

Visual Literacy in a
Post-Photographic Era

by
Donald J. Werthmann

AN ESSAY

Submitted to the
College of Fine, Performing & Communication Arts
Wayne State University, Detroit, Michigan
in partial fulfillment of
the requirements for the degree of

MASTER OF ARTS
May 2004

Major: Photography
Approved by:

Advisor

Date

Contents

Acknowledgements	iv
List of Illustrations	v
Introduction	1
Chapter	
1. The Future Anterior	5
2. A Post-Photographic Era	11
3. Altered Approaches	15
4. Visual Unity	19
5. Visual Literacy	24
Conclusion	28
Bibliography	31
Notes	33

Acknowledgements

I am indebted to my proofreaders Diane Laboda, Leigh Ann Baguley, Lisa and Jay Steichmann, and Jim Sweeton. Their respective areas of expertise and attentiveness to detail helped me clearly articulate the ideas of this essay. I thank you all for your valuable time, warm support, genuine insight, and continual encouragement that made the production of this essay a reality.

I am also very grateful to Steen Christensen for providing me with the many books and intelligent suggestions that prove to be valuable resources of inspiration for this part of my Masters project.

To teachers

List of Illustrations

Number		Page
1.	The Third of May 1808, 1814 Francisco de Goya (1746-1828)	4
2.	16 Jackies, 1964 Andy Warhol (1942-1987)	4
3.	Untitled, 1982 Jerry N. Uelsmann (1934-) Gelatin Silver Print	10
4.	Triple Goddess, 1996 John Paul Caponigro (1965-) Inkjet Giclée Print	10
5.	Pixels Magnified ©2002, All Rights Reserved Donald J. Werthmann	14
6.	Central Park, New York ©1992, All Rights Reserved Donald J. Werthmann	19
7.	Earth Moment ©1984, All Rights Reserved Donald J. Werthmann	19
8.	Celebrating Diversity ©2003, All Rights Reserved Donald J. Werthmann	20
9.	22 Hours to Xian ©1988, All Rights Reserved Donald J. Werthmann	20
10.	Bikers, Datong China ©1988, All Rights Reserved Donald J. Werthmann	21
11.	Hero Mandala ©2001, All Rights Reserved Donald J. Werthmann	21
12.	Subconscious Journey ©2001, All Rights Reserved Donald J. Werthmann	21
13.	Visual Literacy Star ©2002, All Rights Reserved Donald J. Werthmann	25

Introduction

The rapid ascension of digital photographic imaging technology during the previous decade compares in magnitude to the invention of photography itself by Nicéphore Niépce in 1816. The impact of digital imaging “...cannot be directly likened to the nineteenth-century impact of photography on a handmade image culture”¹ however, because its arrival came in what was already a technologically sophisticated world. Nonetheless, an extraordinary amount of change occurred within a very short period of time. Consider that it took one hundred twenty years from the time Niépce created the first unfixed photograph for Eastman Kodak® to market the first mass-produced color film, known as Kodachrome®. In contrast, computer programmer Thomas Knoll, the inventor of the digital image editing software known as Adobe® Photoshop®, began writing some graphics subroutines to simulate a gray scale on an Apple® Macintosh® computer in 1987.² Fourteen years later, Kodak discontinued the sale of Kodachrome Professional 25 Film³ because digital technology garnered greater market shares.

A confluence of many significant advances in imaging technology occurred circa 1994, and since then, virtually every individual within every sector of the photographic industry became a beginner again; no matter how influential the reputation, or how specialized a company’s product line—massive restructuring occurred. In that pivotal year for instance, a start-up company known as Netscape released software called *Navigator* that capitalized on Hyper-Text Markup Language (HTML). Before Netscape, the phenomenon known as the Internet was considered something only computer “geeks” could understand, since only 600 websites existed at the time, yet it offered an ideal medium to transmit and display images. “Navigator opened the Internet to the masses.”⁴ In the following year there were 100,000 websites worldwide; by 1996 half a million existed. Needless to say, the previous decade stands as an extraordinary time to be a photographer, and recently, the most beneficial time in my photographic life to pursue a graduate degree to dissect digital image anatomy.

¹ Wells, Liz. Photography: A Critical Introduction (Rutledge, 1997), p. 289.

² Story, Derrick. Photoshop: A Look Back From Darkroom to Desktop—How Photoshop Came to Light. February 18, 2000. <http://www.storyphoto.com/multimedia/multimedia_photoshop.html>, See Timeline.

³ Ho, Dorothy. Photo District News Kodak to Discontinue Production of Kodachrome 25 Film, July 11, 2001. <<http://www.pdnonline.com/photodistrictnews/index.jsp>>, Search field: Kodachrome 25.

⁴ Walker, David. Photo District News Internet Timeline, May 2000.

Considering all the change and need for restructuring on the artist side of the artist/viewer dialog, my questions are: shouldn't change occur providing the viewer with skills to interpret visual art in the context of these new technologies; and if so, what models of visual literacy offer people a chance to obtain these skills? The contrast between the average social-status of an early nineteenth-century viewer to that of an early twenty-first century viewer is stark. In 1816, predictably aristocratic individuals having the good fortune of education and cultural awareness had the privileges of accessibility, understanding, and interpretation of visual art. Although the accessibility is much more common today, and spans many socio-cultural demographics, the privileges of understanding and interpreting visual art are not as common.

I perceive the dialog in Niépce's time having a sense of balance between what artists created and how the viewers understood those creations; today the dialog is far short of being balanced. The visual literacy skills of a nineteenth-century viewer grew in tandem with the artist, because change occurred in relatively slow, incremental chunks of time. Conversely, to apply this model of balance to contemporary culture is unrealistic because of such significant and rapid changes in technology on the artist side. The tools used to create images changed; yet the conceptual skills for viewing them remain relatively unchanged.

As a consequence, the agility of imaging technology imposes a dilemma on the dialog. Our culture does not keep pace with interpreting its own semiotics, as previous cultures did. Western-culture's paradigms, perceptions and definitions of pictorial accuracy, and visual literacy are at stake. Previously, an artist's audience consisted of a small pool of homogenous viewers, solely those people who had the education necessary to interpret images. Today artists have a large, diverse viewing audience, however, many of these individuals possess too few of the skills necessary to interpret images.

As an example of this idea, consider the pre-Columbian, indigenous Olmec culture of Mesoamerica (1500 to 900 B.C.), the earliest known ancestral fulcrum of the more advanced Mayan culture. Existing temporally with middle- and far-eastern cultures, yet insulated geographically from those spheres of influence, they too constructed large public spaces that allowed people to participate in the livelihood and fabric of their social order. As with people today, the Olmecs viewed art objects to learn about their culture. These objects expressed ideas of social hierarchies, as well as metaphors conveying ideas about the function of natural

laws and their place in the universal structure of the cosmos. Changes in the artist/viewer dialog, and interpretation of signs and sign systems occurred slowly, from one generation to the next, over hundreds of years—not a *decade*.

As an instructor of photographic imaging, I observe that most students initially struggle to understand images. This leads me to propose that there are millions of people who are not pursuing or understanding the need for this type of education, yet are influenced and persuaded by the mass media—as well as by what appears at a local gallery or museum. In effect, they remain excluded from active participation in the social structure, because images have become very sophisticated forms of communication. Images are invariably found in virtually every social context, and so the necessity of understanding them is no longer reserved for an elitist group, but boomeranged back to the populace, as in the Olmec culture.

Visual literacy is as important to an individual's basic skills as are language arts, science, or mathematics, in comprehending what is occurring socially and metaphorically. A barrage of visual information accompanies linguistic information, and people need to be taught to question and interpret how mass media and images impact their lives. The incident of the postmodern era imposes a confusing enmeshment of art and commerce, and very few resources are available to assist people in navigating its nonsensical course of objectives. The culture needs teachers to make visual literacy accessible and functional: to encourage people to critically think about what they are looking at when viewing images. It is unrealistic to think that the entire world can change, but I can at least offer suggestions and curricula to those who happen to show up at my studio, darkroom, digital lab, or critique room door.

During the Age of Enlightenment, an individual needed to actively see, but not necessarily actively create, to understand and interpret visual art. Prior to and including much of the modern era, the skills a viewer needed to interpret visual art were rooted in allegory. An example to illustrate this is the 1814 Francisco de Goya (1746-1828) painting entitled *The Third of May 1808* (ill. 1)—which portrays the execution of captured Spanish citizens in Madrid by French soldiers. To apply that same set of allegorical skills to the bulk of imagery available today is inadequate. Viewers need skills that enable them to cope with the overwhelming and often confusing aesthetics of popular culture, and the elusive nature of postmodernism. The 1964 Andy Warhol (1942-1987) painting, *16 Jackies*, (ill. 2)

provides a well seen cultural foreshadow. With the proliferation of contemporary heuristic technologies, the act of creating images digitally actually clarifies the act of seeing images, thereby building visual literacy skills. It is with this perspective that I focus on how and why the signifieds of *artist* and *viewer* have become more deeply committed symbions than ever before in the history of art. People must learn to bring the linguistic and analytical left-hemisphere of the brain into greater union with the expressive and intuitive right.

This essay interprets a symbiosis of image making and visual literacy that is resultant from a highly transformative era in art and technology. I analyze how semiotics can function within the realm of digital photographic imaging, exemplify how deeply connected it is to various postmodernist ideas, and present an interpretation of my own experience of altered image making in the journey of completing this degree. Rooted in that construct however, I methodically sharpen my focus on the issue of visual literacy, which I continue to find lacking in critiques, studio sets, and digital lab environments. As an instructor of the new technologies, I believe that our culture needs not only to enable people to become critical consumers and *active readers* of visual art, it needs to enable them to become *active creators* of visual art also. Photography students step into image making having experienced an ever-confusing barrage of art and commerce, where signs and sign systems inexplicably change from context to context; so it is critical that they explore visual literacy skills in the process of creating their own images. My objective is to create well-designed instructional models that can offer suggestions and guidance for students to make informed decisions about their craft and vision, and simultaneously unleash their creativity.



ill. 1



ill. 2

Chapter 1 The Future Anterior

A rudimentary life skill for anyone in any social structure is being capable of interpreting signs and sign systems of their own culture and to make sense of the world. The information gleaned by all of the senses is processed through an individual's practice of perception and comparison. Images function differently than words, yet they both possess power to convey meaning, myth, and metaphor. Whether one views splashes of color and light on glass or the written word on paper, the power is there. Images are not deciphered by the analytical, left-brained index of an alphabet, but are instead experienced by a more intangible, right-brained facility to *see* them. The speaking left hemisphere:

“...operates in a more logical, analytic, computer-like fashion. Its language is inadequate for the rapid complex synthesis achieved by the (right) hemisphere.”⁵

Therefore, visually literacy invokes the interaction of both hemispheres of the mind, yet its power resides in the spatially oriented and recessive right side, which offers feeling and intuition that may be articulated verbally.

If Westerners are to apply the science of brain study to visual art produced over the past thirty years—namely the postmodern era—then as a culture we need to make a much greater commitment to the development of skills that incorporate gestalt perception and its inherent information processing. It is a matter of being open and aware not only to one's own intuitive responses and associations, but to the collective unconscious' ability to assist in the decoding of ideas in images. Mitchell defines words as “a ‘significant other’ or rival mode of representation”⁶ when compared to imagery, and German Bauhaus faculty member László Moholy-Nagy declared in 1928 that, “the illiterates of the future will not be those who are ignorant of literature but those who neglect photography.”⁷ I propose a synthesis of these two ideas to identify and define semiotics in the context of digital imaging, and articulate how deeply connected photomontage is to postmodernist ideas.

⁵ Edwards, Betty. Drawing on the Right Side of the Brain (Putnam Book, 1989), p. 29: from research often referred to as the “split-brain” studies, carried out by Dr. Roger Sperry and Dr. Jerre Levy at California Institute of Technology, 1968.

⁶ Mitchell, W.J.T. Iconology: Image, Text, Ideology (University of Chicago Press, 1986), p. 3.

⁷ Mora, Gilles. PhotoSpeak: a guide to the ideas, movements, and techniques of photo... (Abbeville Press, 1998), p. 6.

Semiotics is a post-World-War-II refinement of ideas initiated or rooted in *semiology*. Semiology can assist in defining the Age of Enlightenment but has its foundation in the era of *modernism*—a time when various disciplines of art were being purified and self-defined, to question their own respective foundations. Early twentieth-century structuralist linguists, such as Ferdinand de Saussure, argued that perception and comprehension of the material world is made possible only by the indeterminate, yet inflexible linguistic code of languages, meanings, or *structures* to define what already exists in the world, or what the world is. Semiology defines a completely left-brained approach to interpreting, processing, and understanding. Semiotics borrows from structuralist patterns, but is also inclusive of ideas produced from the non-speaking, right half of the brain. Therefore, viewers do more than just interpret signs and sign systems they *create* them within the context of the culture with:

“...more fluid models, incorporating psychoanalysis, wherein the focus is more upon meaning-producing processes than upon textual systems.”⁸

Therefore semiotics is a form of structuralism; arguing that viewers must interpolate visual information with ideas beyond what actually appears in front of them, it defines what is more commonly known as post-structuralism, and the era of *postmodernism*.

To paraphrase the key ideas of post-structuralism, the *sign* that a viewer is processing is a string of *signifiers*, either in the form of marks on paper or sounds (t – r – e – e); any type of photograph; a fingerprint; etc. A sign must be understood as referring to something other than itself, producing the *signified*, which is conceptual and not a thing in the real world. The word “tree” then, whether spoken, written, or photographed refers to the concept of a type of tree. So the signifiers and the signifieds work together, thereby allowing a viewer to understand and recognize a fragment of their external reality.⁹ Based on this thread, what has transpired thus far is the left-brain process, which can now be relegated to the right brain for a visceral response, or perhaps an interaction with the sign. The right-hemisphere’s intuitive process is lush with images and feelings—not linguistics—that deeply connect to the bio-psycho-social predispositions an individual has with trees. As the artist intent and viewer experience collaborate, both individuals participate in the creation of the art.

⁸ Wells, Liz. *Photography: A Critical Introduction* (Rutledge, 1997), p. 43.

⁹ Bicket, Douglas. k.i.s.s. of the Panopticon - Cultural Theory and New Media Literacy, School of Communications at the University of Washington <http://www.geneseo.edu/%7ebicket/panop/topic_semiotic.htm> ©2001.

The holistic cognitive process can now be expanded when presented in some type of visual construction such as photomontage. The meaning of the tree can easily change regardless of whether it appears in a color or black-and-white rendering, as it interacts with other signs. The black-and-white darkroom work (ill. 3) of Jerry Uelsmann is an extensive exploration in the genre of photomontage and provides a perfect example of how it is possible to extend conceptual possibilities:

“By subverting the currency of literal fact, Uelsmann releases us from the constraints of photography’s mimetic function. No longer burdened by representation, we naturally return to our internal, nonlinear faculties of thought and feeling to savor the inexpressible resonance of his enigmatic visions.”¹⁰

He simultaneously embraces the idea of pre-visualization while photographing, and the idea of *post-visualization* while in the darkroom:

“I’m not just randomly shooting. I think a lot about what I’m photographing... But I do realize that there are other options that I can engage in later that will alter and change the image, so it’s not just that initial vision.”¹¹

To his credit, and in elevating the integrity of his work, the intent behind the interaction of signs is in the forefront of his creative process. The elaborate production process that Uelsmann implements requires as many as six enlargers to produce a single, composite image. Each independently captured element is handcrafted to coalesce with other fragments of reality. So regardless of the prefixes of “pre-” (earlier) and “post-” (future), both modes of seeing define the profound connection they have to an antecedent of some kind. Each final image does not truly supplant these earlier fragments, because they have collectively become the anterior. Uelsmann has something to say, but what that something *is* relies on a viewer’s skills and experience in viewing images. The idea of post-visualization parodies the idea of pre-visualization, and helps identify postmodernism, or as Lyotard states: “Postmodern would be understanding according to the paradox of the future (*post*) anterior (*modo*).”¹²

Similarly, this process of pre- and post-visualization occurs for the digital artist while in the act of creating, and the idea of art being created by and for the proletariat (kitsch) culture

¹⁰ Uelsmann, Jerry N. Artist manifesto. <<http://www.uelsmann.net>> ©2003, <<Enter>>

¹¹ Uelsmann, Jerry N. Interview with Jerry Uelsmann conducted by Paul Karabinis at the University of North Florida, 1997. <<http://www.uelsmann.net>> ©2003, <<interview>>

¹² Lyotard, Jean-François. The Postmodern Explained (Univ. of Minnesota Press, 1993) Pefanis & Thomas, p. 15.

is realized. What I want to emphasize here is that photomontage has become completely viable and accessible for the working class to produce, let alone consume, because of the new technologies. The major difference between Uelsmann's bohemian (avant-garde) workflow and the contemporary digital workflow is that new technologies offer greater agility, fluidity, and ease of change. Using image editing software such as Photoshop, the ability to instantly compare and investigate several possible interactions of signs on a computer monitor can unleash the creative process—as long as the creator knows how to use the tools. It serves as a platform to critically think about the interaction of signs to convey ideas: including splashes of light, color, gesture, and text. Therefore, active creators of digital photographs, especially of photomontage, can become more effective and active viewers of visual art in the culture. The accessibility of digital imaging technology makes it possible.

Some pioneers of color photography, such as Ernst Haas, Jay Maisel, and Pete Turner exclusively utilized 35mm Kodachrome films in photojournalism and commercial genres during the late 1960s, and into the middle 1990s. All three lived in New York City, and "...in an effort to promote color photography as fine art..."¹³ they opened *The Space Gallery* there in 1977. Although sharing the discipline with black-and-white photographers, color photographers operated in a different realm of approach and intent because of limitations imposed by their respective choice in technology. Kodachrome was a superior color film emulsion. It provided a positive rather than a negative image, yet imposed a great deal of anxiety because the film had narrow exposure latitude, and allowed limited options for re-interpretation in post-production. Manipulating it or extending it in a color darkroom was done very little because of technical limits inherent to that environment, the material costs, and time. Their vision occurred in the viewfinder of the camera, and was manifested by means of selecting slides on a daylight balanced light table. The mentality of WYSIWYG (what you see is what you get) prevailed yet black-and-white contemporaries such as Minor White, Ansel Adams, and Jerry Uelsmann, had a comparatively easier time to extend their vision because the technology made it possible.

¹³ Turner, Pete. <<http://www.peteturner.com/biolayout.html>> ©Pete Turner.

By 1994, the aforementioned genres of color and black-and-white photographers were brought, for the first time, into a unified sphere of possibility by means of the latest digital technology because Photoshop, version 3.0, shipped "...with the 'layers' capability."¹⁴ This feature of the software transformed the creative process, since Photoshop could effectively import image data as separate, controllable elements. Layers function like sheets of clear acetate stacked on top of each other. They allow the artist to work on image data stored in each independent "sheet" without disturbing data existing in others. Layers allow changes to the composition simply by changing their order, and as frequently upgraded versions are released, more sophisticated attributes of control become possible (see illustration 4).

The early years of digital technology saw mostly bourgeois professionals who could afford the time and material costs of getting re-trained, but this has since changed dramatically. Recently, the technology has become readily available for the proletariat—consumer class—and a cultural explosion of unparalleled magnitude has ensued. In the context of art history, this occurrence is rather reminiscent of a movement in New York, in the 1930s, known as Social Realism. Marxist-influenced, communist theoreticians created a social, political, and aesthetic ideology with an adequate following—inclusive of painters Ben Shahn (1898-1969) and Diego Rivera (1886-1957)—that wanted to restructure the art world to serve and glorify the working class. It now appears Social Realism experiences a superlative form of manifest from events of the previous decade by putting the tools directly in the hands of the people.

The sublime technological paradigm shift of digital imaging has unified the discipline overall, yet caused irreversible damage to the profession. The term "pro-sumer" is used by photographic manufacturers to imply equity between a professional (elitist), and a consumer (proletariat), in the use of a product. For instance, the Canon Digital Rebel: the first single-lens-reflex digital camera under \$1,000, possesses the exact same six-megapixel sensor as their professional level camera system. Regardless of how one wants to be categorized, as color or black-and-white, or as an amateur or professional photographer; we have all found common ground with the tools. This is a very difficult and even alarming era because guidelines to use in the interpretation of signs and sign systems are not delivered with the technical tools. The

¹⁴ Story, Derrick. Photoshop: A Look Back. From Darkroom to Desktop—How Photoshop Came to Light. See Timeline. <http://www.storyphoto.com/multimedia/multimedia_photoshop.html>, February 18, 2000.

new technologies supersede the amateur's rudimentary skills to make sense of the world. In the throes of what William Mitchell calls a "post-photographic era,"¹⁵ implying that the new technologies have destroyed photographic veracity and integrity, an ethic of mediocrity is jeopardizing the very foundations of image quality and concept as well:

"'Good enough' seems to be the most popular phrase for a large part of the visual communications world.... Photographers who have worked hard to earn the title of professional are experiencing profound frustration as 'good enough' images become increasingly acceptable in the marketplace."¹⁶

If one were to consider the real gravity of this situation, then visual literacy needs to be a primary initiative for the information age to take on. It is as imperative as math, science, or language arts, in addition to elevating the quality of image making itself. Indeed, the new technology offers the creator/viewer the opportunity to construct meaning without the intrusion of a "knowledge-giver," and makes the process completely democratic. But what about all of the gaps and blind spots regarding the amateur's capability to produce images worthy of publication? Photo-educators need to place the mission of visual literacy in the forefront of their instructional philosophy, with a healthy amount of the technical instructional units. If individuals in our labs, studios, and critique rooms are showing up to actively participate in the culture, then we need to build their appreciation as artist and viewer for the power they possess in creating meaningful images, and emphasize that:

"Digital technology is clearly no substitute for traditional skills; it is rather a marvelous extension of them."¹⁷



ill. 3



ill. 4

¹⁵ Mitchell, William. The Reconfigured Eye: Visual Truth in the Post-Photographic Era (MIT Press, 1992), p. 20.

¹⁶ LeVant, Howard. Survey of the Changing World of Professional Photography. Professor at the Rochester Institute of Technology <<http://www.rit.edu/~survey03/overview.html>>, ©2003.

¹⁷ Caponigro, John Paul. Adobe Photoshop Master Class, 2nd Edition: The Essential Guide to Revisioning Photography. (Adobe Press, 2003), p. 78.

Chapter 2 A Post-Photographic Era

Photography possessed the stigma of being the bastard child of the art world for over a century, but is now revered as a hero returning from a journey in the wilderness, sharing its power with the masses. Being reproductions of reality unto themselves, photographs are nonetheless accepted as “original” works of art, and traditionally speaking, photographs enable the populace to experience a tactile representation of the “real.” The problem today however, is that digital reproductions of traditional artwork are commonly accepted as “original” and “real,” thereby amplifying confusion in the definition of *reality* itself.

To its credit, digital imaging technology comprehensively reveals a technical depth and constructive nature of image making never before achievable by photographers. To its core it identifies the postmodern because it is inherently deconstructive and fragmented in its forms of expression, such as photomontage, image compositing, or multimedia. Even if the new technology is used in *straight* photography—meaning very little manipulation—then digital artists still find their work at the cutting edge of postmodernism because pixels are now at the foundation of their craft. A digital era enables multiplicity and palpable indeterminacy, making its impact on the culture exponential to what Walter Benjamin conveyed in 1936, in *The Work of Art in the Age of Mechanical Reproduction*; it leads to pastiche and simulacra. The post-photographic era requires artists and viewers to critically think about images more than ever before, because they appear with other dynamic contents, such as in the poly-semiotic contexts of the Internet.

In a deeply interactive manner image editing software reveals that photographs are visual constructions controlled by means of a mosaic of microscopic picture-elements, known as pixels (ill. 5). Photoshop, as an example, is just one of many important stems of the digital artist’s workflow, as it is an intermediary mode of image editing; it does not necessarily represent the roots of a digital image. Pixels are the roots. Measured in microns, the size and shape of a pixel fluctuates based on the resolution, or pixels per inch, of a capture device. Millions of pixels assembled in a pixel array of a digital camera are measured in *megapixels*. These light sensitive sensors that emulate film—known as either a Charge Coupled Device (CCD), or Complementary Metal Oxide Semiconductor (CMOS)—are also used in flatbed or film scanners, and are where photons coalesce with silicon to produce electrons. The

quantity of electrons released at each pixel site is in direct proportion to the intensity of light striking it, and those electrons are converted into a digital value. This analog to digital input produces the pixels that image editing software interpolates, rendering an image. Residing in a latent fashion in various types of digital storage media, they can then be viewed on the pixel array of a Liquid Crystal Display (LCD), projectors, or even cellular picture-phones. The most intriguing aspect of the pixel array, when put into the context of cultural theory, is that it identifies what art historian Rosalind Krauss exalts in the grid's postmodernist role:

“...through its mesh it creates an image of the woven infrastructure of the canvas; ...the very ground that the grid is thought to reveal is already riven from within by a process of repetition and representation; it is always already divided and multiple.”¹⁸

Inquiring about the invention of the grid is like seeking out who invented the wheel. It is obviously nothing new, as it was utilized even in the camera obscura, but to put the grid and the proliferation of pixel arrays into a comparative context; the modern era of photography never experienced the impact of the grid to the degree photography does in the postmodern era. For it is common now to refer to a digital artist as a “pixel processor,” and in essence making their cultural impact congruent to that of a writer, or “word processor.” A digital artist can alter any image pixel-for-pixel much like a writer can alter text letter-for-letter, enabling change in the meaning, or perhaps creating pastiche. Mitchell implies that the indeterminate state of digital images fits well into post-structuralist linguistic theories as they are used with voice, music, or text in multimedia. He places an emphasis on:

“...their capacity to mean more than one fixed thing... the way that language and sign systems are always ‘in process’ because they are being continually modified and nuanced as they are written and spoken in differing social contexts.”¹⁹

The Internet is a paradigm of a poly-semiotic environment, and the idea of experiencing an image in its intended context is very, very vague. With the image saturation and reproduction capabilities of the World Wide Web, individuals can experience and accept what they see as “original,” when it is actually several generations removed from it. The signs and sign systems of the original intent and context can easily change with no explanation. An

¹⁸ Harrison & Wood *Art in Theory 1900-1990: An Anthology of Changing Ideas* (Blackwell, 1992), p. 1063. Reprinted from Krauss, *The Originality of the Avant-Garde and Other Modernist Myths*; 1986, p. 151-70.

¹⁹ Wells, Liz. *Photography: A Critical Introduction* (Routledge, 1997), p. 286.

image can appear on an all-news website, and then on an all-entertainment website, and mean two completely different things. Western culture is swamped with the conundrum of being such a visually rich culture while maintaining only a marginal sense of accountability for visual literacy among its populace. The frequency of inaccuracy and misinterpretation out-weigh the resources available for people to apprehend how to make sense of it all. Visual literacy can assist the viewer in responding to images with skepticism, using caution to weed out what's unreliable, and realizing how images are subjected to immeasurable reproduction.

Exemplary of this idea is the 1981, dye-transfer print portfolio of Ernst Haas (1921-1986), entitled *The Creation*. This marvelous edition of ten (13" x 19"), full-color, archive-stable images is but a fragment of his legacy of poetic images that inspire many photographers. Each print was hand made under Ernst's supervision, dry-mounted, signed, and placed into one of 300 portfolios. Today very few remain on the market, and a vast majority of viewers need to travel to a regional gallery or museum, or to a private collector of art, to view them in their original conception and context. Alas, viewers think they can rely on the simulation and convenience of the Internet to experience this instead.

On the contrary, it is sickening to experience the *Creation* link at <www.ernst-haas.com>, where a viewer is provided with an entirely different interpretation of *The Creation* portfolio. The most blatant and obvious difference is the loss of tactile interaction with the work, since each piece in the portfolio is dry-mounted, sequenced, and titled on a protective cover sheet. The website comparatively offers random sequencing; the insertion of "new" images; the subtraction of original images; inaccurately titled original images; and "new" interpretations of Haas' image crops, color renderings, density, contrast, etc. They appear much smaller on a computer monitor, and consequently, the subtle details offering compositional tension or a counter-point are lost. Haas' eloquent artist statement serving as the cover sheet upon opening the portfolio lid is nowhere to be found in conjunction with the images online, destroying his original, holistic intent and vision in the portfolio:

“...In photography, through an interplay of scales, an entire universe within a universe can be revealed. What I searched for in visual terms was the connection of the real with the wonderful...”²⁰

²⁰ Haas, Ernst. Passage from his Artist Statement introducing *The Creation* portfolio, 1982.

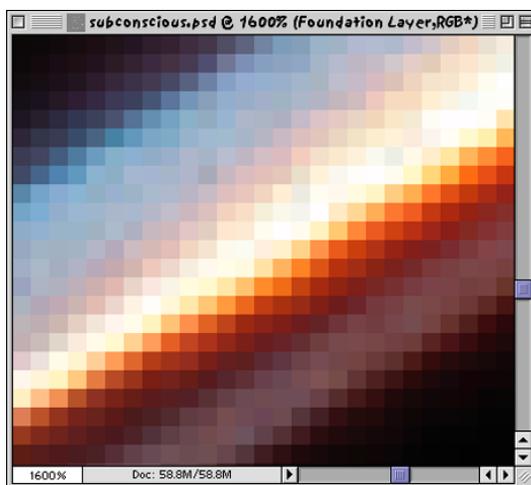
Ironically, the introduction page on the Haas website states:

“He would have been thrilled with the knowledge that people throughout the world now have the opportunity to view his work in this new forum.”

Generally, I can accept this quote with validity because it comes from the reliable source of the Haas Studio, and because Ernst was a well renowned, highly respected teacher of photography. In regard to the integrity of *The Creation* portfolio specifically, however, I strongly disagree with that statement. How does the viewer benefit from this misleading interpretation, other than having an inaccurate electronic reference? *This* is pastiche and simulacra. It is just one example to illustrate the culture’s accepted experience and definition of what is *original* and what is *real*:

“The real is not only that which can be reproduced but that which is already reproduced: the hyperreal.”²¹

The purely simulated experience of the Internet, which millions of people interact with daily, has changed the collective’s perception and definition of reality—and art. If a viewer is not cognizant of a thought processes that deals with interpreting signs and sign systems, then that individual chooses to become easily manipulated or persuaded. If the post-photographic era requires a viewer to pause and critically think about what they are looking at because of its dynamic and poly-semiotic nature, then it must call for stronger initiatives for visual literacy in the culture.



ill. 5

²¹ Harrison & Wood *Art in Theory 1900-1990: An Anthology of Changing Ideas* (Blackwell, 1992), p. 1049. Reprinted from *Jean Baudrillard: Selected Writings* (The Hyper-Realism of Simulation), Stanford, 1988. p. 143-147.

Chapter 3 Altered Approaches

I **consider** myself a photographic scholar, sustained by a journey of working in a variety of professional and educational work environments. My career has always been tightly entwined with advanced photographic technology and a desire to teach how to use it proficiently. During the mid- to late-1980s I worked as a freelance photographic assistant in commercial studios in Detroit, which specialize in automotive catalog and national print-ad imagery. Technically intensive and demanding an enormous amount of diverse equipment, it was the paramount experience to learn and use advanced photographic technology. I gleaned considerable technical knowledge over five-plus years, which proved to be invaluable for the next several years of employment at the Santa Fe Photographic Workshops.

The Workshops, located in Santa Fe, New Mexico, provides comprehensive one-week courses where participants study with a working professional. Immersed in this environment since 1991, I learned exponentially about teaching technique and classroom/field session management from several perspectives of the institution's operation. I experienced dramatic career growth and maturity, from participant, to Work/Study, to Course Assistant, to Operations Manager, to Instructor. I was honored to work with some of the most influential names in the photographic community, and it was here that I witnessed the dramatic technological acceleration that photography experienced in the 1990s. What was revealed most during this part of my career journey is that I am passionate about photography, and empathetic to individuals who want to learn more about it and express themselves with it.

My induction into the Visual Arts Technology Department at Washtenaw Community College (WCC), in January 2000, presented significant changes instructionally. I have realigned my teaching approach from an intensive one-week workshop format to a fifteen-week semester format, and I have adapted to a new instructional philosophy. Both formats made me aware of the needs of adult learners and how to effectively teach adults, yet WCC magnifies that awareness and places an emphasis on technology. Prior to this, in Santa Fe, the instructional philosophy was a moderate blend of technology with an emphasis on aesthetics and traditional processes, even though the student demographic was the same.

I began graduate studies in early 2001 as part of my hiring agreement with the college, which coincidentally demanded that I learn about the technology I teach. This transition into

a digital workflow imposed a significant technical and aesthetic leap into the unknown. As a matter of convenience then, I worked exclusively in the well-endowed studio and digital imaging facilities at WCC. It was physically impractical to truck the equipment to a remote location to create images, and that shift unto itself inspired the construction of my graduate imagery. The impact I felt was similar to what other photographers were experiencing: I was a beginner again. The only consolations I had were relying on twenty years of photographic experience, including high school, and that much of the nomenclature in digital technology is rooted in the traditional processes; it provided a great resource to draw analogies from.

My transition was incremental, as I made a gradual-to-exclusive discontinuation of the use of film. The experience of creating images was perpetual discovery: the hyper-attentive pre-occupation with the new technology presented entirely new possibilities to extend the vision of what I saw in the viewfinder. In conjunction with Photoshop, the use of a high-resolution film scanner led to a high-resolution scan-back system (a CCD in place of a film magazine) that is attached to a medium or large format camera. The scan-back technology in the first year led to the acquisition of single capture camera technology in the next. Extraordinary changes occurred in very short periods of time, and created a game of perpetual “catch-up.”

The ramifications of creating images in a totally digital workflow altered my approach to image making entirely. Earlier in my career I was a self-defined documentary photographer driven to respond to lyrical moments found in everyday life. I was inspired by the intuitive approach demonstrated in the metaphysical color work of Ernst Haas, the decisive moment of Henri Cartier-Bresson, and high contrast poetry of National Geographic photographers such as Sam Abell and David Alan Harvey. For me image making was primarily driven by a story idea, and the confluence of light, color, and gesture.

My vision shifted from anticipating and capturing an unfolding tapestry of events in the real world, (such as in illustrations 7, 9, and 10) to creating environments of archetypes, myth, and metaphor (such as in illustrations 8, 11, and 12). Emerging from this *outward-in* experience, my renderings now come mostly from the *inward-out*, yet the ideas of being a documentary photographer still remain; with the objective to make the unseen, seen. I am inspired by Jungian ideas of the unconscious *Self*, the collective unconscious, and the work of Joseph Campbell regarding myths and archetypes. I am also deeply engaged with the impact

of a person's ancestral lineage upon their worldview, rituals, and cultural identity. My work is driven by ideas of how diverse humankind is, yet how mysteriously we have so much in common. Another significant change that I have perceived is in the artists that I look to for inspiration—all of them women: Elizabeth Opalenik, Olivia Parker, and Maggie Taylor to name a few. These individuals work in a variety of media, inclusive of alternative and traditional process, and digital photomontage. The content of their work possesses sensitivity to the interaction of subject matter and form in ways that challenge a viewer to deeply question and explore their intuitive repose. In planning and creating my own work, I too intend the viewer to interact and search for their visceral response, and connect to the piece.

The greatest problems I struggled with were *how* to physically render these new images. Photographing in the natural world or in the urban landscape was not a viable option since my camera was now tethered to a computer, and therefore mandated a studio still-life environment for image input. The benefit to this circumstance is that it motivated me to implement rather large set constructions, and draw on the studio knowledge and experience garnered earlier in my career. With many compositions completed, the issue of final output was a chronic issue in need of resolve. Digital technology offers numerous choices that are outstanding in regard to creating the illusion of a continuous tone image, and when produced with very skillful digital file management, inkjet prints can rival anything created in the traditional processes. I was never quite satisfied during portfolio reviews with the standard paper sizes available to display my work; even 13 x 19 inch paper appeared too small, and felt amiss to convey the intent. Large format printers were the solution, so yet again I needed to alter my approach.

The Santa Fe Workshops provided the craft, vision, and inspiration I was seeking. Based on testing completed there, I was confident to step into large-format, inkjet printmaking: cyan, magenta, yellow and black dye-inks on thirty-six inch wide canvas. This process of image making is mysteriously analogous to the dye-transfer prints of Haas' *The Creation* portfolio, yet on a substrate exactly like an oil or acrylic painter would use. As technology advances the traditional processes become higher art forms, and so the metaphor of ink on canvas implies a hybrid of new and old. With a complete immersion into the new imaging technology that I discovered upon starting this project, it is gratifying to emerge from the journey with art inspired by the height of the color photographic era *and* the nineteenth-

century handmade image culture. In conjunction with the content arrived at by the viewer, I intend to evoke a sense of reverence for the past, and to emphasize the idea of something tactile, real, and displayed in a specific context.

What I am grateful for, and most fortunate to have discovered through this graduate journey, is obtaining greater visual literacy skills of my own in the process of creating images digitally. It is my experience that as students are enabled as active creators of digital images, they become active, informed readers and interpreters of visual art in general. Signs and sign systems change from context to context without explanation, so apprehending this idea within their own work, in the studio, darkroom, digital lab, or critique room positively reinforces the symbiosis of image making and image viewing. Controlling the interaction of their own subject matter, creatively forming it with genuine intent, and attempting to place their work into a specific context creates an infrastructure that supports their visual literacy skills.

This personal interpretation of the changes photography experienced in the last ten years attempts to articulate and emphasize the importance of adaptability, and is intended to serve as an example of academic and creative tenacity. As an image maker the learning never stops, and as a photographic educator with an aesthetic tightly entwined with technology, I need to teach more than how to use it proficiently. Visual literacy skills are paramount.

What I propose in Chapters 4 and 5 are three instructional models that provide the basic skills I perceive to be highly valuable to students in virtually any visual arts course. Inspired from needs voiced by students over the past nine years of my professional and academic teaching experiences, I formulated these models in the context of some of the courses that I teach: Color Photography, Introduction to the Studio, and Digital Photo Imaging to name a few. They have been gleaned—modified for this essay—from curricular units that I offer to students to stimulate vocabulary and discourse about visual art. Today, courses of this kind are very comprehensive: they include film and digital capture technology, film scanning, Photoshop image editing, and digital inkjet printing techniques. Each course is unique, and designed to teach how to see and approach the dynamics of subject matter and form, and also how to critically view images. Students are encouraged to acquire critical thinking skills to view and understand visual art—to become visually literate—and apply those tools and techniques in the creation of their own images.

Chapter 4 Visual Unity²²

Gestalt psychology was a movement in experimental psychology that originated in the early 1900s, and it made significant contributions to the study of perception and visual problem solving. German researchers such as Kurt Koffka, Wolfgang Kohler, and Max Wertheimer began studying the ways in which perceptions are formed. It postulates the existence of discrete elements and the ability to identify, order, and group them that make the synthesis of larger, meaningful wholes possible. Gestalt is a German word that means "configuration," and is commonly referred to with the phrase; *the whole is greater than the sum of its parts*.

In illustration 6, a viewer's attention can be effectively captured by the offer of dramatic visual information. Why has this design, or arrangement, attracted *your* attention? How is this achieved? The particular subject matter, medium, or artist should be irrelevant—what you are looking for are basic visual concepts.



ill. 6—This image utilizes a device of design where major elements are abruptly cut off by the format edges. Attention is called on this rather unusual placement, which is different from what is expected to be seen, and is achieved by simply finding a new point of view. With this visual technique, the viewer easily completes missing parts with intuition, and information obtained from living in the culture—they already know the basic shape of a tall building.

Composition

Another word for design is composition, which implies a feeling of organization. Just as the word *composition*, in any language's grammar, is not a random collection of words and punctuation; composition in photography is not a careless scattering of random items in a chosen format—horizontal, vertical, square, panoramic, etc.



ill. 7

²² Lauer, David A. *Design Basics* 3rd edition, (Holt, Rinehart, and Winston 1990), main ideas adapted from pages 17-28.

Figure and Ground

This is the relationship between subject and background. It also refers to positive-negative space relationships in the composition (ill. 7). If the figure and ground are too similar, then perception is difficult, and the viewer has difficulty determining what is important in the image. If there is no ground, figures have the tendency to float and feel incomplete (ill. 8).



Structural Economy and Image Foundation

ill. 8

An important aspect of gestalt and visual unity is that the whole predominates over the parts: the viewer first sees the whole pattern before noticing the individual elements. Each item may have meaning, and add to the total effect, but the viewer must first see the pattern as a whole, rather than a collection of bits and pieces. The viewer intuitively looks for some sort of simple organization, and something to unify the various elements: not confusion or unrelated chaos. If the artist can provide visual clues to start with, and control eye-flow with various formal elements, then the viewer has a much better opportunity to find coherency. Providing a sense of closure effectively completes the statement, signaling the viewer to pause and think. If unity and closure cannot be found, then the viewer tends to ignore the image.

This pre-visualization technique (ill. 9) allows the artist to see the foundation of an image as it turns into pure light, shape, and color. By deliberately throwing the image out-of-focus in the viewfinder, only the dominant shapes, their values of light, and their color properties appear. The underlying structure of the composition suddenly becomes more relevant, and this foundation is what determines a viewer's eye-flow. The viewer intuitively responds to the brightest value in the composition first, regardless of how important, or not, the object is.



ill. 9

Three Ways to Achieve Visual Unity

Proximity—An easy way to gain unity, this device is used to make separate elements look as if they belong together, simply by arranging elements close together. It's a common unifying factor. The viewer tends to *group* objects that are close to each other into a larger unit, and relate objects of a similar shape (ill. 10).

Repetition—A widely used device for achieving visual unity is repeating various objects, shapes, colors, texture, directions, or angles in the composition to correlate the parts (ill. 10).



ill. 10

Continuation—This is a more-subtle device than the previous two, and directs viewer eye-flow to imply something continuous—usually a line, an edge, or a direction from one form to another. The viewer's eye is carried smoothly from one form to the next (ill. 11).



ill. 11



ill. 12

Three Ways to Achieve Emphasis

Focal point—As a general rule focal point results when one element differs from another. Whatever interrupts an overall feeling or pattern automatically attracts the eye by this difference, therefore, try to design in odd number quantities like three's & five's (ill. 12).

Isolation—When one item is isolated from the other elements, or group of elements, it becomes a focal point. Just by its separation, an element takes on visual importance.

Separation of Value—As objects and planes of space interact in the composition, tonal value relationships become important. Light values appearing in front of dark values (and vice-versa) provide separation, creating the illusion of depth that photographs usually need.

Other Visual Elements to Consider

Gesture—It is important to consider the use of fingers, arms, legs, or body language.

Gesture drawings are about movement, not so much about objects, yet even an inanimate object, like a broom, can have gesture.

Closure—Images need a visual point of ending just as critically as they need a beginning.

Without closure a viewer tends to stand idle, wondering what to do next, and leaves without any memory of the image. An image without closure can simply be deemed as a study. An image with closure or climax establishes the idea that you might have something to say.

The Elements of Photomontage

Assignment Objectives

A perpetual goal of any visual artist is to become recognized as an individual who can communicate *ideas* by means of metaphor. Poets for instance, utilize metaphor almost exclusively to convey ideas, emotions, spatial relationships, and colors; yet for visual artists, it is by means of semiotics—signs and symbols—that we convey these attributes to the viewer.

In this assignment you are to obtain a written passage, known as a *trigger*, to inspire the creation of a photograph that interprets the essence of a given idea (intent). You are strongly encouraged to think about how an object (subject matter) can take on meaning—other than what it actually is—as it interacts and fuses with control of light and camera (form).

Visual art is a complex interaction of signifiers that can make ideas possible within the viewer's mind, and carries impact and meaning to those who live in the culture it is created for (context). Learning how to express ideas with visual information (content) carries many of the same intricacies as learning a foreign language. Not impossible to master by any means, but it does take a great deal of time and practice to understand it and express it fluently on your own. Through this assignment you will become more visually literate.

Montage vs. Collage — What's the Difference?

Montage is a combination of visual components where incongruent formal elements are blended invisibly and convincingly. In collage, the incongruity between visual components is visible—usually to the point that the whole is obviously fragmented into distinctive, separate parts. Regardless of which method is implemented, the visual unity of photomontage and the separateness of collage are used to create a visual statement, message, or metaphor.

Procedures

Choose a trigger that enables you to implement not only photographs scanned from film, or a digital camera, but flat objects scanned on a flatbed scanner. What matters the most is that you have something to say—the trigger should be something you care about and is meaningful to you—as it will directly affect the quality of the final assembly.

Expected Outcomes

- Import various image elements into a single composition
- Utilization of layer masks to blend the interaction of objects
- Understand the idea of image layer opacity
- Attempt to implement the use of Photoshop filters
- Consider the interaction of electronically made, or scanned-handwritten text
- Possible implied mediums: color, de-saturated or B&W, inverted, or posterized
- Experience color management and the use of an Epson inkjet printer

Be Mindful of These Visual Elements²³

- | | |
|-------------------------------------|-------------------------|
| • Direction and intensity of light | • Interaction / Overlap |
| • Direction and intensity of shadow | • Scale |
| • Reflected light | • Proportion |
| • Color balance | • Edges / Blending |
| • Depth of field | • Noise |
| • Linear perspective | • Repetition |
| • Atmospheric perspective | • Gravity |
| • Texture gradient | • Time |

²³ Caponigro, John Paul. Adobe Photoshop Master Class (Adobe Press, 2000), Chapter sub-headers on pages 97-102.

Chapter 5 Visual Literacy

Assignment Objectives

This assignment is designed to encourage critical thinking and deeper learning by means of evaluating color images of a historically significant color photographer, at the University of Michigan Museum of Art (UMMA). This assignment is evaluated by means of individual written responses on the outline provided. You are encouraged to draw on vocabulary and ideas that display a rudimentary command of visual literacy, like that found in the book entitled *Criticizing Photographs: An Introduction to Understanding Images* by Terry Barrett.

The Photographer

Ernst Haas has been called "the father of color photography." In the 1950s Ernst began working with Kodachrome films to create color compositions and a color palette that served to define fine-art color photography. Ernst died in 1986 leaving a legacy of poetic images to inspire future generations of photographers. In 1981 Ernst produced a portfolio called "The Creation." Eleanor Morris Caponigro of Santa Fe, New Mexico, designed the portfolio. All ten prints were made using the dye-transfer process under Ernst's supervision. When a print met his standards it was mounted, he signed it, and it was placed into a portfolio. Three hundred portfolios were made. Today, only a small number remain on the market.

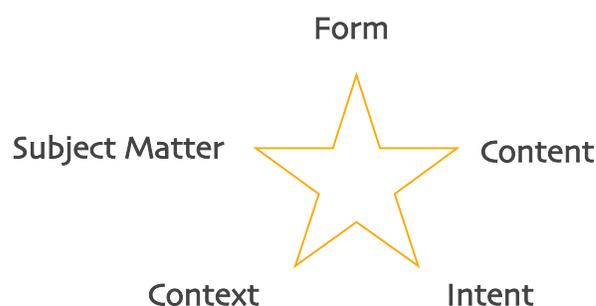
Artist Statement

The idea of a beginning, of something originating out of nothing, of existence born out of nonexistence, remains beyond human comprehension. The abstract idea of a creation of this world, still lives in all of us, filling us with a longing to understand how it came about and why. In this present age of science, at once so powerfully constructive and destructive, we seek instinctively to defend ourselves by searching for the elemental, the natural. However much we try to rebel against nature we cannot escape being a part of it. The elements that surround us also flow through us and the cycle of human life bears a close relationship to the span of the four seasons. The whole is for man unimaginable. We are forced to search for it in its parts. We can only try to find parts which create a whole. In photography, through an interplay of scales, an entire universe within a universe can be revealed. What I searched for in visual terms was the connection of the real with the wonderful. Pictures are more when they begin to signify not so much natural history, as a vision of nature born from intuition and awareness. We see what we feel. We see what we know until we see what we are.

Ernst Haas, 1982

Procedure

The diagram below (ill.13) illustrates the relationship of some basic ideas of visual literacy and can be used to look at any kind of art. Review their meanings and apply them to what you are experiencing with the images viewed in *The Creation* portfolio.



ill. 13

Subject Matter—Quite simply, this is what the image is *of*. Many shy away from describing it because it appears to be too obvious to discuss. It can be the objects, the people, the place, etc: what is this artist literally looking at—*seeing*?

Form—Also referred to as formal properties. These are the ways the artist has chosen to interpret the subject matter. Inclusive of density, contrast, motion blur, depth-of-field, compositional elements, color, light quality; and media such as film choice or digital capture, developers, inks, output media, etc. A deliberate combination of technical approach and formal elements create an image.

Content—This is something that is arrived at by the viewer. It is not a “given” variable in contemporary image making, unless the work is allegorical or adheres to some hierarchy.

Intent—Why is the artist showing this? What is s/he attempting to say? It will behoove you as the viewer to think about the work, ask questions about it, and perhaps arrive at your own answer. Reading an artist statement should help provide clues as to what you are looking at, and perhaps, how to engage with the work.

Context—Where is the work being viewed: in a museum, at a presentation in the studio, in a magazine or book, on a website at home, or on a cellular-picture phone? The possibilities seem immeasurable. Where, when, and how the work is being viewed can change meaning, but also, being mindful of the circumstances that the work is created are important too.

Select one image from *The Creation Portfolio* and respond to the following questions:²⁴

1) Image Title:

2) Describe what you see:

3) Describe another person's interpretation of this image that agrees or differs:

4) Consider how form relates to subject matter. In regard to this image, what does the equation *subject matter + form = content* yield for you?

²⁴ Barrett, Terry. Criticizing Photographs: An Introduction to Understanding Images, 3rd Edition (McGraw-Hill, 2000), All questions have been adapted from pages 180-182.

5) Interpret the photograph by stating one or more questions it raises for you, and then provide your own answers.

6) What do you think Ernst intended to communicate through this image? Why?

7) Visit <www.ersnt-haas.com> to view the *Creation* link. Compare and contrast at least seven different qualities of this electronic version to what you have experienced at UMMA.

8) In which context did you prefer viewing this portfolio? Why?

Conclusion

The history of photography that spans about 200 years is only a fragment of a continuum of art history, and in each consecutive decade of existence photography experienced gradual changes to its technology like other disciplines of art. Improvements that occurred with cameras and lenses, films, papers and chemistries, were like improvements to easels, brushes, paints, and canvas. Each discipline slowly grew in sophistication for artists in the way they expressed ideas, and viewers were able to keep pace with interpreting the semiotics of their culture. During the previous decade however, the rapid ascension of digital technologies made some of the most significant changes to the visual arts since the invention of photography itself. As a consequence, the new technologies paradigm shift significantly impacts Western culture's definitions of pictorial accuracy, and calls for stronger initiatives for visual literacy. Further, it demands that visual arts educators establish stronger objectives for students and other emerging visual artists to consider the variable of viewing context in their work. Ultimately, artists of any discipline need to perpetuate and share their visual literacy skills and creative process with the populace, rather than remaining distant, indeterminate, and esoteric about the ideas or philosophy that support their work.

A contemporary, digitally saturated, Western-culture such as ours needs visual art to make sense, as it did with indigenous cultures such as the Olmecs of Mesoamerica, rather than continuing on its current, nonsensical postmodernist path. The necessity of understanding images, and the culture itself, has boomeranged throughout human history, impacting one social-class or another. The cultural-boomerang of visual literacy has returned to the populace, completing the kinetic circle that was initially launched by the cultural needs of indigenous people. The new levels of digital technology and its dynamic contents are capable of providing a stunning ease of accessibility to the viewer; but is there evidence of any type of corresponding improvement over what people of indigenous cultures experienced in understanding visual art?

One of the greatest challenges photo educators face is to prevent digital imaging technology from overshadowing the creative process, while stimulating discourse about the complexity of viewing visual art. The jargon of digital imaging technology is deeply rooted in analog systems and traditional processes, and these fully manual systems provide a sound

foundation of proficiency for students to step into the new technologies. It must be made apparent to students that images are visual constructions, and that there are still some very real and tactile ways of creating images, without a computer. A contemporary artist relies heavily on people in the culture to bring viewing skills to their visual communication, but the unfortunate circumstance is that the populace has too few of these skills, because the new technology supersedes the ease of availability of visual literacy skills. Therefore, various kinds of photographic communities such as academia, workshops, or even a fledgling gallery club, can provide instructional units revealing not only the creative process but the possibility of inaccuracy and misinterpretation in visual art. Western-culture needs to comprehend that:

“Looking at a picture is not the same as looking out a window. It requires thinking, sorting, analyzing, and decision-making. It is a developed system of thought that can be taught and learned.”²⁵

Undoubtedly, postmodernist dogma affects other art disciplines, such as ceramics, intaglio printmaking, painting, jewelry, or sculpting, but what post-photographic image-makers need to learn from them is the idea of viewing context. To distill the complex and non-linear nature of the creative process into the three words, *what*, *how*, and *why* is comparable to distilling the viewing process into *when*, *where*, and *who*. The viewing context is something commonly overlooked in the educational models designed for a photo student, yet a variable that makes a very critical and consequential difference in how the visual art is perceived, received, and in fact conceived. In intermediate to advanced courses, photo educators need to take assignment objectives far beyond technical skills, and into new levels of expectation and expression by suggesting some meaningful viewing contexts in which to present work.

In many cases, students think first of *what* they want to create; sometimes but not always, they know *how* to create the images as they appear in their mind; but the most critical question they must ask is: “*why* am I going to do that?” What they should be thinking about also is *when* this appears in the culture relative to current events; *where* will viewers most likely experience the work; and then question: “*who* is this audience?” An awareness and practice of these variables basically defines the importance of the symbiosis of active creation and active viewing of visual art.

²⁵ Hirsch, Robert. Exploring Color Photography, 3rd Edition (McGraw-Hill, 1997), p. 27.

Contemporary media devices are very diversified and mobile today, making immeasurable reproduction of images possible, and thereby make an intended viewing audience and viewing context much more difficult to target. There is confusion in the viewing audience's perception of how images function in the culture because of unpredictable and unexplained changes of context in which images appear. Therefore, any visual artist needs to be mindful of their target audience if their work is to have a chance of being accepted as intended.

The practice of visual literacy is perpetuated in formal or informal contact between the artist and viewer—*not* by being distant and esoteric. By means of an artist statement, for example, the creator can concisely articulate the inspiration and intent of the work. Providing the viewer with clues, which can be something as simple as a title, is a very effective way to initiate engagement with the work. In these ways artists become ambassadors for visual literacy, bring genuine intent to the populace, and invite them in for a closer, interactive look.

The instructional models suggested in this essay are but a fragment of what is possible to teach visual literacy skills. The three in this essay have specific intent to address the issues of gestalt perception and visual unity, the interaction of visual elements while creating digital photomontage, and utilizing foundation terminology and skills when viewing visual art. There are several facets of the issue that still need addressing, such as the psychology of color, the psychological implications and use of found objects in compositions, and including even revisiting allegorical techniques that are rudimentary to the visual arts. The limited amount of what is revealed here is student tested and refined, and functions very effectively. Students learn of the potency that visual artists possess to change minds by implementing the semiotics found in their culture, and that greater levels of understanding can be obtained when they themselves become an active viewer. My graduate work may indeed be complete, but the frontier and mission of visual literacy continues onward from here.

Bibliography

BOOKS

- Wells, Liz. Photography: A Critical Introduction. Rutledge, 1997
- Edwards, Betty. Drawing on the Right Side of the Brain. Putnam Book, 1989
- Mitchell, W. J. Thomas. Iconology: image, text, ideology. University of Chicago Press, 1986
- . The Reconfigured Eye: Visual Truth in the Post-Photographic Era. MIT Press, 1992.
- Lyotard, Jean-François. The Postmodern Explained University of Minnesota Press, 1993
Translation edited by Julian Pefanis and Morgan Thomas
Originally published as *Le Postmoderne expliqué aux enfants*, Editions Galilé, Paris 1988
- Mora, Gilles. PhotoSpeak: a guide to the ideas, movements, and techniques of photography, 1839 to the present. Abbeville Press, 1998
- Caponigro, John Paul. Adobe Photoshop Master Class: The Essential Guide to Revisioning Photography. 2nd edition, Adobe Press, 2003
- . Adobe Photoshop Master Class. 1st edition, Adobe Press, 2000
- Harrison, Charles, and Wood, Paul. Art in Theory 1900-1990: An Anthology of Changing Ideas. Blackwell Publishers, 1992
- Barrett, Terry. Criticizing Photographs: An Introduction to Understanding Images. 3rd Edition, McGraw-Hill, 2000
- Lauer, David A. Design Basics. 3rd edition; Holt, Rinehart, and Winston, 1990
- Hirsch, Robert. Exploring Color Photography, 3rd Edition, McGraw-Hill, 1997

ARTICLES

- Walker, David. Photo District News May 2000.
- Hass, Ernst. Artist Statement. *The Creation* portfolio, 1982

REFERENCES

- Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. University of Chicago Press, 5th edition, 1987
- Williams, Robin. The Mac is not a typewriter. 2nd edition, Peachpit Press, 2003
- Egan, Timothy. Lasso the Wind: Away to the New West. Alfred A. Knopf, New York, 1998

WEBSITES

Story, Derrick. Story Photography: Photoshop History - From Darkroom to Desktop: How Photoshop Came to Light. February 18, 2000.

<http://www.storyphoto.com/multimedia/multimedia_photoshop.html>

Ho, Dorothy. pdnonline – Photo District News.

Kodak to Discontinue Production of Kodachrome 25 Film, July 11, 2001.

<<http://www.pdnonline.com/photodistrictnews/index.jsp>>

The Metropolitan Museum of Art, New York - Met Special Topics Page | Francisco de Goya (1746-1828) and the Spanish Enlightenment

<http://www.metmuseum.org/toah/hd/goya/hd_goya.htm>

JPG image: The Third of May 1808, 1814

Original Art: Museo Nacional del Prado, Madrid

Francisco de Goya y Lucientes (Spanish, 1746-1828)

Oil on canvas; 8ft. 4-3/8 in. x 11 ft. 3-7/8 in. (255 x 345 cm)

The Minneapolis Institute of Arts, Minneapolis - ArtsConnectEd

<http://www.artsconnected.org/search/art_e.cfm?DBowner=WAC&id=422>

JPG image: 16 Jackies, 1964

Original Art: Walker Art Center, Minneapolis

Andy Warhol (American, 1942-1987)

Acrylic, enamel on canvas; unframed 80-3/8 in. x 64-3/8 in

Bicket, Douglas. k.i.s.s. of the Panopticon - Cultural Theory and New Media Literacy.

School of Communications at the University of Washington.

<<http://www.geneseo.edu/%7ebicket/panop/home.htm>>

Uelsmann, Jerry N. Jerry N. Uelsmann – <<http://www.uelsmann.net>>

JPG image: Untitled, 1982

Caponigro, John Paul. John Paul Caponigro - <<http://johnpaulcaponigro.com>>

JPG image: Triple Goddess, ©1996

Turner, Pete. Pete Turner Photography - <<http://www.peteturner.com>>

LeVant, Howard. Survey of the Changing World of Professional Photography - Professor at the Rochester Institute of Technology

<<http://www.rit.edu/~survey03/overview.html>>

Notes

About the Technology

This essay was word processed on an Apple Macintosh PowerBook G4 computer, with Microsoft® Word version X. Printed on a Tektronix Phaser 850DP, color printer.

About the Type

This essay primarily utilized the font known as Adobe Garamond. Designed for the Adobe Corporation by Robert Slimbach, the fonts are based on types first cut by Claude Garamond (c.1480—1561).

About the Paper

Printed on HammerMill Laser Print 24lb., radiant-white, acid-free paper

About the Author

Don Werthmann is a full-time Digital Photography Instructor at Washtenaw Community College. He lives in Ann Arbor with his wife, Leigh Baguley, and their two children, Emmett and Sophia.

<<http://courses.wccnet.org/~donw>>