p. 15). It is not until the early nineteenth century, with the romantics, that we begin to see hints of creative thought documentation and

then until the twentieth century that it becomes defined self-concern (Barron, 1997). Barron (1997) stated:

It almost appears that an interest in the creative process in one-self did not become highly articulate until the very end on the nineteenth century, and that it was part of that general movement of mind we call the discovery of the unconscious. (p. 7)

Even after the realization of the creative process and how it influenced creative genius, there was a clear line drawn between scientific rationality and artistic inspiration as a form of genius. The artist was often deemed as defiant and misunderstood (Runco & Albert, 2010). Past research involving creativity and the creative process includes vague statements given by artists about the creative process based on self- observation. It is doubtful whether this romantic (or idealized view of reality) approach to theory can analytically dissect the complex components of creative problem solving (Ghiselin, 1955). Brewster Ghiselin, American poet and academic, edited The Creative Process, a symposium of the writings of thirty eight men and women, among the fields of art, music, literature, and science. Some contributors to the work included such creative minds as Katherine Anne Porter, Albert Einstein, Wolfgang Amadeus Mozart, Vincent van Gogh, and D.H. Lawrence among others. The work was published by The American Society for Aesthetics as an anthology that attempts to describe the process by which original ideas are created. Within this important contribution to the understanding of the creative process, Ghiselin (1955) stated, "Artists statements do not suffer from literary shortcomings but rather from a lack of rigor in analytical thinking" (p. 419). There is a consistent lack of research that deals with the origins of creativity; where and how creative thought is generated, this is an unfortunate state for a phenomena that makes such huge contributions to society (Ghiselin, 1955). Ghiselin (1955) stated:

Today, when widespread, deep, and rapid changes are taking place in the very structure of our lives, whether we desire it or not, and when still other changes seem necessary to preserve us from disaster, understanding of the creative process is particularly important because it can assist in the control of these difficult developments. The creative process is the process of change, of development, of evolution, in the organization of subjective life. (p. 2)

Modern approaches to studying the actual working processes engaged in by the visual artist as they make art, generally consist of two types of case study research; *archival case studies* and *real-life case studies* (Locher, 2010). Archival case studies consist of the study of completed works of art; they do not capture the actual art making process (Locher, 2010). Real-life case studies on the creative process use a variety of techniques in order to analyze the artist's production from start to finish (Locher, 2010). Mace and Ward (2002) generated a descriptive model of the art-making process based on interviews conducted with visual artists in- process of art production. The artists were interviewed on three separate occasions during the development of the visual work. Transcriptions of the interviews were analyzed and categorized in terms of patterns of behavior of each artist. Four phases of artistic generation emerged: Phase 1- Artwork Conception, Phase 2- Idea Development, Phase 3- Making the Art Work, and Phase 4- Finishing the Artwork and Resolution (Mace & Ward, 2002). Mace and Ward (2002) stated:

According to the model, an artist initially engages in various activities of idea conception to identify an idea or feeling that could be a potential artwork. At some point, reflection results in a decision to select one of the potential ideas that have arisen for execution. Once a particular artwork idea has been chosen, it is then developed both conceptually

and physically in a complex set of interactive processes involving the structuring, extending, restructuring, and evaluating of the composition's form and content. (p. 132)

The creative process and intelligence

Both intelligence and creativity as cognitive abilities are affected by many aspects of our make-up; including, genetics and environment. As with intelligence, the creative make-up of an individual is not immune to the nurture vs. nature debate. In a series of studies conducted by Plomin, DeFries, McClearn, and McGuffin (2001), found that twins reared apart, proved that genetic influence increases rather than decreases during development. Plomin, et al. (2001) explains that this is due to the individual's tendency to manipulate their environments to better suite their genetic dispositions. An example; are the differences in intellectual and creative capacities among siblings.

In both modalities of nurture and nature; creativity and intelligence are known to be correlated constructs that share common cognitive executive functions (Benedek, Jauk, Sommer, Arendasy, & Neubauer, 2014). A series of studies have been conducted to conclude the reasoning behind this relationship, see (Ackerman & Heggestad, 1997; Amabile, 1989; Feist, 1998). Benedek, et al. (2014) stated, "One possible explanation would be the common involvement of similar executive processes. Executive functions contribute to the performance in complex cognitive tasks, and are thought to represent the elementary cognitive basis of individual differences in general intelligence" (p. 73). This concept of executive function is used throughout the literature to describe the process by which both fluid intelligence and creativity operate.

Many researchers (Kozbelt & Seeley, 2007; Locher, 2010; Miall & Tchalenko, 2001; Weisberg, 2004) have emphasized that engagement in creative activities is meaningful, and

regardless of whether the resulting products are innovative or useful the process itself, improves individual intellectual performance. The creative process is the act of creation and formulating intelligent decisions to conceive of the final product (Ecker, 1963). Ecker (1963) stated, "The artist utilizes qualitative methods to arrange the qualitative means toward qualitative ends. Art; therefore, is an affair of intelligence- it is intelligence in qualitative ordering" (p. 287). Intelligence is not a single substance but, rather a; multi-leveled ability, and the same must be taken into consideration of creativity (Barron, 1997). Barron (1997) stated:

Research has identified clusters of the many aspects of creativity: originality, fluency and volume of ideas, adaptive flexibility, spontaneous flexibility, expressional fluency, sensitivity to problems. All these can be expressed in a variety of sensory modalities, and in units large and small. (p. 12)

Among the intellectual attributes to the creative process, one main feature of creative success is the ability to take risks. Pollard (2012) stated, "I define creativity as a process of taking the risk of breaking habits in order to develop new ideas, thoughts, connections and artifacts that have value to society" (p.4). Creative product is a direct result of a person's ability to try the new and unknown, to conceive of what could be (Pollard, 2012). This natural curiosity that occurs during execution of creative thought processes have often been compared to the creative functioning of scientific inquiry in a different form (Ecker, 1963). Ecker (1963) developed the six phases of qualitative problem solving developed from the work of John Dewey and stated, "If it *is* possible to describe the artistic process as a series of problems and their controlled resolution, the ensuing generalizations may be of no small consequence to the teaching of art" (p.284). Ecker (1963) also wrote about the methodological analyses of controlled production both in the arts as well as in scientific inquiry. Ecker (1963) stated:

The artist has his problems and thinks as he works. But his thought is more immediately embodied in the object. Because of the comparative remoteness of his end, the scientific worker operates with symbols, words and mathematical signs. The artist does his thinking in the very qualitative media he works in, and the terms lie so close to the object that he is producing that they merge directly into it. (p. 286)

Considering the stance that the ability to be creative is a form of intelligence, naturally it should be able to be measured in the same fashion that intelligence is measured. Intelligence is often measured by testing verbal comprehension and cognitive interpretation, without much regard for testing creative ability. The popular Stanford-Binet Intelligence Test; is written to ascertain acquired knowledge but, lacks the ability to extract from the mind of an individual his/her powers of creative productivity and tendencies toward originality (Barron, 1969). Barron (1969) stated:

The suspicion that in most of the standardized intelligence tests the very important domain of intellectual ability, creativity, was being neglected has existed for some time. In 1898 G.V. Dearborn published in the *American Journal of Psychology* an article titled 'A Study of Imagination', in which he reported the responses of Harvard students and faculty to a series of inkblots; one of his observations was that some of his more 'intellectual' subjects were least imaginative. (p. 43)

There is a very fundamental difference between IQ and intelligence. IQ or intelligence quotient is limited by that which can be measured, whereas intelligence is complex and multidimensional (Kim, Cramond, & Van Tassel- Baska, 2010). The complex ability of the latter is an important component to the cognition of creative thought.

Being creative is an arduous undertaking and in the end can alter the way we see things. It involves developing sensitivity, deep reflection, listening to intuition, and endless practice (Donnelly, 2004). Seeing the world through and artistic an aesthetic lens requires a unique intellectual skill set, that in the end provides an understanding of experiencing the world with quality. Eisner (2002) stated:

Seeing the rock aesthetically, or hearing a wonderful piece of music, or experiencing a fine play is more than becoming aware of its qualities. It is a way of being moved, of finding out something about our own capacity to be moved; it is a way of exploring the deepest parts of our interior landscape. In its best moments it is a way of experiencing joy. (p. 84)

Neuroscience and Creativity

The evolution of creative cognition and its neurobiological foundation is of great interest to better understand the creative individual. The study of the neural mechanisms and how the brain implements them during creative thought is the basis for the relatively new study of cognitive neuroscience and cognitive neurogenetics. Kaufman, Kornilov, Bristol, Tan, & Grigorenko (2010) stated:

The primary goals in the field of cognitive neuroscience are to identify the brain networks involved in the various types and aspects of cognition, and to describe how those brain networks operate, both independently and interactively, in order for that facet of cognition to emerge. (p. 216)

Two very distinct hypotheses exist within the role of the neuropsychology of creative generation: 1. The faculties for creative cognition reside predominately in the right hemisphere (Vartanian & Goel, 2007), and 2. Creative cognition is derived from a reduction in network

inhibition, which originates in the frontal lobe (Kaufman, et al., 2010). Despite the overwhelming supporting evidence for both theories, each of the hypotheses, are quite small in scope to the actual underpinnings of the neuro-scientific behaviors of creativity (Kaufman, et al., 2010).

Modern approaches to studying creativity involve recent technical advances in human neuroimaging to provide researchers observable evidence of targeting brain activity during creative production. Neuro-scientific investigation enables researchers to analyze the structural procedures of creativity as a cognitive function. There are a number of cognitive processes that are important in order for creativity to be possible: including, insight, fluid intelligence, artistic visual perception and musical improvisation (Jung, Segall, Bockholt, Flores, Smith, Chavez & Haier, 2010). Neuroimaging studies have identified several brain regions as being involved in creativity including substantial research that targets the right hemisphere of the brain as directly related to creative expression. In a recent study involving the role of the left parietal regions of the brain and the generation of creative ideas, Mayseless, Aharon –Peretz, and Shamay -Tsoory (2014) stated:

We found that an individual with left temporoparietal hemorrhage who had no previous experience as an artist developed remarkable artistic creativity, which diminished as the hemorrhage receded. We thus hypothesized that damage to the evaluation network of creativity during the initial hematoma had a releasing effect on creativity by "freeing" the idea generation system. (p.157)

This research suggests that the left temporoparietal area is part of a neural network involved in evaluating creativity, and that as such may act as inhibitors of creativity. This research proposes that an explanatory model of creativity centered upon the key role of the left temporoparietal

regions in evaluating and inhibiting creativity may contribute greatly to new neurological understandings of the generation of creative ideas (Mayseless et al., 2014).

Neuro-imaging can not only provide substantial understanding to the generating regions of creativity in the brain but, can also provide genetic insight that may influence neural transmission. There is evidence to suggest that creativity is inherited to some degree (Runco, 2007). Twin studies have concluded that about 22% of the variance in creativity is due to the influence of genes, and genes that influence neural transmission may be the key, such as dopamine receptors (Reuter, Panksepp, Schnabel, Kellerhoff, Kempel, & Henning, 2005). As understanding of neuro science and brain imaging technology increases, we will gain further insight into how our genetic make-up plays a role in our developing creativity.

Education and Creativity

Creativity should be of interest to those seeking to educate citizens to be thoughtful and critically aware (Pollard, 2012). Participation in visual arts education offers the individual a pathway to the practice of creative problem solving. Visual artists are, by their very nature, problem solvers and critical thinkers (Pollard, 2012). Ecker (1963) wrote about many of the similarities of the creative problem solving efforts between the modern/cubists painters Picasso, Braque, and Juan Gris. According to Ecker (1963), the painter Yasuo Kuniyoshi, stated:

There are numerous problems that beset the artist in his work. Consciously or unconsciously each artist tries to solve them. Lately I have come to the stage where I actually take a problem and try to solve it. For instance I was interested in painting a dark object within the dark. In order to carry this out successfully it may take me several years. Once accomplished to my satisfaction, however, it becomes an integral part of me, enabling me to go on to another problem. (p.284)

The visual artist must continually strive to consider the medium they work in and how to best manipulate that medium to represent the form they seek (Ecker, 1963). This thinking requires the artist to consider a multitude of avenues and allows for easy access to the creative experience (Ecker, 1963). The creative process does not necessarily have to be preconceived but, during the process an idea can become conscious and crystallized (Ecker, 1963). Ecker wrote of the creative efforts of the famous sculptural artist Henry Moore. Moore is an English sculptor, known mainly for his semi-abstract sculptures of the human figure. Ecker (1963) stated:

Moore speaks of the sources of his 'sculptural problems' as follows: I sometimes begin with no preconceived problem to solve, with only the desire to use pencil on paper, and make lines, tones and shapes with no conscious aim; but as my mind takes in what is so produced a point arrives where some idea becomes conscious and crystallizes, and then a control and ordering begins to take place. (p. 284)

According to Jensen (2001), Abraham Maslow said, "The arts are far closer to the core of education than are the more exalted subjects" (p. 49). Participation in the visual arts offers a student the experience to perform creative problem solving and perpetually gain the understanding of technique and risk, acting as a simulated playing field in which the individual can freely experiment with creative thought (Pollard, 2012). Pollard (2012) stated, "We need techniques which induce experiences: As oppose to techniques which describe creativity as something that may come in the future" (p. 5). According to Jensen (2001), in his defense for the arts in education; "They can help construct our meaning- represent our world in ways that cannot come through linear teaching" (p. 49).

Creativity is a skill easily taught when the skill is incorporated into visual art lesson plans, but it is important to know that these skills of creativity can then be transferred into many

areas of thinking in a multitude of fields (Jensen, 2001). Kaufman and Sternberg (2010) stated, "We live in a society where those who do not creatively innovate risk failure in any of several domains of life" (p. xiii). The ability to create and develop the; new, is a high demand ability and skill that offers sustained advancement in a variety of fields. Constructing elegant solutions to complex problems is the basis to creative achievement (Mumford, Medeiros, & Partlow, 2012). Creative achievement can be applied to many forms of advancement and does not exclusively lend itself to the arts. Much of our current surroundings are products of creative thought and aspirations that perpetuate a constant desire and motivation to create the new. Mumford, et al. (2012) stated, "Creative achievements are the basis for progress in our world" (p. 30). The creative individual displays high levels of personal energy, persistence in the face of adversity, and tolerance for ambiguity (Donnelly, 2004). The ability to think creatively and innovate new ideas outside of the; box, is an essential asset for success in any career or field. Successful businesses assemble creative teams of individuals for their ability to make connections, predict market trends, and visualize the big-picture. These skills will always be in demand (Phillips, 2013). Wong and Siu (2012) stated, "Creativity, which is concerned with problem solving, is essential if we are to generate new solutions to the massive and complex problems in the unknown future- Our next generation needs an educational platform where they can be taught to possess creativity" (p. 437).

Unfortunately, despite the researched importance, resistance exists to support the full immersion of the arts in educational curriculum (Pollard, 2012). One fundamental problem is the ill prepared understanding in how to go about incorporating creativity learning and just who is qualified to do so. (Pollard, 2012) Beghetto (2010) concluded:

Moreover, it is somewhat difficult to discern what *exactly* creativity-in-education policy initiatives might mean for supporting creativity in schools and classrooms. Clearly, a 'creativity mandate' from external policy-makers will do little to help address long-standing barriers to creativity in the class-room. (p. 447)

This problem is directly related to the lack of understanding of the phenomena that is creativity, and the undocumented scholarly contributions of creativity as an intellectual discipline.

According to Donnelly (2004):

Many attribute the neglect of creativity to a number of reasons: the Platonic notion that creativity is a mystical phenomenon; the persistent belief that creativity is a spiritual process that does not lend itself to scholarly scrutiny; or the fact that early twentieth-century schools of psychology, for example, structuralism, functionalism and behaviorism, ignored creativity. (p. 156)

Arriving at a place where we can effectively incorporate creativity into all aspects of learning is an ultimate goal. Establishing this common curricular goal of consistent incorporation of creativity assignment and assessment of creative competence is a fundamental way of helping students to perform in a world of an uncertain future (Beghetto, 2010). Further investigation of the creative mind can offer insight into implementing meaningful creative curriculum within education that will lead to a learned valuable skill set; including, visual perception and analysis, harnessing creative generation, and the process of scientific inquiry (Donnelly, 2004).

Current Creativity Research

The concept of researching creativity is currently one of great importance among the fields of psychology and education. The American Psychological Association's Division 10, the

Society for the Psychology of Aesthetics, Creativity, and the Arts, sponsors an official APA journal on creativity. Examples of these established journals are *Creativity Research Journal*, *Journal of Creative Behavior, Empirical Studies of the Arts, and; Imagination, Creativity, and Personality*. More journals of creative contribution have emerged such as the *International Journal of Creativity and Problem Solving*, and *Thinking Skills and Creativity*. Other journals feature work of creativity in different areas such as business; *Innovation and Creativity Management, Leadership Quarterly* (Kaufman & Sternberg, 2010). Although the current climate of creative research has been deemed recently as explosive, this has not always been so. Feist and Runco (1993) stated:

One of the most widely cited statements from Guilford's article is that out of the 121,000 titles listed in *Psychological Abstracts* from the late 1920s to 1950, only 186 dealt with creativity. This is fewer than 2 articles out of 1,000. We recently discovered that the figure for more recent creativity research is roughly five times higher. The percentage of articles dealing with creativity in the *Psychological Abstracts* has grown from .002% in the 1920s to approximately .01% in the 1980s. From the late 1960s until 1991, almost 9,000 creativity references have been added to the literature. (p. 272)

Contemporary debate

There is still much to learn about creativity by moving forward with new ideas that illuminate the heart of creative research, while considering past approaches and outcomes that influence new understandings and connections to creative generation. Donnelly (2004) stated, "Such a complex phenomenon as creativity has generated a wide variety of research approaches; with each of the methodologies of psychometric, experimental, and contextual, contributing

unique insights to our understanding" (p. 156). The following are areas of current influence among the field of creativity research:

creativity and creative domain

The term; creative domain refers to the area or subject in which creativity is being applied. Currently, a contested debate exists among creativity researchers as to whether creativity can be applied to a multitude of fields by one individual or can only exist in a specific set of domains for that individual's creative make-up (Baer, 2010). Among the debate involving creative domains, two arguments exist; creativity is domain specific or creativity is domain general. Arguments for generality suggests that all of the qualities that involve creative behavior, such as; creative skill sets, aptitudes, and motivations etc. operate equally throughout a variety of domains. An example of this; if a person is a creative individual, they can most likely use their creativity among a variety of tasks (Baer, 2010). The argument for specificity suggests that creative propensities remain harnessed to designated domains and do not transcend these domains (Baer, 2010). Ivcevic (2007) offers a summary of how both views create an individual's unique creative make- up:

Domain generality would be supported by high inter-correlations among different creative behaviors and a common set of psychological descriptors for those behaviors, while domain specificity would be supported by relatively low correlations among different behaviors, and a diverging set of psychological descriptors of those behaviors.

(p. 272)

Kaufman and Baer (2004) conducted a study that consisted of 241 students asking them to give self -ratings of their creativity in different domains. These ratings were then analyzed for inter – correlations. Kaufman and Baer (2004) stated:

We also examined how such self-assessments in diverse domains relate to other measures of cognitive ability and to creativity as measured with a personality scale. In general, if students viewed themselves as generally creative, they also viewed themselves as creative in different areas. The only area that was not correlated with general creativity ratings was mathematics. (p. 143)

creativity-motivation connection

Hennessey (2010) stated, "For well over half a century, discussions about creativity have been intertwined with questions of task motivation" (p. 342). There exists a great interest in understanding individual artists and what motivates them to create. Hennessey (2010) stated, "Psychologists have long been concerned with and puzzled by behaviors such as exploration and challenge seeking that have no clear external reinforcements" (p. 342). Freud argued that the creative motivations of such geniuses as da Vinci and Michelangelo were a direct component of psychological deficiencies and the displacement of repressed needs (Pope, 2005). Expanding on this Freudian concept of the motivation behind creativity, White (1959) associated motivational characteristics with ego processes and Erickson (1968) attempted to explain the motivation to create as a way to fill voids caused by childhood unhappiness. By 1970 the terms; *intrinsic* and *extrinsic*, began to dominate the literature on motivation and its association with creative behavior (Hennessey, 2010). Hennessey (2010) stated:

Pioneering theorists in the area were De Charms (1968), Deci (1971), and Lepper and colleagues (Lepper, Greene, & Nisbett, 1973), who placed their emphasis on a sense of control: When a person perceives her task engagement as externally controlled, she is extrinsically rather than intrinsically motivated. Most contemporary theorists define

extrinsic motivation as the motivation to do something for some external goal, a goal outside the task itself. (p. 343)

creativity and mental-illness

This controversial topic of the possible link that exists between mental -illness and creativity, produces one of two bold predictions; either creativity and mental -illness are deeply entwined (Kottler, 2005; Nettle, 2002) or they are completely unrelated (Schlesinger, 2009). Contemporary studies of this possible correlation seeks to understand the orientations that creative people are more likely to suffer from mental health disorders or that people with psychological disorders are more likely to be creative (Silvia & Kaufman, 2010). This specific topic is one of the few research topics among creativity that has been somewhat driven by a popular stereotype, perpetuated by popular books and cultural imagination (Silvia & Kaufman, 2010). Silvia and Kaufman (2010) stated, "The world has at least one too many movies about tortured painters, narcissistic architects, depressed poets, and drug-addicted musicians" (p. 381). We rarely see case studies of the artist that completes a BFA program, goes to graduate school in order to refine their craft, and becomes a successful and reputable artist (Silvia & Kaufman, 2010). Silvia and Kaufman (2010) stated, "This area needs more research, but we hope to motivate future research that avoids the problems that have beset this complicated and controversial topic" (p. 381).

Self-Study and Creativity Research

Self-study is the individual study of practice within one's own field of work, and can encompass all that the practitioner does or targets specifics that the practitioner engages in. (Pinnegar & Hamilton, 2009). Pinnegar and Hamilton (2009) stated, "In studying practice, we learn by observing and gathering evidence about aspects of our practice" (p. 27). Self-study is a

method of research that emerged in the early 1990's and initially offered educators a new systematic method in researching their practice (Lassonde, Galman, & Kosnik, 2009). The explorations of knowledge from practice can lead to the deeper understandings in a variety of professional fields and in the multitude of facets of the psychology of human development (Pinnegar & Hamilton, 2009). Lassonde, et al., (2009) stated:

During this period, a complementary strand of research emerged that further enhanced our understanding of teacher education – self-study research. Historically validated forms of research often do not allow researchers opportunities to closely examine their own work thus limiting its value for improving practice. Many teacher educators believe that studying their own practice is essential. From this interest in studying their own work was born the self-study movement. The "official" home of self-study is widely considered to be the Self-Study of Teacher Education Practices (S-STEP) Special Interest Group of the American Educational Research Association. (p. xi)

This special interest group has become a flourishing community, since its "birth" in 1992, there has been a steady increase in membership (Lassonde, et al., 2009). The popularity of this research is due to the ultimate educational mission, which is to create "living" examples of the practices and theories that society values (Pinnegar & Hamilton, 2009). According to La Boskey (2004), the beneficial methodological characteristics to self -study research include; self - initiated research, focused interest, improvement aimed practices, and interactive and trustworthy analysis. Three major paradigms of the Self-study method are as follows: teacher inquiry, reflective practice that includes personal history and narrative inquiry to gain better understandings of practice, and action research that offers the researcher the opportunity to examine practice and make changes to practice as needed (Lassonde, et al., 2009).

Self-study research can offer an interesting and intimate perspective on the inner workings of creative generation and achievement. Art and art- based research strategies bring a nonlinearity to the investigative process- often encouraging a different look at setting, place, and person (Weber & Mitchell, 2004). Pinnegar and Hamilton (2009) stated, "Viewers and creators of art- based data must think beyond traditional borders. Often non -verbal, these creations offer alternative views and provide other ways to examine our experience in the world" (p. 127).

The self-study form of scientific inquiry can offer the artist an insight into their work of creative production, in the same way in which it has been successful in facilitating educators and their practice. The artistic influences of an artist's personal history on creativity and art making continues to be of great interest to the field (Locher, 2010). Studying the individual artists psychological connection between personal history and his or her resulting motives for creating an artwork, can attempt to explain the origins of creativity (Locher, 2010).

Summary of the Literature Review

In summation, this review of the literature highlights several points of interest among the field of creative research and further illuminates the greater understandings of the research questions: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking? Purpose of the study: to examine creativity, the creative process, and aesthetic awareness as they exist within an individual.

This review provides insight into the historical conceptualization of the complex human phenomenon that is creative thought, in order to offer a knowledgeable basis as a formidable research topic. This literature review presents the primary theories of creativity along with the two orientations of inquiry (scientific and metaphoric investigation). Among the primary

theories, there are four that this study focuses on; developmental theory, stage and componential process theory, cognitive theory, and problem finding theory.

The review also covers literature on the major component of the observation of the creative process and its importance to helping develop deeper understandings of creativity. The correlations among creativity and intelligence are of great interest to the field and offer a greater understanding to creativity through the measurement of intelligence. Modern approaches to neuro-scientific investigation allows for direct access to brain imaging and visual representation of creative activity as it exists within the brain, this approach is quickly strengthening our understanding of creative generation. The review presents many of the findings that suggest creativity as a valuable skill set that can greatly enhance education. Education in the arts provides easy access to creative thought and the creative process is noted as a form of scientific inquiry. Despite the novel attributes associated with the implementation of creativity into education, there is still resistance due to a variety of factors.

Lastly, this review provides insight into the plethora of current research that exists within the field of creativity, along with contemporary debates of high interest to creativity: creative domain specificity, the connection between motivation and creativity, and the correlation between mental illness and creative individuals. The methodological approaches to self-study present a unique opportunity for the artist to expand on personal history, creative process, and creative insight. Studying the individual artists psychological connection between personal history and his or her resulting motives for creating an artwork, can attempt to explain the origins of creativity (Locher, 2010).

Chapter 3

Methods

Introduction

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. The term "creative process" refers to the creative practice or activity engaged in by the artist or crafts person. The term "aesthetic awareness" refers to the ability to observe the artistic essence of ones surroundings and experiences. The following outlined research methods are utilized to describe the nature of the creative process and provide concrete examples of aesthetic awareness as they exist within an artist. According to Locher (2010), "There is a long history of interest, which continues to this day, in the psychological connection between an artist's personal history and his or her resulting motives for creating an artwork, as well as its content and style" (p. 134).

The unique form of data collection (see Appendix A) and analysis presented in this study, seeks to learn something in a general way about creativity and something in a particular way about the artist. The study also explores the creative potentials and practical applications to teaching the creative process as a learning tool. Complex forms of thinking take place when the learner is engaged in the meaningful creation of images (Eisner, 2002). The methods section of this study provides greater insight into how observing the creative process can define the intellectual problem solving that occurs in creativity. The creation of art promotes the development of valuable human neurobiological systems (Jensen, 2001). The visual arts are an important part of a brain-based education. They can enhance cognition, emotional expression, perception, cultural awareness, and aesthetics; they can play a significant role in the learning process (Jensen, 2001).

The arts act as a catalyst to the creative process and aesthetic awareness (Eisner, 2002). Arts creation relies on a unique ability to interpret the beauty of our environment. Aesthetic awareness describes the emotional awareness to our physical and expressive surroundings. Our surroundings or environment is, in its most fundamental state, a qualitative one made up of sights and sounds, tastes and smells that can be experienced through our sensory system (Eisner, 2002). The methods section of this study offers a deeper qualitative approach to understanding the aesthetic awareness of the artist and what can be learned by these experiences and insights. Understanding aesthetics can help construct meaning, and represent our world in ways that cannot come through linear teaching (Jensen, 2001).

Research Questions

The following research questions were used in this study: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking?

Domain	Question	Data Collection Points	Analysis
Developmental Theories of Creativity	1. How is creativity developed within an individual?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Cognitive Theories of Creativity	2. How is creativity influenced?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Stage & Componential Process Theories of Creativity/ Problem Finding Theories of Creativity	3. Can art production incite creative thinking?	Completed drawing accompanied by journal writing of creative process	Codebook- coded for thematic relevance

- How is creativity developed within an individual? This question focuses strictly on the developmental components to the artist's background and influence of early creative experiences. A series of reflections (narratives) from childhood that have sparked creative behavior are coded to identify similarity in experience and language.
- 2. How is creativity influenced? This question focuses on the internal and external factors that contribute to creative production. A series of self-conducted interviews highlight the interactions between the self and creativity, creative process, and aesthetic awareness. The interviews are coded in order to identify similarities in language.
- **3.** Can art production incite creative thinking? This question is concerned with the generation of creativity and its relation to art-making. An on-going journal that reflects upon the creative process as the artist is engaged in visual creative production is coded to identify similarities in written form of thought processes that occur during production.

Methods

The qualitative approach to this study attempts to describe and interpret the development of the creative process and aesthetic awareness and their overall relation to the human phenomenon of creativity. This qualitative approach to self-study analysis seeks to provide further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. These theories are explored through the study of an artist's creative history, creative process, and aesthetic insight. Every artist experiences creativity and the creative process in a variety of ways. I adopt the world view of social constructivism and therefore I acknowledge that personal interpretation is shaped

by individual experience. Constructivism is a philosophy that views learning as an active process in which learners construct their own understanding and knowledge of the world through action and reflection. Constructivists argue that individuals generate rules and mental models as the result of their experiences with both other human subjects and their environments and in turn use these rules and models to make sense of new experiences. I hope to create "a living example" of the practice and theories the arts value (such as expressive and creative invention and freedom). By the term "living example", I refer to the tangible creative experiences of working artists as they are engaged in their craft. Eisner (2002) stated:

This move toward a more liberal conception of method is not merely a methodological expansion; it is an epistemological one. It represents a change in the way knowledge is conceptualized. It is a much more fluid concept of method. What counts as knowledge depends on perspective, time, interest, method, and form of representation. (p. 215)

Self-study design

Self-study is the recognition of the authority of the researcher engaged in practice (Pinnegar & Hamilton, 2009). As the researcher, I hold an interest in practical knowledge and question what the creative process might reveal about how creativity is developed within an individual. Researchers engaged in self-study methodology seek to understand themselves in relation to others in order to move ideas forward and gain new understandings of process/practice (Pinnegar & Hamilton, 2009).Self-study research can offer an interesting and intimate perspective on the inner workings of creative generation and achievement. Art and artbased research strategies bring a nonlinearity to the investigative process- often encouraging a different look at setting, place, and person (Weber & Mitchell, 2004). Pinnegar and Hamilton (2009) stated, "Viewers and creators of art- based data must think beyond traditional borders.

Often non-verbal, these creations offer alternative views and provide other ways to examine our experience in the world (p. 127).

The self-study form of scientific inquiry can offer me, the artist, an insight into my work of creative production, in the same way in which it has been successful in facilitating educators and their practice. The artistic influences of an artist's personal history on creativity and art making continues to be of great interest to the field (Locher, 2010). Studying the individual artist's psychological connection between personal history and his or her resulting motives for creating an artwork, can attempt to illuminate the origins of creativity (Locher, 2010). This selfstudy approach to inquiry involves questioning the context of creativity, creative content, and the creative process from my own perspective. Within this study; I have utilized the many unique facets to self-study research to the best of my ability, in order to say something in a specific way about myself, as an artist engaged in creative production, and in a general way about creativity and its contributions to the human experience.

data collection - aesthetic narratives

As seen in Appendix B, the aesthetic narratives represent my visual memory and creative history. All of the components to these narratives allow me to write freely about my own creative make-up. Narratives as data collection offer rich and descriptive experience to aide in the further understanding of the complex phenomenon of creativity. Aesthetic narrative generates the artist's aesthetic perspective. The term "aesthetic perspective" is best described by Eisner (2002), he stated, "Seeing the rock aesthetically, or hearing a wonderful piece of music, or experiencing a fine play is more than becoming aware of its qualities. It is a way of being moved, of finding out something about our own capacity to be moved; it is a way of exploring the deepest parts of our interior landscape, In its best moments it is a way of experiencing joy" (p. 84). Documenting my

own aesthetic perspective will allow me, the researcher/artist, to more fully bring my scholarship into the creative practice by providing robust descriptions as a form of data. The phenomenon of creativity and its processes warrant a detailed and unique research approach to fully understand the dynamics of its origins (Eisner, 2002). Eisner (2002) stated:

For many, doing research in education required one to measure the phenomena investigated and then to apply statistical techniques to treat the quantified data. Research and measurement were like ham and eggs –an inseparable pair. What has happened is that young researchers, in particular, have felt limited by the requirement that phenomena be reduced to what is measurable. They have recognized that form influences meaning and that much of what needs to be understood and conveyed needs a narrative more than it needs a number. (p. 210)

Rich and descriptive narrative research, rather that quantified data, can offer a greater conceptual understanding of what creativity is and what it can accomplish as a cognitive function (Eisner, 2002).

The analyzed data consists of five complex tasks: 1. Presents discovered themes and subthemes. 2. Describes the core and peripheral elements of themes. 3. Builds hierarchies of themes or codebooks. 4. Attached themes to chunks of actual text. 5. Links themes into theoretical models (Bernard & Ryan, 2010). Each written narrative was analyzed and structural/theme coded in order to identify relevant themes and features. Coding of the narratives is concerned with identification of repetitions of creative thought, metaphors and analogies, as well as linguistic connectors.

The first codebook (see Appendix C- codebook 1) identifies creative procedure. This code book identifies all of the points in which I actively remember being engaged in the creative

process. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the procedural components of the creative acts. I then highlighted chunks of information into categorical groups that consisted of three main topics or themes: what I observed of creativity, how I interacted creatively, and how I perceived my observations and interactions with creativity. I then took these themes and further arranged the data into three subthemes; my age at the time of the creative act, the arts-based act I was involved in at the time of creativity, and the people in my life that were there to witness my creativity. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the narrative. This further allowed me to link these structural themes to form my assertions about all of the creative procedures that I found myself engaged in throughout creative generation.

The second codebook (see Appendix C- codebook 2) identifies reactive positions to creativity. This code book identifies all of the instances in which others were reacting to my creative acts. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the components of creative acts in which I noted a reaction on the part of a witness to my creativity. I then highlighted chunks of information into categorical groups that consisted of three main topics or themes: my age at the time of the creative act, the specific individual there to witness my creative act, and how I perceived the witnesses reaction to my creative act. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the narrative. This further allowed me to link these structural themes to form my assertions about the

positive and negative influences of others reactions and creative production in relation to my creative process.

The third codebook (see Appendix C- codebook 3) identifies emotions. This code book identifies any related emotions I have expressed throughout, relating to my creative acts. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the emotional experience during creative acts. I then highlighted chunks of information into categorical groups that consisted of four main topics or themes: my age at the time of the emotional reaction to the creative act, the creative act I was engaged in, the source of the emotional response, and the emotion that I experienced as I was engaged in the creative act. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the narrative. This further allowed me to link these structural themes to form my assertions about the sources of my emotional response to various forms of creativity.

data collection – journal/drawing

As seen in Appendix D, as an in-depth form of data collection into my current processes of creativity, I have completed a ten page written journal that corresponds with a completed graphite self-portrait drawing. The drawing was completed alongside the observation of a black and white photograph. The journal entries represent all of my creative thoughts and procedures throughout completion of the creative work. The creative work details the conscious considerations for line, form, shape, space, color, and value that provide insight into the creative process. Upon completion of the work, I have provided photographical documentation of the work. All art work is original, as shown in Figure 1 and 2.

Fig. 1

Graphite Drawing/Self Portrait



Fig. 2

Black and White Photograph/Self Portrait



Drawing is a creative, strictly human phenomenon of visual and mental exploration. Steinhart (2004) stated, "As rare as the ability is in other species, drawing is almost universal among humans; it is as human a quality as speech and bipedal locomotion, Practically every human being draws at some time in childhood" (p. 36).

This form of data attempts to describe my specific origins of creative cognition and conception of expressive form. The completed drawing took eight hours from start to completion. Journal entries were completed during the creation of the drawing, in order to collect data that related to in-process connections to creativity. The journal acts as a record of creative process and mental creative activity. A research study published in the International Journal of Education and the Arts: *The Destinee Project: Shaping Meaning Through-Narratives*, (Latta & Thompson, 2012) collected data using narrative method in the form of journaling to shape identity and relationships between teachers and students. Latta and Thompson (2012) stated:

Using narrative method in the form of journaling has the power to shape identity and relationships between teachers and students. This article reflects on such journaling and the process of writing poetry to create a space of understanding between two very different people who found themselves in the relationship of teacher and student. "The Destinee Project" is a collection of poetry based on my journaling and narrative inquiry as I seek to deal with the experience of transition of my school and the struggles of my students. In the past ten years, our school has transitioned from an affluent homogenous group to an extremely diverse urban Title I school. My interaction with Destinee and my reflection on our experience together has helped shape my approach to students and parents. I hope to inspire others to engage in journaling and experience the efficacy of writing about classroom experiences. (p. 1)

This unique and versatile form of data collection has allowed me to document what I have learned about my own creativity through personal practice and provide unfettered access to my creative process. The journal was written in an open ended format in order not to limit my thinking and thought processes.

The journal entries were coded to identify major developing themes among the entries. Major themes among the entries consisted of evidence of preconceived vision and imagination, problem- solving and finding resolution, intense concentration and observation, layering of thoughts and creative reasoning, and expressive qualities and creative choices. All thoughts recorded within the journal are original.

The fourth codebook (see Appendix E- codebook 4) identifies creative cognition. This code book identifies and organizes all of the points in which I demonstrated a form of cognitive ability as I was engaged in the creative act. In this codebook I reviewed each entry, absorbing all

of the information, with specific attention to the cognitive components of the creative act. I then highlighted chunks of information into categorical groups that consisted of five main topics or themes: preconceived vision/ imagination, problem solving/ finding resolution, intense concentration/ observation, layering of thoughts/ creative reasoning, and expressive invention/ creative choices. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to creativity and the stages of cognition.

The fifth codebook (see Appendix E- codebook 5) identifies the personal emotional responses during the process of creating a piece of work. This code book identifies and organizes all of the points in which I demonstrated an emotional reaction as I was engaged in creating the drawing. In this codebook I reviewed each entry, absorbing all of the information, with specific attention to the emotional response components of the creative act. I then highlighted chunks of information into categorical groups that consisted of five main topics or themes: beginning stages (overwhelming, nervousness, stressful), throughout (therapeutic, peacefulness, escape), overall (highs and lows, confidence and self-doubt), feeling of greater connection to self and the visual world, feeling of motivation to create and to continue. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to creativity and my various emotional responses associated to creating.

The sixth codebook (see Appendix E- codebook 6) identifies and organizes all of the points in which I demonstrated the act of drawing as a creative and cognitive process. In this codebook I reviewed each entry, absorbing all of the information, with specific attention to the cognitive and creative components of the creative act of drawing. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to drawing as a creative and cognitive process.

data collection – self interview

As seen in Appendix F, a total of four, thirty minute self-conducted interviews were conducted in order to question the potential sources and nature of individual creative fruition, growth, and practice. The interviews focus on the interpretation and verbal articulation of creative analysis and personal understanding of creative growth. According to Kvale and Brinkmann (2009), "The qualitative research interview attempts to understand the world from the subjects' points of view; to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations" (p. 1). Interviewing is by definition: a two-way exchange in which questions are asked and answered, experiences shared, and perspectives outlined. The methodological approach to the interview process in this study consists of the data collection and analysis of the self-interview. The expectation in qualitative interviewing is that two or three people will participate in spoken discourse which is reciprocal and reasonably balanced between talking and listening (Keightley, Pickering, & Allett, 2011). In this study, the traditional sense of the interview process takes a particular departure from this methodological norm. In an article

titled; The Self-Interview: A New Method in Social Science Research from *The International Journal of Social Research Methodology*, Keightley, Pickering, and Allett (2011) stated:

From these modifications, we have developed the 'self-interview'. This method is particularly suited to the exploration of everyday remembering as it is able to incorporate long pauses and discursive disruptions, record both practices of remembering and reflection on them without imposing restrictive genre conventions on responses and retain a focus on the dynamic relations between individual and social dimensions of remembering. (p. 508)

The self-interview has enabled me to consider questions thoughtfully and freely with retrospective reflection and without fear of judgement. Keightley, et al. (2011) stated in relation to the qualitative methodological tool kit, "Self-interview is an important addition to its currently rather sparse methodological tool kit" (p. 507). The four interviews were recorded, transcribed, and then coded in order to find common threads of understanding for creative cognition. Interview questions consist of the following questions as seen in table 2, taken from Barron, Montuori and Barron; *Creators on Creating* (1997);

Table 2

Self-Interview Questions

Questions Asked	Interview Length
 Do you think of yourself as a creative person? If you do, why? If you don't, why not? Do you feel that your maturation as a person has been related in any close way to the maturation of your creative abilities and commitments? Do you grow through your work? 	Interview #1 (30 min.)

Table 2

Continued

Questions Asked	Interview Length
 What about the act of creation itself? Can you recall some piece of work that meant a lot to you? Try to describe it in detail. In retrospect, did you become aware of anything going on in you that at the time of creation you were unaware of? Think of examples of such periods: what was going on in your life or in your thinking about your work at the time? 	Interview #2 (30 min.)
 Are there ebbs and flows in your creativity? Are you suddenly full of ideas, or suddenly without an idea at all? What might cause a sudden spurt of creativity, or a long period of drought? What in particular was going on in your life that you may have been unaware of at the time but in retrospect was highly important in your creative effort? When do you consider the work "finished"? When your work is "finished", do you feel finished with it? How do you feel at the end? 	Interview #3 (30 min.)
 Are you most productive when you are feeling happy? Do you suffer if you are not? Is there something creative that you are putting off doing? Do you expect to get it? What is it? Why must you delay? 	Interview #4 (30 min.)

The seventh codebook (see Appendix G- codebook 7) identifies and reiterates many of the major themes found within the analysis of the written narratives and journal entries. In this codebook, I reviewed the transcribed interview. I then highlighted chunks of information into categorical groups that consisted of four main topics or themes: the reactions I received from others in relation to my creative work, the procedures of my creative process, the emotions involved with my creative process, and a cognitive breakdown of my thinking as I am engaged in creative thought. After developing these themes as they related to the interview, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the transcription. This further allowed me to link these structural themes to form my assertions about the various components of my personal creative process.

Data Analysis

As seen in Appendix C- codebook 1, the six written narratives involve three major topics in relation to the procedural interactions that take place: 1.What I observed 2. How I interacted 3. How I perceived my observations/interactions. These topics are meant to identify the specifics of creative development and creative influence. Each narrative is written to recollect various stages of my life from childhood through adulthood. This code book identifies all of the points in which I actively remember being engaged in the creative process. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the procedural components of the creative acts. I then highlighted chunks of information into categorical groups that consisted of three main topics or themes: what I observed of creativity, how I interacted creatively, and how I perceived my observations and interactions with creativity. I then took these themes and further arranged the data into three subthemes; my age at the time of the creative act, the arts-based act I was involved in at the time of creativity, and the people in my life that were there to witness my creativity. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the

narrative. This further allowed me to link these structural themes to form my assertions about all of the creative procedures that I found myself engaged in creative generation.

As seen in Appendix C- codebook 2, according to the written narratives, the reactions generated from others throughout the various stages of creative generation played a large role in the development of my creative self and offered a view into the various influences of creativity as they have existed. Validation of the creative outcome has clearly been judged in terms of its relevance and effectiveness by many people in my life. This code book identifies all of the instances in which others were reacting to my creative acts. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the components of creative acts in which I noted a reaction on the part of a witness to my creativity. I then highlighted chunks of information into categorical groups that consisted of three main topics or themes: my age at the time of the creative act, the specific individual there to witness my creative act, and how I perceived the witnesses reaction to my creative act. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the narrative. This further allowed me to link these structural themes to form my assertions about the positive and negative influences of others reactions and creative production in relation to my creative process.

As seen in Appendix C- codebook 3, according to the written narratives, the emotional reactions to creative development and influence exposed a need to feel confident in creative generation in order to proceed further in creative activity. Much of the process was riddled with self-doubt and insecurity about the creative concepts being produced. Often engaging in creative acts helps to control many emotions and express them through creative generation. Art making

acted as a therapy to work through highly emotional states. These points of interest involved in the emotional exploration of creative development and influence, proved relevant in a variety of stages beginning with childhood through adulthood and included various forms of art. This codebook identifies any related emotions I have expressed throughout, relating to my creative acts. In this codebook I reviewed each written narrative, absorbing all of the information, with specific attention to the emotional experience during creative acts. I then highlighted chunks of information into categorical groups that consisted of four main topics or themes: my age at the time of the emotional reaction to the creative act, the creative act I was engaged in, the source of the emotional response, and the emotion that I experienced as I was engaged in the creative act. After developing these themes as they related to the narratives, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the narrative. This further allowed me to link these structural themes to form my assertions about the sources of my emotional response to various forms of creativity.

As seen in Appendix E- codebook 4, based on routine journal entries in conjunction with the completion of a graphite drawing, there is strong evidence to further support the claim that creativity as a cognitive process is highly associated with art making. The codebook presents evidence of problem identification and information learning, in this case learning more about the subject that will be represented. There also exists evidence that supports the cognitive process that includes accessing relevant information, incubation thinking, thinking divergently about the problem, and making new links and associations from the art work. Further exploration of the journal also includes points of interest that highlight moments of becoming aware of a novel possibility or alternative solution and high levels of interpretation. This codebook identifies and

organizes all of the points in which I demonstrated a form of cognitive ability as I was engaged in the creative act. In this codebook I reviewed each entry, absorbing all of the information, with specific attention to the cognitive components of the creative act. I then highlighted chunks of information into categorical groups that consisted of five main topics or themes: preconceived vision/ imagination, problem solving/ finding resolution, intense concentration/ observation, layering of thoughts/ creative reasoning, and expressive invention/ creative choices. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to creativity and the stages of cognition.

As seen in Appendix E-codebook 5, identifies the personal emotional responses during the process of creating a piece of work. This codebook identifies and organizes all of the points in which I demonstrated an emotional reaction as I was engaged in creating the drawing. In this codebook I reviewed each entry, absorbing all of the information, with specific attention to the emotional response components of the creative act. I then highlighted chunks of information into categorical groups that consisted of five main topics or themes: beginning stages (overwhelming, nervousness, stressful), throughout (therapeutic, peacefulness, escape), overall (highs and lows, confidence and self-doubt), feeling of greater connection to self and the visual world, feeling of motivation to create and to continue. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to creativity and my various emotional responses associated to creating.

As seen in Appendix E- codebook 6, identifies and organizes all of the points in which I demonstrated the act of drawing as a creative and cognitive process. In this codebook I reviewed each entry, absorbing all of the information, with specific attention to the cognitive and creative components of the creative act of drawing. After developing these themes as they related to the entries, I used the descriptive elements of each chunk of data to build a codebook that represented the specific themes as they related and interacted with the actual text from the entries. This further allowed me to link these structural themes to form my assertions in relation to drawing as a creative and cognitive process.

As seen in Appendix G- codebook 7, self-conducted interview allowed me to speak freely on my understandings of creativity, my own personal creative process, and my interpretations of aesthetics. Each interview is conducted in order to question the subject as to the various stages of life from childhood through adult hood. The transcription of the self-conducted interview was coded in order to dissect the language into four reoccurring themes; reactions, procedures, emotions, and cognitive components. These themes are meant to identify the specifics of creative development and creative influence.

The language within the self-conducted interview regarding the reactions I have received from various influences in my creative life strongly suggest the constant need for validation, and in order for the confidence to continue to create, there has to be an overwhelming amount of encouragement to persist in creative endeavors. The language regarding procedures highly suggests that the act of drawing is indeed a creative act. Drawing procedures consist of a unique creative process that allows the artist many of the expressive components associated with creative generation. The language centered-around the creative procedures also show reoccurring implications that the creative process elicits a sort of high of satisfaction in the work followed by

lows of self-doubt. The language regarding the emotions surrounded around creation highlight the factors to highly suggest that creative acts, act as a sort of therapy to relieve stress, anxiety, and a variety of highly emotional states. The freedom to express oneself in a creative manner elicits high levels of personal satisfaction and feelings of value and self-worth. The language centered around the cognitive components that take place during creative generation suggest deep levels of intense concentration and problem solving attributes. The language presents evidence of problem identification and information learning.

Reliability, validity, and trustworthiness

I seek to contribute a creative approach to studying the origins of creativity and gain a clearer understanding of the existence of creative thought within the heart and mind of one individual/researcher. This being the overall goal, all forms of data collection are appropriately matched for the self-study examination of the creative process. I have a unique insight into my own aesthetic perspective as the researcher and I am qualified to speak on my opinions as an artist and teacher of the arts. Eisner (2002) stated, "To be able to create a form of experience that can be regarded as aesthetic requires a mind that animates our imaginative capacities and that promotes our ability to undergo emotionally pervaded experience" (p. xii). All of the recorded data in this study presents a representation and a personally unique form of what it means to be creative. Eisner (2002) stated, "Form and meaning interact because the form in which ideas appear affects the kinds of experience people will have. Hence, the use of forms of representation that previously had little or no place in research have been recognized as providing new meanings, something needed if understanding is to be enlarged" (p. 211).

This study does not presume to be objective. My own prior experiences and bias have led to the presented findings on creativity. Eisner (2002) stated:

The idea that there is *a* way to capture the "real" way something is presupposes that one can come to the world with a mind empty of all the prior experiences that might color or bias one's view; all perception has its bias, that is, its angle of refraction. Yet a mind empty of what culture and experience have provided, that is, empty of bias, would see nothing. (p. 212)

This study presents the notion that research doesn't necessarily have to be exclusively scientific in nature; research can also be arts-based. Arts- based research recognizes that the arts can help us to better understand the world we live in (Eisner, 2002). Eisner (2002) stated, "For example, fiction can reveal qualities about social class, individual character, home life, marriage, and war that would elude scientific description" (p. 213). Arts based research can ensure that we look at educational research through an alternative lens and not limit ourselves solely to only the scientific rules of research (Eisner, 2002).

This qualitative approach to self-study methodology demonstrates a unique form of rigorous data collection and analytical method. Within the data collection, there is a great emphasis on triangulation (observation, documents, and interviews). This emphasis helps form rich and descriptive data in regards to the human phenomena of creativity. This transferability of creative process allows for any artist/ researcher to conduct research in the same realm of creative inquiry and form similar assertions about creativity. Based on the truthful findings of this work I am confident that there is a level of dependability and stability in relation to my interpretations of creativity and the creative process.

ethical concerns

This study was described by the Auburn University Institutional Review Board as a nonhuman-subjects research study. Therefore, a protocol did not have to be submitted. In this case

the researcher or myself, is the only participant and any and all information and data collected about myself is not considered private. As the only participant and the researcher I am aware of the nature and purpose of the study and what the data is used to communicate.

Summary

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. The previously outlined research methods are utilized to describe the nature of the creative process and provide concrete examples of aesthetic awareness as they exist within an artist. The following research questions were used in this study: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking? The qualitative approach to this study describes and interprets the development of the creative process and aesthetic awareness and their overall relation to the human phenomenon of creativity. This qualitative approach to selfstudy analysis seeks to provide further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. These theories were further explored through the study of an artist's creative history, creative process, and aesthetic insight. This was accomplished through the collection of written narratives from the artist, journal entries of in- process drawing, and self- conducted interviews. These forms of data were analyzed in codebooks to find patters of themes. The analyzed text consists of five complex tasks: 1. Presents discovered themes and subthemes. 2. Describes the core and peripheral elements of themes. 3. Builds hierarchies of themes or codebooks. 4. Attached themes to chunks of actual text. 5. Links themes into theoretical models (Bernard & Ryan, 2010). Studying my individual psychological connection between personal history and my resulting motives for creating an artwork, has provided further insight into the

origins of creativity (Locher, 2010). This study has utilized the unique facets of the self-study methodology to identify specifics about my own creative make-up. The findings presented within this study offer an opportunity to contribute collectively to the overall scope of what is known about the process/practice of creativity.

Chapter 4

Findings

Introduction

The findings presented within this study offer a detailed qualitative approach to understanding creativity, the creative process and aesthetic awareness as they exist within an individual artist. This chapter reintroduces the purpose of the study, the research questions, and advantages and limitations to self-study analysis. This chapter newly introduces the primary assertions compiled through review of the qualitative data. This chapter is organized to provide detailed accounts of the creation of the codebooks created from the three forms of data collected: six written aesthetic narratives, ten pages of personal journal entries correlated to the completion of a graphite self-portrait, and four, thirty minute self-conducted interviews. This particular triangulation of collected arts-based data is meant to dig deeper into the creative production of myself as an artist, and in doing so unearth a greater understanding of the self in relation to the complex human phenomenon of creativity, the creative process, and aesthetic awareness.

Self-Study Design

Self-study is the recognition of the authority of the researcher engaged in practice (Pinnegar & Hamilton, 2009). As the researcher, I hold an interest in practical knowledge and question what the creative process might reveal about how creativity is developed within an individual. Researchers engaged in self-study methodology seek to understand themselves in relation to others in order to move ideas forward and gain new understandings of process/practice (Pinnegar & Hamilton, 2009). Self-study research can offer an interesting and intimate perspective on the inner workings of creative generation and achievement. Art and artbased research strategies bring a nonlinearity to the investigative process- often encouraging a

different look at setting, place, and person (Weber & Mitchell, 2004). Pinnegar and Hamilton (2009) stated, "Viewers and creators of art-based data must think beyond traditional borders; often non-verbal, these creations offer alternative views and provide other ways to examine our experience in the world" (p. 127).

The self-study form of scientific inquiry can offer the artist an insight into their work of creative production, in the same way in which it has been successful in facilitating educators and their practice. The artistic influences of an artist's personal history on creativity and art making continues to be of great interest to the field (Locher, 2010). Studying the individual artists psychological connection between personal history and his or her resulting motives for creating an artwork, can attempt to explain the origins of creativity (Locher, 2010). This self-study approach to inquiry involves questioning the context of creativity, creative content, and the creative process from my own perspective. Within this study; I have utilized the many unique facets to self-study research to the best of my ability, in order to say something in a specific way about myself, as an artist engaged in creative production and in a general way about creativity and its contributions to the human experience.

Purpose of the Study (Significance)

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. According to Locher (2010), "There is a long history of interest, which continues to this day, in the psychological connection between an artist's personal history and his or her resulting motives for creating an artwork, as well as its content and style" (p. 134). This self- study provides further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. Through the study of an artist's history, creative process,

and artists insight, a clearer understanding of creativity and its relation to art making is made known. Geertz (1995) stated, "If you want to understand what a science is you should look in the first instance not at its theories or its findings, and certainly not what its apologists say about it; you should look at what the practitioners of it do" (p. 73).

While the implications of this research study does not aspire to solve every mystery of creativity, The origins of creative thought are worth exploration and can in a small way inform how we learn. The intent of this study was to further illuminate how creative thought is born within an individual artist and to further explore the mental processes and structures that support creative behavior. Russ and Fiorelli (2010) stated, "How these processes crystallize and enable creative products to be formed is a challenging question for the field" (p. 233).

Research Questions

The following research questions were used in this study: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking?

Domain	Question	Data Collection	Analysis
		Points	
Developmental Theories of Creativity	1. How is creativity developed within an individual?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Cognitive Theories of Creativity	2. How is creativity influenced?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Stage & Componential Process Theories of Creativity/ Problem Finding Theories of Creativity	3. Can art production incite creative thinking?	Completed drawing accompanied by journal writing of creative process	Codebook- coded for thematic relevance

- How is creativity developed within an individual? This question focuses strictly on the developmental components to the artist's background and influence of early creative experiences. A series of reflections (narratives) from childhood that have sparked creative behavior are coded to identify similarity in experience and language.
- 2. How is creativity influenced? This question focuses on the internal and external factors that contribute to creative production. A series of self-conducted interviews highlight the interactions between the self and creativity, creative process, and aesthetic awareness. The interviews are coded in order to identify similarities in language.
- 3. Can art production incite creative thinking? This question is concerned with the generation of creativity and its relation to art-making. An on-going journal that reflects upon the creative process as the artist is engaged in visual creative production is coded to identify similarities in written form of thought processes that occur during production.

Advantages

One of the greatest assets to this form of creative inquiry is the component that the researcher has access to the subject's deepest creative ventures. The researcher is offered at all times the ultimate view of the subject's cognitive process of creativity. The self-study digs deep into the exact shifts of thinking throughout the creation of work and engagement in the creative process. Alternative representation has long been an attribute to self-study research (Pinnegar & Hamilton, 2009). Pinnegar and Hamilton (2009) stated, "From its earliest days researchers involved in self-study have used a variety of strategies based in the arts to represent the tensions

of self in relation to other" (p. 128). Arts- based, self-study research provides an alternative view to examining experience (Pinnegar & Hamilton, 2009).

Limitations

Studying only one individual offers only one perspective to creative generation. One perspective with one specific make-up, both environmental and genetic, can only offer one view of personal history, understanding, and one individual process. Fundamental attribution error, Ross (1997), explains the individual's tendency to overemphasize internal dispositions rather than external dispositions. Another limitation is the component that creativity can be a highly subjective conquest and identifying what is deemed as creative can be a difficult declaration. Donnelly (2004) stated, "The creative work of one generation may be considered quaint or passé by the next, only to be rediscovered and praised as creative by a future set of judges" (p. 162). According to Kaufman, Sergey, Kornilov, Bristol, Tan, and Grigorenko (2010):

But, nevertheless, one issue that is important to note in all these studies is the difficulty of deciding what is creative or who is creative and who is not- a problem that has plagued the field of creativity research since its inception. Because there is no standard to determine what is creative (and what is not), comparisons of results across studies using "creative" and "noncreative" participants, processes, and products become problematic and imprecise. (p. 219)

Lastly, the limit of time and finance is a clear limitation to developing a greater understanding to the development of creativity. Some of the best studies on creativity, study creative individuals over the course of several years or longer (Albert & Runco, 1999; Helson, 1999; Plucker 1999; Subotnik & Arnold, 1996), in order to gain the best insight into creative development, process maturation, and cognitive insight.

Findings

Research Question 1: How is creativity developed within an individual?

Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the development of creativity, within my-self as the researcher/artist, emerged:

- 1. Less restrictive play was a crucial component to the development of my creativity.
- 2. An appreciation for observation was fostered in order to develop my creativity.
- 3. The encouragement to explore, played a vital role in the development of my creativity
- 4. Constant positive validation from others was an important component to the development of my creativity.
- 5. The confidence to create is a delicate state that must be fostered carefully in order to persuade myself to continue to create.

The first assertion (1.Less restrictive play was a crucial component to the development of my creativity.) is warranted by several reoccurring themes within the written narratives as well as the journal writing. These themes are constructed through the coding process. Examples of this are in the first narrative, I write about my experiences of being poor, and a particular summer where I recollect a large amount of my imaginative play. In this narrative, I am between the ages of four and five, I write about my memory of being left alone for long periods of time. Two excerpts from this narrative are as follows: "I was quiet and always watching. Observation was a sport, a sort of learning. I was never given many opportunities to learn other than to observe the world around me. I believe my parents were absent in a lot of my learning, leaving me to create. I imagined a world for myself and developed my own autonomy. I reveled in assembling the rules of my surroundings. I used to play eye games sitting on my mother's lap of

the passenger seat of our blue pick-up truck. I would close one eye and try to focus in and out the blurred images of figures, focusing the same way a camera lens would. I would squint as hard as I could until all I could make out were shapes, colors, and patterns that burned into the back of my eyelids" and "I believe my parents were absent in a lot of my learning, leaving me to create". In the second narrative, I write explicitly about the artistic influences of my grandmother, although she was there to facilitate my work she watched from a distant and allowed me to actively problem solve through expressive play. In this narrative, I am still between the ages of four and five, but my direction of creative interaction has shifted, thanks to my grandmother, from observation to drawing. An example in this narrative from the codebook was: "Much of my time at my grandmother's house consisted of drawing at the dining room table as the music box spouted The Blue Danube". In narrative number three, I write about the obsession I began to have for drawing. No one forced me to draw. I took most of the time out of my life to draw and to create with freedom. In this narrative, I am between the ages of five and six, so the play has developed and become more sophisticated. The play is also beginning to draw the attention of peers and teachers. An excerpt from this narrative that highlights this scenario is as follows: "My drawing was self-taught; I was never given any instruction other than by my grandmother that supplied the materials and taught me to look at ordinary objects with a curiosity. In fact I hadn't met anyone that liked to draw, much less someone to offer a formulated critique of my process. I was simply encouraged and in love with the feeling it provided me". Within the journal entries, I write about the importance of play to ignite creativity within myself. This concept is coded as a reoccurring theme that is centered among the concept of play and the feeling of a greater connection to self and the visual world. An example from the codebook is as follows: "Art

offered me the opportunity to play and to be wrong. I could take risks without the fear of failure".

The second assertion (2.An appreciation for observation was fostered in order to develop my creativity.) is warranted by several reoccurring themes within the written narratives as well as the journal writing. In the first narrative, I write about my early experiences with observation and my earliest memories of intense observational activity. In this narrative I am between the ages of four and five, also my major creative influences are my parents and my siblings. Some examples from this narrative that help solidify this assertion are as follows: "My visual memories often lend themselves to vibrant colors, hues, shapes, lines, and not necessarily extraneous details" and "I inspected her face often, taking in all of the natural beauty that was a creature preparing to give life to the world. I would roll back her soft ears, noticing the movement of her fur and look into the striations of green and yellow in her eyes, I would open her mouth and note her pearl white teeth and pink sand paper tongue, I just liked to look, the way a new mother would inspect her new born baby, and in that same way, she was visually perfect to me". In narrative two, I write about my constant obsession to observe the objects at my grandmother's home and her guidance and encouragement to observe the world around me. An excerpt from this narrative is as follows: "I used to trace my finger along the edges of an old wooden music box at my grandmothers house. I would spend hours inspecting its mechanics and appreciating its simplistic beauty". In the third narrative, I write about my willingness to observe and draw, in order to perfect mimicry and create a more realistic drawing. In this narrative, I am a little older, with my age ranging from five to six years of age, and my observation is being directly applied to the art making, therefore indicating a clear and consistent sense of development. The example from the narrative that provides substance to this interaction is as follows: "I was quiet. I was always

observing, and drawing what I observed". In the written narrative number six, I write explicitly about the observations I encountered as a new mother, and how these new sets of observations, spurred a new and unique creative motivation inside of me. My observational skills are much more sophisticated at this stage, my memory is clearer. I am from age twenty seven to age twenty eight. An example from the written narrative is as follows: "I inspected her all over, I had wondered for months what this person living inside of me looked like, and now I finally got to see, and touch, smell, and hear, and love. It was as if I was seeing my own heart beating outside of my body". Within the journal entries, there are several occasions where the theme of intense concentration and observation are made known as a cognitive component to the creative process. One example of this language within the entries is as follows: "You are constantly looking back and forth from image to work using each shape and where it sits in relation to another".

The third assertion (3.The encouragement to explore, played a vital role in the development of my creativity.) is warranted by several reoccurring themes within the written narratives as well as the journal writing. In narrative number two I express many of the exploratory freedoms that were encouraged upon me by my grandmother. In this narrative I write specifically about the encouragement to explore the aesthetic value of objects and the comfort that that activity brought me. An example of this situated within the codebook is as follows: "The aesthetics of the inner and outer workings of this box was nothing less than pure intrigue, the neatness of the box, the sheer beauty of both visual and auditory delight kept me overtly curious". In narrative number three I examine the exploratory process of my need to draw and explore different subjects. I was like a sponge trying to absorb all of the possible drawing techniques, in order to feel satisfied with my creative production. An example from this narrative that incites the need to explore and its relation to my development as an artist is as follows: "Rapidly I began to draw everywhere I

could obtain a workable drawing surface". Within the journal entries, I write often about the exploratory nature of the creative process itself. This is most noted in the beginning stages of preconceived vision and the use of imagination. An example from the journal writing is as follows: "This is why art is so important; it is a form of play that encourages divergent thinking and experimentation".

The fourth assertion (4.Constant positive validation from others was an important component to the development of my creativity.) is warranted by several reoccurring themes within the written narratives, journal writing, and a large portion of the self-interview centers around the importance of positive validation from others. In narrative number two I give much credit to my creative development to the encouragement of my grandmother: "I owe every fiber of creative formation I possess to my grandmother. She encouraged my marks. She provided every mean to create, to me. I witnessed her care, her craft, her regard for creating, reusing, living, and I was inspired to make and to draw. It would be no overstatement to proclaim that she taught me to see". In narrative number four, I write explicitly about my negative experiences of art creation in college and how often, many of the harsh criticisms I received for my work, discouraged me to continue creating. In this narrative, I was between the ages of nineteen and twenty and my motivation to create was still greatly stifled by the lack of validation. Examples of the crucial component of validation from narrative number four are as follows: "Students commented on its lack of visual consistency and my professor said the representation lacked a creative edge and sophistication" and "I was ashamed, torn up in side, I felt hot and embarrassed my hands were clammy and I found it hard to walk to the next piece to be critiqued. I didn't feel like an artist". Within the journal writing there are a few excerpts that also touch upon the need for validation, particularly upon the review of the end product. Throughout the creative process

there are overall highs and lows that either encourages a sense of confidence or a feeling of selfdoubt that is easily swayed by the opinions of others. Examples of this are as follows: "A big part of this process is confidence, if you continually feel good about the work in process and in the final product you develop a key motivator to continue, the confidence to continue requires validation by peers or superiors that gives us the sense that what we are doing is of value and importance-this creative confidence is delicate and unfortunately can be crushed at a very early age". A large portion of the self-interview is devoted to this notion of the importance of validation and the will to continue to create. One very straight forward example of this is as follows: "So, validation from others I think is a big component to why I believe that I'm a creative person".

The fifth assertion (5.The confidence to create is a delicate state that must be fostered carefully in order to persuade myself to continue to create.) is warranted by several reoccurring themes within the written narratives, journal writing, and a large portion of the self-interview centers around the importance of confidence and the motivation to continue to create. The concept of confidence vs. the struggles of self-doubt can mean the difference between continuing to create and all together quitting all together. Some examples of this from the data are as follows: "I experience many highs and lows of great confidence or a great insecurity about the work-this can mean the difference of continuing or throwing the work away and ripping it up".

Research Question 2: How is creativity influenced?

Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the influences of creativity within an individual emerged:

- 1. In myself, there exists a strong aesthetic attachment to objects.
- 2. Exposure to aesthetically pleasing surroundings ignites my creative motivation.
- 3. Significant life changes incite a personal creative drive and need to create.
- 4. The creative work of others influences my drive to create.
- 5. Creative acts can act as a therapy to express high levels of personal emotion.

The first assertion (1.In myself, there exists a strong aesthetic attachment to objects.) is warranted by several reoccurring themes within the written narratives and journal entries. A strong sense of aesthetic attachment is exhibited throughout the narrative writings. In narrative number two I give specific detail about an object that was present during most of my early memories in drawing. Those examples are as follows: "Every morning as I entered my grandmother's house, the dining room visible from the front door, my eyes would dart immediately to the dining room table and I would watch intently" and "I was creating and the music box was in attendance, my grandmother sat two feet away in an old cowhide rocking chair and quilted and hummed the tune to The Blue Danube. She used to say that every drawing mark I made was as sweet as the tune of The Blue Danube" and "I'm not sure if I can explain my fascination with the music box itself or my daily habit of taking its inventory of attendance, but it was comforting to see it there all my life". Within the journal entries there are a number of highlights that attribute the memory of objects in helping spark the preconceived vision of the art work to be. An example of this within the entries; is as follows: "I can clearly see the entire piece in my mind down to minor details. Practice studying objects has helped this process".

The second assertion (2.Exposure to aesthetically pleasing surroundings ignites my creative motivation.) is warranted by several reoccurring themes within the written narratives. Narrative number one brings back many beautiful and nostalgic memories. Often these memories I find to

lack beauty as I look through them with the eyes of my adult self but, as a child the aesthetic beauty was always inspiring me to recreate the beauty that I was subject to. The example of this in codebook one is as follows: "My eyes welled as I come across the spot where I used to play; a sad site, nothing of interest, nothing of pride or admiration, nothing if not for perception. As a child, that spot was a kingdom. That tiny plot of land; dirt, grass, a bit of shade, was the beauty I knew of the world". In narrative number two I write about the aesthetic beauty that my grandmother exposed me to, this exposure helped to spark the need to create. An example of this is as follows: "The aesthetics of the inner and outer workings of this box was nothing less than pure intrigue, the neatness of the box, the sheer beauty of both visual and auditory delight kept me overtly curious". In narrative six, I write about the aesthetic beauty of seeing my daughter for the first time, that ultimately lead to feeling the inspiration to start drawing again. This excerpt writes as follows: "I felt perfect. I felt a pin prick of inspiration starting to rupture, as if I needed to capture the moment with meaning. I grabbed a napkin and a blue ball point pen from the hospital tray and started to sketch her form". Lastly this assertion is warranted by several points made within the self-interview that expressed the need to feel inspired by beauty around me. This beauty provides the fuel for which I feel the need to create. An example from the interview is as follows: "Being inspired, I would say at least feels like it gets me thinking more and gets me considering different avenues, so I am kind of in tune when I get inspired by work and images that I see. I kind of relate them to things in my life and I apply them, so I'm constantly kind of being inspired by people and things around me, it definitely helps bring about longer periods of creative thought".

The third assertion (3.Significant life changes incite a personal creative drive and need to create.) is warranted by several points that I write about within the narratives and speak about

within the self-interview. Growing up as an army brat, I often used drawing as a release of stress for having to change my environment; it became a comfort for me. I also expressed the fact that I tended to use drawing as a social lubricant, it became a way for me to feel accepted into a group. Within the data, I express the memory of having to move for the first time away from my grandmother. I began to draw obsessively during this time and tried to get the drawings perfect. I also recollect going to college and changing my medium to sculpture and then having a baby and becoming newly inspired to draw and to create.

The fourth assertion (4. The creative work of others influences my drive to create.) is warranted by several reoccurring themes within the written narratives, journal writing, and a large portion of the self-interview centers around the importance of influential art and artists as a component to my own creative drive. The written narratives highlight several instances where I write about the influences of others work. One beginning influence that sparked a crucial interest in drawing was the work of Lee J. Ames. The original excerpt from the narrative number 3; is as follows: "I found what ultimately lead to my obsession for perfecting form. I found a book by the artist and illustrator Lee J. Ames (Lee Judah Ames) the book was titled; *Draw 50 Famous Cartoons* ". It was this work that inspired me to draw as much as I could and as often as I could, this eventually lead to my ability to draw and my love of art.

The fifth assertion (5.Creative acts can act as a therapy to express high levels of personal emotion.) is warranted by several reoccurring themes within the written narratives, journal writing, and a large portion of the self-interview. It is made known through the various forms of data that stress is a component to daily life that creating art can have a therapeutic effect on. Two documented pieces within the data are as follows: "I find that I most often am motivated to work when I feel stressed, giving myself a new work to think about and immerse myself in, this tends

to distract me from daily life" and "There is peacefulness to working and drawing. Even looking at drawings and seeing the marks and lines of others is a peaceful event, it requires the ability to stop and slow down-to- breathe and to connect to the visual world, there is no pressure".

Research Question 3: Can art production incite creative thinking? Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the connections between art making and creative thought emerged:

1. My art making process begins with a preconceived vision and requires great imaginative thought.

Warrants: Throughout this extensive self-examination of my own personal creative process, a very common theme emerged that directly related to the beginning stages of creative formation. Some examples represented throughout the data are as follows; "The artist has to consider what the overall subject says about the work and how they choose to represent it" and "I changed my mind several times in the process before seeing a vision, a completed idea in my head of what I wanted to create". Throughout the data collection process and in the creation of the artistic work, I express clear interpretation of the vision that I see in my mind for each envisioned artistic work. Some examples of this from the journal entries are as follows; "This idea is strongly visualized in my mind" and "I can clearly see the entire piece in my mind down to minor details". The sense of imagination that is being exercised within these preconceived visions of the art work has relied on practicing this vision in my mind. The preconceived vision of beginning stages of imaginative play are directly related to the beginning stages of creative thought. Some examples of this within the journal entries are as follows; "Practice studying objects has helped this

process" and "This is why art is so important, it is a form of play that encourages divergent thinking and experimentation".

 My art making process involves a variety of problem solving and finding resolution techniques.

Warrants: Throughout this extensive study that involves the self-discovery of my own creative process; there are a number of overwhelming instances in which I have found myself intensely having to problem solve and employ various problem finding techniques. Throughout the art making process, I had to constantly consider one move to the next. I had to not only solve problem but, ask myself what was going wrong in the process and how to successfully correct the problem. Some examples of the types of problems I encountered are as follows; "It took a lot of reflection to come to the conclusion of what I ultimately wanted to represent" and "My mind is working to problem solve the composition and get the figure/form correct" and "The difficult part about drawing is coming to the realization that most of your time will be spent problem solving and thinking critically about your marks, this type of work is a very different process than being spontaneous". This kind of work, realistic-drawing, is a process that relies strictly on an extensive understanding of the types of problems you will encounter and the creative ways in which to solve them. Some examples of this throughout the writing, are as follows; "Creating the illusion of the 3-dimension requires a precise layering of medium-knowing how much and how little to apply is a learned process" and "A major component to creation is learning the medium you are working in". Drawing, in particular, requires a set of multiple problem solving skills in which you are constantly considering every aspect of the work from (line to shape to value etc.) and how each of the arrangements of these components will ultimately affect the finished work. Some examples, of this within the journal entries, are as follows; "When drawing, not only do I

have to dissect the form and line of the subject but I also have to visually deconstruct the value with a wide range of light to dark" and "I also have to consider the various textures and arrangement of composition and space all while developing a visual representation with meaning and visual aesthetics".

3. My art making process requires intense concentration and observational abilities.

Warrants: Throughout this rigorous process of collecting thoughts as I am engaged in the creative process, there is a great deal of attention placed on how focused I have to be and how deeply I have to observe the subject of the visual work. There is also constant representation, within the data, that suggests a kind of internal dialogue that is happening as I am concentrating on the creative problem solving tasks. Some examples of this within the journal entries are as follows; "You are constantly looking back and forth from image to work using each shape and where it sits in relation to another" and "There is an internal dialogue that exists as you are creating, there are moments of intense thinking and organization, what tasks need to be accomplished". I often refer to the importance of concentration, for example; "Concentration is essential" and "I certainly feel as though I am in a state of creation and concentration". The aspects of technical drawing in particular are mentioned throughout the data; "Technical drawing is a great skill in observation and understanding many of the formal elements of representation". The mediums used within this particular mode of expression require an observation of the use of materials as well; "Constantly noting the way the graphite reacts to the level of pressure on the pencil is a process of observation in itself". The act of observation and noting each individual element of the visual stimulus is of high importance to this process; "Creating the illusion of an object, person, subject, muse, etc. requires the ability (for me anyway) to look at the thing as a whole-and then interpret the line-block-out all you think you know-observe-you may think to

draw an apple but, you have to let go of what you think you know about something and strictly become a researcher".

4. My art making process involves distinct layering of thoughts and creative reasoning.

Warrants: Throughout this extensive study of my creative process, there exists substantial evidence to assert the claim that a distinct layering of thoughts and an involvement of creative reasoning is made known. The organization and layering of these thoughts can ultimately effect the direction of the creative work; "A way of sorting through thoughts" and "As you work there is almost a layering of thoughts that occurs" and "You are always thinking of each step-one after another, but you are also thinking of distracted thoughts irrelevant to your work-almost like a therapy". There also exists a kind of therapy and relaxed state as I become comfortable with my process, I begin to use my thoughts as a reflective tool in working through many problems; "I find myself talking myself through problems or situations that have occurred throughout my life, and I kind of talk my way through them-coming to some type of internal resolution". The thoughts need to be constant and layered in order to keep my brain working and moving from one piece to the next; "Next, I have to shift my attention from the big picture and start to dissect the work piece by piece". For this particular drawing, I had to remain observant of what was in front of me, but I also used some of the form to distort and play with, and find a sense of expression; "As I work, there tends to exist an internal dialogue, I find that different attributes to my personality begin to take over parts of my creative thinking, for example part of me wants to be very organized and analytical, another part of me wants to be free to explore and create without worry of right and wrong, another part of me wants to be recognized all I can think of is praise, when the work is completed".

5. My art making process involves expressive invention and deciphering between, a variety of creative choices.

Warrants: In any kind of drawing that I do, there is always a need to explore alternative means of expression or visually make the work my own. An example of this that exists within the journal entries are as follows; "Finding a unique and interesting way to present the value-becomes the creative component to the work". It becomes almost a skill that is of second nature, and that can be hard to articulate; when you just know to add something or take it away; "You have to almost have a level of sensitivity that is deeply in tune with what you are trying to convey. This can be a difficult skill to teach" and "The final creative work always lends itself to a form of detailed thought, intellectual structure from creative choices to the next set of creative choices". The final product really becomes a kind of record of your thoughts at that time; "A work that represents all of my creative acts at that time-almost like a record of my creative thoughts and actions".

Summary

The findings presented within this study offer a detailed qualitative approach to understanding creativity, the creative process and aesthetic awareness as they exist within an individual artist. To reiterate; the following research questions were used in this study: (1) How, is creativity developed within an individual? (2) How is creativity influenced? And (3) Can art production incite creative thinking? In gaining greater insight into the human phenomenon of creativity, I believe the facets of creativity can greatly influence education.

The self-study approach was used in order to gain unfettered access to my process and memories of creative production, encouragement, and overall understandings. Both the triangulation of creative data and the rigorous self-analysis approach to understanding of creative

phenomenon was utilized to the best of my ability. How the process of creativity is developed within an individual is a challenging question for the field, this analysis has provided a great deal of information that can now be replicated and used to study other artists, then making an even stronger claim to the assertions.

The primary assertions presented in this chapter represent a deeper understanding and personal confirmation of the complex phenomenon of creativity. To reiterate, those assertions are as follows: less restrictive play was a crucial component to the development of my creativity, an appreciation for observation was fostered in order to develop my creativity, the encouragement to explore, played a vital role in the development of my creativity, constant positive validation from others was an important component to the development of my creativity, the confidence to create is a delicate state that must be fostered carefully in order to persuade myself to continue to create, there exists a strong aesthetic attachment to objects, exposure to aesthetically pleasing surroundings ignites my creative motivation, significant life changes incite a personal creative drive and need to create, the creative work of others influences my drive to create, creative acts can act as a therapy to express high levels of personal emotion, my art making process begins with a preconceived vision and requires great imaginative thought, my art making process involves a variety of problem solving and finding resolution techniques, my art making process requires intense concentration and observational abilities, my art making process involves distinct layering of thoughts and creative reasoning, my art making process involves expressive invention and deciphering between a variety of creative choices. Through the writings of one creative individual, a greater conceptual understanding of creative generation, the creative process, and aesthetic awareness are made known.

Chapter 5

Summary, Conclusions, Discussions, Implications, and Recommendations Summary

The purpose of this study was to examine creativity, the creative process, and aesthetic awareness as they exist within an individual. This self-study set out to provide further exploration of the scientific and metaphoric orientations of the developmental, stage and componential process, cognitive, and problem finding theories of creativity. Through the study of an artist's history, creative process, and artistic insight, a clearer understanding of creativity and its relation to art making is made known. Geertz (1995) stated, "If you want to understand what a science is you should look in the first instance not at its theories or its findings, and certainly not what its apologists say about it; you should look at what the practitioners of it do" (p. 73). This study was organized to bring to light some often overlooked narrative conventions so that fresh perspective can be identified, compared, and possibly improved. How the process of creativity is developed within an individual is a challenging question for the field, this analysis has provided a great deal of information that can now be replicated and used to study other artists, then making an even stronger claim to the assertions.

The self-study form of scientific inquiry was utilized to the best of its ability, in order to offer insight into creative production, in the same way in which it has been successful in facilitating educators and their practice. The artistic influences of an artist's personal history on creativity and art making continues to be of great interest to the field (Locher, 2010). Studying the individual artists psychological connection between personal history and his or her resulting motives for creating an artwork, can attempt to explain the origins of creativity (Locher, 2010). This self-study approach to inquiry involves questioning the context of creativity, creative

content, and the creative process from my own perspective and in turn, unearths a great deal of information about the complex phenomenon of creativity.

Research questions

The following research questions were used in this study: (1) How, is creativity

developed within an individual? (2) How is creativity influenced? And (3) Can art production

incite creative thinking?

Domain	Question	Data Collection	Analysis
Developmental Theories of Creativity	4. How is creativity	Points Written aesthetic narratives- visual	Codebook- coded for thematic relevance
	developed within an individual?	memory/ Self conducted interviews	
Cognitive Theories of Creativity	5. How is creativity influenced?	Written aesthetic narratives- visual memory/ Self conducted interviews	Codebook- coded for thematic relevance
Stage & Componential Process Theories of Creativity/ Problem Finding Theories of Creativity	6. Can art production incite creative thinking?	Completed drawing accompanied by journal writing of creative process	Codebook- coded for thematic relevance

- How is creativity developed within an individual? This question focuses strictly on the developmental components to the artist's background and influence of early creative experiences. A series of reflections (narratives) from childhood that have sparked creative behavior are coded to identify similarity in experience and language.
- 2. How is creativity influenced? This question focuses on the internal and external factors that contribute to creative production. A series of self-conducted interviews highlight the interactions between the self and creativity, creative process, and

aesthetic awareness. The interviews are coded in order to identify similarities in language.

3. Can art production incite creative thinking? This question is concerned with the generation of creativity and its relation to art-making. An on-going journal that reflects upon the creative process as the artist is engaged in visual creative production is coded to identify similarities in written form of thought processes that occur during production.

Findings

Research Question 1: How is creativity developed within an individual?

Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the development of creativity, within my-self as the researcher/artist, emerged:

- 1. Less restrictive play was a crucial component to the development of my creativity.
- 2. An appreciation for observation was fostered in order to develop my creativity.
- 3. The encouragement to explore, played a vital role in the development of my creativity
- 4. Constant positive validation from others was an important component to the development of my creativity.
- The confidence to create is a delicate state that must be fostered carefully in order to persuade myself to continue to create.

Research Question 2: How is creativity influenced?

Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the influences of creativity within an individual emerged:

- 1. In myself, there exists a strong aesthetic attachment to objects.
- 2. Exposure to aesthetically pleasing surroundings ignites my creative motivation.
- 3. Significant life changes incite a personal creative drive and need to create.
- 4. The creative work of others influences my drive to create.
- 5. Creative acts can act as a therapy to express high levels of personal emotion.

Research Question 3: Can art production incite creative thinking?

Primary Assertions: Throughout this extensive study, three forms of creative data were collected and analyzed. Five important and reoccurring pieces of information about the connections between art making and creative thought emerged:

- 1. My art making process begins with a preconceived vision and requires great imaginative thought.
- My art making process involves a variety of problem solving and finding resolution techniques.
- 3. My art making process requires intense concentration and observational abilities.
- 4. My art making process involves distinct layering of thoughts and creative reasoning.
- 5. My art making process involves expressive invention and deciphering between a variety of creative choices.

Conclusions

My intentions in this study, was to provide rich and descriptive data through personal accounts and to dissect that data in order to provide scientific analysis and deeper understanding of the human phenomenon of creativity. Through the use of self-study analysis, I have used this research method to the fullest of its ability. I was able to unearth my personal processes and developments of creativity as well as unearth something in a small way about the larger scope of

creative generation. The findings of this study represent the experiences of a creative individual transformed into authoritative written account and then dissected into common applicable themes. Each of the primary assertions discovered as prominent themes within the data, are highly relevant themes among the field of creativity and particularly creative development. I have always felt an intellectual and moral responsibility to researching the arts and the contributions they can make to teaching creativity. Although this research exposes only the creative development composed by one individual, it offers a further representation to the understanding of creative practice. The arts based approach to data collection provides alternative means to attempt to get to the heart of the human phenomenon. It is in my personal opinion that the route to the heart of what we know of creativity can only be made known by deeply reflective and personal accounts of creative acts.

Discussions

Among the primary assertions presented within the findings, several of these assertions relate back to the initial review of the literature in chapter two. There are four main theories of creativity that emerged through the review of the literature; developmental theory, stage and componential process theory, cognitive theory, and problem finding theory.

Developmental theory specifically helps us to understand the roots of creativity and suggests that we can learn much about creativity over time by studying the environment and habits of the creative person, particularly the environment they grew up in and the activities and sights they were exposed to. Key concepts among this theory include; place and family structures, role of play, support during transitions, longitudinal process, and multivariate influences. Developmental theory supports the replication of conducive, creative environments and the inclusion of creative thinking tasks within curriculum in order to instill creative

opportunities and growth. We can learn from the background of a creative individual in a practical manner, to help influence the environment of the creative development of children and their creative potentials (Kozbelt, et al., 2010). Many components of this theory relates directly to the following assertions:

- 1. Less restrictive play was a crucial component to the development of my creativity.
- 2. An appreciation for observation was fostered in order to develop my creativity.
- 3. The encouragement to explore, played a vital role in the development of my creativity
- 4. Constant positive validation from others was an important component to the development of my creativity.

Stage and componential process theory suggests that creativity is directly related to the creative process. A number of models have been proposed that attempt to understand the structure and stages of this process (Getzels & Csikszentmihalyi, 1976; Gruber, 1981; Helmholtz, 1896; Runco, 1994). One of the most popular stage theories of creativity is the creativity stage model by Graham Wallas (1926). Wallas, an English social psychologist, constructed an insightful theory that outlines four stages of the creative process. The outline begins with the *preparation stage*; in this stage the individual gathers information and considers the problem. The next stage is the *incubation stage*; in this stage the individual lets the problem stew while considering multiple solutions. If the incubation stage; In this stage, an idea or solution has made itself known to the individual (an ah-moment ensues). The last and final stage is known as the *verification stage*; in this stage the solution is applied to the problem and results are noted. Although this stage theory is one of the most well-known and popular outlines of

creative stage theory, its linearity has been largely discredited (Kozbelt, et al., 2010). Many components of this theory relates directly to the following assertions:

- 1. My art making process begins with a preconceived vision and requires great imaginative thought.
- My art making process involves expressive invention and deciphering between a variety of creative choices.
- 3. Creative acts can act as a therapy to express high levels of personal emotion.

Cognitive psychologists recognize creativity as a mental process (Donnelly, 2004). Cognitive theories explore the notion that creative achievements have some basis in cognition and that creative individuals possess special cognitive abilities of abstract thinking. The cognitive ability to think abstractly allows an individual to come to a new or creative conclusion when high levels of connections occur (Donnelly, 2004). Kozbelt, et al. (2010) stated, "This kind of thinking has been called metaphoric logical, the idea being that something like "angry weather" is only comprehensible in a non-literal fashion" (p.32). Metaphoric logic requires an individual to use high levels of flexible perception and willingness to shift previous assumptions (Kozbelt, et al., 2010). Cognitive theories are primarily concerned with the thinking of the individual artist and the creative process as a mechanism to creative thought (Kozbelt, et al., 2010). Many components of this theory relates directly to the following assertions:

- 1. My art making process requires intense concentration and observational abilities.
- 2. My art making process involves distinct layering of thoughts and creative reasoning.

Problem finding is mainly a theory of the creative process and the creative persons own unique creative goals. This theory brings the individuals motivations to preform creative acts to the forefront and highlights the exploratory nature of the creative individual. If a researcher is

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more interested in the creators' subjective experience or their reasons for making art, problem finding is likely to be the more appealing framework to study for this level of understanding (Kozbelt, et al., 2010). Kozbelt, et al. (2010) stated:

The problem-finding view holds that the traditional problem- solving view is inadequate to explain how creators come to realize that a problem exists in the first place, and how they are motivated to proactively bring their subjective experience to understand the problem. (p. 34)

In a study by Getzels and Csikszentmihalyi (1976), researchers observed 31 college art students in an open-ended drawing activity, in which they arranged a set of objects and then drew from them. Getzels and Csiksszentmihalyi were particularly interested in the exploratory and motivational behaviors of the students when given the complex task. They found that the more creative students engaged in manipulating the objects and handling them more before completing the given task. Although this evidence exists, the exact nature of problem finding is difficult to discern. Many components of this theory relates directly to the following assertion:

 My art making process involves a variety of problem solving and finding resolution techniques.

Implications

While the implications of this research study does not aspire to solve every mystery of creativity, the origins of creative thought are worth exploration and can in a small way inform how we learn. Through this type of research about creativity, I hope to further promote the true beneficial essence of creative thought and make known the value of teaching creativity. Insights into the creative process can help to enlighten educators as to what creativity is, where it comes from, and how it is best utilized. Teaching creativity is most easily accomplished by teaching

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through the arts (Eisner, 2002). The intent of this study was to further illuminate how creative thought is born within an individual artist and to further explore the mental processes and structures that support creative behavior. Russ and Fiorelli (2010) stated, "How these processes crystallize and enable creative products to be formed is a challenging question for the field" (p. 233). The primary assertions support the hypothesis that there exists a strong connection between creative generation and art production. When considering creativity as an artful process, it is assumed that creativity is a sequence of cognitive operations that produces novel insights and compelling final products (Sternberg, Kaufman, & Pretz, 2002). The primary assertions made about the creative process, attempt to demystify the creative process and in doing so, can be a beneficial tool in preparing more educators to include creativity in teaching curriculum. The lack of understanding about teaching creativity is a problem directly related to the lack of understanding of the phenomena that is creativity, and the undocumented scholarly contributions of creativity as an intellectual discipline. According to Donnelly (2004):

Many attribute the neglect of creativity to a number of reasons: the Platonic notion that creativity is a mystical phenomenon; the persistent belief that creativity is a spiritual process that does not lend itself to scholarly scrutiny; or the fact that early twentieth-century schools of psychology, for example, structuralism, functionalism and behaviorism, ignored creativity. (p. 156)

Arriving at a place where we can effectively incorporate creativity into all aspects of learning is an ultimate goal. Establishing this common curricular goal of consistent incorporation of creativity assignment and assessment of creative competence is a fundamental way of helping students to perform in a world of an uncertain future (Beghetto, 2010). Further investigation of the creative mind can offer insight into implementing meaningful creative curriculum within

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education that will lead to a learned valuable skill set; including, visual perception and analysis, harnessing creative generation, and the process of scientific inquiry (Donnelly, 2004).

Recommendations

Throughout this extensive study into the creative process of an individual, some evidence became known but, was hard to find solid reoccurring evidence to solidify the claims. Such evidence includes: 1. Evidence suggested that the fact that I was poor during my childhood, therefore using my imagination may have influenced my creative mind. 2. Evidence supported the notion that I was a quiet child; this possibly had an influence on my ability to focus. 3. Evidence suggests that my risk taking ability began to diminish as I got older; this most likely had a profound effect on my ability to think creatively. 4. Evidence supported the notion that several significant life changes affected my creative process, more probing on the specific motivations would have to be completed.

This scientific and metaphoric representation of the creative individual reflects a deeper understanding of the developmental, cognitive, and procedural components to being creative. A wider variety of research conducted in this manner can contribute to the whole of what is known about creative generation. Extensive and longitudinal research is warranted in order to grasp the nature of the complex phenomenon of creativity development. And further neurological insights are warranted to gain greater perspective into the cognitive workings of the creative individual and the notable gifts of the creative mind.

References

- Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin*, 121 (2), 219.
- Albert, R. S., & Runco, M. A. (1989). Independence and cognitive ability in gifted and exceptionally gifted boys. *Journal of Youth and Adolescence*, 18, 221-230.
- Albert, R. S., & Runco, M. A. (1999). A longitudinal study of exceptional giftedness and creativity. *Creativity Research Journal*, 12, 161-164.
- Advocacy resources for challenging times.(n.d) Retrieved March 15, 2014, from The National Art Education Association; Americans for the Arts website, <u>http://www.arteducators.org/</u>
- Amabile, T. M. (1989). Growing up creative: Nurturing a lifetime of creativity. Williston, VT: Crown House Publishing Limited.
- Amabile, T. M. (1999). Consensual assessment. In M. A. Runco & S. Pritzker (Eds.), Encyclopedia of creativity (pp. 346-349). San Diego, CA: Academic Press.
- Baer, J. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *Is Creativity Domain Specific?* (pp. 321-341). New York, NY: Cambridge University Press.
- Barron, F. (1969). *Creative Person and Creative Process*. New York: Holt, Rinehart and Winston.
- Barron, F., Montuori, A., & Barron, A. (1997). *Creators on creating*. New York, NY: Penguin Group (USA) Inc.
- Beghetto, R. A. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *Creativity in the Classroom* (pp. 447-463). New York, NY: Cambridge University Press.
- Benedek, M., Jauk, E., Sommer, M., Arendasy, M., & Neubauer, A. C. (2014). Intelligence, creativity, and cognitive control: The common and differential involvement of executive functions in intelligence and creativity. *Intelligence*, 46, 73–83. doi:10.1016/j.intell.2014.05.007
- Bernard, H. R., Ryan, G. W. (2010). *Analyzing Qualitative Data; Systematic Approaches*. SAGE Publications, Inc.
- Campbell, D. T. (1960). Blind generation and selective retention in creative thought as in other thought processes. *Psychological Review*, 67, 380-400.

Csikszentmihalyi, M. (1988). Society, culture, and person: A systems view of creativity. In R. J.

Sternberg (Ed.), *The nature of creativity: Contemporary psychological perspectives* (pp. 325-228). New York: Cambridge University Press.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.

Csikszentmihalyi, M. (1998). Reflections on the field. Roper Review, 21, 80-81.

- De Carms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York Academic Press.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.
- Donnelly, R. (2004). Fostering of creativity within an imaginative curriculum in the higher education. *The Curriculum Journal*, 2, 155-166. doi:10.1080/0958517042000226810
- Ecker, D.W. (1963). The artistic process as qualitative problem solving. *The Journal of Aesthetics and Art Criticism*, 3, 283-290.
- Eisner, E. (2002).*The arts and the creation of the mind*.Philip Hamilton McMillan of the class of 1894, Yale College.
- Ellenberger, H. F. (1958). Existence. Rowman & Littlefield Publishers, Inc.
- Ericsson, K. A. (1999). Creative expertise as superior reproducible performance: Innovative and flexible aspects of expert performance. *Psychological Inquiry*, 10, 329-333.
- Erikson, E. (1968). Identity: Youth and crisis. New York: Norton.
- Feist, G. J. (1998). A meta –analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review*, 2, 290-309.
- Feist, G. J. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *The Function of Personality in Creativity: The nature and nurture of the creative personality* (pp. 113-130). New York, NY: Cambridge University Press.
- Feist, G. J., & Runco, M. A. (1993). Trends in the creativity literature: An analysis of research in the *Journal of Creativity Behavior* (1967-1989). *Creativity Research Journal*, 6, 271-286.
- Finke, R. A., Ward, T. B., & Smith, S. M. (1992). *Creative cognition:Theory, research, and applications.* Cambridge, MA: MIT Press.
- Florida, R. (2002). *The rise of the creative class: And how it's a transforming work, leisure, community and everyday life.* New York: Basic Books.

Gabora, L., Kaufman, S. B. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman&

R. J. Sternberg, (Eds.), *Evolutionary Approaches to Creativity* (pp. 279-300). New York, NY: Cambridge University Press.

- Galenson, D. W. (2001). *Painting outside the lines: Patterns of creativity in modern art.* Cambridge, MA: Harvard University Press.
- Galenson, D. W. (2006). *Old masters and young geniuses: The two life cycles of artistic creativity*. Princeton, NJ: Princeton University Press.
- Gaynor, J. L. R., & Runco, M. A. (1998). Family size, birth order, age-interval, and the creativity of children. *Journal of Creative Behavior*, 26, 108-118.
- Geertz, C. (1995) After the fact. Cambridge, MA: Harvard University Press.
- Getzels, J. W., & Csikszentmihalyi, M. (1976). *The creative vision: A longitudinal study of problem finding in art.* New York: Wiley.
- Ghiselin, B. (1955). *The creative process: a symposium by Brewster Ghiselin*. University of California Press.
- Gnezda, N. M. (2011).Cognition and emotions in the creative process.*Art Educational Journal*, 64(1), 47-52.
- Gruber, H. E. (1981). On the relation between 'a ha' experiences and the construction of ideas. *History of Science*, 19, 41-59.
- Gruber, H. E., & Wallace, D. B. (1999). The case study method and evolving systems approach for understanding unique creative people at work. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 93-115). New York: Cambridge University Press.
- Guilford, J. P. (1968). *Creativity, intelligence, and their educational implication*. San Diego, CA: Knapp.
- Guilford, J. P. (1985). The structure-of-intellect model. In B. B. Wolman (Ed.), *Hand-book of intelligence: Theories, measurements, and applications* (pp. 225-266). New York: Wiley.
- Helmholtz, H. von (1896). Vortrage und Reden. Brunswick, Germany: Friedrich Vieweg.
- Helson, R. (1999). A longitudinal study of creative personality in women. *Creativity Research Journal*, 12, 89-101.
- Hennessey, B. A. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *The Creativity – Motivation Connection* (pp. 342-365). New York, NY: Cambridge University Press.

Ivcevic, Z. (2007). Artistic and everyday creativity: An act -frequency approach. Journal of

Creative Behavior, 41, 271 -290.

- Jensen, E. (2001). *Arts with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jung, R. E., Segall, J. M., Bockholt, H. J., Flores, R. A., Smith, S. M., Chavez, R. S., Haier, R. J. (2010). Neuroanatomy of creativity. Hum. Brain Mapp. 31 (3), 398-409.
- Kaufman, J. C., & Baer, J. (2004). The Amusement Park Theoretical (APT) model of creativity. *The Korean Journal of Thinking & Problem Solving*, 14 (2), 15-25.
- Kaufman, J. C., Kornilov, S. A., Bristol, A. S., Tan, M., Grigorenko, E. L. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *The Neurobiological Foundation of Creative Cognition* (pp. 113-130). New York, NY: Cambridge University Press.
- Kaufman, J.C., & Sternberg, R. J. (2007). Resource review: Creativity. Change, 39, 55-58
- Kaufman, J.C., & Sternberg, R. J. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman & R. J. Sternberg, (Eds.), Preface (pp. xiii-xv). New York, NY: Cambridge University Press.
- Mumford, M., Medeiros, K.,&Partlow, P. (2012). Creative thinking: Processes, strategies, and knowledge. *Behavior Journal of Creativity*, 1, 30-47. doi: 10.1002/locb.003
- Keightley, E., Pickering, M., & Allett, N. (2012). The Self-Interview: a New Method in Social Science Research. *International Journal Of Social Research Methodology*, 15, 507-521. doi:10.1080/13645579.2011.632155
- Kemp, M., (2000). Leonardo da Vinci. Grove Art Online. Oxford Art Online. Oxford University Press. Web. 28 Mar. 2015. http://www.oxfordartonline.com/subscriber/article/grove/art/T050401.
- Kim, K. H., Cramond, B., VanTassel -Baska. J. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *The Relationship between Creativity and Intelligence* (pp. 395-412). New York, NY: Cambridge University Press.
- Koestler, A. (1980). Bricks to babel. New York, NY: Random House.
- Kottler, J. (2005). Divine madness. San Francisco: Jossey -Bass.
- Kozbelt, A. (2008). Longitudinal hit ratios of classical composers: Reconciling "Darwinian" and expertise acquisition perspective on life-span creativity. *Psychology of Aesthetics, Creativity, and the Arts,* 2, 221-235.

Kozbelt, A., Beghetto, R. A., & Runco, M. A. (2010). The Cambridge Handbook of Creativity.

In J. C. Kaufman& R. J. Sternberg, (Eds.), *Theories of Creativity* (pp. 20-47). New York, NY: Cambridge University Press.

- Kozbelt, A., & Seeley, W. (2007). Integrating art historical, psychological, and neuro-scientific explanations of artists' advantages in drawing and perception. *Psychology of Aesthetics, Creativity, and the Art*, 1, 80-90.
- Kvale, S., Brinkmann, S. (2009). *Interviews; Learning the Craft of Qualitative Research Interviewing,* 2nd *Edition.* SAGE Publications, Inc.
- LaBoskey, V. (2004). Moving the methods of self-study research and practice forward: Challenges and opportunities. In J. Loughram, M. L. Hamilton, V. La Boskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 1169-1184). Dordrecht: Kluwer Academic Publishers.
- Lassonde, C., Galman, S., & Kosnik, C. (2009) *Self -study research methodologies for teacher educators*. Rotterdam: Sense Publications.
- Latta, M. M., Thompson, C. M. (2012). The destinee project: Shaping meaning through narratives. *International Journal of Education and the Arts*, 13, 1-13.
- Lepper, M., Greene, D., & Nisbett, R. (1973). Undermining children's intrinsic interest with extrinsic rewards: A test of the "over justification" hypothesis. *Journal of Personality and Social Psychology*, 28, 129-137.
- Locher, P. G. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *How Does a Visual Artist Create an Artwork?* (pp. 131-144). New York, NY: Cambridge University Press.
- Mace, M., & Ward, T. (2002). Modeling the creative process: A ground theory analysis of creativity in the domain of art making. *Creativity Research Journal*, 14, 179-192
- Makel, M. C. (2009). Help us creativity researchers, you're our only hope. *Psychology of Aesthetics, Creativity, and the Arts,* 3, 38-42.
- Mayseless, N., Aharon -Peretz, J., Shamay -Tsoory, S. (2014). Unleashing creativity: The role of left temporoparietal regions in evaluating and inhibiting the generation of creative ideas. *Neuropsychologia*, 64, 157-168.
- Mednick, S. A. (1962). The associative basis of the creative process. *Psychological Review*, 69, 220-232.
- Miall, R., & Tchalenko, J. (2001). A painter's eye movements: A study of eye and hand movement during portrait drawing. *Leonardo*, 34, 35-40.

Moran, S. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg,

(Eds.), *The Roles of Creativity in Society* (pp. 74-90). New York, NY: Cambridge University Press.

- Morgan, C. (2012). Conceptualizing creativity in the creative arts: Seeking common ground. *Journal of Writing and Writing Courses*, 13 (1), 1-17.
- Mumford, M., Medeiros, K.,&Partlow, P. (2012). Creative thinking: Processes, strategies, and knowledge. *Behavior Journal of Creativity*, 1, 30-47. doi: 10.1002/locb.003
- Nettle, D. (2002). Strong imagination. Oxford: Oxford University Press.
- Nietzsche, F. W., & Kaufmann, W. A. (1995). *Thus spoke Zarathustra: A book for all and none*. New York: Modern Library.
- Pearson, B., Russ, S. W., Cain Spannagel, S. A. (2008). Pretend play and positive psychology: Natural companions. *Journal of Positive Psychology: Dedicated to furthering research* and promoting good practice, 3, 110-119.
- Phillips, L. (2013, January 22). Top ten skills children learn from the arts. *The Washington Post*. Retrieved from <u>http://www.washingtonpost.com</u>
- Pinnegar, S., Hamilton, M. L. (2009). Self-Study of practice as a genre of qualitative research: Theory methodology and practice.London, New York: Springer Dordrecht Heidelberg.
- Plomin, R., DeFries J. C., McClearn, G. E. & McGuffin, P. (2001). *Behavioral genetics* (4th ed.). New York: Worth Publishers.
- Plucker, J. A. (1999). Is the proof in the pudding? Reanalyses of Torrance's (1958 to present) longitudinal data. *Creativity Research Journal*, 12, 103-114.
- Pollard, V. (2012). Creativity and education: Teaching the unfamiliar. Joint AARE APERA International Conference, Sydney 2012.
- Pope, R. (2005). Creativity: Theory, history, practice. New York: Routledge.
- Reuter, M., Panksepp, J., Schnabel, N., Keller-hoff, P., Kempel, P., & Henning, J. (2005). Personality and biological markers of creativity. *European Journal of Personality*, 19, 83-95.
- Richards, R. (2001). Creativity and the schizophrenia spectrum: More and more interesting. *Creativity Research Journal*, 13, 111-132.
- Rubenson, D. L., & Runco, M. A. (1992). The psychoeconomic approach to creativity. *New Ideas in Psychology*, 10, 131-147.

Rubenson, D. L., & Runco, M. A. (1995). The psychoeconomic view of creative work in groups

and organizations. Creativity and Innovation Management, 4, 232-241.

- Runco, M. A. (Ed.). (1994). *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex.
- Runco, M. (2007). Creativity. San Diego: Elsevier.
- Runco, M. A., Albert, R. S. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *Creativity Research* (pp. 3-19). New York, NY: Cambridge University Press.
- Runco, M. A., & Chand, I. (1995). Cognition and creativity. *Educational Psychology Review*, 7, 243-267.
- Russ, S.W., & Fiorelli, J. A. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman & R. J. Sternberg, (Eds.), *Developmental Approaches to Creativity* (pp. 233-249). New York, NY: Cambridge University Press.
- Russ, S. W., & Schafer, E. D. (2006). Affect in fantasy play, emotion in memories, and divergent thinking. *Creativity Research Journal*, 18, 347-354.
- Sawyer, R. K. (2006). *Explaining creativity: The science of human innovation*. New York: Oxford University Press.
- Schlesinger, J. (2009). Creative mythconceptions: A closer look at the evidence for the "mad genius" hypothesis. *Psychology of Aesthetics, Creativity, and the Arts,* 3, 62-72.
- Shklovsky, V. (1990). Theory of prose. Elmwood Park, IL: Dalkey Archive Press
- Silvia, P. J., Kaufman, J. C. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman & R. J. Sternberg, (Eds.), *Creativity and Mental Illness* (pp. 381-394). New York, NY: Cambridge University Press.
- Simon, H. A. (1981). The sciences of the artificial (2nd ed.). Cambridge, MA: MIT Press.
- Simon, H. A. (1989). The scientist as a problem solver. In D. Klahr & K. Kotovsky (Eds.), Complex information processing: The impact of Herbert A. Simon (pp. 375-398). Hillsdale, NJ: Erlbaum.
- Simonton, D. K. (1988). Scientific genius. New York: Cambridge University Press.
- Simonton, D. K. (1997). Creative productivity: A predictive and explanatory model of career landmarks and trajectories. *Psychological Review*, 104, 66-89.

Smith, J. K., Smith, L. F. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman &

R. J. Sternberg, (Eds.), *Educational Creativity* (pp. 250-264). New York, NY: Cambridge University Press.

Stein, M. I. (1953). Creativity and culture. *The Journal of Psychology*, 36, 311-322.

Steinhart, P. (2004). The Undressed Art: Why We Draw. New York: Knopf Print.

- Sternberg, R. J. (2006). The nature of creativity. Creativity Research Journal, 18, 87-98.
- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2002). *The creativity conundrum: A propulsion model of kinds of creative contributions*. Philadelphia, PA: Psychology Press.
- Sternberg, R. J., & Lubart, T. I. (1992). Buy low and sell high: An investment approach to creativity. *Current Directions in Psychological Science*, 1, 1-5.
- Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York: Free Press.
- Subotnik, R. F., & Arnold, K. D. (1996). Success and sacrifice: The costs of talent fulfillment for women in science. In K. D. Arnold, K. D. Noble, & R. F. Subotnik (Eds.), *Remarkable women: Perspectives on female talent development* (pp. 263-280). Cresskill, NJ: Hampton Press.
- Sulloway, F. (1996). Born to rebel. New York: Pantheon.
- Vartanian, O., & Goel, V. (2007). Neural correlates of creative cognition. In C. Martindale, P. Locher, & V. M. Petrov (Eds.), *Evolutionary and neurocognitive approaches to aesthetics, creativity and the arts* (pp. 195- 207). Amityville, NY: Baywood.
- Wallach, M. A., & Kogan, N. (1965). *Modes of thinking in young children*. New York: Holt. Reinhart, & Winston.
- Wallas, G. (1926). The art of thought. New York: Harcourt Brace and World.
- Ward, T. B., Kolomyts, Y. (2010). The Cambridge Handbook of Creativity. In J. C. Kaufman& R. J. Sternberg, (Eds.), *Cognition and Creativity* (pp. 93-112). New York, NY: Cambridge University Press.
- Weber, S., & Mitchell, C. (2004). Visual artistic modes of representation for self-study. In J.J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. L. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 979-1037). Dordrecht,: Kluwer Academic Publishers.
- Weisberg, R. W. (1999). Creativity and knowledge: A challenge to theories. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 226-250). New York: Cambridge University Press.

- Weisberg, R. W. (2004). On structure in the creative process: A quantitative case –study of the creation of Picasso's Guernica. *Empirical Studies of the Arts*, 22, 23-54.
- Weisberg, R. W. (2006). Creativity: Understanding innovation in problem solving, science, invention, and the arts. Hoboken, NJ: Wiley.
- White, R. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333.
- Wong, Y., Siu, K. (2012). A model of creative design process for fostering creativity of students in design education. *International Journal of Technology and Design Education*, 22 (4), 437-450.

APPENDICES

APPENDIX A

RESEARCH SCHEDULE

Research Schedule: data includes; (6) written narratives/ creative autobiographies, (4) 30minute interviews- transcribed, completed self- portrait (graphite drawing), 10 page correlative reflective journal of creative process.

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
August 1 st 2014	Autobiography/ The Aesthetics of Poverty	Free- write; explore memories of my childhood that involve creative seeing and thinking.	1.5 hrs.	Started with strong visuals that stuck out to me.
August 2 nd 2014	Autobiography/ The Aesthetics of Poverty	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	35 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
August 8 th 2014	Autobiography/ The Aesthetics of Poverty	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	1.5 hrs.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
August 9 th 2014	Autobiography/ The Aesthetics of Poverty	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking. Edit narrative; clean up grammatical errors/word choice etc.	45 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
August 15 th 2014	Autobiography/ The Aesthetics of Drawing	Free- write; explore memories of my childhood that involve creative seeing and thinking.	1 hr.	Started with strong visuals that stuck out to me.
August 16 th 2014	Autobiography/ The Aesthetics of Drawing	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	1 hr. 20 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
September 5 th 2014	Autobiography/ The Aesthetics of Drawing	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	30 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
September 6 th 2014	Autobiography/ The Aesthetics of Drawing	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking. Edit narrative; clean up grammatical errors/word choice etc.	35 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
September 12 th 2014	Autobiography/ The Aesthetics of Exploration	Free- write; explore memories of my childhood that involve creative seeing and thinking.	1.5 hrs.	Started with strong visuals that stuck out to me.
September 13 th 2014	Autobiography/ The Aesthetics of Exploration	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	30 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
September 19 th 2014	Autobiography/ The Aesthetics of Exploration	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	1 hr. 15 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
September 20 th 2014	Autobiography/ The Aesthetics of Exploration	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking. Edit narrative; clean up grammatical errors/word choice etc.	35 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
September 26 th 2014	Autobiography/ The Aesthetics of Burnt Cookies	Free- write; explore memories of my childhood that involve creative seeing and thinking.	25 min.	Started with strong visuals that stuck out to me.
September 27 th 2014	Autobiography/ The Aesthetics of Burnt Cookies	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	15 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
October 3 rd 2014	Autobiography/ The Aesthetics of Burnt Cookies	Edit narrative; clean up grammatical errors/word choice etc.	20 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
October 4 th 2014	Autobiography/ The Aesthetics of Teaching	Free- write; explore memories of my childhood that involve creative seeing and thinking.	1 hr. 35 min.	Started with strong visuals that stuck out to me.
October 10 th 2014	Autobiography/ The Aesthetics of Teaching	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	40 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
October 11 th 2014	Autobiography/ The Aesthetics of Teaching	Edit narrative; clean up grammatical errors/word choice etc.	20 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
October 17 th 2014	Autobiography/ The Aesthetics of Motherhood	Free- write; explore memories of my childhood that involve creative seeing and thinking.	50 min.	Started with strong visuals that stuck out to me.
October 18 th 2014	Autobiography/ The Aesthetics of Motherhood	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	25 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
October 24 th 2014	Autobiography/ The Aesthetics of Motherhood	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	1 hr.	From these visuals I was able to map out an experience and construct a narrative from visual memory.

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
October 25 th 2014	Autobiography/ The Aesthetics of Motherhood	Further develop; continue to construct a narrative of childhood memories of creative seeing and thinking.	15 min.	From these visuals I was able to map out an experience and construct a narrative from visual memory.
October 31 st 2014	Autobiography/ The Aesthetics of Motherhood	Edit narrative; clean up grammatical errors/word choice etc.	40 min.	Further developing language to accompany my memories and visual sights from my childhood. Also, edited work to flow and create a scene around the visual experience and narrative.
November 1 st 2014	30-minute Interview	Recorded verbal response to pre-written interview questions	30 min.	Develop a deeper personal understanding of creativity through self-interview.
November 7 th 2014	Transcribe	Transcribe recorded interview	15 min.	Transcribe data to be coded.
November 8 th 2014	Transcribe	Transcribe recorded interview	35 min.	Transcribe data to be coded.
November 15 th 2014	30-minute Interview	Recorded verbal response to pre-written interview questions	30 min.	Develop a deeper personal understanding of creativity through self-interview.
November 21 st 2014	Transcribe	Transcribe recorded interview	1 hr.	Transcribe data to be coded.
November 22 nd 2014	30-minute Interview	Recorded verbal response to pre-written interview questions	30 min.	Develop a deeper personal understanding of creativity through self-interview.
November 28 th 2014	Transcribe	Transcribe recorded interview	25 min.	Transcribe data to be coded.
November 29 th 2014	Transcribe	Transcribe recorded interview	20 min.	Transcribe data to be coded.
December 5 th 2014	30-minute Interview	Recorded verbal response to pre-written interview questions	30 min.	Develop a deeper personal understanding of creativity through self-interview.
December 6 th 2014	Transcribe	Transcribe recorded interview	1 hr.	Transcribe data to be coded.

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
December 19 th 2014	Drawing	Develop drawn visual representation of self - portrait in graphite medium	1hr. 20 min.	Consider line, form, value, shape, and texture
December 20 th 2014	Journal	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
January 2 nd 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	2 hrs. 15 min.	Consider line, form, value, shape, and texture
January 3 rd 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
January 9 th 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	1 hr. 25 min.	Consider line, form, value, shape, and texture
January 10 th 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
January 16 th 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	10 min.	Consider line, form, value, shape, and texture
January 17 th 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds

Date;	Title/ Task Completed;	Objective;	Duration of Time Spent;	Notes;
January 23 rd 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	35 min.	Consider line, form, value, shape, and texture
January 24 th 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
January 30 th 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	40 min.	Consider line, form, value, shape, and texture
January 31 st 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
February 6 th 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	25 min.	Consider line, form, value, shape, and texture.
February 7 th 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds
February 13 th 2015	Drawing/ Self Portrait	Develop drawn visual representation of self - portrait in graphite medium	15 min.	Consider line, form, value, shape, and texture
February 14 th 2015	Journal Entry	Record detailed written journal entry of all creative thought processes during developing the drawing	25 min.	Consider all creative thoughts as I work with special interest to shifts in thinking as the process unfolds

APPENDIX B

WRITTEN AESTHETIC NARRATIVES

The Aesthetics of Poverty

My father drove an old blue Ford truck. Or was it a Chevy? My visual memories often lend themselves to vibrant colors, hues, shapes, lines, and not necessarily extraneous details. Silver shiny trim adorned the front grill and wrapped around bright yellow mounted reflectors (the passenger side reflector was cracked and it resembled the shape of the state of Tennessee). The tires were gray and traveled and the doors were big and heavy. The interior was worn exposing bright yellow stuffing that protruded from the seats. My dad let me drive once, on his lap, on an old dirt road. The steering wheel was thin with a massive circumference (at least to my young hands). I could hardly see over the dash and the straight path of dirt seemed to go on for miles. Dust settled around the truck as we drove. Nothing hung from the mirror.

When I search the depths of my first visual memories, colors play an important role in the aesthetic awareness of my childhood. I was quiet and always watching. Observation was a sport, a sort of learning. I was never given many opportunities to learn other than to observe the world around me. I believe my parents were absent in a lot of my learning, leaving me to create. I imagined a world for myself and developed my own autonomy. I reveled in assembling the rules of my surroundings. I used to play eye games sitting on my mother's lap of the passenger seat of our blue pick-up truck. I would close one eye and try to focus in and out the blurred images of figures, focusing the same way a camera lens would. I would squint as hard as I could until all I could make out were shapes, colors, and patterns that burned into the back of my eyelids. My father said that my eyes were "blue": my mother said they were a "bluish green".

My family lived in a trailer park. We resided near the end of the block in a two bedroom trailer. I was the middle child and the only girl. My parents loved each other dearly. My father drove a cab and my mother worked at a retirement home. People used to say she worked at "the old folks home".

I visited the trailer park several years ago and my adult-self failed to see the beauty of my surroundings as I once did as a child. It resembled that of squalor, not much suitable for dogs. The walls of the trailer were dirty and rust from the screws that held the thin tin walls together bled bright orange and copper. Beer cans and cigarette butts scattered throughout the lawn. A rickety splintered porch trailed to a beaten old door. The weeds grew high enough to almost overcome the unit and a few feral cats played, stopping to watch as I walked around stunned at my past. My eyes welled as I come across the spot where I used to play; a sad site, nothing of interest, nothing of pride or admiration, nothing if not for perception.

As a child, that spot was a kingdom. The worms in the dirt knew my mood, the plants that grew nearby all had first and last names, the stray dogs and feral cats had souls of immense beauty. That tiny plot of land; dirt, grass, a bit of shade, was the beauty I knew of the world.

One summer, my world began to revolve around a bright orange tabby cat that used to come around. She was larger than most of the other cats, and they all seemed to bow in her

presence, she demanded my attention. She was quiet but, direct and never ran from even the dogs. We were friends and I named her Sunny. My mother would often fill a bowl of milk or scraps for the strays, Sunny had first dibs. My mom surprised me one day and bought a bag of cat food from the dollar store, she said, "a mama cats gotta eat". As I learned that she was to have kittens, my relationship with her only strengthened. She became a project, a way for me to nurture and care. She would let me hold her and purred loudly in my arms, the dirty cuffs of my pink plastic coat accented her tiny pink wet nose. I inspected her face often, taking in all of the natural beauty that was a creature preparing to give life to the world. I would roll back her soft ears, noticing the movement of her fur and look deep into the striations of green and yellow in her eyes, I would open her mouth and note her pearl white teeth and pink sand paper tongue, I just liked to look, the way a new mother would inspect her new born baby, and in that same way, she was visually perfect to me.

For the last few weeks of that summer, I tossed and turned in my bed. I slept next to my little brother and he was always awake, asking questions, poking, fidgeting. I tried to ignore him. I had more pressing matters to attend to. All I could think of; "What would her kittens look like? How many would there be? What would they need? I decided their names would be: Marty, Texas, Pumpkin, Oscar, and Daisy. I constructed paper collars and colored each one a different color with the crayons my mother got from the old-folks home. She said; "they were for kids that were there to visit their grandmas and grandpas but, they won't miss one box of crayons". I agreed.

My mother put a cardboard box and a bright green towel in the old leaning shed where we kept the old blue pick-up. The kittens came in the middle of the night. When I woke up, they were there. All perfect. There were five, just as I had anticipated, and I recited the names one after the other, caringly pronouncing each kitten as if I were knighting them for knighthood. I felt really happy, like I had received a gift, like I was the only one in the world getting to experiencing five little kittens in my life.

A few months had passed, Sunny had left and never returned. I heard my mom tell my dad that she might have gotten hit by a car. My heart sank, but I pretended she was somewhere with a boy cat, and in love, and as happy as her kittens. Marty, Texas, Pumpkin, Oscar, and Daisy grew bigger, and always playful, always there for me when I needed them. I would tell them stories about their mother, and spend lazy evenings caring for them, loving them, believing we would all grow old together.

One cold morning that winter, Sunny's five kittens were gone too. They never returned. My young mind believed they ran off to join the cat circus on a warm sunny beach.

I later found out that the young cats crawled into the engine of the blue truck, and my dad started the truck to drive to work that cold December morning. The image of that old bluepick-up

truck (maybe a Ford but, possibly a Chevy) sometimes haunts my dreams, I don't let the extraneous details bother me, I drive a Subaru.

The Aesthetics of Drawing

I used to trace my finger along the edges of an old wooden music box at my grandmothers house. I would spend hours inspecting its mechanics and appreciating its simplistic beauty. It was a small simple wooden box with a shiny finish, loose rusted hinges, and four small black protruding knobbed legs. On the cover of the box was a painted image of a single yellow Chrysanthemum. Underneath the belly of the box was a strong short winding key and a brittle label split in half, that read; *Blaue Donau-Blue Danube*. Inside was a glass plate that encased a small music player, when I wound the box I would watch as the tiny metal stems flexed against the teeth of the dimpled cylinder creating perfect synchronized chime after chime of composition. The aesthetics of the inner and outer workings of this box was nothing less than pure intrigue, the neatness of the box, the sheer beauty of both visual and auditory delight kept me overtly curious. My grandmother kept the box on her dining room table.

Every weekday from 6:30 am to 4:15pm I was cared for by my grandmother, until about the age of six. My mother would leave me in the morning, her scrubs freshly washed and smelling of detergent crisp from drying in the sun, to go to work at the nursing home. Every morning as I entered my grandmother's house, the dining room visible from the front door, my eyes would dart immediately to the dining room table and I would watch intently as if the music box where going to lift from the table and start to speak. Even when my mother thought I was asleep and carried me inside, my head rested on her shoulder, I would quickly and quietly peek through my strands of blonde hair and make sure the music box was present. I'm not sure if I can explain my fascination with the music box itself or my daily habit of taking its inventory of attendance, but it was comforting to see it there all my life. It was lovely and consistent.

I once asked my grandmother what the words on the underside of the music box meant. She studied it through thick horned rim glasses and with an equally thick Lousiana accent, said "It looks to be French, and I reckon it's the tune that it plays" I then asked what the song meant, and she said "Well, I don't know but,... I magin it's a place as beautiful as the tune".

She was warm. I could almost see a humble glow radiate from her being. She lived simply but, loved with conviction and truth. She lent a piece of her soul to everyone she met and she created all that she had. She relied on only the sky to water her fruits, vegetables, and herbs, She raised chickens, pigs, cows, horses, and geese, she spoke to plants and animals as if they could understand her. She labored relentlessly without so much as a whimper for her woes. She made all of her own clothing from various scraps. All of her dresses were the same structure but, would encompass a variety of different patterns, they were functional and beautiful. She quilted. She would spend days, months, years on hand stitched quilts of beautiful intricate colors and patterns. She was the first artist I had ever known. She was like meeting the wisest of persons, someone that had traveled the earth and learned every secret to life but, she never drove a car, never traveled outside the state of Lousiana, and couldn't explain the meaning of Blue Danube, and she was all I knew of creating beauty.

The Blue Danube is a waltz by the Austrian composer Johann Strauss composed in 1866 and performed in 1867 at a concert of the Wiener Männergesangsverein (Vienna Men's Choral Association). The Blue Danube is the common English title of; An der schönen blauen Donau, German for "By the Beautiful Blue Danube". Danube is a river in Central and Eastern Europe, the European Union's longest and the continent's second longest after the Volga. It originates in the town of Donaueschingen, in the Black Forest of Germany and passes through or touches the borders of ten countries. At the age of eight my father was stationed in Germany during the end of the cold war. We would often camp along the bank of the Danube. My grandmother was right; "it's a place as beautiful as the tune".

Much of my time at my grandmother's house consisted of drawing at the dining room table as the music box spouted The Blue Danube. I was creating and the music box was in attendance, my grandmother sat two feet away in an old cowhide rocking chair and quilted and hummed the tune to The Blue Danube. She used to say that every drawing mark I made was as sweet as the tune of The Blue Danube.

My grandmother didn't have drawing paper or coloring books. She afforded me every surface to draw on that she could conceive. Every scrap of paper she could find; torn canvas from animal feed, wooden crate pallets, newspaper, paper bags, paper towels, toilet paper. I drew with carpenter pencils, pieces of charcoal, burnt sticks, and rocks found in the red clay of the earth. She would even fill pots with sand or flour or sugar and spread it out on the table, and I would draw with sticks or my finger, creating lines, shape, and space among the granules. Once a month my grandmother hitched an old two seat horse drawn cart to the horse, she called Lou Boy. He was sweet faced and always chewing, he was dark brown with black hair and had one white stripe down his nose. She would load all of her waste and trash into the cart and we would ride, myself on her lap, several miles down the dirt road to a dump where trash was burned. While we were there she would hunt for scraps of paper or fabric and cloth. Cereal boxes turned inside out, discarded card board, or wrapping paper.

Back at the dining room table, I drew, she quilted and, we listened to The Blue Danube and my creative thirst felt quenched. I drew everything I could think of; houses chairs, flowers, lakes, mountains, dogs, trains, people, bugs, dreams, the music box, and how I imagined The Blue Danube might look.

October 2009, I turned twenty six years old and was teaching art in Montgomery Alabama, my mother called me to say that my grandmother was ill. She was living in the nursing home where my mother once worked. I drove with my mother to see my grandmother. While in the car my mother warned that my grandmother suffered from dementia and may not remember my face. I hoped that she would.

Before traveling to the nursing home we stopped at her house and met with my aunt and uncle, we walked around the outside of her house. Her soul still crept among the overgrown

vegetation, rusted lawn furniture, and dried bird bath. It was like a museum overrun by the natural world, remnants remained of a life well lived.

As soon as we walked in the front door my eyes darted to the dining room table. And it was there. I tried to soften my sigh of relief and hide my excitement for seeing the beloved music box that accompanied my creative play as a child. Inside I was overjoyed as if I had been reunited with an old friend. I coolly and nonchalantly walked toward the table and sat down. I stared at the box for a moment as my aunt said, "take whatever you like, we are going to donate everything that is left to the church before we sell the house". I casually picked up the box and gave it four hard turns. Twenty years had come and gone, my eyes welled and my heart ached. I let the box finish its round of The Blue Danube and I put the box in my coat pocket.

Family had ransacked her home, the walls revealed faded discoloration of wood where Louisiana folk art had once hung. Her chest of quits was empty. Antique furniture, historic collectibles, nostalgic tools were no longer present. All the pieces to my grandmother's life that had once assumed the role of function to ensure survival; would now accent homes as works of art. I walked through the house and found a box, affixed atop was a pair of worn pink Minnie Mouse sneakers. Inside the box was scraps of paper and cardboard, I assumed was a burn pile until I noticed the pencil mark on the back of a box of frosted flakes. My mouth started to quiver, there must have been 12 boxes of nothing but my drawings on various forms of scrap paper. I couldn't speak and a knot formed in my throat. We left shortly after and made our way to the nursing home.

She didn't recognize my mother and it took her several minutes to deduct that we were family. My mom spoke and said, "Mama, it's me... Nancy, your youngest daughter and this is my daughter; Tisha. She looked for a long hard pause and then asked my mom if she was there to clean the sheets.

My mom left the room to speak with a nurse about her condition. I sat next to my grandmother and she asked me a few incoherent questions about medicine and dinner. I stared at her. I was trying to comprehend the deterioration of a person, slow descent from going from a woman that provided everything for herself, so composed so strong, to so helpless and unable.

I took the music box from my coat pocket and wound it several turns. I placed it on the night stand next to her bed and her eyes slowly crept from the stand to my face. A brief light of recollection shimmered in her eyes. And she asked me, "Are you the one that draws?"

I immediately, and softly, cried hard, my face involuntarily contorted. I looked down and tried to catch my breath. I ran my sleeve along my nose and sniffed hard. I began to shake my head up and down vigorously to let her know that she was right.

Finally, I mustered a few seconds of composure and said; "yes".

I waited, my eyes moist, my nose full, but finally breathing and said, "I still draw, and I teach drawing... and thank you, thank you so, so, so much. The so's of my words were quick and muffled, I had started to cry hard again. I bent my head and felt my voice still shaking. I felt a hard knot in my throat from fighting back the tears. The Blue Danube continued.

My mom came in and handed me a soda. The moment had gone and the Blue Danube slowly began to fade. I could still hear it playing in my head and it was sweet and it was comforting.

My grandmother passed away in 2009 at the age of ninety two. I owed every fiber of creative formation I possess to my grandmother. She encouraged my marks. She provided every mean to create, to me. I witnessed her care, her craft, her regard for creating, reusing, living, and I was inspired to make and to draw. It would be no overstatement to proclaim that she taught me to see.

The Aesthetics of Exploration

As a child, I grew accustomed to drawing at my grandmothers kitchen table, but rapidly I began to draw everywhere I could obtain a workable drawing surface; on a bale of hay in the first horse stall of the barn at my grandmothers farm, a small wooden bench at the end of the dock on the lake behind her house, on the night stand in my bedroom, on a small wooden vanity near the window of my bedroom, a desk made of plywood and cinderblocks on our back porch, in my dad's truck, in the front seat of my dad's cab, the rusted table in the overgrown garden in our back yard, the picnic table underneath a shady tree, the booth at the 39 cent hamburger stand, the floor in our living room, the coffee table in our living room, underneath and on the kitchen table, underneath and on the dinning- room table, any park bench, and the small cubby of room just beneath the bottom of the stairs.

My drawing was self- taught, I was never given any instruction other than by my grandmother that supplied the materials and taught me to look at ordinary objects with a curiosity. In fact I hadn't met anyone that liked to draw, much less someone to offer a formulated critique of my process. I was simply encouraged and in love with the feeling it provided me.

And then, when I turned five years old, I went to school.

My name written in black marker on a pale green index card taped to a small tan desk with metal legs. My chair was hard brown plastic, comfortable to me. Inside my desk there was a work book, and a box of crayons, pencils, scissors, and glue. I felt nervous. Our desks were in rows, four desks across the front of the classroom and six desks along the side. I sat in the first row near the window, third desk down. The light flooded the room. I would scan the room full of occupied desks, enthralled by children, just like me. We were called by name to assemble a line at the doorway of the class. Girls with patterned dresses and boys with loose laces on their sneakers, we listened closely for our names to be called. I was quiet. One of my earliest memories of school was taking a trip to the library, we had gone to the library before, and I knew the routine. We were allowed to scour the library and search for a book to take home. On this particular trip, I found what ultimately lead to my obsession for perfecting form. I found a book by the artist and illustrator Lee J. Ames (Lee Judah Ames) the book was titled; *Draw 50 Famous Cartoons*. The book was printed bright yellow and adorned with red and green lettering. It was used but, in good shape.

Before Lee Ames, I drew what I felt, and I drew without a skeleton or framework. I just looked and I just interpreted the sight based on how I thought it appeared. If I were drawing the shape of things, I started at a point and looked back and forth from object to pencil as my pencil drove along the paper. Needless to say this book opened my eyes to a formula for representing a form and making it smooth, effortless, and precise.

For the following six months, after discovering that drawing could be broken down into a reliable set of lines placed strategically one on top of the other, I continually checked out the Lee

Ames book from the school library. I carried the Lee Ames drawing book around with me, as if itwere a manual to life. I clung to it day in and day out to my chest, to and from school, in the car, to the park. I kept a few sheets of loose leaf paper tucked inside the book and a pencil in my ear. I practiced every step and perfected each line. I created a plan for myself to draw each character fifty times. That's 2,500 characters in all. Popeye, Scooby Doo, Felix the Cat, Fred Flintstone, Wilma Flintstone, Archie, Jughead, Dagwood, Blondie, and Mr. Lockhorn, among 40 more characters. The outside jacket began to fray and the plastic coat started to peel. On the inside jacket was a brief bio of Lee J. Ames. I asked my mother to read it to me so many times, I nearly could recite it word for word: It said that James was an American Artist (that's what I was, I suppose) born Jan 18th 1921 (boy, he was old) in Manhattan, New York (Statue of Liberty) at the age of 18, he began illustrating for Disney (Disney!) He had published more than 20 *Draw 50* books (you mean there are more of these!) and he now lived with his wife in California (I bet if he could see my work, he would think it was the best he had seen, he might even give me job).

I recently read the prelude to this book and was just as inspired today as I was then, Ames (1979) stated:

To The Reader

This book will show you a way to draw many different cartoons. You need not start with the first. Choose whichever you wish. When you have decided, follow the stepby-step method shown. *Very lightly* and *carefully*, sketch out step number one. However, this step, which is the easiest, should be done *most carefully*. Step number two is added right to step number one, also lightly and also very carefully. Step number three is sketched right on top of numbers one and two. Continue this way to the last step. The last step, and the last step only, should be drawn in firmly.

It may seem strange to ask you to be extra careful when you are drawing what seem to be the easiest first steps, but this is most important because a careless mistake at the beginning may spoil the whole picture at the end. As you sketch out each step, watch the spaces between the lines, as well as the lines, and see that they are the same. After each step, you want to lighten your work by pressing it with a kneaded eraser (available at art supply stores).

When you have finished, you may want to redo the final step in India ink with a fine brush or pen. When the ink is dry, use the kneaded eraser to clean off the pencil lines. The eraser will not affect the India ink.

Here are some suggestions: In the final steps, even when all seems quite correct, you might do well to hold your work up to a mirror. Sometimes the mirror shows that you've twisted the drawing off to one side without being aware of it. At first you may find it difficult to draw the different shapes, or just to make the pencil go where you want

it to. Don't be discouraged. The more you practice, the more you will develop control. The only equipment you'll need will be a medium or soft pencil, paper, the kneaded eraser and, if you wish, pen or brush and India ink-or a felt-tipped pen- for the final step.

The first steps in this book are shown darker than necessary so that they can be clearly seen. (Keep your work very light.)

Remember, there are many other ways and methods to draw cartoons. This book shows just one method. Why don't you seek out others ways- from teachers, from libraries and, most importantly...from inside yourself?

Lee J. Ames

To the Parent or Teacher

"David can draw Popeye better than any of the other kids!" Such peer acclaim and encouragement generate incentive. Contemporary methods of art instruction (freedom of expression, experimentation, self-evaluation of competence and growth) provide a vigorous, fresh-air approach for which we must all be grateful.

New ideas need not, however, totally exclude the old. One such is the "follow me, step-by-step" approach. In my young learning days this method was so common, and frequently so exclusive, that the student became nothing more than a pantographic extension of the teacher. In those days it was excessively overworked.

This does not mean, however, that the young hand is never to be guided. Rather, specific guiding is fundamental. Step-by-step guiding that produces satisfactory results is valuable even when the means of accomplishment are not fully understood by the student.

The novice with a musical instrument is frequently taught to play simple melodies as quickly as possible, well before he learns the most elemental scratchings at the surface of music theory. The resultant self-satisfaction, pride in accomplishment, can be a significant means of providing motivation. And all from mimicking an instructor's "Do as I do."

Mimicry is a prerequisite for developing creativity. We learn the use of our tools by mimicry. Then we can use tools for creativity. To this end I would offer the budding artist the opportunity to memorize or mimic (rote-like, if you wish) the making of cartoons- cartoons he has been anxious to be able to draw.

The use of this book should be available to anyone who *wants* to try another way of drawing. Perhaps, with his friends' encouragement, "David can draw Popeye

better...," he will be persuaded to continue, to experiment, and finally to create his own cartoon style.

Ames, Lee J. (1979). Draw 50 famous cartoons. New York: Broadway Books.

The Aesthetics of Burnt Cookies

In college I majored in studio art. I went off to school with the expectation that I was going to find myself as an artist. Dreams formed from a rented out closet, two block walk to campus in the cold upstate New York winter. I felt creative and confident. Unfortunately I believe college tainted much of my love for the discipline. I had always worked under the premise that what I created was great, it was natural and it represented who I was and where I came from. I loved doing it. Formal critique hardened my heart.

I concentrated in sculpture. I found a powerful and intriguing new medium that sparked my love for creating and offered a unique approach to expression. I poured my heart and soul into my work. I learned several sculptural techniques (welding, modeling, carving, casting, and construction) I worked in various media (wood, plaster, wax, steel, and bronze). I also learned to conceptualize greater cultural agendas. I learned to create with intent and a purpose. I had something to say through my work.

As a senior art student I developed a body of three-dimensional work, that voiced the concerns of the degradation of women in popular media. Much of the work depicted castings of female anatomy accompanied by the visual representation of an animal part that was sought after as sport or considered a trophy (i.e. antlers, tusks, skin, etc.). This combination of imagery was to point out the illicit posturing of the female anatomy within popular media.

In one particular piece, I cast the small of a back in bronze and then attached a welded steel fish tail made of metal pipes and green tattered cloth. The piece hung on the wall as a fisherman might display his prized catch.

I spent countless hours of studio time, often finding a hiding a place in a small corner as security searched the halls before locking the building. The studio smelled like plaster and linseed oil. It was quiet and sounds echoed through the halls. I sketched and worked. I was focused and determined to create a piece that my classmates and professors could truly appreciate. I wanted this piece to be perfect and when I was finally done I stood back and admired my work, I was done, and I accomplished what I had set out to achieve. I liked the work and I was excited for the critique.

The next day; my work was verbally ripped to shreds. Students commented on its lack of visual consistency and my professor said the representation lacked a creative edge and sophistication.

I was ashamed, torn up in side, I felt hot and embarrassed my hands were clammy and I found it hard to walk to the next piece to be critiqued. I didn't feel like an artist. The next student to be critiqued led us to where her work was displayed. As we approached the piece hanging on the wall, it came clear that what was there was a cookie sheet with six circular burn marks burned into the pan, two of the spots still held two smoldering black clumps of charred cookie.

As I approached it, I started to feel better about my work. This was terrible. What kind of talent was this? She couldn't make art. She couldn't even bake cookies properly for that matter.

And then my heart sank as the professor professed that he loved it, he spoke of its purity and its relevance to emotion and blah, blah, blah. The rest of the students chimed in to how brilliant the arrangements of visuals were and the concept was like nothing they had ever seen.

I stood there, with my mouth open, confused, perplexed. Angry, angry at art. I felt betrayed. I didn't care what the consensus of the room was: I'd never burn cookies.

The Aesthetics of Teaching

My first year teaching art, I taught at a small catholic school in Barre Vermont, and on my desk was a large teacher's planning calendar. Each day on the calendar was lined for room to write plans, attendance, and daily duties. The calendar spanned the length and width of the desk with just enough room for a pen holder and a round crystal paper weight at the top. The pastel hues of watercolor splatter adorned the top right-hand corner of the 1stpage. Underneath the stain read; *August 2006*, in Lucinda Handwriting, and underneath that a Greek proverb that read, "All things good to know are difficult to learn".

October struck me. The leaves were golden orange and brilliant reds, a sea of endless visual warmth, but the air was cool. Kids didn't care, they played kickball, sometimes no coats, frozen noses, catching colds. October read; *October 2006*, and underneath a new quote: "Imagination is more important than knowledge, knowledge is limited. Imagination encircles the world" (Albert Einstein, Glimpses of the Great).

Every teaching morning of October 2006, I read the Einstein quote. I reminded myself that I was doing a service to my community. I was transitioning between college student and adult. I reminded myself that I was a product of a good imagination, I'd never considered myself to be a knowledgeable person but I could imagine with ease. My young art teacher self, clung to the belief that I could make a difference and develop an understanding for creative, imaginative curriculum, young art of substance. In November, I ex-acto- bladed the Einstein quote from October, and taped it onto every following month in the calendar.

One morning in late February I taught a lesson on figurative collage and the late works of Henri Matisse to a group of 2^{nd} graders. At my desk, I sat as a young student watched intently my ability to cut and paste, royal blue juxtaposed to green and white. When I was done the student kept a gaze on my desk as I watched him mouth the words of the quote under his breath.

Still he stared, lifted his eyes and said, "What does that mean?"

I paused and then started, "Imagination is something you create or make with your hands or your heart and your great mind....that's....well it's more valuable than just,....uh, you know, knowing things".

He stared.

I started again, "If you think about it, it just makes sense, I mean...its Einstein...he was a really smart guy".

He stared for a moment longer (kind of studying my face) and then said, "Can I use the bathroom?"

I smiled and nodded my head. Later that day the quote still looked at me, every teaching day of the year.

Not long after that, I googled other Einstein quotes, and another one that particularly stuck- out to me was one in which Einstein claimed that no one understood him but, everyone seemed to like him. I considered the original quote. I understood, Right? It was as clear as a bell. *Knowledge* is just the ability to regurgitate facts with no solid foundation for where they come from- it is essentially the work of a machine but, *imagination* is human, it is raw, it is the skill, the talent, and the invaluable ability to create something new, to innovate and create something wonderful for the world to enjoy. I was convinced that I understood.

Research, both qualitative and quantitative, is the path to gaining empirical evidence and calculated clarity to what we may have known to be true and to disprove speculations. Proper inferences can be justified based on detailed and informed accounts of specific human phenomena and their hypotheses.

Human phenomena observed in its natural form, allows us to ascertain raw human interaction. The hearts of our souls bleed for the secrets of our dreams. The ability to imagine is the ability to perceive of various truths.

Up until recently I had been aware of two major truths in my life:

1. Never risk the risk of not risking. (The imaginative process consists greatly of the ability to imagine the possibilities of your actions and risk everything) Embrace opportunity, no matter how small and always follow your heart. Welcoming intuition has perhaps not always served me best but, it has empowered me to feel control over my own destiny and harness my ambitions. In the end- I've gained valuable insight.

2. There is no force greater than love. (Imagination grows strong within those who love deeply). Opening our hearts, opens the mind up to new possibilities.

The third truth recently became aware to me upon hearing the profound philosophical ideals of my 3 year old:

3. In her words "People are just people". (Never be too absorbed that you can't imagine your life in the shoes of another). In times when your faith in humanity is shaken and your ability to perceive the actions of human kind is beyond reproach, consider that their actions are merely a response to the environment in which they have adapted. It has been said that within the creative development of children lies the beating heart of imagination. Children have the ability to love without criticism, and they are among the highly imaginative minds of our scope. They believe without doubt. They are open, they absorb the world with a thirst and desire to discover but, lack the judgment to impose skepticism. The imaginative nature of children warrants our loved attention and care. If given the proper opportunity a child can imagine a place, a notion, an idea that could eventually impact the truths we know and alter or perceived speculations.

With that truth I now resourcefully conclude, and better understand the Einstein quote. I still have that very tattered, stained, scotch taped quote now labeled on the inside of an 8 by 12 marbled teacher manual. I teach college students now. I teach young teachers that aspire to instill creative thought and imaginative works to a new generation of young artists. And when I think about it, I imagine; "It just makes sense".

The Aesthetics of Motherhood

I wasn't ready for this. The car flew down the interstate, passing, bobbing, and weaving through traffic. There was silence and anticipation among the passengers. It was dark outside. Inside the car, faces and colors were muted, illuminated by the green digital glow of the console. My head tilted, glaring out of the passenger side window. My heart was on fire and my mind was drowning. Lights passed; white, green, red, and yellow glaring streaks in the black night. The glass on the window was cold and soothing. My mother spoke but, her words were muffled. I was in my own head. We had arrived.

I wasn't ready for this. I was wheeled into the hospital and sooner than I knew there was a baby. She was small, pink, squirming, grasping, living, and wanting. She was so small, so foreign; her fingers wrapped around mine, her fingernails clenched the size of lentils but, her eyes the size of quarters fixed upon her newly shaped face. A face I would look upon every day for the rest of my life and in my dreams for years to come. I inspected her all over, I had wondered for months what this person living inside of me looked like, and now I finally got to see, and touch, smell, and hear, and love. It was as if I was seeing my own heart beating outside of my body. I stared affixed upon this tiny unknowing being. Nothing could have broken me from my gaze. Her new skin smelled sweet, and her hair was too fine for my callused fingers to interpret. My senses were overwhelmed and my mind could in no way comprehend what I was witnessing. She had arrived

I wasn't ready for this. After the commotion of family and friends, of well wishes and gifts, of nurses and pediatricians, of nutrition specialists and photographers for pictures to remember, the hospital room fell silent. A tornado of voices and information had come and went, now so still, and I welcomed the calm. The room was a neutral sterile gray, except one beam of shallow light that shined through the window. The ray of light was strong and intense as it peeked through the sea foam green curtains and slowly shifted to a muted tint that lay graciously along the side of her silhouette. My life, my situation was riddled with holes, of imperfection but, holding her for a brief moment, I felt perfect. I felt a pin prick of inspiration starting to rupture, as if I needed to capture the moment with meaning. I grabbed a napkin and a blue ball point pen from the hospital tray and started to sketch her form. Perhaps an anxious reaction to an event no longer in my control, perhaps it calms an uneasiness and a fear growing inside me that I may be an imperfect mother, perhaps it was a way to know what I struggled to understand, perhaps I could better understand the complexities of the situation if I could represent it with a process that I knew and loved all so well. The blue ink saturated the napkin but represented her with a radiant truthfulness. As I continued to draw her I concentrated on every mark and kept my focus on her shift in value and tone. Every tiny feature and extremity required a delicate touch of the pen to napkin. As I worked, focused, I thought of my duty to this person, as if all of my own needs, my own ambitions for myself began to melt. I started to feel that maybe I could be a mother for her, I would always look out for her, she would have my heart forever and I was finally at that place. I had arrived.

When I was done I clicked the pen and lay it along the finished drawing, she started to move, and I nursed her back to sleep. My mother called and said she was stopping by with more family to see. I welcomed all the love and support and felt comfort. I drifted off to sleep with her spooned inside my arms.

I was ready for this. When I woke, the napkin was gone and in its place was a lukewarm salisbury steak. I cracked a small smile, (so this is what my art is worth). I jokingly said to baby; "I hope you go into business someday". I delicately adjusted my position, so not as to bother her, as if I were shifting a package with a bomb inside. I sat up and played with the food at the end of my fork, moving it around the plate. I thought about the napkin and wondered if instead of being thrown away, it flew out of the window and landed on a mother's windshield, and when she saw it she was reminded of her baby and remembered all of the new love and initial fear she had experienced as a new mother. In the drawing she saw fear and anxiety but also beauty and love. She was also reminded of the swelling of happiness that erupted upon the realization of being a mother. Then she would go home and hug her child graciously. She would later frame the napkin to hang on her wall. She would tell her friends of the time she found the tiny little napkin drawing of a baby, and how the pen marks arranged just so reminded her of the aesthetics of motherhood.

The nurse gave two quick raps on the door interrupting my trailing thought, she entered quickly saying; "your family has arrived".

APPENDIX C

CODEBOOKS 1, 2, AND 3

Structural	Codes				Thematic Codes
Narrative Title	Narrative Topic	Subjects Age/ Gender	Subjects Artistic Pursuit/ Medium	Subjects Environment	Written Narrative
Nar. #1	Topic #1 Topic #2 Topic #3	F(4-5)	P/M 1	Scenario #1	My visual memories often lend themselves to vibrant colors, hues, shapes, lines, and not necessarily extraneous details. I was quiet and always watching. Observation was a sport, a sort of learning. I was never given many opportunities to learn other than to observe the world around me. I believe my parents were absent in a lot of my learning, leaving me to create. I imagined a world for myself and developed my own autonomy. I reveled in assembling the rules of my surroundings. I used to play eye games sitting on my mother's lap of the passenger seat of our blue pick-up truck. I would close one eye and try to focus in and out the blurred images of figures, focusing the same way a camera lens would. I would squint as hard as I could until all I could make out were shapes, colors, and patterns that burned into the back of my eyelids. My eyes welled as I come across the spot where I used to play; a sad site, nothing of interest, nothing of pride or admiration, nothing if not for perception. As a child, that spot was a kingdom. That tiny plot of land; dirt, grass, a bit of shade, was the beauty I knew of the world.

Structural and Theme Codes (Aesthetic Narratives)

Structural	Codes				Thematic Codes
Narrative Title	Narrative Topic	Subjects Age/ Gender	Subjects Artistic Pursuit/ Medium	Subjects Environment	Written Narrative
Nar. #1	Topic #1	F(4-5)	P/M 1	Scenario #1	I inspected her face often, taking in all of the natural beauty that was a creature preparing to give life to the world. I would roll back her soft ears, noticing the movement of her fur and look into the striations of green and yellow in her eyes, I would open her mouth and note her pearl white teeth and pink sand paper tongue, I just liked to look, the way a new mother would inspect her new born baby, and in that same way, she was visually perfect to me.
Nar. #2				Scenario #2	I used to trace my finger along the edges of an old wooden music box at my grand-mothers house. I would spend hours inspecting its mechanics and appreciating its simplistic beauty. Every morning as I entered my grandmother's house, the dining room visible from the front door, my eyes would dart immediately to the dining room table and I would watch intently.
	Topic #2		P/M 2		Much of my time at my grandmother's house consisted of drawing at the dining room table as the music box spouted The Blue Danube. Back at the dining room table I drew, she quilted and, we listened to The Blue Danube and my creative thirst felt quenched.

Structural and Theme Codes (Aesthetic Narratives) -Continued

Structural	Codes				Thematic Codes
Narrative Title	Narrative Topic	Subjects Age/ Gender	Subjects Artistic Pursuit/ Medium	Subjects Environment	Written Narrative
Nar. #3	Topic #2	F(5-6)	P/M 2	Scenario #1	Rapidly I began to draw everywhere I could obtain a workable drawing surface.
	Topic #1		P/M 1		I was quiet. I was always observing, and drawing what I observed.
	Topic #2		P/M 2		I practiced every step and perfected each line. I created a plan for myself to draw each character fifty times.
Nar. #4		F(19- 20)	P/M 3	Scenario #3	I sketched and worked. I was focused and determined to create a piece that my classmates and professors could appreciate.
Nar. #5	Topic #3	F(22- 23)	P/M 1	Scenario #4	I reminded myself that I was a product of a good imagination, I'd never considered myself to be a knowledgeable person but I could imagine with ease.
	Topic #2		P/M 4		One morning in late February I taught a lesson on figurative collage and the late works of Henri Matisse to a group of 2 nd graders. At my desk, I sat as a young student watched intently my ability to cut and paste, royal blue juxtaposed to green and white.
Nar. #6	Topic #1	F(27- 28)	P/M 1	Scenario #1	I inspected her all over, I had wondered for months what this person living inside of me looked like, and now I finally got to see, and touch, smell, and hear, and love. It was as if I was seeing my own heart beating.

Structural and Theme Codes (Aesthetic Narratives) -Continued

Structural	Structural Codes				Thematic Codes
Narrative Title	Narrative Topic	Subjects Age/ Gender	Subjects Artistic Pursuit/ Medium	Subjects Environment	Written Narrative
Nar. #6	Topic #2	F(27- 28)	P/M 2	Scenario #1	I felt perfect. I felt a pin prick of inspiration starting to rupture, as if I needed to capture the moment with meaning. I grabbed a napkin and a blue ball point pen from the hospital tray and started to sketch her form.

Structural and Theme Codes (Aesthetic Narratives) -Continued

Legend:

Nar. #1: The Aesthetics of Poverty, Nar. #2: The Aesthetics of Drawing, Nar. #3: The Aesthetics of Exploration, Nar. #4: The Aesthetics of Burnt Cookies, Nar. #5: The Aesthetics of Teaching, Nar. #6: The Aesthetics of Motherhood

Topic #1: What I observed, Topic #2: How I interacted, Topic #3: How I perceived my observations and interactions

F: Female (age-years old)

P/M 1: observation/recording visuals, P/M 2: drawing two-dimensional form, P/M 3: sculpting three dimensional form, P/M 4: teaching the creative process

Scenario #1: parents as major influences, Scenario #2: grandmother as a major influence, Scenario #3: peers as a major influence, Scenario #4: master artists as a major influence

Codebook # 2 (Reactive-Creativity)

Structural	Codes			Thematic Codes
Narrative	Subjects	Subjects	Positive	
Title	Age/	Witnesses	VS	Written Narrative of Reactions
	Gender	to	Negative	
		Creativity	reaction	
			to	
			Creativity	
Nar. #1	F(4-5)	M, F, S	Pos.,	I believe my parents were absent in a lot of my
			Indiff.	learning, leaving me to create.
				My family lived in a trailer park. I was the middle
				child and the only girl.
Nar. #2		GM	Pos.	I was creating and the music box was in
				attendance, my grandmother sat two feet away in
				an old cowhide rocking chair and quilted and
				hummed the tune to The Blue Danube. She used
				to say that every drawing mark I made was as
				sweet as the tune of The Blue Danube.
				My grandmother didn't have drawing paper or
				coloring books. She afforded me every surface to
				draw on that she could conceive.
				I owe every fiber of creative formation I possess
				to my grandmother. She encouraged my marks.
				She provided every mean to create, to me. I
				witnessed her care, her craft, her regard for
				creating, reusing, living, and I was inspired to
				make and to draw. It would be no overstatement
			~	to proclaim that she taught me to see.
Nar. #3	F(5-6)	T, P, U	Pos.,	My drawing was self-taught, I was never given
			Neg.,	any instruction other than by my grandmother that
			Indiff.	supplied the materials and taught me to look at
				ordinary objects with a curiosity. In fact I hadn't
				met anyone that liked to draw, much less
				someone to offer a formulated critique of my
				process. I was simply encouraged and in love
				with the feeling it provided me.
				I found what ultimately lead to my obsession for
				perfecting form. I found a book by the artist and
				illustrator Lee J. Ames (Lee Judah Ames) the
				book was titled; Draw 50 Famous Cartoons.

Structural and Theme Codes (Aesthetic Narratives)

Codebook # 2 (Reactive-Creativity)

Structural	Codes			Thematic Codes
Narrative	Subjects	Subjects	Positive	
Title	Age/	Witnesses	VS	Written Narrative of Reactions
	Gender	to	Negative	
		Creativity	reaction	
			to	
			Creativity	
Nar. #4	F(19-20)	T, P, U	Neg.,	Students commented on its lack of visual
			Indiff.	consistency and my professor said the
				representation lacked a creative edge and
				sophistication.
Nar. #5	F(22-23)	S	Pos.	In her words "People are just people". (Never be
				too absorbed that you can't imagine your life in
				the shoes of another).

Structural and Theme Codes (Aesthetic Narratives) -Continued

Legend:

Nar. #1: The Aesthetics of Poverty, Nar. #2: The Aesthetics of Drawing, Nar. #3: The Aesthetics of Exploration, Nar. #4: The Aesthetics of Burnt Cookies, Nar. #5: The Aesthetics of Teaching,

F: Female (age-years old)

M: mother, F: father, S: siblings, GM: grandmother, T: teachers, P: peers, St: students, U: unknown

Pos.: Positive, Neg.: Negative, Indiff.: Indifferent

Codebook # 3 (Emotional-Creativity)

Structural	Codes				Thematic Codes
Narrative Title	Subjects Age/ Gender	Subjects Creative Acts	Subjects Source of Emotion	Subjects Emotional Reaction	Written Narrative
Nar. #1	F(4-5)	O, P	Ob., Ac.	Joy Comfort	I felt really happy, like I had received a gift, like I was the only one in the world getting to experience five little kittens in my life.
Nar. #2		0		Comfort	The aesthetics of the inner and outer workings of this box was nothing less than pure intrigue, the neatness of the box, the sheer beauty of both visual and auditory delight kept me overtly curious. I'm not sure if I can explain my
					fascination with the music box itself or my daily habit of taking its inventory of attendance, but it was comforting to see it there all my life.
Nar. #4	F(19-20)	O,D,S	Co., Un.	Joy Insecure Resentful	I felt creative and confident. Unfortunately I believe college tainted much of my love for the discipline.
					I liked the work and I was excited for the critique.
			Ju., Un.		I was ashamed, torn up in side, I felt hot and embarrassed my hands were clammy and I found it hard to walk to the next piece to be critiqued. I didn't feel like an artist.
					As we approached the piece hanging on the wall, it became clear that what was there; was a cookie sheet with six circular burn marks burned into the pan, two of the spots still held two

Structural and Theme Codes (Aesthetic Narratives)

Codebook # 3 (Emotional-Creativity)

Structural	Codes				Thematic Codes
Narrative Title	Subjects Age/ Gender	Subjects Creative Acts	Subjects Source of Emotion	Subjects Emotional Reaction	Written Narrative
Nar. #4	F(19- 20)	O,D,S	Ju., Un.	Joy Insecure Resentful	-smoldering black clumps of charred cookie. As I approached it, I started to feel better about my work.
				Anger	And then my heart sank as the professor professed that he loved it, he spoke of its purity and its relevance to emotion and blah, blah, blah.
					I stood there, with my mouth open, confused, perplexed. Angry. Angry at art. I felt betrayed. I didn't care what the consensus of the room was: I'd never burn cookies.
Nar. #6	F(27- 28)	O,D	Un.	Anxious	My heart was on fire and my mind was drowning.
					My senses were overwhelmed and my mind could in no way comprehend what I was witnessing.
					Perhaps an anxious reaction to an event no longer in my control, perhaps it calms an uneasiness and a fear growing inside me that I may be an imperfect mother, perhaps it was a way to know what I struggled to understand, perhaps I could better understand the complexities of the situation if I could represent it with a process that I knew and loved all so well.
			Co., Un.	Calm	I started to feel that maybe I could be a mother for her, I would always look out for her, she would have my heart forever and I was finally at that place.

Structural and Theme Codes (Aesthetic Narratives) -Continued

Codebook # 3 (Emotional-Creativity)

Structural	Structural Codes				Thematic Codes
Narrative Title	Subjects Age/ Gender	Subjects Creative Acts	Subjects Source of Emotion	Subjects Emotional Reaction	Written Narrative
Nar. #5	F(22-23)	O,T	Co.	Joy Calm	My young art teacher self, clung to the belief that I could make a difference and develop an understanding for creative, imaginative curriculum, young art of substance.
			Be.	Calm	The hearts of our souls bleed for the secrets of our dreams.

Structural and Theme Codes (Aesthetic Narratives) -Continued

Legend:

Nar. #1: The Aesthetics of Poverty, Nar. #2: The Aesthetics of Drawing, Nar. #4: The Aesthetics of Burnt Cookies, Nar. #5: The Aesthetics of Teaching, Nar. #6: The Aesthetics of Motherhood

F: Female (age-years old)

O: Observation, P: Play, D: Drawing, S: Sculpting, T: Teaching

Ob.: Objects, Ac.: Acceptance, Co.: Confidence, Ju.: Judgement, Un.: Uncertainty, Be.: Belief

APPENDIX D

WRITTEN JOURNAL ENTRIES

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- There must be a quat considuation for the subject of interest in creating. When it crues to readistic drawing. The artist is Saying something crucial with the subject they choose to represent. The self portrait as a classic tune forces the artist to look @ Themselves completely objectively. The artist has to consider what the ounall subject says about the work and how they choose to represent it. It took a lot of reflection to come to the conclusion of what I altimately wanted to represent. I changed my und secural times in the process before seeing a vision, a completed idea in my head of what I wanted to create. This idea is strongly visualized in my mind. I can clearly see The entire piece in my mind down to minor details. Starting the work can be our wheleving and a nervous process, The idia of staring at that blank white paper causes stress and tension but, also a village a way of sorting through thoughts. In realistic drawing - form becomes encything. Sorting through line and shape is an important component. You are constantly looking back and torth from image to work using each shape and where it sts in relation to another. My mind is working to problem Solve the composition and get the figure form convect. There is an interal dialogue that exists as you are creating, there are nonents of intense thinking and organization, what tasks need to be accomplished, there are also moments of down time for example, when the work becomes monotenous or mindless (anating - pattern on texture our and own) the process becomes theraugutic, is I bigin to use that time to consider conflicts in my life or sort through difficulties or even just use that five to think of something I read or did on new ideas. I usually work in quite part, sometimes outside noise influences the work in a good as bad way depending - Concentration is essential. As I'm workingon the Self Portrait, I start to note how old I look in the photo, I reflect about my life, I consider the lines of my face the unkept hair, but, I look happy and fullfilled. I have to truly become familian with my face and all of Their flaws when drawing, although I are able to the artistic lisence to erase wrinkles or stim anas, take not too much, because I do want a true represendation of myself. The beginning steps can be trustrating. I have to

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hard to get encything proportional and even harden to WOrk create a resemblance or a likeness. The initial set up is also extremely important to the process, almost in the same way that a surgione working nuds all the tools and light afforded them, as they work they need tools radily available to them, ready to grab as a thought occurs to them. Once a pattern is determined, it is important to consist to the operation, it provides injoyment. For the nost part the process is enjoyable, especially when all is going well, when you feel the work is looking good the process feels anazing but, when the work is not going as planned it can start to tal bad. It starts to ful like distractions are everywhere. This becomes trustrating - you start to resent the work - maybe the idea is stupid, you almost reach a point where you want to give up and start own. All of the good normals usually out arigh this feeling and you tell yourself not to give up, you find the pusistance to follow through and embrace the unknown. As you work there is almost a laying of thoughts that occurs. you are always thinking of each step - one after another, but you are also thinking of distracted thoughts irrelevant to your work-almost like a thurapy. I find myself talking myself through problems or situations that have occured throughout my life, and I kind of talk my way through them - coming to some type of internal asolution. There is always a tear deep inside that the finished product will not be as you wanted or anticipated it to look, you take the risk anyway and find joy in what you have accouplish Sometimes, I find myself having to improvize. If I ful that the piece is not coming together as I had anticipated or something looks afg - I use my oriative license so to speak, to manipulate what I am looking at, it is a freedom to know that your desicion may or may not yield the exact desired effect but, you go for it anyway, in hopes that in the end you will be satisfied I have to try hand to not to get too concerned with the final product. I concurtrate on small pieces at a time, there is no instructions. I have set my own process and in my head I make organization desicions to as to which section cows first, and Then next etc. It is a process of both trendom and restrictions. As I work I certainly feel as through I am in a state of creation and concentration, I gunnally rud quiet and a free

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open mind. I find that I have to switch between truing my hand and letting it truly explore to having to tighter up and represent nacks, very cenetully and precisely. among all of the work there is a relaxed fuling of independence and notivation, almost as if I feel nourished. I experience many highs and lows of great confidence an some of extreme self doubt. I find that even after I have completed a piece I want to go back and change parts, it's difficult to reach that state of fuling done. I find that I trud to rush the process, even as I work, I have to tell myself to reign in my marks-keep more control. Constant observation is truly the lay to successful drawing. I take time to look whole heartedly at the object, I to detail to replicate at minic those visual appeals within the subject. This is one important aspect to drawing - to remeter is That I am not trying to create an exact raplica of what I obsume but, rather an illusion to what I obsume - the vales are different - I believe this is why formally drained draughtsman are easy to differentiate from artists that have taught thenselves to simply observe and then record. There comes an amount of stress when creating something - There is always a great from that it will not and up being what you exactly wanted, this tear can sometimes make it difficult to want to start or begin a piece. The difficult part about drawing is coming to the realization that most of your time will be spent problem solving and thinking citically about your marks, this type of work is a very different process than bling spontaneous. Tuchnical drawing is a great skill in observation and understanding namy of the formal elements of representation The best drawings, even if they are technical indicate Since of personal expression to the line, value, and ourall structure of the work. This type of line can ravely be taught, it has to be tostind - there has to exist a deeper sence of observation and a quater connection to expressing yourself through the use of line. The line really pigins to take on a lite of it's own, the placement seems to be of second nature, almost as it a subconcious phinomina takes place in the act of creating line. as I am creating, I expressing myself but, I an also trying to replicate an inger

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So in that sure, I an technically trying to place the line just as I see it - there is not much room for mativity in this fashion. Trying to draw something with preciseuss is more an act of creating a 2-Dimensional illusion - all though This is the case - there is still alot of effort That can be placed on things like subject - even choosing an object to draw a sence of using the sences of arestrutics - also the subject it self will lead itself to many constations depending on what is chosen. After the oweall form has been established - I have consider - light and dark value - they are a big component to suing. Creating the illusion of the 3-dimension requires a precise laying of medium - knowing how much and how little to apply is a learned process. Finding a unique and intusting way to present the value becomes the creative component to the work. Sometimes if I make a line, that line will start to resurble Some other shape or even a whole new drawing - I also tind that in cuating realistic drawings, I genually have a desire to add some component of surreal element, simply because it would satisfy that orgatine need to make the work my own. I can be some what expressive with just my line in a realistic chawing, it is nore subtle. The line you use and the manue in which it ays upon the paper can speak volumes to the actual work itself and can reveal alot as to the make-up of the artist themselves. I find that my line needs more control, I have to work @ wrangling in my expressive marks and trying to concentrate on getting the line in the correct place - I trud to pay the most attention to this as I am sketching out the skleton underreater, I lay out almost a map of creating exact form and placement - I have 10 indicate where all fights and darks will be eventually - leaving now for each highlight and low light that will exist when I am done. The layering of details is when I begin to lack control, I tend to none too loosely from space to space or section to section without fully developing the work. Slowing down, having patience is certainly part of this process, breaking down images and truly seeing them is a skill set that has to be fastured - usually from a very early age. Taking the time to obsauce objects is just not something that is done on a regular basis by adults, but children often have a natural inclination to just observe everything around them.

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A wajor component to creation is learning the medium you are working Constantly noting the way the graphite reacts to the level in. of pressure on the pencil is a process of observation in it self. to teach. The creative component comes as you find yourself having to make decisions that will effect the drawing / pill as a whole - what divection night you choose the take your line or where night you cuate artain compositional emphasis. The proass in which you takle These creative problem solving abilities informs much of who you are as an artist. The line tunds to come from a place inside of you. I have noticed that depending on my current state of stress on nood - my line tends to dictate that feeling. This level of expression both works to make the work therapeutic and also informs the work itself. It adds a northin level of interest to the work. I also tind my line influenced by outside factors as well - I midia (writings, music, movies) I expose myself to tends to inform the live as well. I find I most often an notivated to work when I tul stressed - giving myself a new work to think about and emuse myself ing tunds to distract me from daily lite. It becomes a way to retreat into something of significance. Being that I tend to work out namy of my anxieties and trustrations within the work, This explains the use of my line that tends to embody more of an expressive nature. Creating the illusion of an object, puson, subject, muse, etc. requires the ability (for me anyway) to look at the thing as a whole -an thin interpret the line - block out all you think you know observe you may think to draw an apple but, you have to let go of what you think you know about something and strictly become a researcher. Next, I have to shift my attention from the big picture and start to disect the work piece by pille. If I want another level of dimension to the drawing I have to take my time to slowly fill in the value of the work section by section. The line drawing is just the tranework where as the value is really the mat, the life to the representation of the subject. There is a peacefulness to working and chaving. Even looking @ drewings and seeing tu marks and lines of others is a placetul event, it requires the ability to stop and Slow down - to breathe to connect to the visual world, there is no pressure - in work for myself, I allow myself space and

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to breath, it's a refreshing moment for myself. The room non-unbal narrative is a nourishing visual to my soul. It just completes a part of me like no other activity. The best thing I can do is draw inspiration tron my past. When considering the best Thing to draw, or puson, or place, I tend to consider what I have done on what I have enjoyed seeing. I am inoudibly nostalgic and surfimental I like to draw objects from my past that relates to nonunts or memorias. For a viewer of the work, they may think that a painting of a music box is just a painting of a music box, but it implies so much more the visual apprenance of the object. As I work, the tends to exist an internal dialogue, I find that different attributes to my personality begin to take own parts of my creative thinking, for example part of me wants to be my organized and analytical, another part of me wants to be free to explore and create without worry of right and wrong, another point of me would to be recognized all I can think of is praise when the work is completed, another part of me is distracted not focused on the task. All of these parts have to work together to complete one tinal work of art. This is alot to struggle w/ intunally - and some how it also persones a peaceful process, it's a sort of labor of love, tune is much appuired pleasure on a number of different leals throughout the creation of the book. I believe that my disive to complete projects and my connitment towards most things in life is a direct reflection of my experiences in creating, there is a bit of a rush or a high that takes place when you first have an idea and begin The develop that idea. I always like to have soruthing In working on, something always waiting for when inspiration strikes. My kitchen table is sorted up drawing supplies, waiting for that tun minutes I can squeeze in during the day. That time is a part of me a med for the place, the controlled creative notivation that strikes. I have read a lot of theories of creativity lately that point to the theory of connections as playing a big role in generating creative ideas. I tind this to be true within myself. I usually have to be provoked by a isual or a memory that leads to expanding further trom one idea to the my. The tinal creatine work always lands itself to a form of detailed Manght, intellectul structure from creatine choices to the next set of creative choices. I big part of this process is confidence, it you

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continually ful good about the work in process and the final product you develop a key notivator to continue, the confidence to continue requires validation by piers or supriors that gives us the sure that what we are doing is as value and importance - this creative confidence is delicate and unfortunately can be crushed at a very early age. Creatitity is more than being either creative or not creative, everyone has creative potential I just has to be natured and understood. Often as I am working I ful either a boost of contiduce on a great insecurity about the work - this can mean the difference of continueing on throwing the work away and ripping it up. Developing this confidurce rings true to othing areas of life as well, if a puson follows through with creative works and displays a lead of confidure in this area, they may carry this confidure into other areas of life as well. This confidure in creativity and art is a direct result of meanagement, it was never taken away from me, it was always nurticed and incomaged. I am so gratiful that what I hourd so much to do was presented as important and acceptable. I neur felt a lack of encouragement to participate in the arts from my family, I did however teel that every public school system I extend had a tundency to discourage the arts and push for more math and Science. Math and science always felt why foreign to me, I needed the peaceful expression of the arts and the arts offered creativity. Art offered me the opportunity to create and to be wrong, I could make risks without the tear of failure. I have after considered the notion that my skill has developed based on my ability to see. The human eye is an amazing complex evolved structure that allows us the view a variety of different elements. When drawing not only do I have to disect the form and line of the subject but I also have to visually deconstruct the value with a wide range of light to dark. I also have to consider the various textures and arrangement of composition and space all while developing a visual representation with meaning and visual destructics. Much of the process of creation is a about taking a risk, sometimes you have to experience alot of bad drawings before your risk taking pays off. As adults I ful we are so afraid of experiencing failure that we lose the ability to be creation, we advaid of judgement of our ideas, this is why

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children find the act of creativity so easy. As an educator, I believe encouragement is vastly important. The ability to feel confiduat about your desicions and leave from and embrace your mistakes is a valuable lesson than will foreme breed the creative individual. If I could sommarize the essence of creativity, I would conclude that creativity is about letting go. It is about taking our experime and not being afraid to create something based on those experiments. I sometimes feel that throw are aspects of my life, particularly difficult aspects that come through in my work, it's almost a way of embracing obstacles and expressing them. I believe that part of what makes me creative is that I can imagine many aspects of aspects of my life, I am able to see a vision of what something could look like, I see the potential and can envision that potuntial clearly. Sometimes there is just this need or ungency to get to work, to create from an idea, from a spark that hits you and it's like an addiction a voice that won't go away inless you queuch your creative Thirst and just create. What it all comes down to is the rush and the nucl to make something new. I feel very confident and certain that much of what our educational system lacks is the ability to assess the meturests and capabilities of the individual, the kind of changes and reforms that need to happen are one in which we work collaboratively to encourage the growth in areas that are of much by participation in the arts. Thinking creatively is achieved through participation in the arts. My potentials could have been strungthened given the opportunity, in some ways I ful that public education tailed me as a leanner, particularly someone that thrinks in the arts. Why do we feel the need to limit ourselves, why do schools assume that everyone should be good at math ? science, we are all different. We all grow and learn differently about the world around us. I believe we all greatly benefit when we are all unique and use our skills and talents together. I after consider many of the thoughts on the current state of education as I work, my education has certainly shaped my creative self but, in many ways has limited my potentials. I continue to work toward creative potentials and suck to use creativity in many areas of my lite - education, parenting, etc. The arts and my participation in this discipline has greatly shaped who I am, how I learn, and the ways in which I create.

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Often as I work there are multiple questions that run through my wind. I am continually asking myself what I can do better or askat I can do different. In neur afraid to take the risk, I begin to learn what visks are effective and become lass intimidated by those visks - but generally am always open to trying something new, and just going for it and hoping that in the end my risk pays off. No one line I make on the page is a mathematical equation, it really comes down to a series of risks and guesses as to what will make the piece work. This is why art is so important, it is a form of play that incomages divergent thinking and experimentation. Every desicion is one that you ultinately know will impact the ounal work. A large part of this process is finding the right environment to work. The stars have to aligh so to speak in order to be prepared to see a piece through to the end. you have to tue the intunal notivation as well as the intunal motivation, The conditions to work must be vight in order to be productive and you have to ful a since of uncouragement about your work, I believe this is especially true of young artists. If there is a stifling of their expression or they get to a point when they no longer fiel good about what they are doing then they stop and purhaps lose that ability in tuling confortable with the work they are creating. I name always filt encouraged in my art by family members and peers, I was always the artist or the creative one - I never fult put down or fult any restraint for what I was creating - until college - I fult that In college my artistic expression was beater up and I was told it was not as good as this person or this person. I even started to feel that my work was of no value at all. I have learned that as a college professor of the arts now - I want to express a different approach and wake students work valid to them and to know that their work is not being judged, it is a quat expression of chemselves and not a fest of this ability. Evaluation of the work can be heartbreaking, in your own mind it can ful right but, in the mind of a viewer it can be lacking or ful not complete. I think I have had to come to turns with the fulings of others and how my work may be continually mininterpreted on viewed. I always ful their is still much to learn in my own work and I get that fuling when I view the work of others, I often find myself disecting my own work when I am given the opportunity to see someone elses work, Sometimes, most of the time when I work, I start to

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question my notices. Societimes, someone has paid me to do the work, this is the least creative -it's always a challenge to get someone else to undustand your creative vision. Sometimes I simply want to take the time to let out trustration or stress. Sometimes I truly have something to say and med a safe and productive way to say it. Whateun my notices there is always a great deal of accomplishment when finish a piece - even it it's not what I initially intended to create, it becomes it's own unique part of my collection - a work that represents all of my creative acts at that time - almost like a record of my thoughts and actions. I am quatly inspired by the work of others - when I look @ a piece done by another artist, I always try to imagine what this specific process must have been like. I often examine their line, form, since of value, etc. The artistic process is much more important to me than the final product. The product is always something to show for the effort and something to proud of but, it is also more about the experience of being in the creative noment - it's almost like a drug. you feel a high as you work. Those extrume highs can make you feel as if you are the best artist in the world but, they are followed by extreme lows - almost to the point where you want to throw out your brush/puncied neuer work again. In the end, this rollencoaster of emotion, self doubt and self validation is worth the labor. In all of my work I can look back and remember many of the pains and successes of the work, this makes each completed piece special in it's own right. As I near the completion of my work, I add final touches, I perflect on all the points that lead me to this final point, I relish in the journey of the process. I start to get exited at the thought of standing back and finally fuling the fuling of computionalso the act of sharing the work with others - although this can sometimes be a stressor, I have learned to velish in the positine comments and take negativity as helpful critisicum. This self-portrait has certainly tested much of my skill but, has furned out to be a favorite of mine simply because, This never put so much emphasis on recording my thoughts during the process, it has been the ultimate way in which to reflect on my process. I can say without a doubt that I do and have always loved drawing, even more than drawing is the process of creativity.

APPENDIX E

CODEBOOKS 4, 5, AND 6

Codebook # 4 (Cognitive-Creativity)

Major Themes (Journal Writing)

Major Themes	Journal Writing (in process-evidence)
Preconceived Vision/ Imagination	The artist has to consider what the overall
	subject says about the work and how they
	choose to represent it.
	I changed my mind several times in the process
	before seeing a vision, a completed idea in my
	head of what I wanted to create.
	This idea is strongly visualized in my mind.
	I can clearly see the entire piece in my mind
	down to minor details. Practice studying
	objects has helped this process.
	This is why art is so important, it is a form of
	play that encourages divergent thinking and
	experimentation.
Problem Solving/ Finding Resolution	It took a lot of reflection to come to the
	conclusion of what I ultimately wanted to
	represent.
	My mind is working to problem solve the
	composition and get the figure/form correct.
	The difficult part about drawing is coming to
	the realization that most of your time will be
	spent problem solving and thinking critically
	about your marks, this type of work is a very
	different process than being spontaneous.
	Creating the illusion of the 3-dimension
	requires a precise layering of medium-knowing
	how much and how little to apply is a learned
	process.
	A major component to creation is learning the
	medium you are working in.
	When drawing not only do I have to dissect the
	form and line of the subject but I also have to
	visually deconstruct the value with a wide
	range of light to dark.
	I also have to consider the various textures and
	arrangement of composition and space all
	while developing a visual representation with
	meaning and visual aesthetics.

Codebook # 4 (Cognitive-Creativity)

Major Themes (Journal Writing) -Continued

Major Themes	Journal Writing (in process-evidence)
Intense Concentration/ Observation	You are constantly looking back and forth from image to work using each shape and where it sits in relation to another.
	There is an internal dialogue that exists as you
	are creating, there are moments of intense
	thinking and organization, what tasks need to
	be accomplished.
	Concentration is essential.
	I certainly feel as though I am in a state of
	creation and concentration.
	Technical drawing is a great skill in
	observation and understanding many of the
	formal elements of representation.
	Constantly noting the way the graphite reacts
	to the level of pressure on the pencil is a
	process of observation in itself.
	Creating the illusion of an object, person,
	subject, muse, etc. requires the ability (for me
	anyway) to look at the thing as a whole-and
	then interpret the line-block-out all you think
	you know-observe-you may think to draw an
	apple but, you have to let go of what you think you know about something and strictly become a researcher.
Layering of Thoughts/ Creative Reasoning	A way of sorting through thoughts.
	As you work there is almost a layering of
	thoughts that occurs.
	You are always thinking of each step-one after another, but you are also thinking of distracted
	thoughts irrelevant to your work-almost like a
	therapy.
	I find myself talking myself through problems
	or situations that have occurred throughout my
	life, and I kind of talk my way through them-
	coming to some type of internal resolution.
	Next, I have to shift my attention from the big
	picture and start to dissect the work piece by
	piece.

Codebook # 4 (Cognitive-Creativity)

Major Themes (Journal Writing) -Continued

Major Themes	Journal Writing (in process- evidence)
Layering of Thoughts/ Creative Reasoning	As I work, there tends to exist an internal dialogue, I find that different attributes to my personality begin to take over parts of my creative thinking, for example part of me wants to be very organized and analytical, another part of me wants to be free to explore and create without worry of right and wrong, another part of me wants to be recognized all I can think of is praise, when the work is completed, another part of me is distracted not focused on the task.
Expressive Invention/ Creative Choices	 Finding a unique and interesting way to present the value-becomes the creative component to the work. You have to almost have a level of sensitivity that is a hard skill to teach. The final creative work always lends itself to a form of detailed thought, intellectual structure from creative choices to the next set of creative choices. A work that represents all of my creative acts at that time-almost like a record of my creative thoughts and actions.

Codebook # 5 (Emotional-Creativity)

Major Themes (Journal Writing)

Major Themes	Journal Writing (in process-evidence)
Beginning stages (overwhelming, nervousness, stressful)	Starting the work can be overwhelming and a
	nervous process, the idea of staring at that
	blank white paper causes stress and tension
	There comes an amount of stress when
	creating something- there is always a great fear
	that it will not end up being what you exactly
	wanted, this fear can sometimes make it
	difficult to want to start or begin a piece.
Throughout (therapeutic, peacefulness, escape)	but, also a release.
	the process becomes therapeutic.
	I have noticed that depending on my current
	state of stress or mood-my line tends to dictate
	that feeling. This level of expression both
	works to make the work therapeutic and also
	informs the work itself.
	I find that I most often am motivated to work
	when I feel stressed-giving myself a new work
	to think about and immerse myself in, this
	tends to distract me from daily life.
	There is peacefulness to working and drawing.
	Even looking at drawings and seeing the marks
	and lines of others is a peaceful event, it
	requires the ability to stop and slow down-to
	breathe and to connect to the visual world,
	there is no pressure.
	Math and science always felt very foreign to
	me, I needed the peaceful expression of the
	arts. The arts offered creativity.
Overall (highs and lows) (confidence and self-	For the most part the process is enjoyable,
doubt)	especially when all is going well, when you
	feel the work is looking good the process feels
	amazing but, when the work is not going as
	planned it can start to feel bad.
	I experience many highs and lows of great
	confidence and some of extreme self-doubt.

Codebook # 5 (Emotional-Creativity)

Major Themes (Journal Writing) -Continued

Major Themes	Journal Writing (in process-evidence)
Overall (highs and lows) (confidence and self-	A big part of this process is confidence, if you
doubt)	continually feel good about the work in
	process and in the final product you develop a
	key motivator to continue, the confidence to
	continue requires validation by peers or
	superiors that gives us the sense that what we
	are doing is of value and importance-this
	creative confidence is delicate and
	unfortunately can be crushed at a very early
	age.
	Often as I am working I feel either a boost of
	confidence or a great insecurity about the
	work-this can mean the difference of
	continuing or throwing the work away and
	ripping it up.
	You feel a high as you work. Those extreme
	highs can make you feel as if you are the best
	artist in the world but, they are followed by
	extreme lows-almost to the point where you
	want to throw out your brush/pencil and never
	work again. In the end, this rollercoaster of
	emotion, self-doubt and self-validation is
	worth the labor.
Feeling of greater connection to self and the	There is peacefulness to working and drawing.
visual world	Even looking at drawings and seeing the marks
	and lines of others is a peaceful event, it
	requires the ability to stop and slow down-to
	breathe and to connect to the visual world,
	there is no pressure.
	Art offered me the opportunity to play and to
	be wrong. I could take risks without the fear of
	failure.

Codebook # 5 (Emotional-Creativity)

Major Themes (Journal Writing) -Continued

Major Themes	Journal Writing (in process-evidence)
Feeling of motivation to create and to continue	It starts to feel like distractions are everywhere.
	This becomes frustrating- you start to resent
	the work- maybe the idea is stupid, you almost
	reach a point where you want to give up and
	start over. All of the good moments usually
	outweigh this feeling and you tell yourself not
	to give up, you find the persistence to follow
	through and embrace the unknown.
	Among all of the work there is a relaxed
	feeling of independence and motivation, almost
	as if I feel nourished.
	it's difficult to reach that state of feeling
	done.
	A big part of this process is confidence, if you
	continually feel good about the work in process
	and in the final product you develop a key
	motivator to continue, the confidence to
	continue requires validation by peers or
	superiors that gives us the sense that what we
	are doing is of value and importance-this
	creative confidence is delicate and
	unfortunately can be crushed at a very early
	age.

Code book # 6 (Drawing-Creativity)

Major Themes (Journal Writing)

Major Themes	Journal Writing (in process-evidence)
Drawing is a creative process	The best drawings, even if they are technical
	indicate a sense of personal expression to the
	line, value, and overall structure of the work.
	Sometimes if I make a line, that line will start
	to resemble some other shape or even a whole
	new drawing-I also find that in creating
	realistic drawings, I generally have a desire to
	add some component of surreal element,
	simply because it would satisfy that creative
	need to make the work my own.
	I can be somewhat expressive with just my line
	in a realistic drawing, it is more subtle.
	The creative component comes as you find
	yourself having to make decisions that will
	affect the drawing/piece as a whole-what
	direction might you choose to take your line or
	where might you create certain compositional
	emphasis.
Drawing is a cognitive process	In realistic drawing- form becomes everything.
	Sorting through line and shape is an important
	component.
	I tend to pay the most attention to this as I am
	sketching out the skeleton underneath.
	If I want another level of dimension to the
	drawing, I have to take my time to slowly fill
	in the value of the work section by section.
	The line drawing is just the framework,
	whereas the value is really the meat, the life to
	the representation of the subject
Drawing is an aesthetic process	There must be a great consideration for the
	subject of interest in creating, when it comes to
	realistic drawing.
	Even choosing an object to draw is a sense of
	using the senses of aesthetics.
	When considering the best thing to draw, or
	person, or place, I tend to consider what I have
	done or what I have enjoyed seeing.
	I am incredibly nostalgic and sentimental, I
	like to draw objects from my past that relates
	to moments or memories.

APPENDIX F

SELF- INTERVIEW

Self- Interview (Creativity, The Creative Process, Aesthetic Awareness)

Interview #1: (30 min.)

"I want to elaborate on these questions that try to get to the heart of what creativity is an where it comes from, and in that I am here talking to myself in this interview, I'm hoping to really elaborate on the questions in detail and go into great detail about what creativity is to me and hopefully these questions will get to the very nature of myself and creativity, and how it is a phenomenon that exists within myself, and then hopefully explains further what creativity is and what it means to be creative".

"The first question I'm asking myself is; Do I think of myself as a creative person? And I guess the answer to that, there are two answers to that, the first one would be yes. I think of myself as a creative person, and then the second answer to that would be that I hope that I am a creative person. So, one of the other questions is number two; is if you think of yourself as a creative person then why, and I think of myself as a creative person because; I think that for most of my life I have been able to take a situation or a problem and I have been able to look at it through multiple perspectives and come to an array of different solutions or ways in which to look at the problem or the situation, I also think that I'm also the type of person who has ideas, original, creative, inventive, kinds of ideas about things. I'm definitely the type of person where if you give me a task, I'm trying to think of alternative ways in which I can get to the answer or get to a solution to the task. So in that way I think that I would consider myself, if not, you know a fully creative individual, then definitely a divergent thinker".

"The other question asks, um... just to go back to that, why I also think I'm creative, aside from the ways in which I view things, I think that I've gotten a lot of validation from people, that I'm a creative person, I myself like to believe that I am. Like I said, I hope that I'm a creative person, and I do think that I'm a creative person, but I don't think that... that would be possible for me to believe that or to know that, without other people kind of constantly saying: this is a very creative thing that you did. So, I don't think that my experience with being creative certainly would have been the same if people were saying: you know, you're not very creative, or I don't see how this is creative. Um..., so validation from others I think is a big component to why I believe that I'm a creative person".

"And the third question asks: If you don't, then why not?... and I would say that there have been times in my life where I felt um... discouraged, I felt like maybe my ideas were rejected and maybe they weren't as creative as I thought. Or... and truly the only reason that I ever felt that way, is again from the judgement of others. I feel less creative when I'm being judged and my actions are being judged and my ideas are rejected or something that I have created is being rejected. So, not feeling good enough, not feeling like the idea is accepted or is highly criticized has made me feel like... I wasn't a creative person. Another thing that makes me feel less creative, is when I don't create for long periods of time. I definitely think that um... participating

in the arts in some form of art making kind of sparks that creativity and has for most of my life. If I go long periods of time without doing some type of visual work or something that I love that involves creativity, sometimes I feel like the rest of my life is lacking that creative edge that otherwise I would be practicing, um...also I think that my life is kind of overwhelmed with a lot of different things, especially stress, and I think that kind of depletes how I feel about being creative. If I'm an art teacher and I'm spending all of my time creating, learning about creativity, being creative, that is going to be more beneficial for me than you know, doing paperwork, reading e-mails, etc. That kind of stress really kind of depletes the creative process, I think in a lot of ways. So those are the times that I don't feel creative, those are some of the things that take away from that. So just to reiterate, I do think of myself as a creative person, I hope that others see me as a creative person but, but I do have doubts you know, sometimes as to that, simply because of the validation of others or the feedback of others that I receive. Um... but, all in all, I do think that I am the type of person that is inventive and comes up with many, you know creative solutions to problems and ideas".

"The fourth question, says; do you feel that your maturation as a person has been related in any close way to the maturation of your creative abilities and commitments? Which is a really great question um...and I think really hits to the point of um... the kind of evolution of the creative person. And I think that um... there is again kind of two answers to that question as well, I think that yes and no for that question, I think that when I was younger, I was more of a risk taker than I am now. I think that, you know, I was more willing to try things and just do things and who cares kind of how it turns out, um...unfortunately I feel like that has just kind of been stifled in me, and I feel like that would probably the case for a lot of children, you just kind of go for it, and um...whether or not your art turns out, it doesn't matter, because you know you didn't have any hang ups about putting the art down on paper. Or, you know, any type of, kind of, creativity that you're doing even if it's like making a decision, kind of a creative decision about something. I think that I definitely as a young person was certainly more willing to take risks take um...without thinking of, you know, consequences, cause I didn't care as much, I didn't think about what would happen, you know, if I do this. I just did, kind of, as I felt, so the ability to kind of take those risks, I think is a really important component to being creative, because if you're not willing to take the risk of doing something different then the idea will never be considered creative, you're playing it safe it's not a creative solution um...so in that way, I would say that you know unfortunately the creativity has not matured in that way cause now I consider very carefully my choices, and I don't take risks um...but I will say that my creativity has matured in the sense that I have more skill than I used to have, so I'm kind of better able to say what I want to say, or do what I want to do, I have more of the means verbally and visually than I used to. I also think now I'm a little more sophisticated than I used to be you know so I can think on a greater level, so although my creativity has grown in some ways and matured with age and I know it a little better I know a lot more about myself and I'm able to make kind of conscious creative decisions, I do kind of lack that risk taking spontaneity that went along with my youth. I hope that answers that question".

"The next question, question five says; do you grow through your work? I would say yes, I attribute much of my growth as a person to creating art. For as long as I can remember I've made stuff, and it's been a big part of me, just to sit down and truly, you know, make something. So I... it would be impossible for me to say that I don't experience any kind of growth or, you know, personal gain through creating, or being creative, or through my work. I also think that being creative kind of allows me to perceive change or visualize what I want, and that in turn helps me grow as a person if I can see what I want, I can clearly visualize, I have the creative capacity to do that, then I'm constantly experiencing growth whether it's through my education, through my work, through my roles in life, so I think that in that way I certainly grow, in many different levels".

"I also think that if you look at a lot of my work you can certainly see a kind of creative growth and not just the sense of my ability is better as I get older, cause obviously I've learned more about the medium or I've learned more techniques or etc., not just that kind of growth but, kind of like an inner growth. What I want to say is a little different or um...what I've experienced comes through my ability to handle, you know, all of my stresses or all of these components that come out through the art work, it feels different, it feels better. I think that I've also gotten better at my work in that I'm not as sensitive as I used to be about it. I do require a lot of validation when I work, I'm certainly that person, who if they weren't the skilled, the talent, the work, if it wasn't fostered I would have given up, I wouldn't have continued to create, and I think that speaks volumes for how important it is for us to, you know, foster a good relationship with the arts, with children so that they continue to create and continue to experience creativity".

End.

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Interview #2: (30 min.)
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"The first question for this interview is asking me about the act of creation itself, and what about that, that act of creation, and um... so, for me this really encompasses what is the creative process?, and what do you as a person, kind of, go through mentally, physically, as you are creating something, and for me creation typically involves some type of drawing or some type of visual art making, in some way, and there are many different components through-out my life of things that I have created all very different for whatever purpose, but the creative process always feels very similar, kind of, in a lot of those situations I find that; kind of, depending on, you know, the guidelines of myself creating it or what I have available to me really kind of dictates the overall feeling of the process and the way that I experience it, but for the most part when I create something, I generally feel this kind of like; endorphin, kind of, spark almost like an ignition, an excitement um...to, for an idea, it like comes to me. I think about it for a while and it comes to me and I feel so energized to make that idea, kind of, come to fruition and I'm usually also very excited to share that idea with other people and get their input and get their feedback".

"Also, I feel like I have a lot of commitment to an idea, you know, sometimes my ideas end up being too much, I can't even contain the idea, I don't have the means to produce this idea that has come to me, but I still find a lot of motivation to see through my idea and I feel like a certain commitment to that idea or that thought, to follow through with it and complete what I have thought of. It's like, it becomes like this important thing to me that I have created the notion of something, so I want to foster it and help it grow into something bigger. I also feel like throughout the process, you know, you experience kind of like highs and lows as you're developing that idea into something tangible, into something you can show people, something to have to show for that initial idea, um... you kind of have a lot of self-doubt, where you are kind of like; maybe this wasn't such a good idea, but then it can also be completely turned upside down where you feel like; this is amazing, I can't believe I thought of this, this is great, so there's kind of like this constant up and down between how you feel that your idea is something great, and then how you feel how the idea is not so great, and that ultimately can be either the reason why you stick with the commitment, because you feel that sense of pride for the original idea, or it can also be the reason for just breaking you down and not following through with the idea".

"The second question asks in the interview, says; can you recall some piece of work that meant a lot to you?, and there are many pieces that I've done through-out my life, and they have meant things to me in different ways, you know, if I've created something for a person or, you know, it reminds me of that person or I think about that person, if I kind of recall that art work or sometimes I've had pieces that I've created out of feelings and moods, you know, if I feel angry and I work, and if I work on something or start something and if I feel depressed, or if I feel you know love, all of those kinds of emotions are then attached to that work, so that's a really hard question, because you know, I feel like everything has meant something in some way and it's hard to say if one thing meant more than another. It's just kind of a different way that it meant something to me, but sometimes I do think about, I guess in terms of this question, and to answer this question um...there was a piece that I did once when I was in middle school, I was in eighth grade and my father was in the military, so we moved around a lot, and when I was in middle school in eighth grade we had just moved to a very small upstate New York town, the name of the town was Croghan, New York, the town was so small that it didn't even have a traffic light. There was like a, four corners stop sign in the middle of the town, and that was eventually where I went to high school and where I moved from to go to college, but when I first moved there it was a really hard transition because a lot of the students were white and I moved from a place where I was the minority. Most of the other students were African American or Hispanic, um... so I, where I used to live I think I had a different sense about me, I dressed differently and I talked differently, and I just kind of did things differently. I was so, you know, kind of submerged in the culture of where I lived and then was kind of uprooted and taken to upstate New York, in a very small white community, so I didn't fit in very well, and one thing that helped me feel confident in the situation, was the fact that I had a talent and I had an ability. Um... so it, when I moved in eighth grade, we had one art class I think a week, and I remember that art teacher being very absent in my learning, I remember her just kind of like giving us these random projects. She'd say here's a sheet of paper and some pencils and draw something, but, I was very used to that because I had done a lot of that through-out my childhood, so um...you know, I would end up just kind of drawing from my experiences, and I had the skill and the ability to draw. The other kids kind of picked up very quickly on the fact that I was skilled and talented in that way, and as a kid it can be a very envious kind of talent to have. I always reveled in it, you know I always loved the fact that I was considered to be the artist or that was something that made me special and kind of set me apart, it made me feel great".

"This particular piece that I made in eighth grade, was just a drawing but, it was very surreal and the next question here says; try to describe the work in detail, um...and it was all pencil and there were clouds and the clouds were raining over this city, and the gray pencil kind of made it this very dreary and dark city scape, and then sitting on the cloud there was this zebra. I know, it was totally strange but, in retrospect I could probably dissect it and analyze it. The zebra had kind of a human face, and lots of human qualities, because he looked very sad and he's like sitting of this cloud and it's like raining over this desolate city, um... and I mean that was it, but it was really well drawn, I guess...so the piece, really meant a lot to me, because at the end of the school year they had an art show, and they basically took, you know, the teacher took however many pieces that you did that she liked and she put them in the art show, and I think I had like four or five different pieces that she picked from. The art show was sixth through eighth grade, a middle school art show in the gymnasium. One of our teachers took us to see the work, I was excited to see it displayed, it was the first time my work had ever been judged. So I didn't know there were going to be ribbons on the work. When I came upon that drawing of the zebra, it had a huge blue ribbon, it was best in show and the highest honor you could get in the art show. I was so proud and beaming and again I had just moved there and everyone had talked about it and commented on it. It felt wonderful. I felt so amazing about it. It felt even better that, like that this was a piece that clearly represented the fact that I was very different, you know, I was the zebra. And, I was pretty sad about having to leave my home and be planted into this place that was very different from anything that I had known, the whole culture, even though I was the same, I was still, I still stuck out like a sore thumb. Um...so it felt really good that it was so well received by teachers and students who noted my skill and my ability, this was one of the few moments that I fell in love with what I was and what I could do and what I could be, um...and art has continued to just foster that commitment towards working hard and doing good work I guess, so that piece really meant a lot to me".

"The fourth question it asks, it says; In retrospect did you become aware of anything going on in you that at the time of creation you were unaware of? Um...that's an interesting question, I think that, trying to think back because it was so long ago, I think I realized that I had a skill and I had an ability that wasn't necessarily afforded to everybody, and I didn't know where it came from at the time. A lot of people would say to me, because my great grandmother was a painter, so they would say within my family, upon seeing my work, you must have gotten that from your great grandmother. So, I always just assumed that it was this kind of magical ability stowed upon me, I

know now that I spent so much of my childhood, observing and drawing and regurgitating what I saw onto paper that I had been practicing that ability for a long time. So that was definitely something that I was unaware of, that ability that I had, I didn't realize where it came from. I did realize that, you know, the people around me didn't have what I had, especially the small town I grew up in, in middle school. I definitely felt like I excelled in art, there were some kids in the high school art classes that were clearly better than me. I never, I could tell that they were good, But I never wanted to believe that they were better than me. It's like you almost need that high level of confidence in yourself, an ego of sorts. So, to answer that question, I never realized how hard I really worked for that ability that I had. Also, when I created the drawing of the city-scape and the zebra, it really was on this subconscious level, I mean I know that I felt the feeling of isolation and being different, I guess I just didn't realize I was making something so explicit. So, it was definitely a way for me to cope, a release in many ways".

"So the last question is; Think of examples of such periods what was going on in your life or in your thinking about your work at the time? So, to go back to the piece with the zebra, making those things really spoke to what I was feeling, it was an extension of how I felt and illustrated how I felt, I just wish I could get back to that freeness of expression because as I got older and I learned more and I took art classes, I was always so concerned with what the viewer was going to get out of it, cause I wanted it to look good and be good and I wanted to win another ribbon, it's like I got lost and I just forgot how to express myself on a subconscious level. I think that that's too bad, the world kind of took that from me. It got even worse, high school wasn't that bad, I think I still had a really strong sense of self-expression, um... but when I went to college is when it just snuffed every ounce of self, because I was constantly being judged and you weren't really free to create what you wanted, you had guidelines and time limits that dictated what the work was when you got done. Which was good for; learning technique and skill, and getting better with new mediums but, not so much for feeling the gratification for; why we make art. I think that's one of the best examples of how what is going on in my life speaks to my work. It's unfortunate, it seems as though your self-expression would grow as you get older, not the case for me".

Interview #3: (30 min.)

"The first question is; Are there ebbs and flows in your creativity? Absolutely, I think that there is a constant fluctuation through-out the entire life span of my creative self, and just in one particular act there are spurts of creativity that happens, is how I would describe experiencing creativity, so the answer is yes. The second question is: Are you suddenly full of ideas or without ideas? I have to honestly say that I can't recall a time in which I had more ideas than another time, it seems to be fairly steady as long as I have some stimulus in my life, there is always something going on, if there are problems to solve, in which there always are, so I can't say as if I have ever felt a time where I have felt more ideas than another time".

"The third question is: What might cause a sudden spurt of creativity or a long period of draught? I would say that definitely, um...being inspired, I would say at least feels like it gets me thinking more and gets me considering different avenues, so I am kind of in tune when I get inspired by work and images that I see. I kind of relate them to things in my life and I apply them so constantly kind of being inspired by people and things around me definitely helps bring about longer periods of creative thought. I would say in terms of periods of draught; it's stress, I know that working is a way to relieve stress, but I usually just end up having so much on my plate and it takes away from creating art, the mundane events in life get in the way of creating so that's when I can experience going a long period of time without creating. Question number four says; what in particular was going on in your life that you may have been unaware of at the time but, in retrospect was highly important in your creative effort? That's a very interesting question and to do that question justice, I would have to consider many different points in my life, there are hundreds of different scenarios that have ultimately made me the creative person I am today. I think that some, that come to mind are definitely going to school, grade school and then certainly college, motivated me to explore different mediums, and to consider my creative process in ways that I hadn't before. It informed my work in a way, although in some ways, like I said before, I felt as though college stifled my expression, it did motivate me to work and to create a lot of work, it forced it out of me, another thing is finally; teaching, it was very inspirational, I never totally considered myself a teacher. I always thought of myself more as an artist, but eventually teaching became my passion, I felt totally inspired by students, and by teaching, I learned a lot, by teaching drawing, it just um...you know, informed my own drawing in many ways. Teaching became a passion almost more so than creating art, teaching the process and inspiring someone else had more reward. Another point in my life that I think was very important in my creative journey was my pregnancy. During my pregnancy, my first and only pregnancy with my daughter, I think I became very reflective, there were things in me that started to change, I went from being very self-focused to considering her perspective, there was a change in my ideas, my situation in the world. I also ended up creating more, and doing more work, I think biologically, I just felt more creative, I considered greatly what the art might mean to her. What would my art mean to her, is creativity beneficial to the pregnancy"?

"The question number five says; When do you consider the work finished? That's a really tough question to answer because I think that I spend years on one piece just for the simple fact that I never feel finished with it, and my level of satisfaction is constantly changing, and I can even pronounce that I am finished with something and then I go back and want to change it, do something new with it, I guess, I usually get to the point where I feel like if I touch it any more, it's just going to ruin it. I strive for perfection, but sometimes that perfection never comes, so you have to throw in the towel. Question number six says; When your work is finished, do you feel finished? Just to reiterate, no, it never feels finished. It feels wonderful when it feels finished but, that is a rarity for sure, even when it does feel finished, I always want to transform it into something else. You know, after I have gotten this far, I want to help it evolve into something greater. And then the last question says; How do you feel at the end? I never feel done, I never

really feel done, there are really only a hand-full of pieces that I feel are 100 percent complete, but with each piece even if I don't feel finished, I do feel a great level of satisfaction. There is something beautiful about work that goes unfinished. It acts as a record of your process and that record is a documentation of your thoughts and moods at the time. I never concern myself with the final product. I always feel nourished and satisfied, as though I have surrounded myself with an old friend, something comfortable, and it's even better when someone can appreciate it".

Interview #4: (30 min.)

"The first question says; Are you most productive when you are feeling happy? The answer to that is; not necessarily. Um... I would say that in my work, my mood and my emotional state, are very apparent, um... its very obvious how I am feeling, the marks and lines that I make are dictating how I am feeling that day. It's also on a very subconscious level, even if I'm totally sure how I am feeling, I can get a very good idea by how it is going, so I would say that the answer to that is no, I don't feel more productive when I am happy, I would say that I feel more willing to be productive, when I am feeling emotional, because art really works a as a therapy for me. When I'm not feeling emotional I think I'm more goal oriented, in a regular state. But, I feel more productive when I'm emotional because I'm more expressive".

"The second question says; Do you suffer if you are not? Yes, I do think that I suffer from not being productive. Um... in my day to day life, teaching and being a parent, I tend to get really wound up. The art becomes the release from stress. I suffer from not working because I miss the release of tension and pressure".

"The third question asks; Is there something creative that you are putting off doing? I have a lot of creative ideas in my head that I put off, that I don't have the money or the time to complete. My daily life and responsibilities get in the way of creation. When I am working on a piece there are times when I feel like I don't have the mind set to get to it, it takes a certain mood to get to work. For a long time I get stuck in a rut, its work, and its cognitive hard work that requires concentration and mental capacity. I have often been asked to draw things and often not paid. There is this misconception that artists just love making art, but they don't understand it is mental work. Art is very mental and cognitively involved it's like writing a paper, and of course there are a lot of expressive fun moments but also a lot of mental problem solving that is hard work and analysis. So, sometimes I might put the work off in the same way I put off writing a paper or a dissertation".

"Question number four says; What is it and do you expect to get to it? Well, um... I have a small journal of personal goals, all of which are creative in nature. I would hope that before I leave this earth, I accomplish a majority of these goals for myself. The last question asks; Why must you delay? I would say that for me life has gotten in the way of creating art, but I am creative in many areas of my life for example, motherhood, just being around my daughter, I think that I am a creative mom. I have other responsibilities that don't always include making art.

But, it will always be a part of me, I don't make a living as an artist. My passion and my work are somewhat separate, I would say that, that is the state that I am in now, I create my art when I can in between the responsibilities that is my life, and I'm ok with that, so, I feel satisfied.

APPENDIX G

CODEBOOK 7

Major Themes/ Self-Interview

Reactions- This portion of analysis refers to all points of data within the self-interview that involve the reactions of others around me in relation to my creativity.

"I think that I've gotten a lot of validation from people, that I'm a creative person".

"So, validation from others I think is a big component to why I believe that I'm a creative person".

"I feel less creative when I'm being judged and my actions are being judged and my ideas are rejected or something that I have created is being rejected. So, not feeling good enough, not feeling like the idea is accepted or is highly criticized has made me feel like... I wasn't a creative person".

"I do require a lot of validation when I work, I'm certainly that person, who if they weren't the skilled, the talent, the work, if it wasn't fostered I would have given up, I wouldn't have continued to create, and I think that speaks volumes for how important it is for us to, you know, foster a good relationship with the arts, with children so that they continue to create and continue to experience creativity".

"So I didn't fit in very well, and one thing that helped me feel confident in the situation, was the fact that I had a talent and I had ability".

Procedures- This portion of analysis refers to all points of data within the self-interview that involve any form of my creative procedure.

"Another thing that makes me feel less-creative, is when I don't create for long periods of time. I definitely think that um... participating in the arts or in some form of art making kind of sparks that creativity and has for most of my life".

"For me creation typically involves some type of drawing or some type of visual art making, in some way, and there are many different components through-out my life of things that I have created all very different for whatever purpose, but the creative process always feels very similar, kind of, in a lot of those situations I find that; kind of, depending on, you know, the guidelines of myself creating it or what I have available to me really kind of dictates the overall feeling of the process and the way that I experience it".

Major Themes/ Self-Interview (Continued)

Procedures- This portion of analysis refers to all points of data within the self-interview that involve any form of my creative procedure.

"I also feel like through-out the process, you know, you experience kind of like highs and lows as you're developing that idea into something tangible, into something you can show people, something to have to show for that initial idea".

"Absolutely, I think that there is a constant fluctuation through-out the entire life span of my creative self, and just in one particular act there are spurts of creativity that happen, that is; how I would describe experiencing creativity".

"There are hundreds of different scenarios that have ultimately made me the creative person I am today. I think that some, that come to mind are definitely going to school, grade school and then certainly college, motivated me to explore different mediums, and to consider my creative process in ways that I hadn't before. It informed my work in a way, although in some ways, like I said before, I felt as though college stifled my expression, it did motivate me to work and to create a lot of work, it forced it out of me".

"Another thing is finally; teaching, it was very inspirational, I never totally considered myself a teacher, I always thought of myself more as an artist, but eventually teaching became my passion, I felt totally inspired by students, and by teaching, I learned a lot, by teaching drawing, it just um...you know, informed my own drawing in many ways. Teaching became a passion almost more so than creating art, teaching the process and inspiring someone else had more reward".

"Another point in my life that I think was very important in my creative journey was my pregnancy. During my pregnancy, my first and only pregnancy with my daughter, I think I became very reflective, there were things in me that started to change, I went from being very self-focused to considering her perspective, there was a change in my ideas, my situation in the world".

Emotions- This portion of analysis refers to all points of data within the self-interview that involve any form of emotion that is attached to creating.

"Also I think that my life is kind of overwhelmed with a lot of different things, especially stress, and I think that kind of depletes how I feel about being creative".

Major Themes/ Self-Interview (Continued)

Emotions- This portion of analysis refers to all points of data within the self-interview that involve any form of emotion that is attached to creating.

"That kind of stress really kind of depletes the creative process, I think in a lot of ways".

"Unfortunately, I feel like, expression, that has just kind of been stifled in me, and I feel like that would probably be the case for a lot of children, you just kind of go for it, and um...whether or not your art turns out, it doesn't matter, because you know you didn't have any hang ups about putting the art down on paper".

"So I... it would be impossible for me to say that I don't experience any kind of growth or, you know, personal gain through creating, or being creative, or through my work".

"It's like, it becomes like this important thing to me that I have created the notion of something, so I want to foster it and help it grow into something bigger".

"You kind of have a lot of self-doubt, where you are kind of like; maybe this wasn't such a good idea, but then it can also be completely turned upside down where you feel like; this is amazing, I can't believe I thought of this, this is great, so there's kind of like this constant up and down between how you feel that your idea is something great, and then how you feel how the idea is not so great, and that ultimately can be either the reason why you stick with the commitment, because you feel that sense of pride for the original idea, or it can also be the reason for just breaking you down and not following through with the idea".

"I always reveled in it, you know I always loved the fact that I was considered to be the artist or that was something that made me special and kind of set me apart, it made me feel great".

"It felt even better that, like that this was a piece that clearly represented the fact that I was very different, you know, I was the zebra. And, I was pretty sad about having to leave my home and be planted into this place that was very different from anything that I had known, the whole culture, even though I was the same, I was still, I still stuck out like a sore thumb. Um...so it felt really good that it was so well received by teachers and students who noted my skill and my ability, this was one of the few moments that I fell in love with what I was and what I could do and what I could be, um...and art has continued to just foster that commitment towards working hard and doing good work I guess, so that piece really meant a lot to me".

Major Themes/ Self-Interview (Continued)

Emotions- This portion of analysis refers to all points of data within the self-interview that involve any form of emotion that is attached to creating.

"So, it was definitely a way for me to cope, a release in many ways".

"So, to go back to the piece with the zebra, making those things really spoke to what I was feeling, it was an extension of how I felt and illustrated how I felt, I just wish I could get back to that freeness of expression because as I got older and I learned more and I took art classes, I was always so concerned with what the viewer was going to get out of it, cause I wanted it to look good and be good and I wanted to win another ribbon, it's like I got lost and I just forgot how to express myself on a subconscious level. I think that that's too bad, the world kind of took that from me"

"Being inspired, I would say at least feels like it gets me thinking more and gets me considering different avenues, so I am kind of in tune when I get inspired by work and images that I see. I kind of relate them to things in my life and I apply them, so I'm constantly kind of being inspired by people and things around me, it definitely helps bring about longer periods of creative thought".

"I would say in terms of periods of draught; it's stress, I know that working is a way to relieve stress, but I usually just end up having so much on my plate and it takes away from creating art, the mundane events in life get in the way of creating so that's when I can experience going a long period of time without creating".

"I think that I spend years on one piece just for the simple fact that I never feel finished with it, and my level of satisfaction is constantly changing, and I can even pronounce that I am finished with something and then I go back and want to change it, do something new with it, I guess, I usually get to the point where I feel like if I touch it any more, it's just going to ruin it".

"It feels wonderful when it feels finished but, that is a rarity for sure, even when it does feel finished, I always want to transform it into something else".

"But, with each piece even if I don't feel finished, I do feel a great level of satisfaction".

"I would say that in my work, my mood and my emotional state, are very apparent, um... its very obvious how I am feeling, the marks and lines that I make are dictating how I am feeling that day. It's also on a very subconscious level".

Major Themes/ Self-Interview (Continued)

Emotions- This portion of analysis refers to all points of data within the self-interview that involve any form of emotion that is attached to creating.

"I don't feel more productive when I am happy, I would say that I feel more willing to be productive, when I am feeling emotional, because art really works a as a therapy for me".

"Yes, I do think that I suffer from not being productive. Um... in my day to day life, teaching and being a parent, I tend to get really wound up. The art becomes the release from stress".

"I would say that, that is the state that I am in now, I create my art when I can in between the responsibilities that is my life, and I'm ok with that, so, I feel satisfied".

Cognitive- This portion of analysis refers to all points of data within the self-interview that involve any display of cognitive activity in relation the creative process.

"I think that for most of my life I have been able to take a situation or a problem and I have been able to look at it through multiple perspectives and come to an array of different solutions or ways in which to look at the problem or the situation".

"I'm definitely the type of person where if you give me a task, I'm trying to think of alternative ways in which I can get to the answer or get to a solution to the task".

"I think that when I was younger, I was more of a risk taker than I am now. I think that, you know, I was more willing to try things and just do things and who cares kind of how it turns out".

"I think it is a really important component to being creative, because if you're not willing to take the risk of doing something different then the idea will never be considered creative, you're playing it safe it's not a creative solution".

"I strive for perfection, but sometimes that perfection never comes, so you have to throw in the towel".

"There is something beautiful about work that goes unfinished. It acts as a record of your process and that record is a documentation of your thoughts and moods at the time".

Major Themes/ Self-Interview (Continued)

Cognitive- This portion of analysis refers to all points of data within the self-interview that involve any display of cognitive activity in relation to the creative process.

"For a long time I get stuck in a rut, its work, and its cognitive hard work that requires concentration and mental capacity. I have often been asked to draw things and often not paid. There is this misconception that artists just love making art, but they don't understand it is mental work. Art is very mental and cognitively involved it's like writing a paper, and of course there are a lot of expressive fun moments but also a lot of mental problem solving that is hard work and analysis".

"I would say that for me life has gotten in the way of creating art, but I am creative in many areas of my life for example, motherhood, just being around my daughter, I think that I am a creative mom".