

The Value of the Semantic Differential to the Art Educator

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Abstract of Thesis

The Affective Responses of 32 At-Risk Young Adults to Portraiture Using the Semantic Differential

Attempting to discover the utility of the Semantic Differential in determining learner needs and preferences at the outset of a 9-week beginner art-appreciation class, the researcher surveyed her students' affective responses to 30 portraits. Over a one-year period, thirty-two at-risk young adults completed the survey using 16 bi-polar adjective pairs (good: bad | beautiful: ugly, etc.) to indicate how they felt about each portrait. The respondents had one minute to rate each portrait or thirty minutes total. Supported by research on the cross-cultural validity of the survey tool, the universal relevance of portraiture alongside curriculum, cognitive and visual culture theory, the student responses reveal that (1) the survey mechanism itself is useful to the art educator; and (2) there is a wealth of information on student preferences in terms of style, media, and subject.

Responses to the portraits reveal near total engagement with the process as well as interesting patterns and divergences: in one example, two portraits created 1,000 years apart were ranked "positively" by all respondents. Other examples reveal a complexity of responses across media and style as well as race, gender and age of subject.

While it has yet to be demonstrated whether the survey results can be generalizable across a population of similarly-situated individuals, the researcher believes the real value may lie in the survey's use in creating a dialogue based on

immediate information about student preferences; where, within a community, students can mine the degree to which they have been influenced by their material culture. The dialogue will serve as a safe jumping off point to explore their identity and their role in society through discussion, art production and interpretation.

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The truth is I was curious. I came across the below image while researching survey tools and was intrigued by the pairing of the survey instrument with imagery and decided to find a way to explore its potential. Initially, there was no problem to be solved, theory to be supported or hypothesis to be tested.

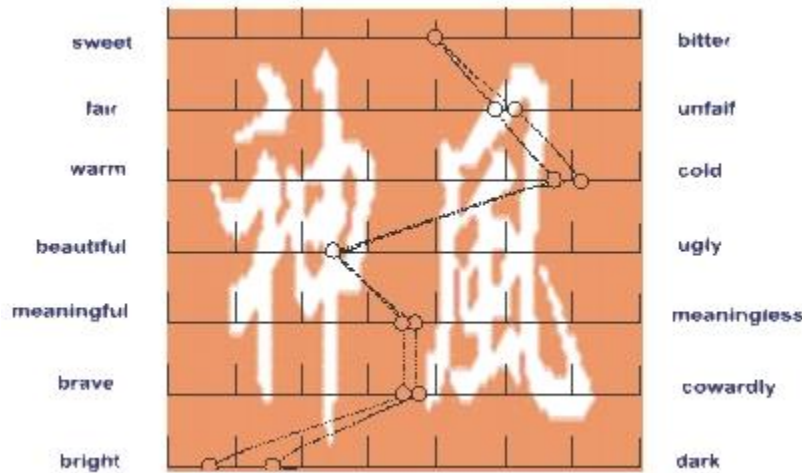


Figure 1: Example of the Semantic Differential (Krus, DJ & Ishigaki, VJ, 1992).

The image in Figure 1 is an example of the Semantic Differential where there are paired two Japanese symbols - 'God' and 'wind' - whose combined meaning is 'kamikaze'. The symbols are embedded within a field of interval scales between two lists of opposing adjectives. The scales are overlaid with a line graph summarizing responses to the images relative to the adjectives. The middle scale is a neutral response.

What we read in this image is at once immediate and mysterious: the affective

choices on the part of the respondents were slightly more bitter than sweet, more unfair than fair; cold and beautiful but neither meaningful nor meaningless; neither brave nor cowardly; bright not dark. Whomever the respondents were, however many respondents the line chart signifies – an average of many or just the two – we now have information about their perceptions, attitudes and emotions which arose in response to the symbols within the context of the adjectives and their own subjective experiences. Our act of looking at this image mirrors what is experienced when considering a work of visual art: the aesthetic and poetic appeal of the adjectives alongside the symbols and the perplexity from the unanswered, perhaps unanswerable question: *what does it mean?*

This question is the thread I tugged on for two years and in the course of my research I have discovered that the question is itself limiting and that what I ended up pulling apart were my own notions about why I teach art and what it means to be an educator. I also discovered along the way an unconscious conflict in my motives: I wanted to find out more about the Semantic Differential for its own ends but at the same time wanted – or was looking for - assurance that there would be some concrete result or meaningful discovery at the end of the project.

The unacknowledged conflict between pursuing the project for its own end and the desire for a tangible result informed how I set up the research project and interpreted the results. This tension also mirrors the schism playing out in the wider ecosystem making up our society: curiosity, innovation and creativity are American

hallmarks but so is the desire for a straight path from idea to profit, from hypothesis to cure, from preschooler to learned citizen (as measured by a multiple choice test and the ability to find a job).

Innovation, however, is not a linear process. In 2013, *Nature* magazine profiled a scientist who has advanced significant developments in the area of mental health by advancing the field known as Optogenetics where energy frequencies can be modulated in the brain. His findings grew out of research from the study of energy receptors in algae. His efforts to find funding from the National Institutes of Health were rejected several times because his research involved use of a technology and not a hypothesis (Smith, 2013). Eric Kandel, author of the *Age of Insight*, whose work with portraiture is discussed later, found models for cell memory from an unlikely source and despite opposition from his peers: “Kandel soon realized he needed a simpler system and chose the invertebrate sea slug *Aplysia*, much to the dismay of his colleagues who thought that no self-respecting neurophysiologist would abandon the study of learning in mammals to work on an invertebrate (Howard Hughes Medical Institute, 2014).”

Some place between algae and the sea slug lay the arts. Justification for the arts isn't the focus of this effort but the above examples from the world of science reflect the even-greater pressure placed on artistic endeavors toward a justifiable and measurable end.

I resisted this urge and left the project open ended. Over a one-year period – from April, 2013 to March, 2014 -- I tested the Semantic Differential with 32 of my high

school students using adjective pairs to gauge their responses to a range of portraiture. The idea - having seen the tool paired with imagery – was that the results could be relevant in the arts classroom and perhaps tell me something important about my students. During the time that the data was collected, I began to consider the ways in which I should look at the results. To that end, I looked to my experiences as an educator.

As a teacher in an urban Title I high school, running arts workshops for at-risk adults, and as a volunteer in the Peace Corps, I found that these are situations where the learner may be marginalized, where there is a distinct power dynamic as well as a cultural chasm and where facilitators make quick, initial assumptions about the students through their own compromised lenses; students may tell the teacher what they think the teacher wants to hear; and the learner has little experience hearing and trusting his or her own voice.

I recently observed a workshop for medical students exploring adult-learning principles for their work as future medical educators. Surprisingly, more than half of the group addressed the following question to the instructor: *are we considered adults?* This is less a reflection on the mindset of the Millennial than the relationship of the novice to the expert in any learning situation.

According to William Pinar (2012), curriculum comes primarily from the passions of the teacher while cross-cultural educator, Jane Vella emphasizes making the subject matter relevant to the learner (Vella, 2003). I choose to make my students aware of

visual culture in the mode described by Elliot Eisner (2002) as “...developing the student’s ability to use the arts to understand the values and life conditions of those living in a multicultural society” (p. 29).

Surrounded by imagery, the students I teach are vulnerable learners who have found safety in staying quiet, who have no sense of self and are totally unaware of how their visual culture is already inside them, unconsciously driving and shaping their choices. Identity is formed by constant exposure to material culture in which we exist and in which we have become inured. And as we develop, consciously or unconsciously, we in turn create culture. It is to society’s benefit that we help our young people figure out their place within the maelstrom.

How can I make my students aware of these forces in ways that are meaningful to them? At the outset of any class the truth is that I have no idea. In the beginning of the term I try to get to know a little about my high school students through conversation or brief surveys with harmless questions like: “What is your favorite movie?” “What is your favorite song?” Often, they cannot answer. They may not know, they may be uninterested, there may be literacy issues, or the process of writing or expression itself may be too arduous in a world of digital immediacy, where creativity is consumed not produced. I am a mid-career professional but a beginner teacher and the questions I asked are trite; why would these students, many of whom have trust issues, reveal anything meaningful to a stranger? These types of exercises in the first day of class feel like an invasion.

But invade we must. By March of 2014, I had collected an overwhelming amount of data – 10,000+ points which had to be manually managed and analyzed. The results were overwhelming and involved weeks of coding looking for patterns, commonalities, divergences, anything that would make sense of the information. Was there something in the data that could tell me something interesting about my young-adult students? Could the results be generalized? What did it all mean?

I found liberation in the review of the literature which provided meaningful ways to consider the project and make sense of the results. Before administering the survey I conducted research to learn more about the Semantic Differential, portraiture and visual culture.

The work of Charles Osgood validated the Semantic Differential as cross-culturally relevant in measuring affect while portraiture, the object to be considered through the survey tool, is also universally relevant. In the 19th century, Charles Darwin “proved that facial expression is the primary social signaling system for human emotions and therefore that facial expression is central to social communication” (Kandel, 2012, p. 327).

Furthermore, humans perceive one another through the filter of the outward which cognitive archaeologist, Merlin S. Donald (1998, 2000) demonstrated as significant to the development of the human brain. We are who we are first because of culture, not as the result of an internal genetic change. Material culture and within it

visual culture “... externalizes memory and greatly amplifies the permanence, and power, of distributed cognition” (Donald, 1998, p. 181).

In the *Handbook of Research and Policy in Art Education*, Kerry Freedman and Patricia Stuhr (2004) discuss visual culture as the ‘totality of humanly designed images and artifacts that shape our existence’ (p. 816). It ‘reflects, as well as influences, general cultural change’ and ‘students and teachers are becoming aware of the power of visual culture in the formation of attitudes, beliefs, and actions’ (p. 821).

Having made the connection between visual culture, portraiture and the survey tool, I had to next situate the learner. After coding the data I moved on to consider curriculum theory, affect theory, pedagogy, arts education, issues of competence and motivation and briefly, Deleuzian philosophy. Certain themes were repeated: we’ve moved beyond the Age of Reason to an age of intersubjectivity and pluralism which is at cross-purposes in the current educational system with its emphasis on standardized testing; that teaching and learning is about who we are as students and teachers and not the pursuit of disembodied knowledge.

Learning for the sake of acquiring facts is meaningless and once we have defined something we stop learning and looking. Deleuze, as explained by Colebrook, notes that “...the point is to move away from common understanding because it forecloses learning or difference” (Colebrook, 2001, p. 49).

Finally: “We can assess our values not by giving ultimate meaning or foundation but by looking at what they do” (Colebrook, 2002, Introduction). It is here that ‘what

does it mean?' gave way to 'what does it do?' I may not know yet what my project means but I do know what it did. These results and the lenses by which I considered this project will now be explored more fully in the Literature, Methodology, and Results sections. But as has been noted, what we do is about who we are. This next section delves into how I became an arts educator.

Background

Mongolia

I was well into my career when for the first time I was caught unexpectedly by my inability to communicate verbally. I was living in Mongolia as a Peace Corps volunteer assigned to the United States Agency for International Development (USAID) Gobi Initiative project where I helped my Mongolian counterparts train rural herders in the benefits of business diversification (growing vegetables alongside their goats and making felt products from the wool of their sheep) and developing business plans so that they could secure micro-loans. My first assignment given to me by a Mongolian manager in the capital of Ulaanbaatar was to deliver a presentation to 60 Mongolian peers about all the problems in the approved business plans (math and translation errors, strange business concepts and profit decreases from year-to-year). In short, I was told to explain “everything that is wrong with these plans.” I’d been in the country a short time but long enough to know better.

My goal was to minimize myself and rely on a PowerPoint presentation with screen shots of the some of the business plans. Standing before the group of Mongolian managers – known for becoming silent in the presence of any perceived authority – I simply showed them three key images and asked the following question: “What is going on here?” I then stepped out of the way and kept quiet. I didn’t know it then but I was facilitating the business version of Visual Thinking Strategies. Simply

asking the question and remaining silent had an unexpected effect on the group. They immediately identified what was wrong with the business plans as reflected in the images and the entire group became very lively, relating the nominal mistakes to underlying organizational obstacles within the Gobi Initiative: improper sequencing in the program components, flawed herder training, lack of trust among Mercy Corps management and poor systems.

This unexpected and rich conversation led to a six-month project where ideas were solicited from the Gobi Initiative managers and recommendations made to management -- most of which were accepted. According to the Mercy Corps Country Director the next year's cycle saw "more plans approved in less time with fewer mistakes." That was my first exposure to the power of the visual.

What I learned in Mongolia on subsequent projects revealed to me that (1) host country nationals (HCNs) don't necessarily know what they want but they do know what they *don't* want and they know what has failed in the past but are unlikely to say so; (2) the power dynamic means that the HCNs will most likely tell the expatriate instructor/leader what the HCN thinks the instructor wants to hear and (3) sometimes all of this is complicated by the fact that HCNs want what the teacher/leader wants because you're you. In my experience, Mongolians wanted whatever Americans wanted because, well, we had things and they didn't -- things being material objects and leisure time. At the end of the day, people just want to not have to work so hard for so very little. But together we labored under the misapprehension that if it works for

Americans it will work for Mongolians. I was to find out that this also exists in the teacher-student dynamic in the United States when working with marginalized groups from disadvantaged neighborhoods.

I came away from Mongolia knowing two things: the visual can trump the written and spoken word and the way HCNs/expatriates try to develop solutions together is a messy process fraught with cultural cross purposes where no one hears themselves or one another.

The Corcoran College of Art & Design

In July 2008, after returning from Mongolia, I took my first art class the Corcoran College of Art & Design's continuing education program – metal sculpture. In this first art class, my wise instructor – leaving off all discussion of art, what it means, or otherwise - told me to let my Mongolian experience inform my work without over thinking the process. My first sculpture was a metal Mandala. In *Thou Art That* Joseph Campbell discusses that early humans made use of symbols to express awe and gratitude for the mystery of existence and to reconcile a growing consciousness (Campbell, 2001). Mongolians are Tibetan Buddhists living in tents surrounded by corrugated metal fences and gates and the Mandala I created was deeply symbolic of where I had been and where I was headed as an 'early arts educator' although I was largely unaware of this at the time.

I entered the arts education program and I told everyone what I was telling myself: I'd been in the Peace Corps, found something intriguing in the visual, and my

new mission was to educate myself in the discipline and take it back to development agencies and make them use it. My original thesis ideas had to do with making the case for art education in the Peace Corps, cross-cultural and economic development. All along I was intrigued by the translation of art and artistic processes into other disciplines.

At-Risk Adults | Reconsidering the Question

While I didn't know exactly what I would do with an arts-education I did make a decision early in the program to focus on adult learning. To that end, in my second year at the Corcoran, I, along with another classmate, designed, developed and delivered two five-hour workshops for the young adults living at a crisis facility. This experience showed us the value of initial assessments and that there is a benefit to asking very carefully worded questions which bring the learner inside to a safe space rather than push away and alienate.

As mentioned in the Introduction, a principle of adult learning theory is that whatever is taught must be relevant to the student's experience. In order for the content to be relevant the teacher must know what is important to the learner and attempt to do some sort of needs assessment beforehand. This is unquestionably a good practice but: (1) there isn't always the opportunity to do so; (2) sometimes the learner doesn't have enough experience to know what is important— they don't understand the possibilities – so the teacher must make some assumptions; and (3) the form the needs assessment should take is in doubt.

In this case we managed a brief pre-interview with several of the participants. The brief meetings were somewhat useful and helped us to understand how to change our opening warm up. Our original question was the unimaginative: “What is Art?” In the pre-interview the students revealed their conceptions of art as having to do with adornment - how they decorated their bodies with tattoos, fingernail designs, hairstyles, jewelry and clothing. Afterward, we changed the opening question to: “Where is Art in Your Life?” This had a warm and calming effect on the 16 participants.

Both workshops, despite predictions to the contrary by the caseworkers, were deemed successful. The staff was pleasantly surprised to find the students extremely engaged and astonished that they did not move from their art projects when pizza was delivered three hours into the event.

Arts Educator

In fall of 2012, I began teaching art appreciation to adults, ages 16-24, returning to high school at night to earn their high school diploma. This is a formal learning environment where the instructor is expected to lead well organized, objective-driven, standards-based lessons and is evaluated on these factors as a condition of employment.

The students who come to this night program are a mix of young adults from varying situations. Some are just entering the United States from various parts of Africa, primarily Ethiopia. Another group has just come from Central America or is first generation Americans from parents who came from Honduras or El Salvador. The third

group is local, African American and typically born into poverty.

The students from Ethiopia tend to have been formally educated, have good organizational and study habits and strong attendance. Their primary obstacle is facility with the English language and that they work fulltime (at 7-11s all over the city). The students of Latin American descent also have language issues and may have full-time jobs and/or children. The women tend to respond to most questions with “I don’t know” even if they do know. The African-American students typically have had their education interrupted due to family crises involving homelessness, pregnancy, drugs or mental or emotional challenges.

Some students have special needs and exhibit behavior and control problems. Most do not know English well enough and struggle to write. They tend to have poor vocabularies, poor study habits, emotional and (wider) cultural unawareness and are very distracted by their cell phones. Attendance is a problem. I’ve taught six nine week terms and the classes have been small – only five to 10 students per class and usually only half pass the class. The other half fail because they stop coming soon after the term starts.

Very few of these students come to the program because they are intrinsically motivated to learn or finish their education. It’s clear they feel forced to be there – another box to check off so that they can earn a higher wage at their job, get a job in the first place or receive public assistance. It’s a means to an end and very few are there for the pleasure of learning. There have been many times when I have asked students to

leave the room because of refusal to engage in the assignment, throwing objects, threatening myself or others, shouting/screaming, etc. Many days, especially in the beginning, were a struggle to maintain order. The art of teaching took a backseat to the effort to maintain control.

While these were not the students and this wasn't the environment I had in mind when I thought to teach adults, there have been some fine moments: when students overcome fear and engage in drawing a self-portrait, make a visual connection with something outside the classroom or in one instance when a student figured out how to show yearning in three-dimensional form. They have painted their lives as labyrinths, designed a protest poster for a government shutdown, become comfortable in an art museum and have - in broken English - explained why visual literacy is as important as language literacy.

Literature Review

Symbolizing Capacity

Culture drives human development and human development drives culture. However, cognitive archaeologist, Merlin Donald (1998) has identified that the human species' cognitive capacities for symbolizing came first from outside the human brain through material culture and was not the result of any new genetic development that suddenly caused humans to "symbolize." Material and symbolic culture have developed so recently, so quickly and so overwhelmingly in human evolution that there hasn't been time for a genetic response; that there is certainly a symbiosis between cognitive development and outside culture but our capacities came from the external – relations with other humans and the physical environment.

Donald makes the point that to adapt to a "demanding cultural world human beings are aided by powerful capacities that were specially evolved for living in culture" (Donald, 2000, p. 185)" These are three of the executive functions: memory, attentionality and evaluation (the ability to cross-reference ideas). These functions are "traditionally identified with consciousness, or more specifically with what we call conscious capacity. This is a critical skill from the viewpoint of survival. If a child cannot make an initial connection with culture, the child cannot acquire the central skills that any symbolizing mind must have" (p. 184). Furthermore, conscious capacity "...is the key evolutionary feature of the human mind. It provides our connection with culture. At the same time it is also the mediator for acquiring and assembling all our complex

symbolic skills” (p. 184).

As part of these capacities, we are wired to tolerate ambiguity and to evaluate emotional states – this is an evolutionary imperative and it transcends culture. Humans process information – in our case visual information – physiologically bottom up through the amygdala and culturally top down through the prefrontal cortex where we evaluate what is presented based on memory.

This type of processing draws on attentionality and categorization: “Usually, we are looking for and paying attention to specific things, as determined by other sensory cues and our memory of past experiences. Thus, the response of neurons in the visual pathway reflects not only the physical characteristics of an object or our memory of it, but also our cognitive state: for example, when we are paying attention, we can more readily analyze the shape and proportions of an object and relate it to objects previously encountered than when we are off daydreaming” (Kandel, p. 311).

Art educator, Kerry Freedman, points out that our “psychobiological responses to visual culture... have much to do with the ecology of our development as human beings. In general, we see to recognize, rather than to appreciate, because our most motivating interests have always been to protect ourselves from harm ...” (2003, p. 64). Within a community, “we come to know and use our knowledge to engage with our environment in different, individual ways and in ways influenced by social groups” (p. 64). For example, the ways in which we attach meaning to color or objects is dependent on the social group to which we belong. Kandel furthers Freedman’s

argument by making the case that the survival mechanism of evaluating *emotional* states to escape danger also allows us to understand our own states and thus our culture and the culture of others (2012).

In his profile of fin de siècle Vienna in the *Age of Insight*, Kandel discusses how a confluence of economic, social, cultural and geographical loosening and accessibility fostered cross-disciplinary insight and analysis among physicians, biologists, psychologists, artists and philosophers. As such, there was recognition that rational, linear, dualistic, objective thinking didn't always hold true and that humans were driven by unconscious forces (Freud) and that emotions were not subordinate to reason. In short, the 400-year old philosophies from the Age of Reason that had driven human progress and had a tremendous influence on scientific thinking were called into question. The excesses of industrial society, the prevalence of mental illness, and an understanding of disease originating at a cellular level, brought forth the realization that: "Truth was not always beautiful, nor was it always readily recognized. It was frequently hidden from view; moreover, the human mind was governed not only by reason but also by irrational emotion" (Kandel, 2012, p. 12).

Kandel explores how this 'Age of Insight' revealed the emotional, biological and evolutionary relevance of portraiture; specifically, through the works of painters Egon Schiele, Oskar Kokoshka and Gustav Klimt. As scientists uncovered the structure of the cell and psychologists looked anew at the underlying causes of mental illness these

painters used these discoveries and ideas in their work through development of biological motifs (Klimt) and tortured self-portraits (Schiele).

Kandel explains what occurs physiologically and emotionally when we take in a visual cue: “Our emotional response to a painting comprises both unconscious emotional reactions and conscious feelings, whether positive, negative, or indifferent” (p. 309). And viewers use two types of long-term memory – explicit and implicit – when looking at a painting. “Implicit memory is critical for the beholder’s unconscious recall of emotion and empathy in response to the subject of a painting. Explicit memory is critical for the viewer’s conscious recall of the form and subject of the paintings. Together, the two systems bring personal as well as cultural memories to bear on a work of art” (p. 309). Here, scientific thinking demonstrates an act of perception is not mechanistic, or of a dual nature where subject considers object. Perceiving is about who we are and the culture from which we develop.

Klimt, Schiele and Kokoshka modeled not only their sitter’s physiology but their underlying psychology, feelings or mood; the ugliness that could lie beneath was revealed in their portrait paintings. Not only did these painters attempt to show their sitters’ psyches, their works reveal their own states as painters. Kandel describes Kokoschka’s process where “...he unconsciously conveys his own unbridled, instinctual urges. At times the paint is recognizably aggressive; elsewhere it is calm and quiet. The application of the paint thus acts as a narrative of Kokoshka’s own unconscious as he constructed the image, a narrative that is often wholly independent of the person he

painted” (p. 143). Kandel notes that “painting portraits is a good way to learn about another person’s psyche... painting portraits of other people is also a journey of self-discovery, a process through which the artist uncovers his own nature and the ... road to portraiture and to another person’s psyche was through an understanding of his own psyche and, by extension, through self-portraits ...” (p. 143). In sum, artistic cognitive process involves emotional states and is informed by outward culture which includes a social community; thinking is not purely mechanical but brings together individual and collective memories, conscious and unconscious, is connected to emotion, irrationality and survival. When we perceive we learn about ourselves as much as we do the perceived.

Visual Culture and Art Education

Since, in the past 150 years, visual culture has exploded. It transcends disciplines and resists categorization and in this the field of art education is in a state of disequilibrium. What to teach and how to teach it is actively being reconsidered. According to Donald, demands on cognitive capacity have never been greater as “...we live in a global culture with an infinity of instant information but no collective memory” (2000, p. 184).

As digital and contemporary culture form a map across the visual landscape, art educators haven’t been able to keep up and make sense of it. In what ways should visual culture be defined? What is its place within art education? In what ways does

visual culture subsume and broaden traditional art education? Has fine art been marginalized within popular visual forms and is that a bad thing? Art educator, Aaron Knochel, writing for *Visual Arts Research* states: “The curricular revitalization of art education through visual culture has occurred in a similar time frame as networked computing has transformed learning spaces. This onslaught of innovation, both curricular and technological, makes it difficult for teachers to understand what skills in critical thinking and digital literacy learners need in a participatory visual culture” (p. 16).

Jesse Beier explains that within art education, “visual literacy has thus been established as a strategy that can be used to decode, interpret, and understand the visual world, much like a written or oral text. As a result of this *reading*, the goal is for learners to become more attuned to their visual world and therefore better equipped to participate in it as both producers and consumers of the visual” (2013, p. 37). He believes that “is possible to read the world and desirable to do so.” (p. 38) Merely teaching the history of certain images or focusing only on traditional art production such as drawing - without providing any interdisciplinary meaning can no longer suffice in art education.

More specifically, Kerry Freedman urges art educators to teach across cultures, disciplines and artistic forms through consideration of the relationship between maker and viewer through mediation of the object, context (aesthetic meaning), social perspectives of global/hybrid cultures, interactive cognition navigating the relationships

between people and objects, to learning and differences in the construction of knowledge, and interdisciplinary interpretation (2003, pp. 20-22). As the 'Age of Reason' gave way to the 'Age of Insight' Freedman believes that the Kantian/Cartesian theories of aesthetics relying on an analytical framework where 'pure knowledge is objectified' (p. 25) which continue to inform curriculum development must give way to an aesthetic theory that considers the relationship of aesthetics to meaning in contemporary visual culture and is global, emotional and relevant. (Freedman, 2003)

Freedman, with Stuhr, makes the case that the fields of anthropology and sociology have done more to address the "power of representation, the formation of cultural identities, functions of creative production, the meanings of visual narratives, critical reflection on technological pervasiveness, and the importance of interdisciplinary connections" more so than art education (2004, p. 816).

In 2009, Paul Duncum categorized the ways – some of which are problematic - in which visual culture was being used in arts education: (1) as a "generic term for fine-art media;" (2) as always relating even "tangentially" to popular culture; (3) equal to a "kind of pedagogy" not related to subject matter; (4) deconstructs popular-culture imagery without student production; (5) deconstructs screen or digital media but inappropriately responds with traditional media; but also (6) can analyze mass-media images and respond with like technologies (pp. 69-71). "As diverse as these approaches appear ... they share at least one similarity. The primary emphasis among art educators in dealing

with visual culture is to consider the relationship between imagery and the student viewer” (p.71).

Identity and Curriculum

For Freedman & Stuhr, within the multiplicity and fragmentation of visual cultures, knowledge isn't about what the student knows but who he or she *is*. Current theories of cognition describe learning as not necessarily a function of a developmental progression but as development itself occurring as a result of exposure to culture and especially visual culture; that curriculum is process and learning is process. Further, the “process of curriculum *is* its product. It is flexible, at some times sequential and at other times highly interactive, making connections not only to the previous lesson but also to life experiences” (2004, p. 823). In this regard, “as students have been given greater freedom and involvement, the role of art teachers has become that of facilitating the search for meaning in the visual arts. In this context, the content, objectives, learning, and teaching methods of art vary according to the needs and expectations of the students” (Hsu & Lai, 2013 , p. 8).

Interpreting the visual is not a one-dimensional exercise: “Images are not surfaces of universal messages whereby a commonsense interpretation becomes apparent to all who look on. Instead, images serve as filters of how we see and are seen in the world, tinting our perceptions about our peers, building a bricolage of our

understanding and assumptions about the other, and looking back at us to inform our self-concept” (Knochel, 2013, p. 16).

Facilitation of these cultural forms involves communication, suggestion and appropriation. Communication involves what occurs “between maker and the viewer ... suggestion involves a process by which association is stimulated in viewers ... [and] appropriation involves the creative interpretation by a viewer...” (Eisner E. W., 2004, p. 821).

Communication, association and appropriation are tied directly to the emotional response of the student viewer. “Although affect, as a concept, is characteristically elusive, it can be understood in terms of its force on the body that either enhances that body’s capacity to act or diminishes it. In other words, affect can be examined in its ability to change a body at a molecular level” (Beier, 2013, p. 31). These molecular changes occur when we are engaged: Humans tend to “to look longest at things that are intriguing but not overwhelming and people are not likely to visually study things that are simplistic or predictable, and when things are chaotic or threatening, we tend to look away” (Freedman, 2003, p. 64).

‘Intriguing’ may have something to do with: “What draws the viewer in is not the story, but rather the lack of a cohesive narrative and the potential for this attitude to form a new assemblage with the body of the viewer” (Beier, 2013, p. 33). “It is within this molecular space where sensation occurs, where affect is activated, and it is

within this space where art can transform if only momentarily, our sense of ourselves and our understanding of our world” (Beier, 2013, p. 33). According to Beier, we make space for sense by looking at images that are not cliché – that require a response – echoing Freedman’s notion that learning occurs where there is disequilibrium.

As noted earlier in this work cognitive development may occur from the outside in. Humans do not simply create culture - culture creates us. As imagery becomes more ubiquitous the process is hastened. There are at least two problems for arts educators: one, students are unconscious of how they are influenced from outside in and vice versa; and two, teachers – reacting to the pressure of large classes and the need to quantify student achievement – develop curriculum that can be easily assessed.

William Pinar outlines the tension: “Curriculum theory is that interdisciplinary field in which teacher education is conceived as the professionalization of intellectual freedom, fore fronting teachers’ and students’ individuality, that is to say their originality, their creativity, protecting their opportunities to dissent, engaged in ongoing if complicated conversation informed by a self-reflexive, interdisciplinary erudition” (2012, p. 183). But “for many practicing teachers, “curriculum” is understood as what the district office requires them to teach, what the state education department publishes in scope and sequence guides. For many prospective teachers, curriculum denotes a course syllabus, perhaps only a list of books to read. A highly symbolic concept, school curriculum is what older generations choose to tell younger generations” (p. 188).

If art education resides in a state of disequilibrium it does so in the wider tumult within the discipline of curriculum: “Whatever the school subject, the curriculum is historical, political, racial, gendered, phenomenological, autobiographical, aesthetic, theological, and international” (p. 188). And as noted by Donald, Freedman and Kandel, the dynamic that exists among perception, cognition, material culture, emotion, viewer and art object is a plurality of interrelatedness. As it relates to curriculum Pinar says it like this: “Why are teachers not permitted, indeed, encouraged, to show students that academic knowledge is not (like standardized tests) self-contained, that it reaches out toward and back from life as human beings live it?” (p. 189).

Semantic Differential

The Semantic Differential is intended to be used statistically using Factor Analysis and regression models to test its ability to measure predictive and probabilistic affective *dimensions* across cultures. However, a few academic institutions provide examples of using the Semantic Differential to use simple averages combined with visuals to measure the semantic or connotative meaning of certain adjective pairs correlated with a concept (University of California, 2014).

In the meantime, the lineage of the Semantic Differential has been laid out by David R. Heise in *Surveying Cultures* (Heise, 2010). The first attempts to measure affective states took place in the late-1800s by experimental psychologists. As cited in Heise, Wilhelm Wundt used contrasts to characterize affective states and stated that there were basic ways to organize the responses including the ‘directionality’ toward

either the negative or positive direction. “Such directions may always be designated by the two names that indicate their opposite extremes.” Later, William McDougall in the early years of the last century promoted the notion of a sentiment as expanded “to the domain of affective association beyond Wundt’s affectively laden sensations to cognitions of all kinds including ideas and concepts acquired from culture...” (As cited in Heise, 2010, p. 24). Namely, cultural entities are internalized in people’s minds not only with cognitive meaning schemes, but also with affective associations that vary along three bipolar dimensions: goodness versus badness, weakness versus powerfulness, and quiescence versus activation; and the affectivity of cognitive concepts is the foundation of individual motivations in interpersonal and institutional activities” (MacKinnon 1994; Scholl 2008 as cited in Heise 2010, p. 37).

Osgood’s work involved ratings of concepts (in the case of this thesis project the concept is a certain portrait) to be differentiated from one another. Osgood’s work was in attempting to create a multi-dimensional space that combined not just one-dimensional directionality (positive or negative evaluation) or intensity (the degree to which a concept was perceived negatively or positively) but also with activity that included space for neutrality. Heise provides the example that “...subjects rated the concept *eager* and the concept *burning* both as very active, but *burning* was rated as hot while *eager* was rated as neither hot nor cold, and *burning* was rated as a bit bad while *eager* was rated as quite good” (Heise, 2010, p. 40). Statistical work in Factor Analysis led to Evaluation, Potency, and Activity as the first, second and third dimensions in

measurement of affective responses. An ambitious project in 1975 to isolate 'universals' across cultures by deriving indigenous bi-polar scales validated Osgood's work as discussed in his *The Measurement of Meaning and Cross-Cultural Universals of Affective Meaning*.

From the literature, the adjective pairs must be relevant to the domain or concept to be surveyed; for example, a researcher would not use the adjective pairs convex:concave or sweet:sour for portraiture. Ways to decide on the scales is to find someone who is knowledgeable in the domain (an art educator in the case of portraits) or do a literature review for descriptive words or phrases or simply use a thesaurus. Some problems have to do with survey respondents interpreting the scales differently and /or not having the literacy to adequately understand the scales. "Ultimately, scale selection is a matter of investigator judgment" (Maguire, 1973, p. 52).

Methodology

As explained in the Introduction, the concept of using the Semantic Differential to survey young adults earning their high school diploma came together in the winter of 2013. Once it was decided to use the survey tool then the next decision was whom and what to survey. The easiest and most relevant choice was this researcher's students at a local high school. At the time there was some pressure to hurry along the research in order to present the thesis in the spring of 2013 so in conversations with my advisor we reviewed the idea of quickly surveying a group of the school's students - perhaps on a Saturday - in order to gather as much data as quickly as possible. However, having taught at the school for six months I was believed that the only way to gather any number of students would involve some sort of incentive and would be unlikely to bring in any more than 10 or 15 at most. As mentioned earlier, attendance and commitment are issues in the environment. I decided that it would be best to take the time to conduct the survey with as many of students as possible over the next year before presenting in the spring of 2014.

The next step then was to prepare to deliver the survey at the start of the next term in April 2013. Preparation involved selecting the content, the adjective pairs, creating the survey packets and informed consent documents.

Content

It was decided to use portraits as the “concept” that would be rated by the students. One of the units taught in my art appreciation course is portraiture through interpretation of images and practicing basic drawing skills. It also made sense to limit the imagery to one certain type to make it easier to analyze results. The goal was to find a range of portraiture: contemporary and historical across style, media and subject. I considered images of subjects that were old and young; male and female from as many ethnicities as was feasible. I had two primary sources: winners of the 2012 Outwin Boochever Portrait Competition from the Smithsonian National Portrait Gallery and the Heilbrunn Timeline from the Metropolitan Museum of Art. A few were selected from random internet searches. In consultation with my advisor, we settled on the final 30 portraits and order in which they would be presented.

Thirty seemed to be the lowest number of portraits to use and still obtain a meaningful variety of subjects that reflected the historical canon and contemporary culture as validated by the work of Freedman and Stuhr above on ‘global and hybrid’ cultures. It was some concern that 30 portraits might be too many and the students would suffer from fatigue but the thinking from the outset was to be as ambitious as possible in the number of portraits used.

Adjective Pairs.

As referenced above in the section on Semantic Differential, an expert from the concept discipline is a valid way to select adjectives. Adjective pairs were selected that

were relevant to portraiture and could be mapped back to the three categories of Evaluation, Frequency and Potency (in the beginning it was believed that the analysis could involve mapping to the dimensions but the more training in statistics is necessary before this can happen). Below, are the 16 adjective pairs:

Good	___:	___:	___:	___:	___:	Bad
Real	___:	___:	___:	___:	___:	Unreal
Beautiful	___:	___:	___:	___:	___:	Ugly
Meaningful	___:	___:	___:	___:	___:	Meaningless
Desirable	___:	___:	___:	___:	___:	Undesirable
Valuable	___:	___:	___:	___:	___:	Worthless
Strong	___:	___:	___:	___:	___:	Weak
Right	___:	___:	___:	___:	___:	Wrong
Interesting	___:	___:	___:	___:	___:	Boring
New	___:	___:	___:	___:	___:	Old
Important	___:	___:	___:	___:	___:	Unimportant
Familiar	___:	___:	___:	___:	___:	___: Unfamiliar
Practical	___:	___:	___:	___:	___:	Frivolous
Expensive	___:	___:	___:	___:	___:	Cheap
Powerful	___:	___:	___:	___:	___:	Powerless
Easy	___:	___:	___:	___:	___:	Difficult

The goal was to keep the language as simple as possible and to measure the most basic possible responses to a portrait.

The pairs map back to the three categories – evaluation, potency, frequency – as follows:

EVALUATION (is it good or bad?)

Good	___:	___:	___:	___:	___:	Bad
Ugly	___:	___:	___:	___:	___:	Beautiful
Meaningful	___:	___:	___:	___:	___:	Meaningless
Desirable	___:	___:	___:	___:	___:	Undesirable
Right	___:	___:	___:	___:	___:	Wrong

POTENCY (is it strong or weak?)

Practical	___:	___:	___:	___:	___:	Frivolous
Expensive	___:	___:	___:	___:	___:	Cheap
Powerful	___:	___:	___:	___:	___:	Powerless
Valuable	___:	___:	___:	___:	___:	Worthless
Important	___:	___:	___:	___:	___:	Unimportant
Interesting	___:	___:	___:	___:	___:	Boring
Strong	___:	___:	___:	___:	___:	Weak

FREQUENCY (is it relevant in the respondents' world?)

Easy	___:	___:	___:	___:	___:	Difficult
New	___:	___:	___:	___:	___:	Old
Real	___:	___:	___:	___:	___:	Unreal
Familiar	___:	___:	___:	___:	___:	Unfamiliar

Some of the adjective pairs map neatly to the categories as in the obvious pairing, Good|Bad belonging squarely in the evaluation section. How to map the pairing Real|Unreal is not as clear cut. Is a *real* image more relevant and immediate (frequency) than an image that is unreal? Or, do these particular adjectives primarily serve to simply recognize and categorize a *type* of portrait? If this is true then the selection of whether a portrait was more real or less real becomes an objective exercise rather than reflecting an emotional response. Certain adjective pairs may involve a change to the relationship of the viewer to the image; in effect, the respondent makes the selection at an emotional remove. At this point in the research project these questions were interesting theoretical questions but meaningless without the benefit of the student responses. The more important question was whether the adjectives themselves would make sense to this audience.

Mechanics

It was intended that the 30 images would be projected onto a screen from a projector. None of the images would have any contextual information such as title or artist name. The students would be given a packet with 30 response pages each containing the 16 adjective pairs as demonstrated above. To prevent the student from going into “auto pilot” the positive | negative adjectives were randomly flipped from left to right in a different way on each of the 30 pages and reordered from top to bottom randomly on each of the 30 pages. This had the effect of slowing down the student response and ensured that the students had to study the pairings before making their check mark on one of the five spaces. However, if a respondent decided/felt that they were neutral on *all* images they could just quickly check the middle section of the pairs for every image. Surprisingly, an ‘extreme neutral’ response only happened in 10 portrait responses of 1020 (.009803).

The principal reviewed and approved the survey to be conducted on an ongoing basis. Each of the surveys was given in the first week of the term and none or nearly none of the students have had no meaningful exposure to art the obvious purpose of giving the survey in the beginning of the term was to get the uninfluenced response. It was explained to the students as a group the (1) purpose of the project, (2) that it was strictly voluntary, and (3) that they could decide at any point – even after completion of the survey – to not participate or withdraw their response packet. They were asked to sign the consent form after completing the survey so that they could make an informed decision.

Of course, as their teacher in a formal learning environment where I assign a summative grade, it would be difficult in the beginning of a class for one of these students to refuse to take the survey; and of course, none refused.

The survey was delivered four times in the past year to multiple classes at the beginning of each term. There were five to twelve students who took the survey each time and there are a total of 37 surveys, 32 of which were entirely completed.

Results

The good news is that there is a lot of data. The bad news is that there is a lot of data. Thirty-two surveys were completed over four 9-week terms from April 2013 to February 2014. Of the 15,360 total expected responses (32 surveys x 16 adjective pairs x 30 portraits) only 7 adjective pairs were skipped. This is a 99% response rate.

Because the surveys were done in an environment where there are no computers they have to be manually administered and manually coded. Each survey required an hour to transfer - un-flip and reorder - the responses to Excel from this:

IMAGE 8		
Familiar	___: ___: ___: ___: <input checked="" type="checkbox"/>	Unfamiliar
Unreal	___: ___: ___: ___: <input checked="" type="checkbox"/>	Real
Ugly	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Beautiful
Meaningful	___: ___: <input checked="" type="checkbox"/> : ___: ___:	Meaningless
Desirable	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Undesirable
Worthless	___: ___: ___: ___: <input checked="" type="checkbox"/>	Valuable
Unimportant	___: ___: <input checked="" type="checkbox"/> : ___: ___:	Important
Good	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Bad
Frivolous	___: ___: ___: ___: <input checked="" type="checkbox"/>	Practical
Cheap	___: ___: ___: ___: <input checked="" type="checkbox"/>	Expensive
Powerful	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Powerless
Difficult	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Easy
Right	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	Wrong
Interesting	___: ___: <input checked="" type="checkbox"/> : ___: ___:	Boring
Old	<input checked="" type="checkbox"/> : ___: ___: ___: ___:	New
Weak	___: ___: <input checked="" type="checkbox"/> : ___: ___:	Strong

Figure 2 Survey Example

To this:

	Positive		Neutral		Negative
Image 8	Good		x		Bad
	Real		x		Unreal
	Beautiful		x		Ugly
	Meaningful		x		Meaningless
	Desirable			x	Undesirable
	Valuable		x		Worthless
	Strong	x			Weak
	Right	x			Wrong
	Interesting	x			Boring
	New			x	Old
	Important		x		Unimportant
	Familiar			x	Unfamiliar
	Practical		x		Frivolous
	Expensive		x		Cheap
	Powerful		x		Powerless
	Easy		x		Difficult

Figure 3 Survey Result after Unscrambling and Coding

It's much easier to see the overall response to the image - negative or positive - once the adjectives are re-aligned directionally. The first wave of coding which took place in the summer of 2013 and January and February 2014 was to organize the data into the Excel spreadsheets. The data is so voluminous that there are 960 of these Excel summaries and three separate worksheets.

A lot of time was spent researching software programs that could chart the responses from left to right (see Figure 4 below). Microsoft Excel only charts information on an X, Y axis and does not tabulate data bilaterally (as far as this researcher was able to determine). Marketing companies use such software and there are companies that will design specific survey charting for a fee. This is something which may be considered in the future.

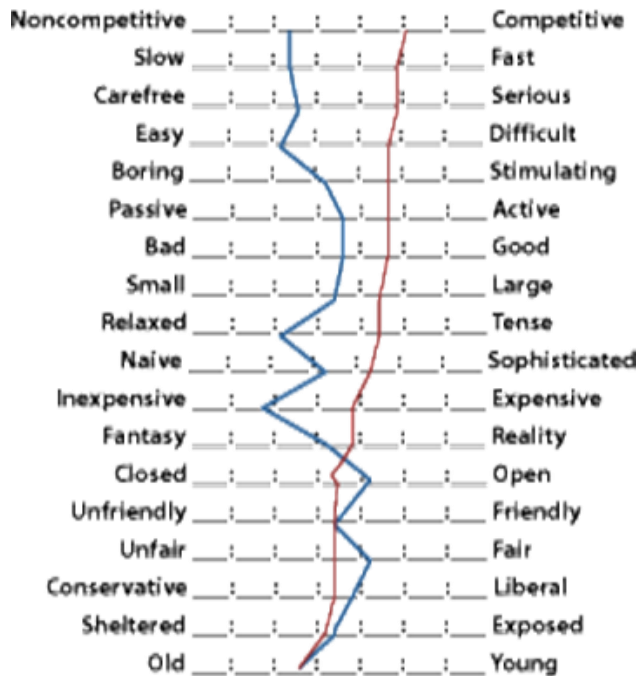


Figure 4 UC Davis Psychology Dept.

Additionally, I was debating whether or not to use corresponding numerical values to map the responses. For example, instead of Xs I would use a 0 for the middle, neutral response, and +1, +2 for the positive responses and -1, -2 for the negative responses.

	Positive	Neutral	Negative	
Good			-1	Bad
Real			-2	Unreal
Beautiful		0		Ugly
Meaningful			-1	Meaningless
Desirable	1			Undesirable
Valuable	1			Worthless
Strong		0		Weak
Right			-1	Wrong
Interesting			-1	Boring
New			-1	Old
Important			-1	Unimportant
Familiar			-1	Unfamiliar
Practical			-1	Frivolous
Expensive		0		Cheap
Powerful	2			Powerless
Easy		1		Difficult

Figure 5 Mathematical Example

Then a composite of responses (an average) could be created and made visual by

the following blue graph line.

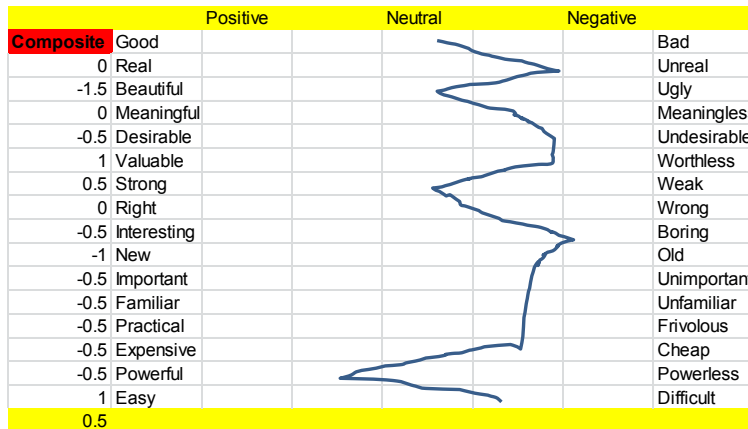


Figure 6 Composite

An average, however, in this case is meaningless. In this particular project, the value lies in observing the divergent responses, where half of all respondents viewed an image favorably and the other half, negatively. Creating an average masks the meaning. It may be useful in the future to use mathematical coding, especially, if the information were seen to be replicable and were factor analysis to be used, but for now I decided to forgo a numerical assignment and find my own methodology to code and interpret the responses.

I believe that this decision has been important. Having to work manually with the data has created an intimacy - like sharing a toilet with a cell mate - that has forced me to think through the issues associated with the research project. These can be looked at in three ways. First, making sense of the data process itself with respect to: (a) the hierarchy among adjective pairs and (b) creating a framework to interpret the responses within the hierarchy. Second, filtering my role and biases during the data interpretation and organizing my responses to the data - the questions, insights,

problems. These interpretive responses are the third area, the future of the data in the form of lesson plans, focus groups and future research projects.

To summarize how to move forward within a sea of data is by: (1) creating a framework to analyze the data, (2) filtering my role within the process and (3) organizing the data's future, especially to be mindful of its future relationship with the students.

The questions of what was to be done with the data was/is subordinate to this framework. These were my preliminary observations before I understood that I needed to refine the framework.

Engagement

The response rates show that all students were engaged with the entire process and demonstrated stamina all along in every group. I expected to see frequent extreme neutral responses in the later images as the students became fatigued or bored by the process; however, this didn't happen. Here is one example based on responses to two very different but challenging images - numbers 28 and 29 - late in the survey.

Respondent 13 ranked image 28 as entirely neutral but the very next image, number 29 there is a mixed response.



Figure 7 Dubuffet (Image 28)

	Positive		Neutral		Negative	
Image 28	Good		x			Bad
	Real		x			Unreal
	Beautiful		x			Ugly
	Meaningful		x			Meaningless
	Desirable		x			Undesirable
	Valuable		x			Worthless
	Strong		x			Weak
	Right		x			Wrong
	Interesting		x			Boring
	New		x			Old
	Important		x			Unimportant
	Familiar		x			Unfamiliar
	Practical		x			Frivolous
	Expensive		x			Cheap
	Powerful		x			Powerless
	Easy		x			Difficult

Figure 8 Extreme Neutral Response



Figure 9 Coffee (Image 29)

	Positive		Neutral		Negative	
Image 29	Good	x				Bad
	Real			x		Unreal
	Beautiful	x				Ugly
	Meaningful	x				Meaningless
	Desirable	x				Undesirable
	Valuable	x				Worthless
	Strong		x			Weak
	Right			x		Wrong
	Interesting	x				Boring
	New	x				Old
	Important	x				Unimportant
	Familiar	x				Unfamiliar
	Practical			x		Frivolous
	Expensive		x			Cheap
	Powerful	x				Powerless
	Easy				x	Difficult

Figure 10 Mixed Response

Adjectives

It became immediately apparent that the adjective pairing 'frivolous | practical' should be dropped. It seemed that this pair received the most neutral rankings and based on the questions I received from the respondents when taking the survey the meaning of frivolous is unclear. More importantly, I'm not sure what I was after in the

first place except perhaps to create another tie to the Frequency/Relevance category.

Of course there is concern that where the semantic meaning of the adjective pairs is concerned either the respondent has no idea what the words mean or the student brings his or her own meaning. Initially, this was a concern; however, in coding the surveys there seems in most cases to be integrity and logic within the overall responses to one portrait and then across all portraits.

Neutrals

Rarely are neutrals really neutral. If all adjective pairs for an image were marked as neutral it could be interpreted that the actual response may not in fact be neutral but one of antipathy. When only several adjective pairs are marked neutral then depending on which pairs were marked the response becomes either more or less positive, negative or conflicted. Neutrals tend to swing the response in some way.

Conflation

Conflation occurs in any relationship between viewer and object (it occurs as I interpret these results but more on that later). The response is to the entire image without considering separately the form, media and content. "Negative" rankings of "old" and "unfamiliar" are not necessarily pejorative but may be qualities the respondent associates with the subject within the artwork based on his or her life experience. So is the survey respondent checking off a response that the subject is "bad" or that the artwork is "bad?" Or does the respondent put himself or herself in the position of society at large when considering an image - a poor-looking black man, a

corporate white woman? How much of the response is the respondent's response?

Total emotional response from universal positive/negative rankings?

In the initial review two portraits were given nearly the same ranking by all respondents to all adjective pairs - one universally positive and the other, negative.



Figure 11 Essaydi (Image 30). 31 of 32 respondents (96%) ranked the image as good or very good.



Figure 12 Calder (Image 22). 2 of 32 (5%) ranked the image as good.

Could it be that these universal ratings are true and total affective responses? Does a systematic positive or negative preference signal a quick response rating sidestepping rational thought? And if so, does it short-circuit conflation or just ignore it? In any

event, awash in a sea of data these two images were initially the only clear signals of student preference.

Values

One benefit of the totality of responses is that a researcher can see that where an adjective pair is neither positive nor negative, as in the cases of "old | young" or "difficult | easy," is that it can reflect a belief on the part of the respondent about what he or she values. Where there is a positive rating and where for example, the far right choice of "difficult" is also selected (which arbitrarily lives on the negative side of the survey) then we might assume that the student values difficulty. Maybe we can't assume it but it's a place to begin an exploration. See Figure 9 above, the Susannah Coffee ranking where a mostly positive ranking is associated with "difficulty." The student signaled that he or she values difficulty, not "ease" in a portrait they ranked as positive.

Preliminary Codes

Midway in my coding I decided it would be useful to give each excel summary a color code as follows:

- Blue for a predominantly positive ranking
- Yellow for a predominantly negative ranking
- Gray for a predominantly neutral ranking
- Red for rankings where responses diverged in some way; for example, a portrait was ranked as valuable but meaningless, desirable but ugly.
- Purple when the totality of responses indicated a "value" selection as explained above.

The color codes for this summary below (Figure 13) are blue for a predominantly

positive ranking of good, real, beautiful, meaningful, valuable, strong, right, interesting, important, expensive and powerful. The red code reflects that there is a conflict of some sort - in this case the negative ranking for “undesirable.”

	Positive		Neutral		Negative
Image 8	Good		x		Bad
	Real		x		Unreal
	Beautiful		x		Ugly
	Meaningful		x		Meaningless
	Desirable			x	Undesirable
	Valuable		x		Worthless
	Strong	x			Weak
	Right	x			Wrong
	Interesting	x			Boring
	New			x	Old
	Important		x		Unimportant
	Familiar			x	Unfamiliar
	Practical		x		Frivolous
	Expensive		x		Cheap
	Powerful		x		Powerless
	Easy		x		Difficult

Figure 13 Mixed Color Coding

I was tempted to guess at what the student was thinking or feeling when making the selections. Does the student think the portrait is undesirable or does the student think that others think that the portrait is undesirable? In coding, the impulse is to give priority to extreme positive rankings of “strong, right and interesting” but without a methodology - such as formally weighting directional extreme or certain adjective pairs - it would be unwise to guess because this leads to inconsistent coding. Also it is impossible to know what memories or experiences the student was filtering this image against, what perceptual and neurobiological forces were at work without meaningful follow up.



Figure 14 N'dop King Mishe (Image 8). 30 of 32 or 93% ranked the image as good or very good.

The preliminary review of data revealed only a few concrete observations but generated many questions. It's clear that even with years of research and follow-up these questions will not be easily answered. Rather than allow myself to become swamped by these the questions I decided they were a map of future exploration and also mirror my how I teach art appreciation. The first two weeks of the term are about "unpacking" what the student knows. We don't look for easy answers but we work through exercises - such as cutting out and categorizing all the images in a Sunday's *New York Times* so that I can understand how the students approach the visual. They want to know the right way to sort the images but I leave it to them. I want to know what they know without influencing them. This survey accomplishes the same thing. It will help me know what they know. Additionally, and surprisingly, it shows me what I know

and don't know and what it is I assume. It is here that I'll turn to the next section which was about how I learned to work with this data.

Working with the data

As when considering a work of fine art the more time you allow yourself to spend just staring at the data the greater the number of insights. I have often questioned the utility of gathering so much information without going back to the students for their response. However, I can say that had I done so my follow-up questions would have been limited and poorly -framed. One of the reasons I wanted to work with the Semantic Differential was because it short circuited the language used in other surveys. Had I gone back earlier - after having only seen ten or so responses - I would not have had the experience of refining how I analyzed the data and would have made superficial and inappropriate assumptions. For example, in the preliminary coding, I came away with impressions that turned out not to be true. "They always code image two as meaningless." "Why do they hate the subject in image 24?" However, the enormity of the responses forced me to create a methodological system of interpretation where I discovered that my impressions were wrong.

Hierarchy of Adjective Pairs

My first attempt to rationalize the process was to look for patterns other than the obvious universal positive/negative responses. One pattern had to do with how I was coding rather than what I was observing. I was inconsistently giving weight to certain adjectives depending on the image it was tied to. For example, if the image was

of an "old" person then an "old" ranking was not pejorative and considered as the respondent identifying a factual quality associated with the subject. In addition, I was inconsistently factoring out the pairings mentioned before that are neither positive nor negative when assigning a color bar code. I was also curious as to whether or not any one of the pairings such as 'good | bad' was an indicator of the overall response.

As I used the five color codes - blue, red, gray, yellow, purple - I found that I skipped some where the responses to were too divergent to assess or I was assigning mostly red (for inconsistent or a conflict in the choices). A Red color code could mean anything from "the student clearly doesn't understand the meaning of the adjectives" to "this is very nuanced and sophisticated response on the part of the respondent." Ideally, I could take the "reds" and go back to the students and have them respond; however, since the majority was coded red without any coherent framework, my questions would have reflected this and generated incoherent follow-up responses.

Halfway through this initial coding I decided to start formally ranking the pairs.

To be eliminated and ignored:

Practical ___: ___: ___: ___: ___: Frivolous

Viewed as not positive or negative:

New ___: ___: ___: ___: ___: Old
 Familiar ___: ___: ___: ___: ___: ___: Unfamiliar
 Expensive ___: ___: ___: ___: ___: Cheap
 Easy ___: ___: ___: ___: ___: Difficult
 Real ___: ___: ___: ___: ___: Unreal

Viewed as positive or negative:

Interesting	___:	___:	___:	___:	___:	Boring
Meaningful	___:	___:	___:	___:	___:	Meaningless
Valuable	___:	___:	___:	___:	___:	Worthless
Good	___:	___:	___:	___:	___:	Bad
Beautiful	___:	___:	___:	___:	___:	Ugly
Desirable	___:	___:	___:	___:	___:	Undesirable
Right	___:	___:	___:	___:	___:	Wrong
Important	___:	___:	___:	___:	___:	Unimportant
Strong	___:	___:	___:	___:	___:	Weak
Powerful	___:	___:	___:	___:	___:	Powerless

In weighing the relative importance of those listed in this last group, I want to believe there may be evidence that the top two pairings are the lead indicators of a positive or negative response to the image. Interesting | Boring reveals to what degree - irrespective of conflation or hesitation on the part of the respondent - they will engage with the portrait whether they like it or not. There are examples of negative or tending-to-negative ratings where the image was rated as extremely interesting. All the other adjective pairs below these two pairs can be associated with qualities of the subject, separate from the artwork. For example Image 6 irrespective of overall positive or negative rating is usually rated as 'strong' versus 'weak' in the pairing.

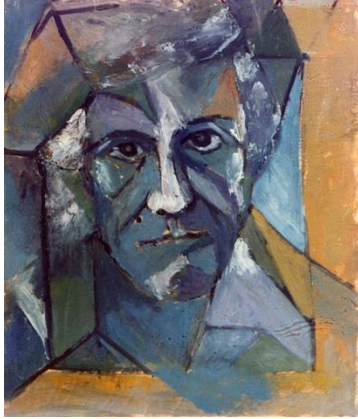


Figure 15

More evidence and information is needed before these observations can be considered valid but they are compelling bits of information from which to try to build this framework. The observations also led me to refine the coding as follows:

- Blue and yellow ratings. In the case of an overall positive or negative rating where the rating was associated with more than six neutral responses, the image number by respondent was italicized. Respondent 10 **Image 27**
- Red ratings. Divergent or conflicted responses continued to be noted; however, where a response was a conflict by only *one* adjective pair the image number by respondent was italicized. Respondent 9 **Image 27**
- Interesting | Boring. In this adjective pair, whenever an extreme directional response occurred (extremely interesting or extremely boring) or the neutral column was checked (neither interesting nor boring) a note was made underneath the image number with EB, EI, and NIB. This is so that interesting responses can be tracked in a summary sheet. In this particular example, the respondent rated the image as positive but extremely boring.

Image 27	Good		x				Bad
	Real		x				Unreal
EB	Beautiful		x				Ugly
	Meaningful			x			Meaningless
	Desirable	x					Undesirable
	Valuable			x			Worthless
	Strong					x	Weak
	Right			x			Wrong
	Interesting					x	Boring
	New		x				Old
	Important			x			Unimportant
	Familiar	x					Unfamiliar
	Practical			x			Frivolous
	Expensive	x					Cheap
	Powerful					x	Powerless
	Easy	x					Difficult

Figure 16

Refining the methodology for coding had several benefits. It diminished inconsistent rankings, it made coding quicker, it allowed intriguing examples to be isolated for follow up, allowed me to create a summary so that I could view overall responses by respondent and image very easily. Without the summary I was left with my initial false impressions because it was too difficult to fight through the spreadsheets.

If I hadn't spent the time coding and the time refining coding I would have missed the following:

Respondent 19, Image 8. In reviewing the summary sheet I can see that there are 28 positive responses, four conflict, one neutral and one negative. I followed up on the negative and see that it was coded incorrectly. It should be rated as a *conflict*. The italics indicate that a negative rating was conflicted by only one positive adjective selection of "slightly good." It was also given rated as extremely boring. The summary

also shows that this particular student rated only two images positively, the rest are negative or conflicted. This would be interesting information to be able to share with the student in a sensitive way to obtain more information.

Another analysis could involve checking one respondent's responses to all images. It would be good to do another survey where the student respondents provided their own adjectives or advised on adjective selection. Further analyses could attempt to discover if there is a pattern related to age, race or style, e.g., images of older humans received negative responses.

The researcher struggles with the idea that the project fell short because there isn't a tidy way to make sense of all the data and tie it up with a string of resounding conclusions. There is a lot left to explore. What the results do provide – despite contradictory responses - are rich and clear indicators of complex interactions between student viewer and image. The results reveal possibilities, many new paths to explore. Even better, armed with the maps of their own responses, the students can head out along these paths and discover for themselves what their responses mean – emotionally, cognitively and culturally. Here are some concluding indicators or possibilities:

- The survey is useful. The students have the stamina and the focus to rank 30 portraits using 16 adjective pairs in a meaningful way.
- The student respondents value difficulty and do not value ease.
- The students have nuanced- to-contradictory responses to the images indicating that there is a relationship with most of the images that can be explored.

One final note about the results: in addition to Image 30, (Lalla Essaydi), Image

9, Ancient Egyptian Mummy Portrait, was also found to be ranked by over 90% of the respondents as “good” or “extremely good.”

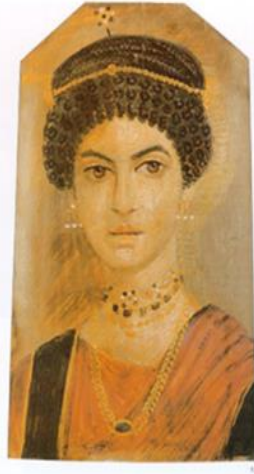


Figure 17 Fayum Mummy Portrait, 100 AD



Figure 18 Essaydi, 2012

A point of interest is that the portraits have in common the fact that they are both depict women, elaborately adorned and from North Africa (Essaydi is from Morocco,

and the Mummy Portrait is Egyptian). This is the sort of top line – low hanging fruit - type of information that would be useful for taking back to the respondents in a focus group in order to gather their responses; OR, to take back to them with the information on their nearly universal rankings and then designing a cultural, art historical and studio lesson where they explored the image relative to their initial responses to it.

Conclusion

As we've seen, when we look at a work of art our hard-wired biological systems, specific cultural context and attentional state come together in a complex cognitive and emotional response. In the moment of response we make quick judgments: I like it. I hate it. I dismiss it. These swift judgments belie the complexity of evolutionary process, our specific time and place in the world, and current state of mind which make us who we are. A snap judgment then also masks *who* we are.

As this thesis comes together there are national and world events taking place which call for the development of a capacity to slow our perceptions in order that we may understand how observer and observed are more connected than separated. The Missouri, Ohio and New York shootings of black men and boys by white police officers reveal the need for these capacities in our wider culture outside the art classroom.

New York Times Op-Ed Columnist, Thomas L. Friedman, considers the problem of the Islamic State terror organization (ISIS) in the article, *Who Are We?* There, Friedman quotes Maqsoud Kruse: "It is all about how we equip and support our youth and prevent them from being someone who says, 'I have the truth.'" We need them to have "the ability to deconstruct ideas and be immune and self-resilient" to extremism. It is all about, "how we get them to pause and think" – before they act" (Friedman, 2014).

I may teach visual art but I do so in a world in a particular place and time where the ability to understand the emotional component of perception is imperative. Therefore, it is my job to help my students understand themselves and their world

through visual art, which means slowing them down, uncovering what went into a response to an object, and helping them along the road to self-discovery. In this, the Semantic Differential has been demonstrated through the process of this research project, to be a potentially useful tool.

Just as perception is borne out of context, curriculum is conceived from individuals situated within these biological and material spaces. K-12 curriculum in the United States has become increasingly proscribed, limiting the influence of the teacher. Jane Vella and William Pinar have reacted against this context in different ways. Vella emphasizes the safety of and relevance to the learner 'where the student becomes the subject of his or her own learning' while Pinar believes curriculum design has been overly influenced by government policies that put too much responsibility on teachers to control educational outcomes through standards and standardized tests. While Vella seeks to empower the student, Pinar seeks to empower the teacher.

In my use of the Semantic Differential I have taken the position that the student needs more structure (I selected the construct and the adjectives) than perhaps Vella would approve but also believe teachers need more guidance in developing curriculum than perhaps Pinar would want.

Some of Pinar's ideas on curriculum and implicit ways in which it manifests have been key to my understanding of how I teach and my project design. Pinar believes curriculum can be the product of unconscious forces at the societal level either masking or perversely revealing earlier national traumas arising from slavery, racism or

misogyny. This can play out as class or racial divide but more compelling to me is that it can play out as the self-divided. Where does arts education and the individual teacher end up within these layers of contexts? It's not an easy place to map, but Kandel, Pinar, Vella, et al have helped fix my coordinates within the larger construct. Hopefully, I can help my students in the same effort.

This brings us to the research project. In practical terms, where can it go? I see that it could be used in three distinct ways: 1) as a longitudinal study where the affective preferences of similarly situated learners are gathered over time to determine patterns; 2) as a one-off needs-assessment exercise in the beginning of a class; or, 3) as both a needs assessment *and* the building block of a student-driven curriculum for the entire term.

Longitudinally, use of the Semantic Differential could expand on some of the interesting patterns already revealed and become an exploration to discover the meaning behind the choices through statistical analysis and focus groups. What would be required for this to happen is for the survey to be delivered and assessed digitally where the initial results could be more or less immediate; a valid methodology for interpreting the results and adjectives selection all need to be explored.

As a one-off exercise at the beginning of a class it has already demonstrated its utility as a safe way to start a conversation where the student doesn't have to engage in formal art observation or art making but as a way to hear themselves relative to their

community of peers and begin to construct knowledge and meta-knowledge. I believe the device to be flexible and relevant to arts education in its use of imagery and in the way it diminishes text.

The third way, which is how I see its best use is as a device to uncover my own students' context and intentions over the longer period of the term, which – once again - gives them safety to socially construct knowledge of the wider world and of themselves and to become, again the 'subjects of their own learning'. As such, the information learned from the Semantic Differential in that first day or week is used by the teacher and student body to develop the entire term's lesson plans based on student preferences and ideas from their own cultures but within the teacher's vision of cross-cultural understanding. This blends Vella's need for safety with Pinar's ideas about curriculum coming from the 'passions of the teacher'. Ideally, in the future there would be a way for the students to see their results in real time so they can see where they fall within their peer group. Again, a valid method for interpreting the results would be required.

There is also potential for the Semantic Differential to be used to measure aesthetic development. It would be interesting to either re-survey the students with the same images at the end of the term to see any degree of change; or, survey the students with a new set of images at the end of the term – images which might be considered challenging in some way.

Finally, there is potential for it to be used outside the classroom and outside the discipline of arts education. The use of the Semantic Differential as I have demonstrated the process could be applied to situations involving facilitation where team building or conflict resolution is the objective. Select historical and contemporary images emphasizing race and religion could be used to explore untested attitudes and beliefs in various contexts where – again – an exploration of the self is undertaken relative to the wider, material culture.

Indeed, in this way, the surprise was the revelation of my own preferences in the use of the Semantic Differential. Slowed by the laborious process of coding the results, I became aware of my response to the response, helping me to understand my process, and the biases of the choices I made and assumptions about my future students. This is valuable information which also helps me map where I am, chart some prior unconscious beliefs and in short, gives me more information about my own context and who I am.

In the beginning of this thesis, I related how I changed the question from ‘what does it mean?’ to ‘what does it do?’ This shift helped me change my thinking. Going forward, what is required is that I develop a new set of questions which will evolve the way I frame my work with my students. New processes can generate new questions and these help us understand how we think, how we perceive and who we are in it.

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Portraits

Image 1. Neil Shigley, *Michael 67*, Plexiglas-block print on paper mounted on canvas, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 2. Graham Smith, *1 Dow Portrait* | Pen and Ink. Courtesy: Graham Smith



Image 3. Beverly McIver, *Depression* | Oil on Canvas | 2010. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 4. Rick Chapman, Brett Favre, Photograph Gelatin Silver Print | 2001 | Gift of Rick Chapman and Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 5. Margaret Bowland, *Another Thorny Crown: Gray J*, 2010, Oil on linen. Courtesy of the artist and Driscoll Babcock Galleries, New York



Image 6. Unknown cubist portrait.



Image 7. Unknown child's self-portrait.



Image 8. Ndop Portrait of King Mishe miShyaang maMbul, ca. 1760-1780. Wood camwood powder, 19 1/2 x 7 5/8 x 8 5/8 in. Brooklyn Museum, Purchased with funds given by Mr. and Mrs. Alastair B. Martin, Mrs. Donald M. Oenslager, Mr. and Mrs. Robert E. Blum, and the Mrs. Florence A. Blum Fund, 61.33. Creative Commons-BY Image: overall, 61.33_PS2. Brooklyn Museum photograph, 2007



Image 9. Unknown, mummy-portrait in encaustic waxes on wooden panel, ancient Egypt, 110-130 AD; Courtesy National Museums Scotland, A.1951.160



Image 10. Sean Cheetham, Champagne Wishes and Caviar Dreams..., Oil on paper, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition.



Image 11. Egon Schiele, self-portrait, watercolor, 1912; Wikimedia Commons.



Image 12. Rembrandt Harmenszoon van Rijn, Self Portrait with Beret and Turned-Up Collar, 1659, National Gallery of Art, Washington, D.C., Public Domain



Image 13. Rieko Jujinami, Aki, Mixed media on acrylic mirror, 2011 | Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 14. Lucy Fradkin, Arthur Waters the Garden, Mixed Media, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 15. Jason Hanasik, Sharrod (Turn/Twirl), HD video, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 16. Martha Mayer Erlebacher, Self-Portrait, Nero pencil on paper, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 17. Duccio di Buoninsgna, Madonna and Child, Tempera and gold on wood, ca. 1300; www.metmuseum.org (2004.442)



Image 18. Lia Cook, Su Brain Tracts, Hand-woven cotton and rayon, 2011. Courtesy Smithsonian American Art Museum, Outwin Boochever Portrait Competition



Image 19. Unknown Civil War Photograph.



Image 20. Albrecht Dürer, *Head of a Young Woman*, chalk on prepared paper, Robert Lehman Collection, 1975.1.859 Metropolitan Museum of Art www.metmuseum.org



Image 21. Antonello da Messina, Christ Crowned with Thorns, Oil on wood, The Friedsam Collection, Beques of Michael Friedsam, 1931, (32.100.82), Metropolitan Museum of Art, [www. Metmuseum.org](http://www.Metmuseum.org)



Image 22. Alexander Calder, Calder's Self-Portrait, 1968, Calder Foundation, New York/Artists Rights Society (ARS), New York, Calder, Foundation, New York.



Image 23. Charles Balthazar J.F. Saint-Memin, Osage Warrior, 1805-1807, Watercolor and graphite on off-white wove paper, Metropolitan Museum of Art, www.metmuseum.org



Image 24. Richard Avedon, Cesar Estrada Chavez, Photograph, Gelatin silver print, 1976; National Portrait Gallery, Smithsonian Institution.

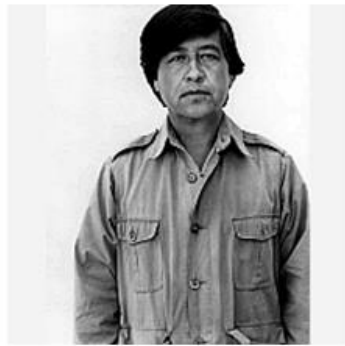


Image 25. Unknown Ceramic Fragment.



Image 26. Susanna Coffee, *Flowery Skull*, Oil on Panel, 2012. Courtesy of the artist.



Image 27. Unknown photograph of Mongolian girl.



Image 28. Jean Dubuffet, *Jean Paulhan*, Acrylic and Oil on Masonite, 1946. Credit: Jacques and Natasha Gelman Collection, 1998, www.metmuseum.org



Image 29. Susanna Coffey, *Blanche*, oil on panel, 2011. Courtesy of the artist.



Image 30. Lalla Essaydi, *Converging Territories #24*, Digital Photograph, 2011. From the Smithsonian National Museum of African Art Exhibition fall 2011.

