The True Value Placed on Creativity:

Is the Fear of Risk a Factor?

by

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ABSTRACT

The True Value Placed on Creativity: Is the Fear of Risk a Factor?

There is a popular notion that creativity is highly valued in our culture. However, those "in the trenches," people in creative endeavors that actually produce the acts of creativity, say this is not so. There is a negative correlation between the value stated and the true value placed on creativity by our contemporary culture. The primary purpose of this study was to investigate that correlation as well as a possible contributing factor to this negative correlation—the fear of risk involved in enacting and accepting creativity.

The methods used in this study were literature review and interview. An extensive literature review was done, as much has been written on creativity. The review was done in four parts: 1) the difficulty in defining creativity; 2) fear and the fear of creativity; 3) solutions – ways to be, express, and accept creativity; and 4) the plethora of articles written about creativity. Six one-on-one interviews were conducted with creative individuals (hereinafter referred to as creatives) from a variety of commercial creative endeavors. Creatives in commercial fields were chosen specifically because of their ability to influence the culture.

The results of this study showed that the hypothesis, that there is a negative correlation between the value stated and the true value placed on creativity, is true. The fear of risk involved in enacting and accepting creativity as a factor in this dichotomy was also shown to be true.

DEDICATION

I wrote this several times and nothing seemed even adequate so I'll say this simply –

To the beautiful Michele, she knows why.

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Chapter 1

INTRODUCTION

Background

The concept of creativity is universally accepted. Almost anyone we ask will tell us that creativity exists. Most will say it is a good thing, a positive personal attribute, and an asset to business. Furthermore, most of the current literature on the subject places a positive value on creativity by and for individuals, businesses, and the culture as a whole. However, the occurrence and acceptance of creative acts is rare, or at best, not promoted and we are continually rewarded for maintaining the status quo. This leads to the notion that while we say creativity is valued, the statement "creativity is a valuable personal and professional attribute" is merely rhetoric in our contemporary culture.

If creativity is truly valued, why do we use it so seldom? Why is conformity rewarded more often than not? Is the fear of risk in enacting and accepting creative ideas a factor in the correlation between perceived value and usage? This study attempts to answer these questions by exploring the value placed on creativity by our culture and creative individuals, and the fears involved in expressing and accepting creativity. The major hypothesis is that there is a negative correlation between the value stated and the true value placed on creativity by our contemporary culture and that the fear of risk involved in enacting and accepting creativity is possibly a factor in the suppression of a truly creative culture.

Research Topics and Questions

Topics for this study include creativity, personal values, cultural values, risk, and the fear of innovation and creativity. Research questions are as follows:

What degree of value do individuals, specifically those involved in creative endeavors, place on creativity?

According to most of the literature reviewed, creativity is a valuable personal attribute. Interviews with individuals in creative fields provide insight into the true value these individuals place on creativity as an asset in business and in their personal lives.

To what degree does our culture value creativity? Does our value of creativity correlate with its rate of occurrence?

Creativity is popularly believed to be a positive quality in our culture. There is significant evidence, through the lack of use and promotion of creativity in our contemporary culture, to disprove that belief. Answering these questions resulted in a negative correlation between the perceived value of creativity and its utilization and promotion, revealing the true value of creativity in our culture.

How much is fear of risk a factor?

Many people fear the unknown and avoid embracing activities that are outside of their comfort zone. Could this fear be an obstacle to creative action? Does this significantly impede progress in our culture? When the correlation between the perceived value of creativity and its utilization and promotion is negative, this study showed that a degree of fear of risk is a significant factor.

Purpose of the Research

The outcomes of this research have shown that the perceived value of creativity is much higher than the actual value placed on it. This study also identified the fears that we need to overcome to alleviate this dichotomy and revealed influences that will allow creativity to be more readily accepted.

Justification

Creativity has been the subject of an overabundant amount of literature. The assumption in most of this literature is that creativity is a valuable attribute for both organizations and individuals. For example in *Launching the Imagination*, the author states, "Once viewed as peripheral, creativity and innovation have become highly valued

in contemporary life" (Stewart, 2008, p. 110). But is it? The gap in current research is the truth of that assumption. If creativity were truly a valuable personal attribute and business asset, would it not be more widely accepted in our culture? We value beauty and it is all around us. We value wealth and most people strive for it. We say we value creativity. It would make sense that something seemingly as valued as wealth and beauty would be just as prevalent. But can we say we value something as intangible as creativity? Wealth is a quantifiable entity, beauty has marked standards in our culture but creativity is difficult to even define.

While we profess to value creativity there is less tolerance for experimentation with new and innovative actions, as our culture demands that individuals and businesses be more accountable to antiquated systems. We live with paradigms established in better times and too often, the reason for action is, "because that's the way it's always been done." In spite of this, people and businesses that do embrace new or creative thought are proving to be more successful. An example is Proctor and Gamble (P&G).

Several years ago P&G created an arena within the corporation called the newgrowth factory. It is "a network of novel structures and capabilities to rapidly shepherd new products and even business models from inception to market Although the factory is still ramping up, its early successes suggest that collective creativity can be managed and can generate sustainable sources of revenue" (Brown 2011). This is even more evident in the advertising and design industry where " . . . creativity seems to be the single most frequently used and admired characteristic in the advertising industry, and probably the single most important criterion of agency achievement and success" (Helgesen 1994).

There is a need for positive change in our culture and society. In his landmark work *Grow or Die* (1973, p. 48), Geo. T. Land describes the titular theme of the book, "closing a system to new alternatives inevitably results in either radical changes or collapse and extinction." Change in our culture is not legislated. It comes about through influence. Art and design can be a catalyst for influence and change. In identifying the

true value of creativity, this study reveals ways and may empower creative individuals to influence our culture to be more accepting of creativity, to become more creative, and to overcome the fears involved.

Methodology

Interviews and literature review were the primary research methods used in this study. Interviews contained both direct and "tour-type" questioning to mine accurate information, and capture nuances that might have been missed in an anonymous survey. Subjects interviewed were involved or employed in a variety of creative endeavors. The virtue of their professional standing confirmed the level of creativity, creative behavior, and/or traits in these individuals. Questions explored the value placed on creativity by these subjects, their viewpoints on the value placed on creativity by our culture and the correlation of that value with its rate of occurrence and acceptance. They also explored the fears involved in being creative and implementing creative ideas to answer the question, "Is the fear of risk a factor?"

These interviews helped establish the true value of creativity in both creative individuals and the culture they work in. This method also helped identify the fear of risk involved in being creative and implementing creative ideas as well as the fears involved in the acceptance of those ideas. As a creative conducting the study, the researcher had no difficulty developing a rapport with other creatives.

The review and analysis of the multitude of contemporary and historical literature on creativity was used to establish the perceived value of creativity in our culture and gave a broader and more accurate view than the interviews alone.

Definitions

"Creatives"

A common term in the advertising and design industry to describe those persons responsible for developing concepts or employed in the capacity of an art director,

designer or copywriter. This has become as much a job title designation as a description of the job function or personal attribute. For this study, the term is used to designate those in creative fields who hold a position that is charged with creating concepts in their respective disciplines.

"Perceived v. actual value"

The definitions for these terms in the marketing arena and this study are similar. In marketing, the actual value of something, generally a good, service or idea, is a measure related to the cost that it takes to produce and sell it at a profit. The perceived value is what the end user (consumer) believes the product is worth. This perception is based on the opinions of the market and the benefits the customer expects to receive from the product. The ideal for the producer is that, due to the perception (perceived value) of the customer, the product may be sold for much more than the cost of production (actual value), thereby generating higher profits. This is easier to ascertain for goods or services than ideas. For goods or services, actual value is measured by accounting for the costs of product development, labor, materials, shipping, marketing, etc. Perceived value is harder to determine. Creativity is generally not thought of as a service or good and is, therefore, difficult to quantify, so determining both perceived and actual value is challenging.

In this study, the perceived value and actual value are defined in much the same way. The perceived value is our perception of the value of creativity and the actual value, while not necessarily quantitative, is the measure of its occurrence, use and acceptance. This study uses the terms "perceived value" in juxtaposition to "actual value" to describe the value of creativity in our culture.

"Creativity"

In order for this study to be accurate and comparable, "creativity" must be defined. This is a difficult task as most of the articles and books cited in this paper, as well as many others, do not clearly define creativity. Many merely explain how difficult defining creativity would be. For example in *Creativity for Graphic Designers*, a book

solely about creativity, the closest the author, Mark Oldach, comes to a definition of creativity is to say it "is complicated" (2000, p. 3). Nevertheless, common characteristics of creativity mentioned most often in these sources are fluency, flexibility, elaboration, and rarity or originality.

In scientific terms, a distinction between "little-c" creativity and "Big-C" Creativity is made. Psychologist Dean Keith Simonton, PhD, of the University of California, Davis defines "little-c" creativity as everyday problem solving and the ability to adapt to change and "Big-C" Creativity as far more rare. "It [big-C] occurs when a person solves a problem or creates an object that has a major impact on how other people think, feel and live their lives." Simonton goes on to say, "You can't be [big C] creative unless you come up with something that hasn't been done before . . . The idea also has to work, or be adaptive or be functional in some way" (Kersting 2003).

As stated above, creativity is generally not a service or good. It is often referred to as a verb meaning, "taking creative action." With that in mind this study will be about "Big-C" Creativity and will define it as the ability to transcend traditional ideas and generate new ideas that meet some criterion of usefulness. The last part of this definition, "that meet some criterion of usefulness," is important to the future outcomes of this study. In the exploration of the value of creativity in our culture, this study concentrates on those creative individuals who have the means to change that value in the future—designers and artists whose creativity meets a criterion of usefulness.

Scope and Limitations

This study explored how creativity is valued. It also explored the correlation between the fear of implementing new and creative ideas, as defined above, and the lack of creativity in the current culture. There were limitations of both time and travel in this study. The study was limited to western views on creativity as it was conducted only in metropolitan Phoenix. These limitations will foster the question, "Do the results of this study reflect the value of creativity in all of western culture?" Ethnicity and gender was not

considered. While current economics could be a factor in the fear of risk for businesses and therefore a factor in the reduced emphasis on creativity, that area was not specifically explored in this study.

Other limitations to this study may require some justification. Interviews were conducted with only creative people and, even more limiting, only creative people who are in a position to change the culture. There are always those "crazies," outliers, and anomalies to any society or culture who exhibit creativity in their lifestyles or avocations who may affect their culture. However, these are generally not the main influencers. The people who can influence and eventually change the culture are the filmmakers, designers, writers, and artists. This is the group this study has chosen to focus on.

Conclusions to the Introduction

The introduction presented the background, research topics, and research questions for this study. The purpose of the research, justification for it and its methodology was introduced. Definitions used in this thesis and the scope and limitations, both imposed and encountered, were presented. The following sections will provide an extensive literature review, detailed methodology, interviews, and finally findings and conclusions.

Chapter 2

LITERATURE REVIEW

Introduction

The literature review for this study will look at four different aspects of creativity: the difficulty in defining creativity; fear and the fear of creativity; solutions – ways to be creative, and to express and accept creativity; and the plethora of articles written about creativity. Most of these writings assume that creativity is a valuable attribute for individuals, organizations, and our culture. In *Launching the Imagination*, the author states, "Once viewed as peripheral, creativity and innovation have become highly valued in contemporary life" (Stewart, 2008, p. 110). The gap in this research is the truth of that assumption.

Creativity is difficult to define

Writings in this section are reviewed that attempt to define creativity. As the title suggests in *Creativity for Graphic Designers* (Oldach, 2000), a textbook commonly used in design and creativity courses, creativity is the main subject. While many aspects of creativity are covered, the author never defines it for the reader. Creativity can be difficult to define and in most literature, it is defined specifically within the context of that writing. In a blog article written by Bradley (Woody) Bendle, *The Demand for Curiosity, Creativity and Innovation* the author describes the difficulty in defining it.

"According to the Merriam-Webster Dictionary, creativity is "the quality of being creative or the ability to create." But, the challenge is in how you describe the quality of being creative – without using the term 'creative' (2012).

In *Toward a Broader Conception of Creativity . . . A Case for "mini-c" Creativity* (Beghetto & Kaufman, 2007), the authors add to the already accepted concept of "little c" and "Big C" creativity. *In Unpacking Creativity*, Kerrie Unsworth (2001) defines creativity by breaking it down into four distinct creativity types. *Scrutinizing Creativity* (Hollenberg et al, 1999) defines creativity in terms of individual and groups and makes a damning

statement on the future of creativity. Mitch Ditkoff defines creativity as an element of innovation in *Creativity . . . It's the Fuzzy End of Innovation* (2008) and Rita Mae Brown (2004) as an element of everyday life.

Reviews:

Toward a Broader Conception of Creativity: A Case for "mini-c" Creativity, an article by Ronald A. Beghetto, University of Oregon and James C. Kaufman, California State University at San Bernardino

In this article, the authors argue that "mini-c" creativity is a necessary element in advancing creativity theory and research. Mini-c creativity is defined differently than both "little-c" creativity, the creativity we use everyday, and "Big-C" creativity, creativity that has major impact. "Mini-c" creativity "refers to the creative processes involved in the construction of personal knowledge and understanding." This, according to the article, addresses gaps in the current concept of creativity and offers researchers "a new and important unit of analysis." (Beghetto & Kaufman, 2007)

The article defines "mini-c" creativity as "the novel and personally meaningful interpretation of experiences, actions, and events." The benefits of this definition of creativity are mostly to education and development. According to the article, "[b]ecause mini-c creativity is concerned with the individual creative processes involved in student knowledge construction and development," it will help distinguish aspects of creativity that are domain specific and those that might be domain general. (Beghetto & Kaufman, 2007)

Critical analysis and conclusions

Often when defining something that is difficult to define, it is beneficial to break it down into smaller, easily definable parts. Science has long defined creativity in terms of "Big-C" and "little-c" creativity. The authors of this article saw a need to break this

distinction down even further. This article shows that how we define something will affect how it is utilized and understood.

Unpacking Creativity, an article by Kerrie Unsworth, University of Sheffield

The author of this article starts with the irony that while challenging assumptions is a common predictor of creativity and trait of creatives, researchers in creativity rarely challenge the assumptions of creative research. This article challenges the assumption that creativity is a unitary construct and according to the author, "hinder[s] a fuller understanding of the phenomenon." The author argues against "homogeneity" by starting with two dimensions of creative engagement, why and what, and developing a matrix of four creativity types: responsive, expected, contributory, and proactive. (Unsworth, 2001)

The article explores "Why engage in creativity?" and "What is the initial state of the trigger?" where he draws on Csikszentmihalyi's early work. From this, the author created a matrix of creativity types, with one axis moving from discovering problems to responding to existing problems and the other focusing on drivers for engagement from external drivers, i.e., situations requiring that it be performed, to internal drivers, i.e., a wish to be creative, or a desire to achieve a goal. The results are four creativity types, responsive creativity (responding to presented problems because of external drivers), expected creativity (discovering problems because of external drivers), contributory creativity (responding to presented problems because of internal drivers), and proactive creativity (discovering problems because of internal drivers). (Unsworth, 2001)

Critical analysis and conclusions

The author redefines creativity in order to facilitate creative research. While creativity is broken down into smaller, more definable parts, an overall definition of creativity is not explored or presented.

Scrutinizing Creativity an article by Dennis Hollenberg, Jacob Goldenberg, David Mazursky, and Sorin Solomon

In this article, two conflicting opinions are expressed about the process of creativity for individuals and groups. Jacob Goldenberg, David Mazursky, and Sorin Solomon advocate that the process of creativity is the same for groups and individuals. Dennis Hollenberg argues that the processes for the two are qualitatively different. According to Hollenberg, each person interprets according to his or her own "developmental and experiential histories." He says that while creative groups may propose solutions to problems of higher "quality" than those arrived at by individuals, they are much less likely to be unique. Individuals "are better at producing the long-shot solutions to problems that connect disparate elements in unintuitive ways." (Hollenberg et al, 1999)

While Jacob Goldenberg, David Mazursky, and Sorin Solomon advocate that the process of creativity is the same for groups and individuals, the heart of their study is between human creativity and a possible mechanical, computerized creative future.

"The similarity we drew between the creativity of structured groups and that of individuals merely exemplified the deficiency of unstructured methods in enhancing creativity. However, this issue was only remotely related to our main focus on human incapability to outperform a template-based, idea-generating computerized routine."

The authors believe these findings require a reappraisal of the human relation to creativity. (Hollenberg et al, 1999)

Critical analysis and conclusions

What is germane to the discussion of the definition of creativity is this final statement in the article by Jacob Goldenberg, David Mazursky, and Sorin Solomon.

"According to the Webster dictionary the words "creative" and "mechanical" are antonyms . . .Yet our human judges systematically

gave high creativity grades to the output of a mechanical computer procedure, showing that there is a clash between what humans declaratively define as creative and the operative definitions that humans actually apply in practice." [italics mine]

Creativity . . . Its the Fuzzy End of Innovation, an article by Mitch Ditkoff

The author defines creativity in this article as an essential element to innovation. He begins by choosing a definition of innovation from among the 600 that he found in a Google search. "The two I like the best," the author states are "'the ability to adapt, alter, and adjust that which already exists for the sake of adding value' and 'the commercialization of creativity." He goes on to state, "No matter how we define it, there is no innovation without creativity. Creativity is the catalyst, the spark, the 'fuzzy frontend." (Ditkoff, 2008)

Ditkoff then defines creativity in terms of five attributes; attend, intend, suspend, extend and connect. "Attend" is the ability to utilize more of one's senses, paying attention to both outside trends and patterns and inside feelings and ideas. He states that most people look but do not see, listen but do not hear, and reach out but never touch. Creative people, on the other hand, do all three. "Intend" is the notion that creativity takes effort. The author describes creativity as "flaccid" because of the lack of intention. "To spark innovation, you need to get in touch with your intention - what really moves you. "Intention" can take many forms - to change, to improve, to think out of the box. Whatever form it takes your effort needs to be more than cerebral or politically correct – It needs to be primal, tidal, core." "Suspend" is the antidote for practicality according to the author. The suspension of belief when we attend a movie can be easily used in our everyday activities. "While there is nothing wrong with gathering data, an addiction to it often subverts our natural creativity . . . It is in this state of suspension that our innate creativity percolates to the surface." "Extend" describes the "stretching" of a creative act or idea, going beyond existing boundaries. "Bottom line, if you want to break new ground, you will

need to go for it. You will need to stretch, extend beyond your normal ways of thinking and doing." "Connect" in the author's view is not only the connection between and among people but also ideas. "If you want a breakthrough, it's time to start looking for new connections-uncommon linkages between this, that, and the other thing. Who (or what) do you need to connect with in a new way in order to jump-start innovation?" (Ditkoff, 2008)

Critical analysis and conclusions

This article theorizes that creativity is an essential element in innovation, what the author describes as "the ability to adapt, alter, and adjust that which already exists for the sake of adding value' or 'the commercialization of creativity." Like Unsworth's article above, in order to define creativity, the author breaks down creativity into manageable parts to define. He describes the process or attributes that creatives must follow or have. This article shows once again, it is difficult to define creativity directly or simply.

Be creative, an article by Rita Mae Brown

In this short article, the author defends creativity as not the "synonym for manipulation and distortion" but as an everyday attribute that can improve our lives. She states that being inventive or imaginative or creative is not the sole domain of artists. She quotes author John Updike, "Any activity becomes creative when the doer cares about doing it right, or better." (Brown, 2004)

Ultimately she defines creativity as, "Stepping into the unknown, listening to your own voice even as you redefine your vision, retaining your convictions while you release your certainties, learning from the mistakes you inevitably make, and keeping success one more try away. If you can't see yourself being creative, take another look, in fact, that's as good a definition of creativity as any other." (Brown, 2004)

Critical analysis and conclusions

While this article is, on the surface, very simplistic, it seems to cut to the heart of what creativity is to the common person (i.e., those who are likely outside the realm of creative endeavor).

Summary

Creativity can be difficult to define. The writings in this part of the review define creativity in a variety of ways. In some articles, creativity is broken down into definable parts whether those are attributes or creativity types. In others, it is defined in terms of its relationships. Almost all, however, show that how we define creativity affects how it is utilized and understood by our culture.

Most of the literature reviewed here defines creativity specifically within the context of that writing. This thesis is no different. For the purposes of this study, it will be defined as the ability to transcend traditional ideas and generate new ideas that meet some criteria of usefulness.

Fear and the fear of creativity

In his 1933 inaugural speech Franklin Roosevelt spoke the now more than famous words," . . . the only thing we have to fear is fear itself." He was not the first to describe this condition. In his 1623 essay, *Fortitudo* from De Augmentis Scientiarum Book II, Sir Francis Bacon said essentially the same thing, "Nothing is terrible except fear itself."

In this section, the subject of fear and the fear of risk is explored in its relation to the expression and the acceptance of creativity. This section will also briefly explore another possible reason that creativity is not accepted, the relationship of creativity and unethical behavior.

The article *Are you Afraid?* discusses fear in the workplace as a motivator and as a destroyer of creativity (McManus, 2006). Poet Mary Ruefle in *On Fear* (2012) and

David Bayles & Ted Orland in *Art & Fear* (2011) discuss fears as an artist and Amy Kraft (2012) about our reaction to fear in art. In *Searching the Brain for the Roots of Fear*, Joseph LeDoux discusses the amplification of anxiety by our ability to imagine the future (2012). Alina Tugend offers a solution to a more creative education by overcoming the fear of being wrong (2011). The *Dark Side of Creativity* offers that creativity can lead to more dishonesty (Gino, & Ariely, 2012).

Reviews

Are you Afraid?, an article by Kevin McManus

In this article, the author discusses fear-based workplaces. He states that many people feel that fear in the workplace is a good thing, a motivator, "that employees need to fear for their jobs . . . This keeps them motivated to stay on the right track." "Fear, McManus states, " is culturally accepted as a motivator" citing its use by marketers and politicians. (2006)

He also states that it is obvious that fear in the workplace hinders many things including organizational performance and that using fear as a motivator is wrong. A fear-based workplace creates paranoia, stress, and frustration. "The potential for human error increases, and the desire to do anything more than make it through the day dies under such conditions." (McManus, 2006)

He offers other motivational options. Instead of threatening people's jobs, we can motivate them by promoting the things that make them feel secure in their employment, such as "keeping skills up to-date, staying connected, and continually searching for ways to add more value to [the] organization." (McManus, 2006)

Critical analysis and conclusions

The assumptions made in this article are significant to this thesis. The article is from *Industrial Engineer* magazine, which is aimed at an audience that is not necessarily considered creative. Regardless, McManus states without preamble "Using fear as a

motivator destroys creativity." He goes on to say that fear as a motivator "discourages a majority of the types of human contribution that we rely on to support workplace improvement," (2006) indicating that contribution is creative in nature.

On Fear, an article by Mary Ruefle

The author states that one of her fears as a poet is that her life will be revealed as "intrinsically unnecessary and superfluous." She explores fear by speaking with other poets, a doctor, a pilot, an anthropologist, and a philosopher. She explores the CIA Exploitation Training Manual and the Judeo-Christian tradition of fearing God in an effort to understand fear. Ruefle makes a distinction between emotions and feelings. Emotions, according to the author, are "hardwired, biological functions of the nervous system such as fear, terror, sexual attraction, and feeding behaviors." Feelings are complicated cognitive reactions between emotions, memories, experience, and intelligence. While fear is both an emotion, what drives all animals away from life-threatening situations, and a feeling, fear involving cognitive reaction and requiring self-consciousness, it is only the latter that the author seeks to understand. The author lists what she calls concrete human fears:

"Fear of death of illness of pain of suffering of despair of not understanding of disturbance or reversal of powers of being unloved of the unknown or strange of destruction of humiliation of degradation of poverty of hunger of aging of unworthiness of transgression of punishment of making a mistake of loss of dignity of failure of oblivion of outliving the mind of eating an anchovy." (Ruefle, 2012)

Critical analysis and conclusions

The author comes to several conclusions in this article:

 No one feared being born but all those responsible for the birth were fraught with fear.

- By age of four we have learned fear because we fear the recurrence of a pain we once felt. Ruefle refers to poet Tony Hoagland's description of "the ghost of an experience." (2012)
- The antidote of fear is to follow procedures.
- The impulse toward order and chaos are both born of fear and desire.
 Artists are driven by the tension between the desire to communicate and the desire to hide (the fear to communicate).
- We have always been at the mercy of collective desire and collective fear. We are "an unhappy people in a happy world"
- Because we fail, we desire to progress and become better.
- Finally, in direct opposition to Kevin McManus, fear is the greatest motivator of all time.

While the author concludes that fear is a motivator for her art, the unsaid or unwritten conclusion is that overcoming fear is the motivator of her art. "And I want to say the poet is never afraid because he is unceasingly afraid, and therefore cannot become that which he already is" (Ruefle, 2012).

The Art Of Fear, an article by Amy Kraft

In this article, the author proposes that art or an aesthetic experience can be enhanced by fear. The author looks at two studies. In one at Loyola University, some participants watched a scary movie clip, while others sat quietly, watched a puppy video, or exercised. They then rated a series of abstract paintings. The scary movie watchers rated them as more awe-inspiring than the others. Another research study showed a correlation between the positive judgment of art and heightened activity in the insular cortex, generally a sign that the brain is activated by fear. This suggests that our reaction to art is primal and fundamentally rooted in fear. "When we're afraid, we're hyperaware." (Kraft, 2012)

Critical analysis and conclusions

This article brings to light another element in the relationship between fear and creativity. While artists must overcome fear to express their creativity, that art may be enhanced by the fear of the viewer.

Art & Fear, Observations On the Perils (and Rewards) of Artmaking, a book by David Bayles and Ted Orland.

This book is written in two parts. In the first part, the authors explore the nature of making art, art & fear, fears about yourself and others. The second part, they explore art (and the fears explored in the first part) in relation to culture, the outside world, the academic world, and conceptual worlds. Within these sections, they make some assumptions, provide some answers, and ask some questions. (Bayles, & Orland, 2011)

In the beginning of this book, the authors state, "This is not the age of Faith, Truth and Certainty. Creating art in this culture means creating in certain uncertainty." According to the authors, fear for the artist is both where the artist has been and where the artist may go. "Art is like beginning a sentence before you know its ending. The risks are obvious: You may never get to the end of the sentence at all – or having gotten there, you may not have said anything." The artist must overcome fear—acting out of fear—becomes a self-fulfilling prophecy. One of the ways the authors suggests to overcome the fear of uncertainty is to embrace it. " . . . tolerance for uncertainty is the prerequisite to succeeding." (Bayles, & Orland, 2011)

The book also explores the fear of acceptance. Some, such as performing artists, "face the added, real-time terror of receiving an instant verdict on their work." Very often, this dilutes the work, as artists create work that they imagine their audience can imagine. (Bayles, & Orland, 2011)

The authors promote that change for art and creativity to be more accepted is needed but the change will come slowly.

"When Columbus returned . . . and declared the earth was round, almost everyone else went right on believing the earth was flat. *Then they died* – and the next generation grew up believing the world was round. *That's* how people change their minds." (Bayles, & Orland, 2011)

Critical analysis and conclusions

There is much to fear in being creative and as the authors put it, "avoiding the unknown has considerable survival value."

Searching the Brain for the Roots of Fear, an article by Joseph LeDoux

In this article, the author proposes that anxiety greatly amplifies our ability to imagine the future and our place in it. He makes a distinction between anxiety and fear. Both are negative emotional states. However, fear is triggered by a stimulus that can cause harm, while anxiety is a state in which the threat is anticipated. The terms are often misused. When we say we are "afraid" we might fail, we really are anxious that we might fall. According to the author, "the truth is, the line between fear and anxiety can get pretty thin and fuzzy." (LeDoux, 2012)

Fear is universal among animals, but anxiety, what the author calls "an experience of uncertainty" is especially well developed in humans. "We can project ourselves into the future like no other creature." (LeDoux, 2012)

Critical analysis and conclusions

Creativity is often a foray into the unknown, a perfect medium for anxiety or fear.

The irony, as pointed out by this article, is that we can use creativity to envision a better future or use it to worry about it.

Why Wrong Is Not Always Bad, an article by Alina Tugend

According to the author of this article our education system along with parental expectations have created an environment where students fear failure and are, therefore, less likely to take risks and be creative. The author proposes that mistakes in this environment are something to avoid at all costs and that it is a detriment to learning.

Oddly, this can especially be an issue in affluent schools where students are "rarely or never allowed to fail." (Tugend, 2011)

This culture reinforces that learning is all about the results, that mistakes are something to be feared and avoided. The author quotes several studies that show errors tend to be interpreted as an indication of failure in learning. This presents a mixed message - avoid mistakes that are a necessary learning tool. The author also explains that this is amplified with the constraints on teachers of time, curriculum, and standardized tests. (Tugend, 2011)

Critical analysis and conclusions

Student's interest in experimenting is stifled because experimenting may end up in failure. The result is children who are afraid to take risks, to be creative, or to be wrong. This article shows that a clear negative correlation exists between the fear of risk and enacting creativity.

Dark Side of Creativity: Original thinkers can be more dishonest, a research article by Francesca Gino, Harvard Business School, Harvard University, and Dan Ariely, Fuqua School of Business, Duke University, Durham, NC.

In this 5-part study, the researchers test whether creativity increases dishonesty.

The hypothesis is that a creative personality promotes an individuals' ability to justify their behavior, leading to unethical behavior. (Gino, & Ariely, 2012)

Results showed that participants in part one with creative personalities tended to cheat more than less creative individuals and creativity is a better predictor of unethical behavior than intelligence. Part two showed that participants who were primed to think

creatively were more likely to behave dishonestly than those in a controlled situation. Parts three and four showed that creatives had more ability to justify their dishonesty and part five showed that dispositional creativity moderates dishonest behavior. Overall, the study showed an association between creativity and dishonesty, that there is a link between creativity and rationalization "highlighting a dark side of creativity." (Gino, & Ariely, 2012)

"Greater creativity helps individuals solve difficult tasks across many domains," the authors state, "but creative sparks may lead individuals to take unethical routes when searching for solutions to problems and tasks." (Gino, & Ariely, 2012)

Critical analysis and conclusions

Creativity requires cognitive flexibility and divergent thinking, elements also found in unethical behavior. Unethical behavior may be a choice for all individuals but the ability to be more successfully unethical, according to this study, seems to be the domain of creatives.

This research, once again, starts with the assumption that, "Creativity is a common aspiration for individuals, organizations, and societies" (Gino, & Ariely, 2012).

Summary

There are at least 530 documented phobias including, ironically,
Hippopotomonstrosesquipedaliophobia, or the fear of long words. While there is no
documented fear of creativity, there is the fear of anything new (neoophobia), the fear of
being laughed at or ridiculed (gelotophobia) and the fear of failure or defeat
(kakorrhaphiophobia).

Fear is prevalent in our culture. Roger Ailes, president of Fox News admits to playing to his audiences' "darkest fears" (Dickinson, 2011). Kevin McManus in *Are you Afraid?* writes of "the fear-based blinders that society likes to place over our eyes" and

infamous Southern California internet celebrity Doctor Phineas Waldolf Steel says, "[t]he human being is a creative being, but its creativity is stifled by fear" (Wilson, 2010).

The literature in this section shows varied views of the relationship of creativity to fear and the fear of risk. In *Be creative*, Rita Mae Brown states, "The true corruptors of creativity are the fears and false modesties that we impose — or allow to be imposed — on us" (2004). David Bayles and Ted Orland in *Art & Fear* state that artists must overcome fear (2011). In *On Fear*, Mary Ruefle says that fear is the greatest motivator of all time (2012), in contrast to Kevin McManus in *Are you Afraid?* who writes that fear as a motivator "is the destroyer of creativity" (2006). These writings show that the relationship between creativity and fear is complicated and sometimes contradictory but all show that a close relationship exists.

It has been suggested that the poet Emily Dickinson suffered from severe anxiety, so perhaps she is the expert on creatives and fear.

While I was fearing it, it came,

But came with less of fear,

Because that fearing it so long

Had almost made it dear.

Solutions - Ways to be creative, to express, and accept creativity

Many articles and popular books provide suggestions to help business and individuals become more creative. These include articles on enhancing creativity through cohesive groups (Moore, 1997), self-compassion (Zabelina & Robinson, 2010) and even video games (Hutton & Sundar, 2010). Tim Love's article, *In times of challenge, creativity to the rescue*, calls for advertising to lead by producing "fearless ideas" (Love, 2002). *Creativity, Culture Contact, and Diversity* explores the idea of cultural contact and "attractor images" (Montouri, & Stephenson, 2010). Creativity of the individual in business is the subject matter of the book based on Michael Ray and Rochelle Myers' Stanford University course. And renowned creative thinkers are reviewed - an interview with Dr.

Min Basadur by Dorte Nielsen (2011) and *Flow*, a book by Mihaly Csikszentmihalyi (1990).

Reviews:

The positive effects of cohesion on the creativity of small groups, a research article by R. M. Moore

This study looks at the affects of small group cohesion on creativity. According to the researchers, creativity is highly valued in our society, and " . . . individual achievement is emphasized more so than that by a group." They propose that group work will be less creative or even "anti-creative" due to group members' tendency to agree with each other's ideas. The researchers feel that this logically leads to the assumption that groups with high cohesion will conform even more and be even less creative. This study assumed that the opposite was true—that groups with high cohesion will experience greater creativity than groups whose members have low cohesion. (Moore, 1997)

Seventy-nine groups in total were studied. Each group had 3 to 5 participants. Participants were students at a large university. Gender, age, or ethnic make up and diversity were not mentioned in the study. The 79 groups were chosen from two distinct areas of the university. Forty groups were formed from students in social science classes at the larger urban university campus, while the other 39 groups were formed from students in liberal arts classes at one of the university's branch campuses primarily attended by art students. The researchers chose art students under the assumption that artists are naturally creative and many are loners and like to work alone. A control group was created consisting of 20 individuals working alone. Eleven of these were from the branch campus and nine from the main campus. These students did not complete the questionnaire but they were asked to individually complete the same experiment as the groups. (Moore, 1997)

Student participants completed a questionnaire that led them to believe they either had a lot in common with members of their group or had little in common. This

questionnaire was not used to divide students into high- and low-cohesion groups. They were assigned arbitrarily into high- or low-cohesion groups but a script was read to them that "based on the questionnaire, students in the entire class either had a lot in common with each other or had little in common." If the class was told they had a lot in common, they were told that each group should work well together. If they were told they did not have a lot in common, they were told that they should do their best working with each other in the group in which they were assigned. (Moore, 1997)

The groups were then given the task of examining two paintings, one realistic and one abstract, discuss each of the paintings, answer five questions for each painting and record their answers in 12 minutes. The questions concerned symbolism, intention of the artists, color, quality of the work, and innovation. A post-experiment questionnaire determined if the manipulation of participants into high- or low-cohesion groups was successful. (Moore, 1997)

The study was done in the student's regular classrooms, with each classroom divided into approximately 5 or 6 groups of 3 to 5 students each. Researchers visited each classroom twice. The first time, they administered the first questionnaire. Questions included student interests, likes, and dislikes to make the students believe the researchers were using that information to place them into cohesive or non-cohesive groups. On the post-experiment questionnaire, participants were asked their opinions on the cohesion of their group with questions like, "Do you feel you got along well with other members of the group?" Scoring was done on a Likert-type scale. (Moore, 1997)

The results showed that high cohesion groups had more creative answers than groups the low cohesion groups. About 65% of the high-cohesion groups had high creativity scores compared to 31% of the low-cohesion groups. The control group, participants working alone, fell in between. (Moore, 1997)

The study does not prove that working in groups increases creativity. While high-cohesion groups scored higher than individuals, the low-cohesion groups scored

significantly lower. As the researchers put it, this proves "that 'more heads' are not always better than one." (Moore, 1997)

Critical analysis and conclusions

The researchers chose to manipulate the student participants into believing they were working in cohesive or non-cohesive groups, instead of actually forming cohesive groups and non-cohesive groups based on the first questionnaire. The participant's perception of cohesiveness then becomes a factor in the study. That made some of the other factors in the study suspect.

The researchers also made some rather broad assumptions:

- "Cohesion allowed and encouraged feedback among group members thereby
 decreasing the risk of the negative effects that conformity could have on a group"
 (Moore, 1997). Since only final answers were analyzed, they have no way of knowing
 the workings within the group.
- "Creativity will continue to be valued in our society, especially in time periods of limited resources when new ideas are often sought" (Moore, 1997). This is not a proven, or even commonly accepted, idea.

Do the results of this study hold up in the workplace or in society in general?

Researchers in this study defined cohesion as "the attraction members of the group felt for each other based on having similar likes and dislikes." The study does, despite its faults, make a good case that creativity is more prevalent in groups where high cohesion under this definition is present when compared to low-cohesive groups. It also raises the question, is there "strength in numbers" in overcoming the fear of creativity?

Don't Be So Hard on Yourself: Self-Compassion Facilitates Creative Originality

Among Self-Judgmental Individuals, a research article by Darya L. Zabelina and

Michael D. Robinson

Self-compassion can be a means to eliminate self-criticism, which may undermine creative expressions. It was hypothesized that while tendencies toward critical self-judgment would undermine creativity in originality output, as opposed to fluency, it could be increased in an induced self-compassionate mindset. (Zabelina, & Robinson, 2010)

Participants—86 undergraduate psychology students from North Dakota State
University—were given three seemingly unrelated tasks, a writing activity, a performance
test and a questionnaire. (Zabelina, & Robinson, 2010)

Results of the writing activity allowed researchers to place subjects into the control group or the "self-compassion" group. The performance test was a means to evaluate creative originality. The test used was the Torrance Test of Creative Thinking (TTCT). One of the questionnaires was a self-evaluation of mood. Participants could rate their mood as positive or very positive, or negative or very negative. A second self-evaluation asked the fluency of their self-criticism through a series of statements that participants rated on a Likert-type scale. (Zabelina, & Robinson, 2010)

Three areas were explored in the study—creative potential, self-compassion, and tendencies of self-criticism. Self-judgmental individuals were placed in the control group and in a group that was manipulated into a self-compassionate condition.

(Zabelina, & Robinson, 2010)

Results showed that without a manipulation towards self-compassion, critical self-judgment was a strong prohibiter of creativity. Subjects who were chronic self-critics had equal levels of creative originality when manipulated to self-compassion. (Zabelina, & Robinson, 2010)

Critical analysis and conclusions

A couple of things in this study are very relevant to this thesis. First, the study explores how enhancing or at least not inhibiting creativity (i.e., inducing self-compassion) has a positive affect on creativity, and it poses a premise essential to

understanding the fear of risk involved in expressing creativity. The researchers confirm not only that self-censure is detrimental to creative thought but that "the production of original thoughts in creativity tasks is likely to require some degree of risk-taking" (Zabelina, & Robinson, 2010).

Can Video Games Enhance Creativity? Effects of Emotion Generated by Dance

Dance Revolution, a research article by Elizabeth Hutton and S. Shyam Sundar

The researchers in this study were looking to find a correlation between emotion and creative potential. They used a model of emotion comprised of valence and arousal. Valence was defined as "the extent to which an individual feels positive or negative;" arousal as "the extent to which he or she feels energized either physically or mentally." The researchers started with the premise that playing video games can be an intense experience. Their research question then became could the excitement generated by playing video games, either physical or mental, depending on mood be transferred from one realm to another and affect creativity? (Hutton & Sundar 2010)

Subjects consisted of 90 undergraduate and graduate students enrolled at a large university in the mid-Atlantic region of the United States. Students were recruited face-to-face and were told the purpose of the study. The methodology was described as a "fully-crossed factorial experiment" consisting of two areas, valence with two conditions, positive or negative mood, and arousal, with three levels of physical exertion–low, medium, and high. (Hutton & Sundar 2010)

Researchers used testing (The Abbreviated Torrance Test for Adults), self-evaluation, and monitoring of physical attributes. For the valence portion of the study, a 20-item emotion recognition booklet was compiled using photos of faces. Next to each picture were the words anger, fear, sadness, disgust, happiness, and surprise.

Participants were asked to identify the emotion in each face by circling one of the words. This was used to manipulate the participants. Half of the participants were told that they passed the test, the other half were told that they failed. (Hutton & Sundar 2010)

For arousal, participants danced to the song "Pump Up the Volume" on the video game "Dance Dance Revolution Extreme 2." Beginner, light, and standard levels in the game corresponded to low, moderate, and high levels of activity. Participants were randomly assigned levels of play. Participants were connected to a device to measure galvanic skin response. This was recorded before, during, and after playing the game. After playing the game subjects were asked to circle a number on a self-assessment manikin (SAM) scaled from 1 to 10 where 1 was sad and 10 was happy. (Hutton & Sundar 2010)

Subjects then took The Abbreviated Torrance Test for Adults, a paper and pencil test containing verbal and figural sections. This was given to measure four abilities associated with creativity—fluency, originality, elaboration, and flexibility. Participants were also asked to self-evaluate how energetic they felt mentally and physically while taking the creativity test. This was an online questionnaire consisting of questions such as, '[w]hen I started taking the test, I felt alert, attentive, interested, or determined" to measure mental energy, and "[w]hen I started taking the test, I felt active, excited, jittery or nervous" to measure physical energy. (Hutton & Sundar 2010)

Researchers concluded that creativity was highest under low arousal–negative valence conditions and high arousal–positive valence conditions. Researchers had predicted that positive valence would have a positive effect on creativity, but this was only true with high arousal. The highest creativity index scores were a result of negative valence and a low level of arousal. (Hutton & Sundar 2010)

Critical analysis and conclusions

The video game chosen is an anomaly among video games. Participants do not just sit and play the game but must actively move on a floor pad to score. While this allowed researchers to test both mental and physical energy and arousal, it will not translate to most other video games. Also, researchers did not take into account the "process of creativity" and stated so in their discussion.

If the creative process follows a linear path, then perhaps individuals are in a state of high arousal when first confronting the task and do their best when encouraged. Once they fully understand and confront the complex task, then they may slip into a state of low arousal, to conserve energy and allow defocused attention or the unconscious mind to arrive at a solution that must be analyzed and doubted before it surfaces. In the final stage, creativity appears to be better served by negative valence, which is known to promote more in-depth, detail-oriented analytical thinking (Hutton & Sundar 2010).

The idea that emotion plays a part in creativity is a common belief. According to this study, combinations of negative arousal and valance as well as positive arousal and valance are ways to induce creativity.

In times of challenge, creativity to the rescue, an article by Tim Love

In this article, the author challenges the advertising industry to be the solution, or at least part of the solution, to overcoming the fear prevalent in our culture by presenting fearless ideas. Fear, he states, is the biggest factor inhibiting peace and prosperity. "It suffocates the creativity that brings people together and that fuels economic optimism." It can also be detrimental to a business that thrives on creativity such as advertising. Love states the advertising industry is best equipped to take on the challenges in our modern culture because of its inherent creativity. By being fearless it can create jobs, to improve global relationships and make people's lives better. (Love, 2002)

The author proposes that there has always been a relationship between fear and creativity. "It's why many artists suffer demons, like those suffered by Jackson Pollock and Vincent van Gogh." The solution for these artists was to not be paralyzed by this fear. Another solution to unleash potential creativity is recognition in an inspirational environment. The "side effects" of this are optimism and enthusiasm. And those, in turn, "encourage people to fearlessly take risks and think differently." (Love, 2002)

Critical analysis and conclusions

Advertising and commercial design are a major influence in our culture and, according the author, it is their duty to lead by example. The idea of innovation and creativity as a means to overcome hard economic times is not a new one. During the Great Depression, Charles Kettering of General Motors in a speech given in 1938 stated that the economy cannot stimulate itself. What is needed is creativity and new ideas.

Creativity, Culture Contact, and Diversity, an article by Alfonso Montouri and Hillary Stephenson, California Institute of Integral Studies, San Francisco

The premise of this article is that creativity can benefit from diversity and cultural contact. According to the authors, this is historically true. They cite recent trends in researching cultural contact, such as hybridization, cosmopolitanism, and cultural innovation and promote that this knowledge can lead to better understanding and greater creativity. (Montuori, & Stephenson, 2010)

The issue they address is that most images currently emerging from cultural contact are images of conflict as opposed to images of creativity. The authors propose to research and document cultural creativity starting with the arts, and expanding into all areas of life. This will result in positive "attractor" images that can counteract the conflict-oriented images and produce greater creativity. The authors define "attractor images" as images, not restricted to visuals, of creative interaction among cultures "that orient a culture's thinking and feeling about a topic." (Montuori, & Stephenson, 2010)

The authors also cite this challenge to overcome – "[u]ntil recently, the concept of "group creativity" was considered an oxymoron." Despite many examples of group creativity in our culture such as musical or theater groups there are no images of this activity. Historically, Western culture has promoted the notion of the lone creative genius. But "[a]n increasing awareness of the activities of creative groups, with stories about

creative collaborations, software teams, and so on is now making inroads in the culture so that the notion of creative groups is not so foreign." (Montuori, & Stephenson, 2010)

The authors recognize the challenge ahead. "An enormous creative task lies ahead of those who choose to view the world in a more complex way, valorizing creativity, collaboration, and complexity." To succeed it must involve the arts, sciences and humanities and must begin with the collection, documentation, and distribution of "attractor images" of cultural creativity. (Montuori, & Stephenson, 2010)

Critical analysis and conclusions

The authors believe that "cultural creativity" already exists and the task at hand is to reveal it. It is a bold assumption and a bold premise that popularizing "attractor images" will promote greater creativity.

Simple. Simplex. Simplexity, an interview with Dr. Min Basadur by Dorte Nielsen

This is the transcript from an interview of Dr. Min Basaur by Dorte Nielsen. The interviewer describes Dr. Basadur as an interesting and charismatic person who spoke with enthusiasm and professionalism. Dr. Basadur has been described as an "Author, Thinker, Inventor, Consultant, Strategist, Innovator, Speaker, Researcher, Professor, Problem Solver and Founding Director of Basadur Applied Creativity Inc. and The Center for Research in Applied Creativity." He has written many articles for scientific journals, several book chapters and two books on innovation, problem solving and creativity. (Nielsen, & Basadur, 2011)

Most of the interview was focused on Basadur's theory of "Simplexity Thinking."

This was developed from Basadur's experience working in what he describes as "real organizations" and discovering how problem solving and creativity works there. "The fact that it was a circular never ending process was one of the most important discoveries."

According to Basadur, "The Simplexity Thinking System" can make even very complex problems very simple. It is described as a system of thinking simply. It integrates

behaviors, attitudes, and thinking skills required to make a process work into a continuous process of adaptability. (Nielsen, & Basadur, 2011)

One of Basadur's key contributions to the field of creativity is changing "why? and how?" to "Why? and What's stopping you?" "If you ask people 'How?' - they're just going give you a solution. But the 'What's stopping you?' forces them to think about the real facts underlying the challenge." His systems are formulated to induce creative behavior making it more than just a process. (Nielsen, & Basadur, 2011)

Critical analysis and conclusions

It is obvious from this interview that Dr. Basadur thinks differently and creatively.

The concepts he discussed range from simple to ethereal. He is focused on increased creativity in organizations through creative thinking.

Flow, a book by Mihaly Csikszentmihalyi

In this book Csikszentmihalyi describes his idea of "flow," a mental state of complete focus. He describes that flow will allow an individual to experience activities in their fullest including creativity. He enumerates the components that accompany "flow." Among these are:

- 1. The activity is an enjoyable one with clear goals/rules.
- The participant knows every moment is getting them closer to those goals there is immediate feedback.
- The skills needed for the activity match the skills available to the participant –
 he/she has the capability of doing this but it is a challenge /not boring
 because it is too easy.
- 4. Feeling of focus and concentration is present.
- 5. Outside concerns are removed from the participant's attention.
- Participants exhibit a feeling of control of their life not completely on edge, but in control.

- 7. Loss of self-consciousness participants are no longer worried about what others think of them or their actions/ no defensiveness.
- There is a transformation of time no sense of time, it goes quicker than normal. (Csikszentmihalyi, 1990)

Csikszentmihalyi defines the difference between pleasure and enjoyment.

Pleasure is automatic and takes no skill nor promotes skill. It is the satisfying of instincts.

Flow produces enjoyment, not merely satisfying instincts – but experiencing the experience. In many experiences enjoyment is the main goal. Csikszentmihalyi relates a story about an antique dealer who gives up a sale because of the lack of enjoyment in the process. (1990)

He defines Psychic entropy as something that conflicts or distracts from intentions but also asserts that attention and consciousness are limited resources.

Csikszentmihalyi also describes the "Complex personality" as a personality with clarity, focus, knowledge of choice, and the ability to commit and to seek and find challenge.

(Csikszentmihalyi, 1990)

He describes an autotelic experience and personality. An autotelic personality does things for their own sake rather than for some late goal. Csikszentmihalyi defines four characteristics or habits of an Autotelic personality - the ability to set goals, the ability to pay attention without assumptions, and the ability to become immersed in the activity. An autotelic personality, according to Csikszentmihalyi, is always learning. An autotelic experience is worth doing because the goal is intrinsic in the process of doing the activity. (1990)

Critical analysis and conclusions

Subsequent readings show that "flow" has a documented correlation with enhanced performance. A flow state, as Csikszentmihalyi describes it, positively correlates with optimal performance in creativity.

Creativity in Business, a book by Michael Ray and Rochelle Myers, Stanford University.

This book is based on the course that Michael Ray and Rochelle Myers teach at Stanford University. As the title states, this is an introduction to enhancing creativity and using it as a tool for business. Overall the book tells readers they must go beyond the established norms and rules. (2000)

The authors define creativity in this way—something is creative when a heuristic approach is used; an indefinite path is followed that can lead to learning or discovery.

They also give several premises for creativity: Creativity is essential for leadership, happiness, and success; everyone is creative; creativity is often blocked by fear and judgment; and that creativity is idiosyncratic, different in each of us. (Ray, & Myers, 2000)

According to the authors, for most, creativity has been inhibited by fear and negative personal judgment. So they also speak of another quality necessary for creativity - Strength. This "inner strength" helps them overcome fear and allows "creative business people to take appropriate risks." (Ray, & Myers, 2000)

The concept of experiences of "Essence" is introduced. An example is love in which we are not affected by fear. The authors also introduce the concept of the "Voice of Judgment" with the heuristic, "destroy judgment, create curiosity." (Ray, & Myers, 2000)

Chapter four is dedicated to paying attention, a similar premise to Mihaly Csikszentmihalyi's "flow." This chapter concludes that there is a strong positive correlation between sensory orientation/visual imaging and creativity and achievement. (Ray, & Myers, 2000)

The book also explores asking dumb questions, the concept of EEE (easy, effortless and enjoyable), eliminating pressures of time and stress, and the concept of being your creative self at all times. (Ray, & Myers, 2000)

Critical analysis and conclusions

The authors quote Congressman Ed Zschau on the subject of asking dumb questions to enhance creativity, "I think creative people are curious, and they're not

always asking the question, 'How is this relevant to what I'm going to be doing?" (Ray, & Myers, 2000). The techniques promoted in this book, including dumb questions, are focused on business but may be relevant to creativity in our all our culture.

Summary

Many different ways to enhance or be or become creative have been explored, researched and written about. The literature above has been a small sampling. Perhaps one of these is the solution, but it is more likely that a combination of some or all of them is the solution. In order to be effective the solutions must be widespread, reaching all of our culture.

"Many worlds are possible-it all depends on representation, especially the collective representation. To make a "world" takes more than one person, and therefore the collective representation is the key. It's not enough merely for one person to change his representation. That's fine, but we're saying that the real change is the change of collective representations." (Bohm, & Nichol, 2003 p 60)

Much has been written and researched about creativity

An overabundance has been written about creativity. Some by creatives explaining their actions and behaviors, some by scientists looking for the reasons behind creativity and some by curious onlookers and casual participants in creativity. The subject matters range from how creativity affects us (Kelly, & Daughtry, 2008; Massetti, 1996) and how we, in our activities, affect creativity (Kim, Hon, & Deog-Ro, 2010; Kreitler, & Casakin, 2009) and how we became creative (Domino, Schmuck, & Schneider, 2002) to how we can test for or predict creativity (Cubukcu, & Cetintahra, 2010; Epstein, Schmidt, & Warfel, 2008; Kipper, 2006). Creativity as a core value has been explored (Dollinger, Burke, & Gump, 2007).

Researchers have also written on self-assessment of creativity under the influence of recreational drugs (Jones, Blagrove, & Parrott, 2009), whether canons of creative behavior theorized almost 60 years ago still hold true (Kipper, 2006), Creativity in education, (Sheridan-Rabideau 2010) and even the proliferation of scholarly research on creativity (Hennessey& Amabile, 2010).

Reviews:

Academic Orientation and Creativity: Does a Creative Personality Correlate with

Students' Approach to the Academic Environment, a research article by Kathryn E.

Kelly, Northwestern State University and Don Daughtry, Texas A&M University –

Kingsville

Researchers in this study explored the correlation between creativity and students' approach to the academic environment. Their hypothesis was that creativity would correlate significantly and in a positive manner with the creative expression factor of the Survey of Academic Orientations (SAO). Participants completed the SAO to measure academic orientation and the Scale of Creative Attributes and Behavior (SCAB) to measure creativity. (Kelly, & Daughtry, 2008)

SAO is a 36-item survey and was used to assess individual differences in six areas of academic orientations. These are reading for pleasure, academic apathy, academic self-efficacy, mistrust of instructors, creative expression, and structure dependence. This was quantified on a Likert-type scale using 5-points with 1 as "Strongly Disagree" and 5 as "Strongly Agree." SCAB is a 20-item scale designed to measure five components of creativity: creative engagement, creative cognitive style, spontaneity, tolerance, and fantasy. The 20 items reflected these components with 4 items each. The participants respond to each item using a 7-point Likert-type scale ranging from 1 as "Strongly Disagree" to 7 as "Strongly Agree." Higher scores indicated more creativity. (Kelly, & Daughtry, 2008)

Results of the surveys were compared and analyzed by the researchers. No information was given about the context (when, where or how) in which the surveys were administered. Results showed that individuals scoring higher on the SCAB also scored significantly higher on academic orientation variables in the SCAB survey such as creative expression and reading for pleasure. This proved the hypothesis, "that creativity would significantly, positively correlate with the creative expression factor of academic orientation." (Kelly, & Daughtry, 2008)

Critical analysis and conclusions

This study showed the affects of creativity on other behavior as opposed to behaviors that affect creativity. The hypothesis, that creativity would correlate significantly and in a positive manner with the creative expression factor of the SAO to measure academic orientation, was shown to be true.

The researchers admit to several areas of concern with the study - the subject sample was small and primarily female. They also recognize that the SCAB should have additional research to verify its validity. One of the areas the study neglected which would be more longitudinal would be to also include the relationship of creativity to academic achievement.

An Empirical Examination of the Value of Creativity Support Systems on Idea

Generation, a research article by Brenda Massetti, St. John's University

One of the assumptions this study made was that organizations seek more innovative ways to compete and therefore the ability of their employees to generate new and valuable ideas becomes an asset for those companies. The study set out to show that computer software might enhance creative performance and become a useful tool for business. (Massetti, 1996)

An experiment was conducted to determine whether two popular creativitysupport applications significantly enhanced creativity in participants. The independent variable manipulated in this study was the type of support each participant used to generate creative responses. The dependent variable was the subjects' creative performance on a given task. Hypotheses included that the use of an Individual-level Creativity Support Systems software (ICSS) would result in a greater number of ideas, more creative ideas, more novel and more valuable ideas being produced for a given task than with the use of conventional software or no software. (Massetti, 1996)

Subjects in this study were 44 MBA students taking a graduate course in management information systems at a large university. All were volunteers for the study and none were familiar with any of the software applications used prior to the beginning of the study. After analyzing the data, one subject was viewed as an outlier and was dropped from the study leaving a total of 43 subjects. Subjects in the study completed the same task using one of four treatments: generative ICSS, exploratory ICSS, conventional software, and no software (a 1 x 4 design). Subjects were randomly assigned to treatments after receiving creativity training. Experts in the area of the task rated the creative merit of each subject's performance on the task assigned. The experiment occurred over two sessions. In the first session, participants were trained in creativity. Subjects were given an introduction in how to think more creatively, told of the importance of creativity for business decision-making, and examples of how organizations have used creativity to become more successful. In the second session, one week after the first, subjects were assigned to a software application and received an initial overview of how their application functioned or assigned to the conventional group, which used no software. Softwares used were "IdeaFisher" a novel-thought support tool, "Ideatree" which was selected because it had an exploratory focus, and "Harvard Graphics" as a control mechanism for any factors that resulted simply from computer use as opposed to creativity support. (Massetti, 1996)

The results of the study showed overall that the software did not generate more ideas than subjects using conventional software or no software. There was partial support for the second hypothesis, which stated that with the help of ICSS software

subjects would generate more creative ideas. In that area, subjects using software outperformed subjects using a pen and paper. (Massetti, 1996)

The third hypothesis, that subjects would generate more novel ideas with the support of software, and the fourth hypothesis, more valuable ideas would be generated with software support, were disproven as the application users of either ICSS software did not outperform the control group or the conventional "pen and paper" group.

(Massetti, 1996)

Critical analysis and conclusions

The study was done in 1996 and computer software has evolved much since that time. The software available at the time is an obvious limitation to this study. It was also done as a one-time evaluation and does not account for use of creative-enhancing software over time.

The abstract states, "The results suggest that responses generated with software support are significantly more novel and valuable than responses generated by pen and paper" (Massetti, 1996). Yet in the study itself, no significant differences were reported. The researchers even state that the little improvement shown in some areas may not have been a result of the use of software, "it is unlikely that using technology, per se, produced the performance enhancements" (Massetti, 1996) and that the software may have only contributed by "providing decision support and not simply charming subjects into performing more creatively" (Massetti, 1996).

Once again this study assumes a positive value for creativity without any evidence or justification.

Proactive Personality and Employee Creativity: The Effects of Job Creativity

Requirement and Supervisor Support for Creativity, a research article by Tae-yeol

Kim, Alice H. Y. Hon, and Lee Deog-Ro.

This study looked at three areas in the work place: proactive personality traits in employees, employee creativity and supervisor support for creativity. It was assumed that proactive personality was a personal characteristic that affected creativity. The researchers defined proactive personality as an "individuals' disposition toward engaging in active role orientation, such as initiating change and influencing their environment. Proactive people initiate changes, take action, and persevere until meaningful change occurs in the achievement of their goals, in contrast to passive people who just adapted to their undesirable circumstances." (Kim, Hon, & Deog-Ro, 2010)

Two hypotheses were made prior to starting the study. The first hypothesis was that proactive personality is positively associated with employees' creativity. In particular to this study, which was conducted in South Korea, proactive personality is positively associated with South Korean employees' creativity. The second hypothesis was that proactive personality, the requirement of creativity for the job and supervisor support all affect creativity interactively. (Kim, Hon, & Deog-Ro, 2010)

Participants were employees in research and development teams for various companies in South Korea. These included six manufacturers, three software development companies, three pharmaceutical companies, and two construction companies. 238 employee/supervisor pairs were invited to participate in the study. Each pair was asked to complete a questionnaire at the workplace during company time. Four different questionnaires were used in the study. The employees were surveyed on their proactive personality. The supervisors were asked about their employees' individual creativity as well as the requirement of creativity for each job, and how much support for creativity they provided. Employees completed one questionnaire and supervisors completed three different questionnaires. All the questionnaires were assessed on a seven-point Likert-type scale with one being "strongly disagree" and seven being "strongly agree." (Kim, Hon, & Deog-Ro, 2010)

For employees to assess their proactive personality, the Seibert, Crant, and Kraimer ten-item scale to measure proactive personality was used. Sample statements

on the measure included: "I am constantly on the lookout for new ways to improve my life; I can spot a good opportunity long before others can; and if I see something I don't like, I fix it." (Kim, Hon, & Deog-Ro, 2010)

For supervisors, the job creativity requirement was measured using four items: "My team is required to be creative; [t]he nature of the projects that my teams works on requires us to be creative; [m]y team is required to come up with novel ways of doing things; and [i]n order for my team to perform successfully, we have to think of original or different ways of doing things." (Kim, Hon, & Deog-Ro, 2010)

To measure supervisor support for creativity, another four-item scale was used. Content of the items include feedback about employee ideas concerning the workplace and support for an unpopular idea or solution at work. Employee creativity was measured using a 13-item scale developed by Zhou and George. Sample statements included, "[s]uggests new ways to achieve goals or objectives; and [c]omes up with new and practical ideas to improve performance." (Kim, Hon, & Deog-Ro, 2010)

The results showed that employees exhibited the most creativity when the job creativity requirement and supervisor support are both high. (Kim, Hon, & Deog-Ro, 2010)

Critical analysis and conclusions

This study speaks of organizations that aspire to foster a creative and innovative culture and states that they may be more successful at that if they hire employees who possess a proactive personality and if the jobs they are employed to do require high creativity. The researchers also point out that supervisors should provide support for that creativity in employees or it "may constrain their motivation to be proactive" (Kim, Hon, & Deog-Ro, 2010). But more importantly, the researchers state that building organizational practices that support creativity "may be particularly important" (Kim, Hon, & Deog-Ro, 2010). They also state that, "organizations should empower proactive people to maximize

their proactive tendency in order to further increase their creativity (Kim, Hon, & Deog-Ro, 2010).

The study begins with identifying proactive personalities. This is a different starting point than many of the articles reviewed. The study, like many others, assumes that creativity is a valuable commodity but as stated earlier, it was conducted in South Korea. This is a very different work culture from the west. So the question is can these results be generalized for other cultures or other contexts, particularly western culture and work places, or does this culture value creativity in practice more than western cultures?

Motivation for Creativity in Design Students, a research article by Hernan Casakin and Shulamith Kreitler, The Ariel University Center of Samaria, School of Architecture, Ariel, Israel

The main issue in this article is the study of motivation for creativity in design students. The premise was that motivation is a function of four types of beliefs and it was hypothesized that scoring these four belief types in the subjects would enable the researchers to predict creativity. This would validate the cognitive orientation theory and a questionnaire used to measure that, the COQ-CR or "Cognitive Orientation of Creativity" questionnaire. (Kreitler, & Casakin, 2009)

The subjects of the study were 52 students of architecture that were recruited randomly from students in their first to fifth year of study at a school of architecture in a college in central Israel. 35 of the subjects were male and 17 were female. Their mean age was about 23 years with the youngest at 21 years of age and the eldest at 35. The subjects had an average of almost 14 years of education at the time of the study. (Kreitler, & Casakin, 2009)

Three questionnaires (surveys) and a project were used to identify and score four types of beliefs concerning themes seen as relevant for creativity. These were goals, norms, oneself and reality. The task was to design a small museum in a creative way.

The museum had to have an exhibition area for artistic pictures and posters, a sculpture gallery, a coffee-shop area, a multipurpose room for seminars and lectures, another room for administration, and general services like bathrooms, utility closets, etc. One of the questionnaires was an attitudes survey, one was a questionnaire about designing and the third is known as the "Cognitive Orientation of Creativity." The Cognitive Orientation of Creativity questionnaire was given, evaluated and used as a predictor of creativity before the task. The participants were administered the remaining questionnaires upon completion of the task. The evaluations were done by four architects each working independently without knowing the goals of the study. Each architect-judge had at least 10 years of design experience. They rated the overall creativity of each design on a 5-point scale from 1 having little creativity to 5 showing high creativity. (Kreitler, & Casakin, 2009)

The attitudes survey consisted of 33 items. Each represented a viewpoint, assessment or evaluation relevant to the process of designing and evaluating designs. The participants were asked to choose one of four responses for each item - very true, true, not true and not at all true. A sample item was, "In the course of designing I made an effort to understand in depth the nature of the problem posed by the task." The second questionnaire about designing consisted of six questions and ratings about the design process. These included questions about the existence of a central idea that guides design, difficulties in designing, additional materials in designing, how interesting and meaningful the design task is, and involvement of emotions and logic in the design process. The Cognitive Orientation of Creativity consists of 384 items in four randomly ordered parts. Each part referred to one of the four belief types—beliefs about self, general beliefs, beliefs about norms, and beliefs about goals. Subjects were asked to respond to each item with "agree completely, agree, disagree, or disagree completely." the items were evaluated for each of the four belief types and then ranked in 11 categories like self development, inner-directedness and contribution to society. (Kreitler, & Casakin, 2009)

According to the authors, the final analysis showed that the, "majority of variables referring to creativity" were predicted by the Cognitive Orientation of Creativity questionnaire, proving it is a valid tool for assessing and predicting motivation for creativity. (Kreitler, & Casakin, 2009)

Critical analysis and conclusions

Because the Cognitive Orientation of Creativity is based on such a variety of areas and contains such an enormous amount of items (384), it seems to be a valid instrument to self-evaluate creativity and motivation for it. However, it is a 384-item survey. It is very long and time consuming and tedious enough to skew the results by the task of taking the survey itself. Certainly the last item of the survey could not be considered or contemplated as comprehensively as the first by the respondents. The study of creativity in any form will be subjective but the validity of the measure of creativity in this study was based on only 4 judges of subjective design.

An Empirical Assessment of the GAM Theory of Creativity, a research article by George Domino, Jaymee Schmuck, and Mikelle Schneider.

William A. Therivel, PhD, presented a theory through several articles in the 1990s known as the GAM theory of creativity, which postulates that creativity is a function of genetics, assistances, and misfortunes. This two-part study was made to test the validity of Therivel's theory. (Domino, Schmuck, & Schneider, 2002)

The participants in the first part of the study were 529 undergraduate college students attending the University of Arizona. All were volunteers. An effort was made to recruit creatively oriented majors such as architecture, art, creative writing, marketing, and music. Participants in the second part of the study were two groups of upper-division college undergraduates. The first group consisted of 158 honors students (GPA 3.5 or above). 52 of the 158 obtained scores of 45 and below on the ACL Creativity Scale (high achievers–low creative.) The second group were 136 students whose cumulative GPA

was 2.5 and below. In the second group, 47 students scored 45 and below on the ACL Creativity Scale (low achievers–low creative). (Domino, Schmuck, & Schneider, 2002)

Two different parts of the study were made. In the first, a five-section questionnaire was created and used. It contained questions about age, gender and talent in six areas. Section 2 was about genetics. It asked the respondent to indicate whether blood relatives shared their talents. It also asked if they were a "precocious" child and questions about behaviors that reflect if creativity is inherited or biological. In the third section, the respondent were asked to list assistances, good circumstances and positive experiences. Section 4 asked about misfortunes. The last section used Domino's Creativity Scale (ACL Creativity scale). Both groups in the second part of the study were administered the same questionnaire as the first part of the study except for the last section which had been administered earlier. In the first section, respondents self-rated their creativity using a 10-point scale as they also did in section 5 by checking all of the 59 adjectives listed that were self-descriptive. (Domino, Schmuck, & Schneider, 2002)

The different majors that were present among the volunteers were coded into three categories: most creative (art, dance, and creative writing), possibly creative (journalism, psychology, anthropology), and least creative (accounting and engineering). For the entire study, nine variables were numerically assessed from the data: ACL Creativity Scale raw score of number of adjectives endorsed from section 5; self-ratings of creativity from section 1; academic major, rated on a 3-point scale of creativity; number of talent fields indicated and categorical rating of yes or no for genetics from section 2; as well as ratings on a 9-point scale for genetic evidence, precocity, assistances and misfortunes. (Domino, Schmuck, & Schneider, 2002)

The results from the two parts differed significantly in only one area—the self-ratings of creativity. Students who obtained higher scores on the ACL Creativity Scale rated themselves higher on creativity and were more likely to be enrolled in a creative major. There is no support for the potential role of genetics. While the study shows that genetics as a factor in creativity is a popular belief the empirical evidence does not

support this. Only mild support was found for the role of assistances. And very little support was found for the role of misfortunes in creativity. (Domino, Schmuck, & Schneider, 2002)

The conclusion is that there is little support of Therivel's GAM theory.

Statistically, no significant differences on ratings of genetics, precocity, ratings of assistances, and misfortunes were obtained. No evidence that would allow the prediction of levels of creativity in individuals was found. This study showed that the popular belief that creativity is a genetic function is likely to be untrue. (Domino, Schmuck, & Schneider, 2002)

Critical analysis and conclusions

Therivel's theory (GAM) seems to have its roots in famous creatives (well known artists, composers, etc.) with genetic or positive/negative experiences, which affected their creative abilities. Although this study makes a good case for its results, the study itself has many flaws and questionable procedures. The authors of the study admit many of these. Therivel's theory used "youths" so the use of young people, college students, in this study seems appropriate but using college students as opposed to professionals certainly skewed the results. The authors admit that the nature of the study was indicated in the recruiting of respondents. It seems that this would attract more volunteers who saw themselves as creative than those who did not. The ratings by the researchers in sections 2, 3 and 4 may have been done using a protocol that they were trained to use, but who developed the protocol and what criteria was used?

There are many popular beliefs about creativity, such as tragedy or misfortune instills creativity, and creativity and mental illness or psychoses are closely related. The GAM study that was the subject of this research seems to have been formed on popular belief or a sampling of only known cases. The results of this research are believable despite questions of how the researchers got there. William Therivel, the developer of the GAM theory, wrote a response to this article in 2004 tilted *The Invalid Empirical*

Assessment of the GAM Theory of Creativity by Domino, Schmuck, and Schneider that states these researchers misinterpreted his theory, making the entire study invalid.

Does Analogical Reasoning With Visual Clues Affect Novice and Experienced

Design Students' Creativity?, a research article by Ebru Cubukcu and Gozde Eksioglu

Cetintahra

One of the assumptions made in this study was that design students' creative abilities should be enhanced. One of the popular but unproven theories is that cues from familiar conceptual domains can be a trigger to generate creative ideas. Because the use of this as an educational tool to enhance students' creative abilities is not clearly defined, this study investigated whether this process also known as analogical reasoning, in combination with visual clues could help enhance creative thinking skills in design students. (Cubukcu, & Cetintahra, 2010)

The participants in this study consisted of 103 undergraduate students who were enrolled as City and Regional Planning majors, a design-based program, at Dokuz Eylul University, Izmir, Turkey. Subjects were volunteers. Approximately 59% were first year students who had not received any design training. The other 41% were second year students who had received training in basic design. The student-subjects creative-thinking skills were tested with no visual clues, under low visual clue conditions, or high visual clue conditions. (Cubukcu, & Cetintahra, 2010)

The Torrance Tests of Creative Thinking Figural form was given to both groups of students. The form consists of three parts. The first two parts, picture construction and picture completion were used in this study. Although the sampling in this study was not evenly divided between men and women or novice and experienced students the variation was recognized and attempts were made to minimize it. The subjects' were not told to use the visuals as clues when present to solve the problems in the figural form test. Their performance was assessed based on fluency, flexibility, originality, and elaboration. The study analyzed how the presence and amount of visual displays affected

creative outcomes in students with and without prior design training. Gender differences were also analyzed. (Cubukcu, & Cetintahra, 2010)

The results showed that the presence of visual clues enhanced fluency and flexibility. Between the two groups, experienced and novice, the novice students showed more creative potential when assessed on elaboration. The number of visual clues influenced novice and experienced students differently. Novice students achieved better scores under high visual conditions while experienced achieved high scores under both. (Cubukcu, & Cetintahra, 2010)

Critical analysis and conclusions

While the results showed that the presence of visual clues enhanced fluency and flexibility and therefore creativity, the researchers were aware of many limitations of their study. The aspects of creativity, flexibility, and fluency, they tested for and analyzed are not universally accepted as the only measures of creative potential. The guidelines for analysis were not up to date and were not analyzed for appropriateness in the Turkish culture where this study was done. The sampling was a limited group in a single discipline. Also, the visual clues used in this study were random and unrelated to the visual activities tested.

Measuring and Training Creativity Competencies: Validation of a New Test, a research article by Robert Epstein, Steven M. Schmidt, and Regina Warfel. University of California, San Diego.

The Epstein Creativity Competencies Inventory for Individuals (ECCI-i) test is derived from research on the creative process in individuals, which suggests that creative expression can be accelerated through the strengthening of any of 4 measurable, trainable competencies: capturing (preserving new ideas as they occur), challenging (taking on difficult tasks), broadening (seeking knowledge and skills outside one's current areas of expertise), and surrounding (seeking out new stimuli or combinations of stimuli).

The two studies in this article were to prove the tests reliability by testing subjects before and after training in the four areas above. (Epstein, Schmidt, & Warfel, 2008)

In this research, two studies were made. In the first, participants were business people who attended creativity-training seminars in the Philadelphia area. Participants consisted of 208 subjects who were racially and ethnically diverse. 136 were women and 72 were men. The average age of the subjects was 41 years of age. In the second study, participants were 173 Brea city employees in Orange County, California. The ECCI-i was administered before training. Items on the test are exemplars of typical behaviors within each of the four core competency areas. The ECCI-i has 28 items, evenly divided among the four competency subscales. Answers were recorded on a 5-point Likert-type scale labeled agree and disagree at the extremes. The subjects self-evaluated their creativity then were administered the test in a paper-and-pencil format. Answers were recorded on a form that was later scanned into a computer database for analysis. (Epstein, Schmidt, & Warfel, 2008)

In the second study, during a 1-week baseline period, the managers of five city departments kept a log of the number of new ideas suggested to them by department employees. Then, over a period of several months, employees and managers were invited to attend creativity-training seminars. Before the start of each session, participants took the ECCI-i online. Approximately 8 months after the training session, 74 of the initial 173 participants took the ECCI-I again online. The group consisted of 44 women and 30 men, with an average age of 45 years. 60 were Caucasian, 2 were African-American, 5 were Asian, and 6 were Hispanic. Again for a 1-week period afterward, the five department managers kept a log of the number of ideas that were suggested to them by department employees. (Epstein, Schmidt, & Warfel, 2008)

According to the authors, the test was also shown to be a valid predictor of 2 measures of creative expression in the first study. In the second study, after the 8-month follow-up test was given, a small but significant increase in ECCI-i scores was observed

as well as a significant increase in creative output according to the baseline and follow-up of creative ideas given to department managers. (Epstein, Schmidt, & Warfel, 2008)

Critical analysis and conclusions

The study showed that the 4 competency areas of the ECCI-i: capturing (preserving new ideas as they occur), challenging (taking on difficult tasks), broadening (seeking knowledge and skills outside one's current areas of expertise), and surrounding (seeking out new stimuli or combinations of stimuli) are both measurable and trainable. The authors admit that the training only marginally improved test scores, but led to a significant increase in creative output according to the number of creative ideas given to department managers. The results of this analysis were indeed significant—city officials attributed more than \$600,000 in new revenues and about \$3.5 million in innovative expenditure reductions.

The Canon of Spontaneity— Creativity Revisited: The Effect of Empirical Findings, a research article by David A. Kipper, Roosevelt University, Chicago, Illinois.

Does an accepted canon of the relationship of spontaneity/creativity and the quality of life established by JL Moreno in 1953 hold true when analyzed in modern studies? (Kipper, 2006)

Twenty senior psychodramatists from the US and Europe with a minimum of 25 years of experience were the participants in forming the Spontaneity Assessment Inventory and the Spontaneity Deficit Inventory used as empirical data in the study.

Analysis of the studies and subsequent findings were solely by the author of the article. (Kipper, 2006)

The article uses/analyzes empirical data reported in recent studies (the Spontaneity Assessment Inventory and the Spontaneity Deficit Inventory) to analyze an older accepted study (canon). Methods used were analyzing adjectives that describe "the

feeling of being in a spontaneous and non-spontaneous state" using a Likert-type scale in the SAI and SDI studies and intellectual analysis of data by the author. (Kipper, 2006)

The author of the article contends that there are still many questions to be asked and further study is needed but that, in general, Moreno's findings were accurate. He suggests that the canon's sequence be revised and that spontaneity/creativity are both healthy, as Moreno suggested, and unhealthy as indicated by recent empirical evidence. (Kipper, 2006)

Critical analysis and conclusions

There are many theories about creativity in many different disciplines and theaters of life, psychology, art and design, business and modern culture in general. The article showed that this theory, because of its constant use and application, is still valid, but modern research methods can supply the means to evolve and revise it.

Creativity and Values, a research article by Stephanie Clancy Dollinger, Phillip Burke, and N.W. Gump, Southern Illinois University Carbondale.

This research tests several hypotheses elaborated from previous creativity researchers. Previous researchers have suggested that a significant element in creativity is the desire to be creative. This implies that creativity is a core value. Based on this assumption and Schwartz's model of the dynamic structure of values theory, which theorizes that the structure of values can be a predictor of behavior, researchers in this study tested the prediction that creative individuals will hold a different values system than less creative individuals. (Dollinger, Burke, & Gump, 2007)

Participants consisted of 278 undergraduate university students. They ranged from 17 to 57 years of age, with an average age of approximately 22 years. 91% were single (never married). Gender was divided approximately two to one female to male with 66% female and 34% male. (Dollinger, Burke, & Gump, 2007)

The study was conducted in two time periods 1 year apart with 120 participants the first session and the remaining 158 in the second time period. All participants received course credit in a Personality Psychology course for participating. Subjects completed a questionnaire packet including a values survey and demographic data. All participants (278) completed the Schwartz Values Survey and a behavior-based self-report measure of creative accomplishments. 134 of these participants also completed three creative products. One month later, they completed a creative accomplishment survey, and were given two creative products, the drawing and story tasks. The final creative product, a photo essay, was an individually selected project. Instructions for all creative products were provided at this time and projects were due two months later. (Dollinger, Burke, & Gump, 2007)

The two surveys given to participants were the Schwartz Values Survey and Hocevar's Creative Behavior Inventory, a self-evaluation of creative accomplishments. The Schwartz Values Survey is a 56-item measure where participants rate the importance of values on a scale ranging from 1, as opposed to my values, to 7, of supreme importance. For the creative accomplishments section, participants were asked to complete Hocevar's Creative Behavior Inventory, which asks participants to indicate their past involvement in various creative activities, such as creating a sculpture or writing a short story, on 4-point scale. The scale ranged from, "never did this" to "did this more than five times." Some of the participants (134) were asked to devise three creative products. One task was visual (drawing), one verbal (short story), and the third involved a combination of these methods (photo essay). All creative products were independently scored, then standardized and combined to yield a single creative products score. (Dollinger, Burke, & Gump, 2007)

The results are consistent with Schwartz's values theory. Creativity does reflect values like self-direction, universalism, and stimulation but not values like security, tradition, power, or conformity. This also supports the claims made by creativity scholars, Barron and Helson, who indicated that desires or goals are a central feature of the

creative individual. These results support the view that creativity is grounded in values, and Schwartz's model of the dynamic structure of values as a predictor of behavior.

(Dollinger, Burke, & Gump, 2007)

Critical analysis and conclusions

Researchers in this study admit that social desirability is "a substantive variable" in the value survey but they also indicate that social desirability, as a stylistic bias in the self-reported accomplishments section, should be ignored as a factor.

The abstract for this study states, "Barron and Helson independently have suggested that a central element in all forms of creativity is the desire or goal to be creative, implying creativity as a core value" (Dollinger, Burke, & Gump, 2007). In addition, within the study the researchers state, "Several eminent scholars of creativity have identified desires or goals as central features of the creative individual" (Dollinger, Burke, & Gump, 2007). These are very different statements when considering the value placed on creativity by our culture or society.

That creativity may be, "a function of the values held by creative people" or that the, "valuing of creativity to the point where it is a personal guiding force or chief motive in life" for creative individuals is useful. The researchers state that, "it is possible to value those qualities that we do not possess, as well as ones that we do" (Dollinger, Burke, & Gump, 2007) but the question of the value of creativity for the majority of individuals still remains.

Cannabis and Ecstasy/MDMA: Empirical Measures of Creativity in Recreational Users, a research article by Katy Jones, Mark Blagrove, and Andrew Parrott.

This study investigated the associations between marijuana and Ecstasy/MDMA users and creativity. Creativity was measured both empirically and subjectively by outside judges. The study was undertaken because of the popular belief that drugs such as these increase creative ability. Because many studies and research prior to this one were

conflicting, there were no predictions made for the outcome - merely investigation.

(Jones, Blagrove, & Parrott, 2009)

The sampling for the study included 15 Ecstasy users, 15 chronic cannabis users, and 15 nondrug-user controls. The Ecstasy users consisted of 11 men and four women with a mean age of 23 years old. Marijuana (cannabis) users consisted of six men and nine women with an average age of 22 years old. The controls, nondrug users, were four men and 11 women whose average age was also about 22 years of age. All participants were students at Swansea University Wales and were recruited to the study using fliers in bars around the campus. Ecstasy users had to have used Ecstasy within the last three months. Marijuana users and controls had to have never used Ecstasy. Participants were drug free at the time of testing. The study was done in 2008. (Jones, Blagrove, & Parrott, 2009)

Three different tests were given, a consequences behavioral test of creativity, a self-assessed performance on the consequences test, and Gough's Trait Self-Report Creative Adjective Checklist. Current use of alcohol, nicotine and cannabis was recorded along with estimations of lifetime drug consumption and were considered in the final evaluation. Subjects were also rated on an intelligence test and results were considered as a factor. The participants completed the three measures of creativity listed above. (Jones, Blagrove, & Parrott, 2009)

The consequences test involved five scenarios where possible consequences had to be devised. The test was not described as a test of creativity to the participants. A sample questions is "What would be the results if none of us needed food anymore in order to live?" Participants were given two minutes per scenario question to write as many consequences as they could. Answers were rated as obvious, remote, duplicate or irrelevant. The scoring was conducted using standard blind rating by independent judges. They looked for "remoteness" and then a frequency of "rare" responses. Remote was defined as not obvious and "rare" was defined as occurring in less than 5% of all responses. The participants also self-evaluated their responses and overall results on the

consequence test by being asked how original and creative they thought their answers to the consequences test were. They were told that this was a test for creativity after completing the test but before their self-evaluation. The self-evaluation was rated on a Likert-type scale in comparison to their peers—one being "far less creative" to five being "far more creative" than other people in general their same age. The third test was the Gough Creativity Adjective Checklist, which consists of a list of 30 adjectives. The participants were asked to check all that applied to them. Scoring was done by adding one point for each of the creative adjectives and subtracting one point for the non-creative adjectives. The test consisted of 18 positive or creative adjectives such as confident or egotistical and 12 non-creative adjectives such as cautious or submissive. (Jones, Blagrove, & Parrott, 2009)

The results of this study showed no significant differences between groups in the standard scoring of remote responses. There were significant differences in self-evaluation. Ecstasy users saw themselves as far more creative than the control group even though they scored similarly on the remote creative response section and the frequency or rare responses. Men also saw themselves as more creative than women. The most significant result is that marijuana users had significantly more "rare-creative" responses than controls even though they did not rate themselves as more creative. (Jones, Blagrove, & Parrott, 2009)

Critical analysis and conclusions

This study was done because of the popular belief that drug use enhances creativity. They chose two drugs that are inherently different—Marijuana, a depressant or relaxer, and Ecstasy, an amphetamine.

While a number of hypotheses can be formed about the associations between drug use and creativity, two possibilities for marijuana use come out of this study. The regular use of marijuana may enhance creativity, showing creativity can be increased by artificial means, or it may be that more creative individuals use drugs such as marijuana.

Marijuana use increases dopamine levels, which in turn increases goal-directed behaviors and reduces inhibition. If an increase in dopamine levels is a trigger for creativity, the question then becomes can this increase be induced naturally, by influence or lifestyle change?

Also this study cannot, without doubt, differentiate between being creative and the self-perception of creativity. Therefore, is the feeling of being creative a self-fulfilling prophecy?

Creativity Repositioned, an article by Mark Sheridan-Rabideau, University of Wyoming, Laramie, Wyoming.

In this article, the author argues that while the arts are best to teach creativity, a re-positioning to creative thinking and artistic entrepreneurial thinking is needed. The author calls this "[c]reating the artist-citizen." According to the author, creative artists see the world differently and are able to share that perspective through new ways of communicating. There is a triangular relationship between artists, their art, and their audience. This relationship allows new perspectives to understand a complex world. (Sheridan-Rabideau, 2010)

The need for the artist-citizen arises because most serious research on creativity is by psychologists who study the process of creativity but don't offer recommendations for thinking or acting more creatively, or by business scholars who research fostering creativity but not how to be more creative in our own work. (Sheridan-Rabideau, 2010)

The author admits that creativity does not belong exclusively to the arts, but it should lead this "important" endeavor. Creative individuals are needed in every discipline and a pedagogical shift is necessary. This "would help lead engineering students to see themselves not simply as the inventors of machines, but rather as the inventors of solutions to the most pressing problems facing humanity." (Sheridan-Rabideau, 2010)

He proposes this pedagogy would include three key elements, curiosity, creativity and innovation, and collaboration. He offers several things each teacher can do, including

"promote passion and celebrate curiosity . . . foster experimentation and innovation, embrace failure as a logical outcome of exploration, and teach creativity and divergent thinking as new ways of seeing the world." (Sheridan-Rabideau, 2010)

Critical analysis and conclusions

The arts have been the traditional home of creativity but the need to spread it to other disciplines is imperative. Teaching the young is long term but is also likely the best solution.

Creativity, an article by Beth A. Hennessey and Teresa M. Amabile.

This article discusses, among other things, the proliferation of research on creativity. The authors do not necessarily see this as a positive. According to the authors, the study of creativity is a basic necessity. They mention six new periodicals dedicated to the study of creativity since their research began. But even though the number of publications has increase so has the fragmentation in creativity research. "Researchers and theorists in one subfield often seem unaware of work being done in another." This means research is often done at a single level and only within one discipline. The reason for this is historical. (Hennessey, & Amabile, 2010)

Starting about 1950 creative researchers focused on a few "big questions" creative personalities, creative thinking techniques, and the social psychology of creativity. Since the 1990s, many more topics have been explored but according to the authors, very few have been "big" questions. The article promotes several premises of creativity. These include individual creativity has some stable trait-like aspects but the social environment also influences it; people are most creative when they are motivated by intrinsic motivation; real understanding of creative behavior will require more interdisciplinary research that recognizes a variety of interrelated forces at multiple levels; and all things being equal, positive affect is more conducive to creativity than negative affect. (Hennessey, & Amabile, 2010)

Critical analysis and conclusions

This article promotes some obvious premises but it also points out a gap in creativity research. That no one has taken a 30,000-foot view and seen the research as disjointed. Collaboration, therefore, may be key to the future or even the survival of creativity.

Summary

That there has been a lot written about creativity is a gross understatement. This is only a very small sampling of the work that has been written. Some has been written in an effort to gain understanding and explain creativity, some to test for and recognize it, and some to figure out ways to enhance it. In most of the literature in this review, the assumption is made that there is a positive value of creativity in our culture. Some state this assumption and in some, it is obvious by the nature of the study. However, nearly all of this literature focuses on creativity within the individual and very little on its relation to others.

The range of literature reviewed here, from how creativity affects us and how we can affect it to the actions and behaviors of creatives under the influence of recreational drugs, focuses specifically on the individual's understanding and perception of self-creativity. Even in *The positive effects of cohesion on the creativity of small groups* (Moore, 1997), the study was more about the individual's feeling of belonging than the resulting creativity from the group or the acceptance by the group of individual member's creativity.

The gross amount of writing on the subject of creativity may have a secondary and unintended effect. By so thoroughly and closely examining the trees we may have missed the forest. The plethora of writing about the details of creativity may serve as a distraction to seeing creativity as a whole and hide that it is undervalued in our culture. In a study tilted, *The bias against creativity: Why people desire but reject creative ideas* the

authors may have summed it up best. "The field of creativity may need to shift its current focus from identifying how to generate more creative ideas to identify how to help innovative institutions recognize and accept creativity" (Mueller, 2011).

Conclusions to the Literature Review

This literature review began with the question, is creativity truly valued in our culture? The premise was that if creativity were truly a valuable personal attribute and business asset, it would be just as prevalent as other things we value in our culture such as wealth and beauty.

The review was divided into four sections: The difficulty in defining creativity; fear and the fear of creativity; ways to be, express, and accept creativity, and; the amount of research that has been done and written about creativity.

Creativity can be difficult to define. The writings in this part of the review define creativity in a variety of ways and most showed that how we define creativity affects how it is utilized and understood. A definition of creativity for this thesis was also presented.

In the section on fear and the fear of creativity, it was made obvious that fear is prevalent in our culture and that it can be a motivator to creativity (as an adversity to overcome) but is more often a detriment to creativity.

Many solutions were offered in the next section, ways to be, express, and accept creativity. This was a small sampling but revealed that, in order to be effective, the solutions must be widespread, reaching all of our culture.

That there has been a lot written and researched about creativity is a gross understatement. A range of literature was reviewed here. Nearly all of this literature focused on creativity within the individual. The shear amount of writing on the subject of creativity may have the unintended consequence of not seeing creativity as a whole and hiding that it is undervalued in our culture. This was pointed out in *Creativity* by Beth A. Hennessey and Teresa M. Amabile (2010).

Chapter 3

METHODOLOGY

Introduction

Interviews and literature review were the research methods used in this study. Interview was used to establish the true value of creativity in individuals and the culture and to identify the fears involved in being creative. Six interviews were conducted with creative individuals ranging from a pastry chef to an architect. The review and analysis of literature was used to ascertain the perceived value of creativity. Four areas of creativity were reviewed.

Justification of the Methodology and Methods

Interview was used to establish the true value of creativity in both creative individuals and the culture they work in. This method also helped identify the fears involved in being creative and implementing creative ideas on a day-to-day basis. As a creative conducting the study, rapport with other creatives was not demanding or difficult.

Six interviews were conducted with creative individuals. A variety of creative endeavors were represented. The interviewees consisted of an architect, a graphic designer and educator, a fashion designer, a pastry chef, a graphic designer specializing in the music industry, and a photographer. Creatives in commercial fields were chosen because of their ability to influence the culture.

Interviewing was chosen as a method for this study to allow for nuances that may have been missed in an anonymous survey. Only those involved or employed in creative endeavors were interviewed. The level of creativity, creative behavior and/or traits in these individuals was confirmed by virtue of their professional standing. All participants gave permission to use their true identities in the reporting of this study to establish their experience and expertize.

Interviews explored the value placed on creativity by these subjects, their view of the value placed on creativity by our culture and the correlation of that value with its rate

of occurrence. To answer the question "Is the fear of risk a factor?", the interview was also used to identify the fears involved in being creative and implementing creative ideas as well as the acceptance of creativity. Interviews contained both direct and "tour-type" questioning to establish accurate information.

The review and analysis of literature was also a key element in this study. The literature review and document analysis of both contemporary and historical writings was undertaken to establish the perceived value placed on creativity in our culture. This literature review contains a rich variety of writings, research articles, popular articles and books on a variety of subject matters within creativity as much has been written on the subject. The limitations of this study would not allow for a large enough or comprehensive enough study to explore this area. Therefore, review of existing literature gave a broader and more accurate view than interview alone. Four areas of research and writings on creativity were reviewed; the difficulty in defining creativity; fear and the fear of creativity; ways to be, express, and accept creativity, and; the amount of research that has been done and written about creativity.

Interview Setting and Subjects

Six in-depth semi-structured participant interviews were conducted. Participants were contacted ahead of time with an information letter (included in the appendix) and were told the subject of the study. Participants were chosen for their diversity and their experience and expertize in creativity. Participants included Miguel Berastegui, an architect; Andy Robles, a graphic designer and educator; Angela Johnson, a fashion designer; Kelly Jo Rose, a pastry chef; Shari Corbett, a graphic designer specializing in the music industry; and John Covington, a photographer, all creatives in commercial fields. When possible, interviews were conducted at the participant's place of business.

Interviews followed an interview guide. The interview questions were arranged in four sections. 1) Are you creative? These questions focused on creative ability/ innovation or imagination. 2) How often are you creative? These questions explored

frequency. 3) The value of creativity, which sought to determine the value of creativity and other personal attributes. 4) Fear, to understand the aspects of fear related to implementing creativity. The interview guide is included in the appendix.

During the interviews the guide was followed in an unstructured manner. The topics were covered in the order of the interview guide or as they arose naturally in the participants' narration. In the following section, the interviews have been written in the order of the questions on the interview guide not necessarily in the order they were asked or answered. This has been done for consistency only. Care was taken not to change the meaning by the rearrangement. No notes were taken, as the interviews were audio recorded digitally.

Conclusions to the Methodology

Methods chosen and used in this study, interview and literature review are introduced and detailed in this section. Justifications are presented for each method. The literature review is chapter 2 of this thesis and the interviews follow this section.

Chapter 4

INTERVIEWS

Introduction

Interview was chosen as a method to establish the true value of creativity in both creative individuals, the culture they work in and to identify the fears involved in being creative and implementing creative ideas. Six interviews were conducted with creative individuals. A variety of creative endeavors were represented by Miguel Berastegui, an architect; Andy Robles, a graphic designer and educator; Angela Johnson, a fashion designer; Kelly Jo Rose, a pastry chef; Shari Corbett, a graphic designer specializing in the music industry; and John Covington, a photographer. Creatives in commercial fields were chosen specifically because of their ability to influence the culture.

The level of creativity in these individuals was confirmed by their professional standing. All participants gave permission to use their true identities in the reporting of this study to establish their experience and expertize (consent forms can be found in the appendix).

Interview 1 - Miguel Berastegui, Architect

Miguel Berastegui is a working architect serving on projects throughout the Southwest, California, Colorado, Florida, Louisiana, and Central America. He is a member of the Rio Salado Architecture Foundation, past president of the ASU Alumni Association, and a board member of Release The Fear.

His career in Architecture, along with his own consultancy, has involved project strategy; winning high quality projects; building & maintaining client relationships; leadership of project teams to achieve design excellence & sustainability for projects both in the public & private sectors; programming & planning; interior architecture & FF&E; mixed-use, urban and community design, conceptual design generation; and identity/branding strategies.





Miguel is currently the owner/partner of design studio 3 architecture and MB Studio, a graphic consultancy. Throughout his career he has served in various roles as Principal-in-Charge, Project Director & Project Manager.

The interview

Are you creative?

When asked if he felt he was a creative person Miguel responded with, "We can't turn it [the creativity] off." He went on to say that he believes creatives are always creative and sometimes that is a problem. "Clients don't want to pay for really creative work. Clients think it's just a drawing – its not." Good creative is costly. Clients see real creativity then see the cost. "Can't you just reduce your fee?" The solution to that is the client can reduce their scope or the creative can reduce his deliverables.

How often are you creative?

Creativity starts for Miguel as soon as he speaks to the client because they are already giving information. The process starts there then adjustments begin. "During the process, you are creative a majority of the time."

How often do you utilize creativity in the context of the rest of your life?

"We can't turn it off. At the grocery store – that door is too small, the lighting is too dark, that avocado packaging makes it look like liver. I am constantly critiquing my surroundings like the sales guy who's always selling vertical blinds."

How valuable is creativity?

"My creativity is essential to me and the level of creativity helps secure my confidence. That assurance justifies my creativity to a non-creative person and lets them accept it."

To illustrate how creativity is undervalued, Miguel told a story about a nuclear engineer who retired but became a consultant. The power plant calls one day and says we aren't running and can't figure it out. The engineer, now consultant, goes and spends an hour looking at the control board then gets a screw out of his toolbox, screws it in and fixes the problem. He hands them an invoice for \$50,000.

"That's way too much" They say. "We need a breakdown."

"Okay," the engineer replies, "It's one dollar for the screw and \$49,999 for knowing what to do with it."

"There are times when clients just want get it done and "okay" is good enough.

Many clients just want okay because it costs less."

Is economics a factor then in people not accepting real creativity, because it costs more?

"How much does safe cost? Not a lot and there is no risk of being wrong.

Sometimes creativity and good design costs because it's custom, just for you." Miguel added that complacency, accepting "okay" is just as detrimental as money to creativity.

"Creativity works this way – if you really want it I can give you a Ferrari with a gocart engine. It will look pretty, it just won't function." The solution? "When the fee is low I just try to be more creative within the budget."

Does that translate to our culture?

"There is value in success, our culture doesn't want to fail. The risk is reduced if they see a preconceived value in you and you as a creative have to be confident and promote your value. It takes ego to do that but then your ego is at risk. You tell a client that you're creative but often that doesn't mean much."

The term is diluted?

"Creative means you're on the cutting edge but it's used to give the illusion of being on the cutting edge. Your reputation is more important."

Miguel elaborated on not only the dilution of the term creativity but also the dilution of the act of creativity in our culture. "You can't go to the bookstore and get a copy of *Do-it-Yourself Arthroscopic Surgery* but you can go buy a copy of Photoshop Creativity is diluted because you can become your own designer. People who design their own house are seen as creative when it may not be even functional. 'But I'm okay with what I've got.' It takes bravery to be creative but let's not mistake bravery for creativity."

"Our culture doesn't value creativity much. Europeans value creativity more – we don't have the history. They are surrounded by tradition so they want different, flashy."

Is fear a factor?

"We have this fear of failure we have to overcome."

How do you overcome it - the fear of failure?

"I accepted that the first try is going to be a failure - it's tracer fire. Now you know what they [the client] doesn't like."

"Creative people have trouble presenting. A lot of them are introverts but they do it because of the work."

Any last thoughts?

"There are misconceptions that creativity is always designing something new.

There is also creativity in conceptually solving a problem."

Interview 2 – Andy Robles, Graphic Designer and Educator

Andy Robles holds a Bachelor of Arts degree in Visual Communications from the Art Center Design College and completed many hours of course work at the University of Arizona under the tutelage of Jackson Boelts. He began his journey into art & design in 1984 as a production artist for a sign company in Tucson, Arizona. Currently he is the





owner and principle creative of AGR Visions Design which was established in 1990 with a vision of creating solutions for its clients that are innovative, cutting edge, and effective.

As an educator for the past 10 years, Andy shares the knowledge and skills he has acquired over the past 25 years

The interview

Are you creative?

"Yes. Creativity started for me as a kid. I've always enjoyed things that were different. Something I've always believed, there is more than one solution to every problem."

How often are you creative?

"I would say most of the time." He went on to elaborate that this was true not only as a designer but as an educator as well. "You know, even lesson plans. Each student learns differently." Andy admitted that he is "only occasionally creative outside of my professional life."

How valuable is creativity?

"It's valuable to me. Without it I'd be bored . . . or boring (smiling)." Andy then spoke about other's valuation of creativity, "My clients value it but I don't know anybody outside of that that values it." He related a story about a student. The student picked up a freelance job to design a logo and business suite for a local company. The client was pretty involved in directing the design, the student produced what the client wanted, and was paid. When time came to put together her final portfolio she asked if she could put in one of the preliminary designs, which she liked better, and was told she could. The client had an opportunity to see her portfolio and upon seeing the design for his business suite said, "Wow, why didn't you show this one to us?" "I did." was her response.

"People too often say, 'I want you to be creative . . . but do it this way."

"Clients trust my judgment because we're established." That hasn't always been the case for Andy. "An example, a typical scenario was the reaction by the owner of an agency I worked for. I was working on a logo for a restaurant. 'What the hell is that?' The client never saw it."

"Clients can be very sterile – corporate-like." Several times throughout the interview Andy used these terms interchangeably.

"You need to educate clients, to educate them on their audience, consumer base. It's hard to educate them on the creative process. I have a new client who does gluten-free cookies . . . This new client has no clue."

"Food is hard and it's a new client, so should I really go outside the box? – Right now I have, and I'm very skeptical about saying this, 'creative freedom,' I really don't but I'd like to think I do. I have creative freedom until I show her, then I don't anymore. She seems very conservative."

Is fear a factor?

"In the beginning of my career there was a lot of anxiety presenting different ideas to clients but not really anymore."

"One of my favorite quotes, 'In order to lead a truly creative life you have to lose the fear of being wrong." This quote is attributed to Joseph Chilton Pearce, an author on human and child development who believes that active, imaginative play is the most important of all childhood activities (Mercogliano, Debus, & Pierce, 1999).

When asked about creativity and the culture, Andy responded that most people are fearful of being creative.

Is it the risk of being wrong?

"Oh, of course. It's so easy to be not wrong."

Parting thoughts?

"Creativity requires a lot of discipline in the sense of understanding that what we do is subjective, some people will like it and some people won't. We can't take that personally, we have to persist."

Interview 3 - Angela Johnson, Fashion Designer

Angela Johnson is an award winning, eco-friendly clothing designer with nearly 20 years of experience in the fashion industry. She is best known for her "upcycled," elaborately constructed ball gowns and other garments from "thrifted" and recycled T-shirts. After earning her Fashion Design degree from the Fashion Institute of Design and Merchandising in L.A., she got her start working in design and production for *X-Large Clothing*, the line owned by Mike Diamond of the Beastie Boys and *X-Girl*, the line owned





by Kim Gordon of Sonic Youth. She also owned an internationally sold, mass-produced clothing line called *Monkeywench Clothing* in the mid 1990s. She is the founder of *LabelHorde*: AZ's Hautest Fashion Directory and has been honored as Fashion Group

International of Arizona's Rising Star; Artist of the Year by the Scottsdale Cultural Council's Chairman's Committee; Best Local Fashion Designer by Arizona Foothills Magazine three times; and has been featured in countless books, magazines and news programs.

She has held positions on the Board of Directors for the Fashion Group

International of Arizona and has been one of the coordinators for Scottsdale Fashion

Week.

The interview

Are you creative?

"You know, people tell me I'm creative so I guess I'm creative." She also spoke about creativity in others. "So many people think they have it (creativity) or they don't, but I really believe you can learn creativity."

How often are you creative?

"I think I'm creative most of the time but sometimes I'm not. I think everyone has their creative moments. I've had more creative moments as I become more experienced."

"Creativity is the majority of the process – even patternmaking which is left-brained. There is creativity in solving problems of the pattern, getting it to do what you want it to do."

"In coming up with the idea, you have to be really creative. Like not using 'fashion' as your inspiration but something different like using bugs or something squirmy as inspiration"

And after that?

"Turning it into a garment is more like an engineer but it's still creative. There is creativity in every bit of it. You are solving problems."

One of the things you are known for is the recycled t-shirt thing. Where did that come from?

"That was being creative – it came out of necessity." She explained that she was involved in doing "mass" clothing for retail sales in Los Angeles. The manufacturing part was right there, readily available. Then she moved to Phoenix where those manufacturing facilities don't exist. "I had to quit that business."

"I was teaching and the T-shirt thing was a project for students – creative re-use.

I used it as an example with shirts I got from the goodwill. People saw it and really liked it,

I saw a business in it."

Is a lot of creativity "I did this because"?

"In my world it is. You end up having to do something different or find a solution and have to come up with something you never did before."

What about outside your professional life?

"Our house looks like an amusement park or something. There's no beige. My daughter's room is *Alice in Wonderland*. It's upside down. There's a floor on the ceiling with a table hanging upside down so, yeah, everybody in my life says, 'you're the crazy one.' And they're all looking for ideas."

How valuable is creativity?

"My creativity is valuable to me personally, but how valuable is it to others? It depends. If they [clients] see examples first then there is trust."

There are times when she feels her creativity is not valued. "Sometimes when too directed, all I am is the seamstress."

Do you think our culture, as a whole, values creativity?

"No. Like school, you have to be there everyday at the same time, you take tests that are yes or no. Our whole world is left-brained. It's so opposite of what creativity is.

We are not all going to be accountants."

Is fear a factor?

"Your creativity is you so it is fearful putting it out there."

On risk - "Early it was harder. I was young, maybe my ideas weren't as good as I thought they were, but later I could say let's take a little chance."

"I have to make money so I have to give people what they think they want. You have to sell out a little bit. My first collection *Monkeywench*, we were one of the first to bring back capris and we really got some harsh reaction. Then the next year they were hot and buyers were now asking for them. That felt a little stifling, I had these ideas that were a little ahead of when they should come out and I felt 'nobody gets it yet.' I would get a little down and say, well maybe I'll just make stuff for the masses and stifle my own creativity."

When did you lose the fear of being wrong?

"When I started my t-shirt collection – it wasn't until then, because I'm not working with someone else's investment money."

"We need to change. You're born with creativity but creativity is also something you can bring out in yourself."

Interview 4 - Kelly Jo Rose, Pastry Chef

Kelly Jo (KJ) Rose holds a degree in Baking and Patisserie from the prestigious Le Cordon Bleu College of Culinary Arts. Armed with an array of "top secret" family recipes passed down from generation to generation, she owns and operates K.J. Sweetie, LLC. K.J. Sweetie focuses on "traditional-with-a-twist" flavor pairings and only uses the freshest local ingredients.





The interview

Are you creative?

"Yes, I'm a creative person."

So how creative can you be as a pastry chef?

"Baking is an exact science. You have to know what parts you can be creative with and what parts you can't or you're going to end up with an explosion. You can do a lot with flavors and pairings, exotic spices."

"I took a recipe I found online for 'Rollo Cookies.' I baked some the way the recipe said, then I made some adjustments and added chili pepper. *Spicy Senoritas* – simple but really different. It started with the idea of chocolate with something spicy."

[Author's note: I had the privilege of tasting these – a great combination of flavors and a testament to Kelly Jo's creative abilities.]

How often are you creative?

"Most of the time. You need to know what the process is and what the end product is then you can be creative. Things have to be right though. You can taste love in a cookie. If I'm angry, they're angry cookies. They don't turn out."

How valuable is creativity?

"Some people value creativity more than others. It is better to bake for creatives who don't bake. They value it more."

"What works on one person doesn't work on another. One catering job they wanted really specific things. What I did was okay but there was nothing really wow. I didn't get any referrals from that one. Experience tells you when to be super creative and when not to be."

"People don't want to take risks. In life in general, we don't take risks, so why would we take risks in our food?"

Is fear a factor?

"Oh yeah. Part of the reason I went into baking was for the compliments. If someone says, 'Oh, that's gross,' I don't know if I can take that."

"I'm on a fantasy football league and my team sucks. I'm not good at this so I thought, I'll bake and I felt like a rock star. I can do this and do it well."

When asked about our creativity and our culture, "[a] creative culture would be better – more love."

Interview 5 – Shari Corbett, Designer and Studio owner

Shari Corbett wakes up every morning with a desire to create. Typically, everyone has a special talent or "calling" and Shari has found hers. She is the owner/designer of One Louder Designs, a design studio specializing in work in the entertainment industry. Her clientele includes promoters, management companies, artists, and venues. She also works as a partner and creative consultant with two other businesses—Cinemacia, a video production company, and Rockin Apps, a cutting edge application development company.





The interview

Are you creative?

"I am absolutely a creative person. Sometimes though I look at others [creatives] and think I have a long way to go."

How often are you creative?

"I don't think I'm as creative as I want to be. As a business owner there are other things that occupy my time."

"Initially on a project, I'm real creative then you spend a lot of time 'creative finessing."

"Creativity is a bonus in my personal life, it has opened doors for me. And I communicate with my husband better because I'm creative and he is both right and left-brained."

How valuable is creativity?

"Clients want you to think outside the box but stay in the box. It's all about control. Clients want to own projects and be in control and dictate stuff, 'No, Helvetica is not the typeface for that.' I have one client that is un-trainable."

"We get creative freedom within a certain realm, with restrictions."

"There is a lot of just okay stuff out there. Everybody is a designer, or think they are. I don't think we [creatives] are as revered as much as we once were. Okay stuff waters down our expectations. People aren't exposed to real creativity so they don't know they are missing it. 'What do you mean a Chevy is not a BMW?"

Is fear a factor?

"We are all afraid of judgment. Creativity, what we do - it's personal. I am naturally an introvert so I invented an alternate personality to overcome that. If all else fails I overcome fear by, well, I just 'suck it up."

Interview 6 – John Covington, Photographer

John Covington has made his mark in editorial, advertising, automotive, portrait, alternative fashion, music, and lifestyle photography. His base of operations is in





Phoenix, Arizona, where he shoots regularly for a wide range of national publications.

Covington's passion for photography began at age eight with his first Brownie camera. However, his road to photography took a few turns and detours before the camera became his full-time vocation. His unique life experiences are revealed in his photographs.

His industrial design time spent at the Art Center College of Design (Pasadena) expresses itself in his images, his uniquely stunning graphic compositions.

You can see his years as a rock drummer reveal themselves in his fascination with fringe characters and underlying rhythm in his backgrounds and lighting.

If you wonder where the fascination with soft curves, smooth lines, and on-theedge detailing comes from, credit it to his years as designer and manufacturer of alternative American motorcycles. Covington's past infuses his present. He explores the edges that make people stop and stare, then wonder if what they're beholding is safe or dangerous.

The interview

Are you creative?

"Of course I'm a creative person. I grew up in an environment very conducive to creativity. It was mostly my mother. She took me to the Phoenix Art museum and the Heard. I grew up in the 1960s but I was the youngest of four boys so I had hand-medown 1950s toys like an erector set. The high school I went to had a great shop, that all helped me be creative."

"I know I'm creative, I have all these absolutely useless skills that no one wants to pay me for."

How often are you creative?

"I use creativity in all facets but it is also works as a hindrance. A lot of people don't understand someone like me. It freaks people out. You start to explain to people what you do and they think you're bullshitting them."

"I haven't worked for anyone since 1987. I have the mindset that I am 100% unemployable so I have no choice but to figure out a way to make a living on my own."

How valuable is creativity?

"I'm not sure people see it all the same way. Young guys that give it away, it gives guys a chance to get their work out there but it also dummies it all down, makes it less valuable. And people will accept the 'just good-enough guy.' There is a lot of 'good enough.' Those guys don't last long but there's always another 'good enough' guy behind them."

"People say, 'It takes like a two seconds to take that photo' but it really took a lifetime to take that photo."

Is fear a factor?

"It's hard to take criticism but it is easier if you know it's good. One of the fears I had to overcome was starting this career when I was older. Experience counts but you still have to be fresh."

"One of the pressures of commercial art is nobody wants it if there is even a little flaw. There's always another guy that will get that job next time. You have to have both sides of your brain working all the time. Taking the picture, that's the easy part."

"So how do you sustain? I worked hard at making money, not be an obstruction to doing what I want."

John spoke about moving back and forth from Phoenix to L.A., risking all to change careers from musician to custom-bike builder to photographer. He admits to being a risk-taker but in his words, "I'm not a thrill seeker."

Conclusions to the interviews

Six interviews were conducted with creative individuals in a variety of commercial creative endeavors. Several recurring themes emerged.

Individual value of creativity

All of the interviewees felt that they were creative individuals and all felt that their creativity was valuable to them. "My creativity is essential to me" (Miguel Berastegui).

Some of the interviewees felt that they were creative individuals by their own self-evaluation, "Yes, I'm a creative person" (Kelly Jo Rose), some by the evaluation of others, "people tell me I'm creative so I guess I'm creative" (Angela Johnson), and some by circumstance ""I know I'm creative, I have all these absolutely useless skills that no one wants to pay me for" (John Covington).

All felt that it was an asset in their professional lives but not all felt is was an asset in their personal lives. Angela Johnson says her creativity extends well into her personal life, "Our house looks like an amusement park." While Andy Robles states he is "only occasionally creative outside of my professional life."

The value of creativity in our culture

Most of the interviewees felt that their creativity was valuable to their clients, in varying degrees, but not by the culture in general. "Our culture doesn't value creativity much" (Miguel Berastegui). "Our whole world is left-brained. It's so opposite of what creativity is" (Angela Johnson).

The devaluation of creativity by our culture may be due to the dilution of the concept of creativity and the indiscriminate use of the term creativity. Miguel Berastegui says the use of "creative" to describe someone who designs his own house even if it is done badly is wrong. "It takes bravery to be creative but let's not mistake bravery for creativity." "There is a lot of just okay stuff out there People aren't exposed to real creativity so they don't know they are missing it" (Shari Corbett). John Covington believes

people don't value creativity because they don't understand what is involved, "People say, 'It takes like two seconds to take that photo' but it really took a lifetime to take that photo."

The fear of risk

All agreed that the fear of risk was a factor in expressing creativity (mostly early in their careers) as well as a factor in the acceptance of it by others. Andy Robles says, "[i]n the beginning of my career there was a lot of anxiety presenting different ideas to clients but not really anymore." Andy also says most people fear creativity because of the risk of being wrong, and "It's so easy to be not wrong." "People don't want to take risks' (Kelly Jo Rose).

Although he has taken many risks in his career, John Covington states that he is not a thrill-seeker. It appears that creativity is very much about taking risk but not necessarily about seeking thrills.

In the scope and limitations section of this thesis, it was stated that current economics could be a factor in the fear of risk for businesses and therefore a factor in the reduced emphasis on creativity. This was not specifically explored in this study. However, economics was mentioned several times during interviews as a contributing factor to the fear of risking creativity. "How much does safe cost? Not a lot and there is no risk of being wrong" (Miguel Berastegui). "I have to make money so I have to give people what they think they want. You have to sell out a little bit . . . maybe I'll just make stuff for the masses and stifle my own creativity" (Angela Johnson).

In questioning the interviewees about fear of the risk involved in being a creative, the subject of fear in general came up. Aside from some wildly irrational fears like "bowling," all felt that having overcome the fear of risk in enacting creativity, to varying degrees, leaves the creative person relatively fearless. The fear of risk outside the creative arena, such as financing new ventures, for these individuals is greatly reduced.

Many had ways to overcome their own fears such as Shari Corbett's alter ego, "I am naturally an introvert so I invented an alternate personality to overcome [the fear of judgment]." Or Miguel Berastegui's acceptance of rejection, "I accepted that the first try is going to be a failure - it's tracer fire. Now you know what they [the client] doesn't like."

Chapter 5

FINDINGS & CONCLUSIONS

Introduction

This section presents the findings and conclusions of this study. The hypothesis set forth at the beginning of the study—in most of the current literature on the subject, a positive value is placed on creativity by and for individuals, businesses, and the culture as a whole; yet the occurrence and acceptance of creative acts is rare therefore there is a negative correlation between the value stated and the true value placed on creativity—is shown to be true. The fear of risk involved in enacting and accepting creativity as a factor in this dichotomy is also shown to be true.

Our culture is and has been a victim of its own dogma. The idea of creativity is valued, not the actual process, acts, or attribute of creativity.

Autoethnography

While this thesis uses a traditional research design—setting forth a preconceived hypothesis then setting out to validate it—its beginnings are much closer to grounded theory. As a creative, a graphic designer, an art director, and teacher for nearly 40 years, the author has had a very personal relationship with creativity in our culture. After earning a Bachelor of Fine Arts degree from Michigan State University in 1974, his career in design spanned a time that saw the change from all hand-produced art to digital design. Despite the major changes in the field witnessed, the concept of creativity and the struggle for it to be readily embraced has changed little. The notion that creativity is not as valued as our culture propagates it to be was formed over this span of time.

It is difficult to ignore that experience, so throughout the analysis of this study and the writing of this thesis autoethnography has been employed.

Autoethnography is not as established or accepted method as many others in social research. However, there are several justifications for using autoethnography in this study. Ethnographers write "thick description" of a culture (Geertz, 1973).

Autoethnographies seek to produce thick descriptions through personal and interpersonal experience. The study of something as subjective as creativity can certainly benefit from this type of research. The narrator's credibility is key for autoethnography to be believable, reliable and accurate. As stated above, the author of this thesis has been a creative, a graphic designer, art director and teacher of creativity and design for nearly 40 years.

Lastly, there are still some researchers that believe that research can be done from a neutral, impersonal, and objective point of view (Delamont, 2009). But researchers do not exist in isolation. We are connected to friends and relatives, partners, children, coworkers and students. Autoethnography acknowledges, accommodates, and celebrates subjectivity and the researcher's influence on research (Ellis, Adams, & Bochner, 2011).

Findings

Barry Staw, a Professor of Leadership and Communication at Northwestern University, in his essay *Why no one really wants creativity*, states, "[t]he term creativity has a nice ring to it and nearly everyone thinks it is a good thing; but few people or organizations really want creativity. When they think it through, when the processes involved and their attendant costs are made clear, people and firms tend to back away from creativity" (1995).

Although the findings of this study are not quite as pessimistic as Staw's statement, it is not optimistic either. Staw wrote the essay, *Why no one really wants creativity*, nearly 20 years ago and little has changed since then. In much of the literature reviewed, creativity was shown to be complex, difficult to explain, more difficult to induce or control, and mostly misunderstood. The interviews brought much of this theory into clear practical view.

Individual value

Most of the literature reviewed focused on creativity in the individual and it was treated as a valuable personal attribute, one that was desired especially by creatives. In *Creativity and Values*, the authors state that creative individuals value "creativity to the point where it is a personal guiding force or chief motive in life" (Dollinger, Burke, & Gump, 2007).

All of the interviewees felt that they were creative individuals. John Covington said, "I know I'm creative, I have all these absolutely useless skills that no one wants to pay me for." All also felt their creativity was valuable to them. Miguel Berastegui called his creativity, "essential."

Cultural value

"Individual creativity has some stable trait-like aspects but it is also influenced by the social environment" (Hennessey, & Amabile, 2010). The interviews show that "the social environment" does not especially value creativity. Most of the interviewees felt that their creativity was valuable to their clients, in varying degrees, but not by the culture in general.

"I had these ideas that were a little ahead of when they should come out and I felt 'nobody gets it yet.' I would get a little down and say, well maybe I'll just make stuff for the masses and stifle my own creativity" (Angela Johnson). Angela blames this partially on the way we are treated in school. "Like school, you have to be there everyday at the same time, you take tests that are yes or no. Our whole world is left-brained. It's so opposite of what creativity is. We are not all going to be accountants."

"I don't think we [creatives] are as revered as much as we once were. People aren't exposed to real creativity so they don't know they are missing it" (Shari Corbett).

"People will accept the 'just good-enough' guy. There is a lot of 'good enough" (John Covington).

Miguel Berastegui discussed the idea that complacency is detrimental to the value of creativity. "Creative means you're on the cutting edge but it's used to give the illusion of being on the cutting edge." Just as the myriad of research and writing on creativity masks its undervaluation, as noted by Beth A. Hennessey and Teresa M. Amabile in *Creativity* (2010), the overuse of the words "innovation" and "creativity" dilute their meaning.

"Innovation. These days, there's hardly a mission statement that doesn't include it, or a CEO who doesn't promote it." This was from an article in Forbes magazine in February of 2012 (Bendle, 2012). So, if innovation is a key word in most mission statements, why are we not an innovative society?



On Broadway Ave. just west of the I-10 freeway in the short span of under two miles, there are three businesses that used the words "creativity" or "innovation" in their name. One business is named *Creative Communications*. Their website proclaims them as "Arizona's largest Motorola two-way radio dealer." The question, "how creative is selling two-way radios?", prompted further investigation. According to the Arizona Secretary of State, there are more than 500 businesses registered in Arizona with the

word "creative" in their name and an equal number using the word "innovation" (2013).

Could it be that the terms "innovation" and "creativity" are just trendy words to use?

Fear of risk

Fear and especially the fear of risk are certainly shown to be a factor in enacting and accepting creativity by our culture. In *Are you Afraid?*, Kevin McManus calls fear the destroyer of creativity and Tim Love writes in, *In times of challenge, creativity to the rescue*, "Fear is the biggest factor inhibiting peace and prosperity. It suffocates the creativity that brings people together and that fuels economic optimism" (2002).

According to Michael Ray and Rochelle Myers, "for most, creativity has been inhibited by fear" (Ray, & Myers, 2000).

"Your creativity is you, so it is fearful putting it out there" (Angela Johnson).

"We have this fear of failure we have to overcome" (Miguel Berastegui).

"People are fearful of being creative . . . It's so easy to be not wrong" (Andy Robles).

"This is not the age of Faith, Truth and Certainty. Creating art in this culture means creating in certain uncertainty" (Bayles, & Orland, 2011). In *The bias against creativity: Why people desire but reject creative ideas,* the authors conclude that participants in their study demonstrated a negative bias toward creativity when they experienced uncertainty. That bias against creativity interfered with participants' ability to recognize a creative idea. "These results reveal a concealed barrier that creative actors may face as they attempt to gain acceptance for their novel ideas" (Mueller, Melwani, & Goncalo, 2011).

There are solutions offered to overcome barriers to creativity such as fear.

Speaking about self-compassion in *Don't Be So Hard on Yourself: Self-Compassion*Facilitates Creative Originality Among Self-Judgmental Individuals, "it appears that inductions of this type may be generally efficacious in removing some of the barriers to

uncensored output generally thought to undermine original creative thinking." (Zabelina, Robinson, 2010)

Conclusions

While the interviewees could not ascertain why they are creative, "people tell me I'm creative so I guess I'm creative" (Angela Johnson); "I know I'm creative, I have all these absolutely useless skills that no one wants to pay me for" (John Covington), all felt they are creative, "Yes, I'm a creative person" (Kelly Jo Rose), and that their creativity was valuable to them, "My creativity is essential to me" (Miguel Berastegui). None, however, felt their creativity was truly valued, "My creativity is valuable to me personally, but how valuable is it to others? It depends" (Angela Johnson). Clients were seen as valuing creativity but only with proper preparation such as education or reputation as a creative. "There is value in success, our culture doesn't want to fail. The risk is reduced if they see a preconceived value in you" (Miguel Berastegui). "You need to educate clients" (Andy Robles). Even then it can be difficult, "[c]lients want you to think outside the box but stay in the box . . . I have one client that is untrainable" (Shari Corbett).

The dogmatic notion that creativity is valued in our culture is so accepted that it found its way into some of the scientific studies that were reviewed, as "fact." For example, the research article, *The positive effects of cohesion on the creativity of small groups*, makes a statement that has no bearing on the outcomes of its study, "[c]reativity will continue to be valued in our society, especially in time periods of limited resources when new ideas are often sought" (Moore, 1997). This study clearly shows that statement to be untrue. We like the idea of creativity more than the actual practice of it. The term "creativity" is found in corporate mission statements, job description requirements, and lists of desirable personal attributes but it is mostly rhetoric. Real creativity requires great tolerance of risk, is difficult to manage, and as Barry Staw noted, is costly (Staw, 1995).

One of the reasons our culture does not value creativity may be the misunderstanding of real creativity. According to Miguel Berastegui, the term "creative" is

"used to give the illusion of being on the cutting edge." Accepting "okay stuff" (Shari Corbett) or "just good enough" (John Covington) allows the culture to believe it is creative without the risk and the inherent fears that come with real creativity.

In *Art & Fear,* the authors state there is much to fear in being creative and it is not necessarily easy or logical, "avoiding the unknown has considerable survival value." Fear of risk, risking uncertainty, and risking failure is certainly a factor in our expressing, enacting, and accepting creativity. It is a fear "we have to overcome" (Miguel Berastegui) but cannot eliminate. There is an inherent relationship between fear, risk, and creativity. Perhaps it is a Ying-Yang relationship, one does not exist without the others. There is no creativity without risk and its inherent fears and perhaps no risk without creativity. Fear and especially the fear of failure have long been seen as something to be avoided at all costs. Creatives have learned to live and even thrive with fear and failure. Mary Ruefle calls fear "the greatest motivator" (2012) and Miguel Berastegui likens failure to "tracer fire." Our culture needs to see the value of failure. This can be best implemented in our educational system.

Our culture is a highly uncreative place. In an article in the New York Times, author Chuck Klosterman comments on the popularity of a then new television series about zombies.

"When we think critically about monsters, we tend to classify them as personifications of what we fear. Frankenstein's monster illustrated our trepidation about untethered science; Godzilla was spawned from the fear of the atomic age . . . What if contemporary people are less interested in seeing depictions of their unconscious fears and more attracted to allegories of how their day-to-day existence feels?" (2010).

Whether we see the fight against zombies representative of our futile rote existence or we see ourselves as part of a mindless mob, the "zombie" (substitute "uncreative" here) apocalypse is now. Read your e-mail, follow the format, nod and smile at your boss. As Klosterman says, "This is the zombies' world, and we just live in it" (2010).

There is a need to change for our culture to become more creative. As Kelly Jo Rose put it, "A creative culture would be better – more love." More love? A more creative culture could be the cure for many of our contemporary ills. A creative culture that doesn't default to traditional paradigms would be truly innovative. A creative culture that questions rather than just accepts would lessen our buying into political rhetoric. A creative culture that promotes a workplace free from the fear of failure would result in workers going beyond expectations and, in turn, may result in corporations seeing their workers as assets rather than expenses. A creative culture ultimately would result in greater innovation, an improved economy, happier people, and perhaps—more love.

It is possible to change the culture. It will take training and education. In Creativity and Values, the researchers state, "it is possible to value those qualities that we do not possess, as well as ones that we do" (Dollinger, Burke, & Gump, 2007). So where does the change begin? Real creativity, its expression and acceptance can become a social meme. Our culture does not change through legislation—we will often defy what we are told to do—the change will come through influence. The influencers are designers and artists and filmmakers and educators. We will see examples of the creative life we can mimic in song and movies and advertising and, if we do it right, even "Intro to Chemistry."

The first step

In the chapter *The Nature of Collective Thought* of *On Dialogue*, David Bohm writes about growing societies with more rules and authority and the resulting stress. "And the further civilization goes, by and large, the greater the stress." Then he asks the poignant question, "[w]hy don't people see this clearly? It seems a very present danger and yet it seems people can't see it." (2003, p 54)

When I began this research I had grand visions of discovering the dichotomy between the perceived and true value of creativity in our culture, getting people to see it clearly, and finding the magic solution(s) to change that and, in turn, the world. The truth

is that this study and its findings and conclusions are the minute beginnings. Step one in a twelve-step program— "admitting the problem." The reference here to a twelve-step program, a course of action for recovery from addiction or compulsion, is not used lightly. We are a culture addicted to conformity and safe behavior. We, those of us who practice and value creativity, need to consider an intervention and convince the rest of the culture it needs help.

Further Study

There is certainly further study needed to find those magic solutions I envisioned at the beginning of this study. Some solutions—overcoming fear, promoting the true value of creativity, and ways for creativity to be more accepted have been revealed in this study. They were not the focus of the study and therefore, should be explored further.

Economics was mentioned several times during interviews as a contributing factor to the fear of risking creativity. In recent times, businesses have been held accountable on a quarterly basis. This can result in accepting existing paradigms rather than exploring creative, but risky, options. For marketing, finding profit by exploiting existing markets is quicker than creating new markets. Even though the key phrase cited in the latest Boston Consulting Group Survey is "Innovate or die" (Wagner, et al 2013), instituting a creative work environment is a long-term endeavor and out of the economic realm of most businesses. The effect of economics on creativity and innovation bears more study as well.

REFERENCES

- Ainsworth-Land, G. T. (1973). *Grow or die: The unifying principle of transformation*. New York: Random House.
- Arizona Secretary of State (2013). Registered Name Information Search. Retrieved from http://www.azsos.gov/scripts/TNT_Search_engine.dll/ListNames
- Bayles, D., & Orland, T. (2011). Art & fear: Observations on the perils (and rewards) of artmaking. Santa Cruz, CA: Image Continuum Press.
- Beghetto, R. A., & Kaufman, J. C. (2007). Toward a Broader Conception of Creativity: A Case for "mini-c" Creativity. *Psychology of Aesthetics, Creativity, and the Arts 1* (2), 73–79. doi: 10.1037/1931-3896.1.2.73
- Bendle, B., (2012, February 28). *The Demand for Curiosity, Creativity and Innovation*. Retrieved from http://www.innovationexcellence.com/blog/2012/02/28/the-demand-for-curiosity-creativity-and-innovation/
- Brown, B., & Anthony, S. D. (2011). How P&G Tripled Its Innovation Success Rate. *Harvard Business Review*, 89(6), 64-72. Retrieved December 3, 2011 from EBSCO*host*.
- Brown, R. M. (2004). Be creative. *Natural Health*, *34*(6), 12. Retrieved June 17, 2012 from MasterFILE Premier
- Bohm, D., & Nichol, L. (2003). On dialogue. London, Eng.; New York, NY: Routledge.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Cubukcu, E., & Cetintahra, G. (2010). Does Analogical Reasoning With Visual Clues Affect Novice and Experienced Design Students' Creativity?. *Creativity Research Journal*, 22(3), 337-344. doi:10.1080/10400419.2010.504656
- Delamont, Sara (2009). The only honest thing: Autoethnography, reflexivity and small crises in fieldwork. *Ethnography and Education*, 4(1), 51-63. doi: 10.1080/17457820802703507
- Dickinson, T. (2011). The Fox news Fear Factory. *Rolling Stone*, (1132), 54. Retrieved June 17, 2012 from MasterFILE Premier.
- Dollinger, S. J., Burke, P. A., & Gump, N. W. (2007). Creativity and Values. *Creativity Research Journal*, *19*(2/3), 91-103. doi:10.1080/10400410701395028
- Domino, G., Schmuck, J., & Schneider, M. (2002). An Empirical Assessment of the GAM Theory of Creativity. *Creativity Research Journal*, *14*(3/4), 331-339. Retrieved September 3, 2011 from EBSCO*host*.
- Ellis, C., Adams, T. E., & Bochner, A. P., (2011). Autoethnography: An Overview. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 12*(1), Art. 10, Retrieved September 19, 2013 from http://nbn-resolving.de/urn:nbn:de:0114-fqs1101108

- Epstein, R., Schmidt, S. M., & Warfel, R. (2008). Measuring and Training Creativity Competencies: Validation of a New Test. *Creativity Research Journal*, 20(1), 7-12. doi:10.1080/10400410701839876
- Field, P. (2011). The value of creativity. *Market Leader*, (Q2), 42.
- Geertz, C. (1973). The interpretation of cultures: Selected essays. New York: Basic Books.
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal Of Personality And Social Psychology*, *102*(3), 445-459. doi:10.1037/a0026406
- Helgesen, T. (1994). Advertising Awards and Advertising Agency Performance Criteria. *Journal of Advertising Research, 34* (4), 43-53. Retrieved December 7, 2011 from EBSCO*host*.
- Hennessey, B.A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology,* 2010 (61), 569-598. doi:10.1146/annurev.psych.093008.100416
- Hollenberg, D., Goldenberg, J., Mazursky, D., & Solomon, S. (1999). Scrutinizing Creativity. *Science, New Series* 286 (5448), 2271-2272. Retrieved August 23, 2011 from JSTOR.
- Hutton, E., & Sundar, S. (2010). Can Video Games Enhance Creativity? Effects of Emotion Generated by Dance Dance Revolution. *Creativity Research Journal*, 22(3), 294-303. doi:10.1080/10400419.2010.503540
- Jones, K. A., Blagrove, M. M., & Parrott, A. C. (2009). Cannabis and Ecstasy/MDMA: Empirical Measures of Creativity in Recreational Users. *Journal of Psychoactive Drugs*, *41*(4), 323-329. Retrieved September 22, 2011 from EBSCO*host*.
- Kelly, K. E., & Daughtry, D. (2008). Academic Orientation and Creativity: Does a Creative Personality Correlate with Students' Approach to the Academic Environment?. *Individual Differences Research*, *6*(4), 253-259. Retrieved October 6, 2011 from EBSCO*host*.
- Kersting, K. (2003). What exactly is creativity? Psychologists continue their quest to better understand creativity. *Monitor on Psychology, 34*(10), 40. Retrieved December 9, 2011 from http://www.apa.org/monitor/nov03/creativity.aspx.
- Kim, T., Hon, A. Y., & Deog-Ro, L. (2010). Proactive Personality and Employee Creativity: The Effects of Job Creativity Requirement and Supervisor Support for Creativity. *Creativity Research Journal*, 22(1), 37-45. doi:10.1080/10400410903579536
- Kipper, D. A. (2006). The Canon of Spontaneity— Creativity Revisited: The Effect of Empirical Findings. *Journal of Group Psychotherapy, Psychodrama & Sociometry* (15453855), 59(3), 117-126. Retrieved August 28, 2011 from EBSCO*host*.
- Klosterman, C. (2010, December 3). My Zombie, Myself: Why Modern Life Feels Rather Undead. *The New York Times*, Retrieved from http://www.nytimes.com/2010/12/05/arts/television/05zombies.html?

- Kraft, A. (2012). The Art of Fear. *Psychology Today, 45*(3), 10. Retrieved June 17, 2012 from MasterFILE Premier.
- Kreitler, S., & Casakin, H. (2009). Motivation for Creativity in Design Students. *Creativity Research Journal*, 21(2/3), 282-293. doi:10.1080/10400410902861471
- LeDoux, J. (2012, January 22). Searching the Brain for the Roots of Fear. *The New York Times,* Retrieved from http://opinionator.blogs.nytimes.com/2012/01/22/anatomy-of-fear/?_r=0
- Love, T. (2002). In times of challenge, creativity to the rescue. *Advertising Age*, 73(18), 30. Retrieved June 17, 2012 from MasterFILE Premier.
- Massetti, B. (1996). An Empirical Examination of the Value of Creativity Support Systems on Idea Generation. *MIS Quarterly*, *20*(1), 83-97.
- McManus, K. (2006). Are you afraid? (performance). Industrial Engineer, 38 (5), 18
- Mercogliano, C., Debus, K. (interviewers) & Pierce, J. (interviewee). (1999) An Interview with Joseph Chilton Pierce [Interview transcript]. *Journal of Family Life magazine,* 5 (1), Retrieved from http://appliedmeditation.org/The_Heart/articles_joseph_chilton_pearce.shtml
- Michalko, M. (2006). *Thinkertoys: A handbook of creative-thinking techniques*. Berkeley, CA: Ten Speed Press.
- Montuori, A., & Stephenson, H. (2010). Creativity, Culture Contact, and Diversity. *World Futures*, 66, 266–285. doi: 10.1080/02604021003680503
- Moore, D. J. (2007). Design and the creative process. New York: Thomson.
- Moore, R. M. (1997). The positive effects of cohesion on the creativity of small groups. *International Social Science Review, 72*(3/4), 84. Retrieved October 11, 2011 from EBSCOhost.
- Mueller, J. S., Melwani, S., & Goncalo, J. A. (2011). *The bias against creativity: Why people desire but reject creative ideas*. Retrieved September 30, 2013 from Cornell University, ILR School site:
- Nielsen, D. (Interviewer) & Basadur. M (interviewee). (2011) Simple. Simplex. Simplexity [Interview transcript]. Retrieved from http://creativityresearch.blogspot.com/2012/01/simple-simplex-simplexity-interview.html
- Oldach, M. (2000). Creativity for graphic designers: A real-world guide to idea generation from defining your message to selecting the best idea for your printed piece. Cincinnati: North Light Books.
- Ray, M. L., & Myers, R. (2000). Creativity in Business. New York: Broadway Books.
- Ruefle, M. (2012). On Fear. *Poetry, 200*(3), 275. Retrieved June 17, 2012 from Academic Search Premier.

- Sawyer, K., (2010). 2010 BCG Innovation Survey April 27, 2010. New Research, Retrieved June 4, 2012 from http://keithsawyer.wordpress.com/2010/04/27/2010-bcg-innovation-survey/
- Sheridan-Rabideau, M. (2010). Creativity Repositioned. *Arts Education Policy Review*, 2010 (111), 54–58. doi: 10.1080/10632910903455876
- Staw, B. M. (1995). Why no one really wants creativity. In C. Ford & D. A. Gioia (Eds.), Creative Action in Organizations: Ivory Tower Visions and Real World Voices. Thousand Oaks, CA: Sage Publications, Inc.
- Stewart, M. (2008). Launching the imagination: A comprehensive guide to basic design. Boston: McGraw-Hill Higher Education.
- Therivel, William A. (2004). The Invalid Empirical Assessment of the GAM Theory by Domino, Schmuck, and Schneider. *Creativity Research Journal 16* (1), 357-359. doi:10.1080/10400419.2004.9651465
- Tugend, A. (2011). Why Wrong Is Not Always Bad. *Education Week*, *30*(31), 25. Retrieved June 17, 2012 from Academic Search Premier.
- Unsworth, K., (2001). Unpacking Creativity. *The Academy of Management Review 26* (2), 289-297. Retrieved August 22, 2011 from EBSCO*host*.
- Wagner, K., Foo, E., Zablit, H., & Taylor, A. (2013). The Most Innovative Companies, Lessons from Leaders. Retrieved from https://www.bcgperspectives.com/content/articles/innovation_growth_most_innovative_companies_2013_lessons_from_leaders/
- Wilson, T. (2010) Famous Dr. Steel. *Global Entertainment Mag*. Retrieved on April 10, 2011 from http://www.globalentertainmentmag.com/DrSteel.html
- Zabelina, D. L., & Robinson, M. D. (2010). Don't Be So Hard on Yourself: Self-Compassion Facilitates Creative Originality Among Self-Judgmental Individuals. *Creativity Research Journal, 22*(3), 288-293. doi:10.1080/10400419.2010.503538

APPENDIX A

HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL





To: Mookesh Patel

AED

From: Mark Roosa, Chair

Soc Beh IRB

Date: 07/31/2013

Committee Action: Exemption Granted

IRB Action Date: 07/31/2013
IRB Protocol #: 1307009449

Study Title: The True Value Placed on Creativity: Is Fear a Factor?

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2).

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B INTERVIEW GUIDE

Interview guide

Are You Creative?

Section 1 - questions on creative ability/ innovation or imagination

- 1. Do you feel you are a creative person?
- 2. In everyday thought, people often spontaneously imagine alternatives to reality when they think "if only..." Do you feel you have these thoughts more often than most? How often do you act on these thoughts?

How often are you creative?

Section 2 - questions on frequency

- 1. How often do you utilize creativity in the context of your business?
- 2. How often do you utilize creativity in the context of the rest of your life?
- 3. Tell me about your typical
 - day at work
 - process for this project
 - process when you start a new endeavor

The value of creativity

Section 3 – questions on the value of creativity and other personal attributes

- 1. How valuable do you feel your creativity is to you? As a professional attribute?
- 2. How would you rate it among other personal attributes?
- 3. Do you feel that your creativity is valued by others?

By your supervisor?

By your partner?

By your friends and family?

Fear

Section 4 – questions on the fear of implementing creativity

- 1. When faced with a creative task do you feel anxiety or panic?
- 2. When faced with presenting a particularly creative concept to a client or supervisor do you feel anxiety or panic?
- 3. What kinds of things do you fear?
- 4. What do you do to overcome fear?

APPENDIX C INFORMATION LETTER

The True Value Placed on Creativity: Is Fear of Risk a Factor?

Dear Reader

I am a graduate student under the direction of Dr. Wil Heywood and Prof. Mookesh Patel in the Visual Communications Department, The Design School, Herberger Institute for Design and the Arts at Arizona State University. I am conducting a study to research the difference between the perceived value of creativity and the actual value placed on it. This study should also identify the fears that we need to overcome to alleviate this dichotomy and reveal influences that allow creativity to be more accepted.

I am inviting your participation, which will be an informal interview about your opinions of creativity in our culture. The interview will be approximately one hour in length. You will have the right not to answer any question, and to stop the interview at any time.

Your participation in this study is voluntary. You may choose not to participate or to withdraw from the study at any time. Participants must be 18 and older.

Your participation and responses to the interview will be used to help determine the perceived and actual value of creativity in our culture. There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used without specific and written permission.

I would like to digitally record this interview. The interview will not be recorded without your permission. Please let me know if you do <u>not</u> want the interview to be taped; you may also change your mind after the interview starts. These recordings will be destroyed at the conclusion of the study.

If you have any questions concerning the research study, please contact me at howard.gelman@asu.edu, Dr. Wil Heywood at will.line.will.heywooD@asu.edu or Prof. Mookesh Patel at mookesh@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

Sincerely,

Gelman

APPENDIX D INTERVIEWEE CONSENT

CONSENT FORM The True Value Placed on Creativity: Is Fear a Factor?

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RISKS

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BENEFITS

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CONFIDENTIALITY

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COSTS AND PAYMENTS

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INVESTIGATOR'S STATEMENT

Subject's Signature

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