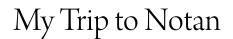
# Georgia State University ScholarWorks @ Georgia State University

Art and Design Theses

Ernest G. Welch School of Art and Design

Spring 4-8-2012



James M. Chapman

Follow this and additional works at: https://scholarworks.gsu.edu/art\_design\_theses

## **Recommended** Citation

Chapman, James M., "My Trip to Notan." Thesis, Georgia State University, 2012. https://scholarworks.gsu.edu/art\_design\_theses/101

This Thesis is brought to you for free and open access by the Ernest G. Welch School of Art and Design at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Art and Design Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

## MY TRIP TO NOTAN

by

## JAMES MICHAEL CHAPMAN

Under the Direction of Stan Anderson

## ABSTRACT

My Trip to Notan charts my own journey from the rawness and acceptance of multiple life losses into understanding, and finally, renewal. The key result of this project is a prototype book, a 48-page digital Print-On-Demand (POD) publication, which also includes a DVD that inserts into book's back and features live demonstrations, interviews and other segments related to the book. Additionally, the body of work from which the book was gleaned was presented at the thesis exhibition. Ultimately, My Trip to Notan is a sketch of my understanding of the framework that threads through design, physics and philosophy, inspired by the simplicity of the ancient art of Notan, and upon my own fragmentary observations gathered from the journey. My hope was to reveal some sense of the pulse that drives the inquiry, rather than the suggestion of any sort of destination.

INDEX WORDS: Notan design, Symbol, Gestalt image, figure/ground, Positive and negative space, blank, White space, Otherness

# MY TRIP TO NOTAN

by

# JAMES MICHAEL CHAPMAN

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Fine Arts

in the College of Arts and Sciences

Georgia State University

2012

Copyright by James Michael Chapman 2012

# MY TRIP TO NOTAN

by

# JAMES MICHAEL CHAPMAN

Committee Chair: Stan Anderson

Committee: Elizabeth Throop

Paige Taylor

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

May 2012

For my son, Owen

## Acknowledgements

Eternal thanks to my wife, Carmen, whose support and encouragement in my MFA quest have been both heroic and steadfast, even when my own was not. Thanks to my thesis committee, chair Stan Anderson, Elizabeth Throop and Paige Taylor, whose insight, patience and guidance have been considerable. Thanks to graduate director Joe Peragine and all the excellent professors, instructors and fellow students for their friendship and inspiration. Thanks to my family for their support, especially to Rick for the strong coffee before my long bus commutes. Salutes to Ken Williams, Gene Coker and Drew White for moral support. Thanks to Ben and Kari Niles and Rick Johnson, amigos all. Thanks to Keith Albertson, editor dude and friend. And in honor of my late, great friend, Jeanette Niles, who never feared the tides.

# **Table of Contents**

Acknowledgements	
List of Figures	
Introductionl	
Travelogue 1: Early Rumblings	
Travelogue 2: The First Shape I Saw	
Travelogue 3: The Case of the "Afro Panda'	
Travelogue 4: The Bounded and the Unbounded	
Travelogue 5: The Difference in Looking & Seeing	
Travelogue 6: Saying and Not Saying	
Travelogue 7: Science and the Science-Minded	
Travelogue 8: The Image, Once Loose in the Mind	
Travleogue 9: Arrangement & Rearrangement	
Travelogue 10: Light, Mother of Shape	
<b>Conclusion</b>	
Bibliography	

# List of Figures

Figure 1. The Resulting Project: Book, CD and original work2	
Figure 2. Movie stills from an animation. 2009-2010	
Figure 3. Drawing monuments, which the mobile application renders as sound4	ŀ
Figure 4. A 'singing' drawing from the session (shown in Figure 2) using an iPiod4	ŀ
Figure 5. Insect 5, The study of a insect under magnification. 8" x 10", colored pencil on paper5	)
Figure 6. Drill, 36" x 70", oil pastel on plastic, 20116	
Figure 7. Rock Piling chart, randomly-tossed paper triangles into patterns9	)
Figure 8. Woodruff Park, using the basis of notan design couple with watermedia 201111	1
Figure 9 Negative and positive triangles compared	2
Figure 10 The World Wildlife Fund logo1	3
Figure 11. The "Afro Panda" made using a numeral 3 and an 8. Vector illustration, 2010	4
Figure 12. Greenish Self Portrait, a watermedia painting, 20 X x 27, 201110	6
Figure 13. Anachronesia I, 20" x 27," watermedia, 2010	8
Figure 14. Circuit, 12" x 12," watermedia, 2011	0
Figure 15. Anachronesia II, 15" x 22," watermedia, 201124	ł
Figure 16. Rabbit or duck?	7
Figure 17. Light striking a skull	)
Figure 18. Value applications	)
Figure 19. But what color red is it?	)
Figure 20. When notan is a gradient	

## Introduction

"on a plateau where there used to be trees (you could feel the memory of their shapes all about)" Ray Bradbury, from *Fahrenheit 451*<sup>1</sup>

Last year I witnessed the birth of my son and the death of my mother; both events were marked by dogged struggle, as if passage into or out of this life meant breaking through a heavy veil, and only then by sweat and troubled flesh. I marveled at my son's emergence and was stunned at the absence of my mother. Just prior, I had lost my first wife in a long, cruel war with cancer. I also had lost my father, many relatives and close friends and even my favorite little collie – all in a terribly short time. The blows shattered my little world, and I milled about like a windblown scarecrow trying to piece together some sense of it. Still, I believed that in time, my life would resume much the same as before, except with a sense of subtraction for all that was lost.

I was mistaken.

Absence has its own quality, but it is not one of subtraction. It is one of peculiar presence. It is akin to hearing a distant music whose source you can never reach, no matter which direction you turn. It tinges all it touches with its silent rippling waveform.

Many have written of this enigmatic space with eloquence. I am moved by a passage, for instance, by author Loren Eiseley: "Every time we walk along a beach some ancient urge disturbs us so that we find ourselves shedding shoes and garments, or scavenging among seaweed and whitened timbers like the homesick refugees of a long war."<sup>2</sup> Albert Einstein wrote of "a knowledge of the existence of

<sup>&</sup>lt;sup>1</sup> Ray Bradbury, Fahrenheit 451, (New York, NY: Ballantine Publishing Group, 1953), 44

<sup>&</sup>lt;sup>2</sup> Loren Eiseley, The Unexpected Universe, (San Diego, CA: Harcourt Brace & Company: 1969)

something we cannot penetrate..."<sup>3</sup> And I marvel at the words of poet Kakuzo Okakura: "Real beauty can be experienced only by one who mentally completes the incomplete."<sup>4</sup>

These musings speak of things hidden rather than things non-existent – things perhaps obvious to the babe, the warrior and the mystic, but invisible to others. I recall how my son, as an infant, frequently chortled at the ceiling as if watching cherubs play dog pile; I have seen the dying suddenly perk up to smile and greet long-deceased people from their past.

What is this space? How does one even discuss it?

My hope in coming to graduate school was to slow down and observe the wave rolling in its silence, enough so to give it a name, a face, anything. I felt by doing so, l, the windblown scarecrow, might be able to then find some semblance of peace over it at last. And though history has not boded well for those who follow music into a forest. I did so, out of the need to know.

In time, I wanted to express my observations visually.

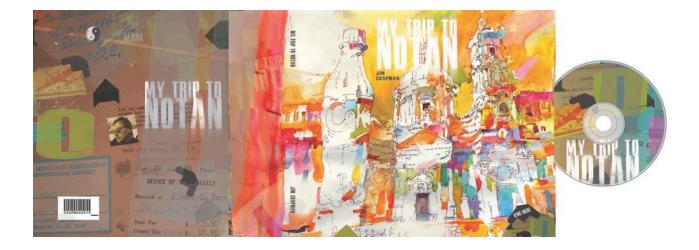


Figure 1. The resulting project: a hardcover book, 8" x 10", a DVD movie short, supported by a new body of work. 2009-2012

<sup>&</sup>lt;sup>3</sup> Albert Einstein, *Ideas and Opinions*: "The World as I See It." (New York. NY: Bonanza Books, 1988; originally published by Crown Publishers, 1954), 10

<sup>&</sup>lt;sup>4</sup> Kakuz Okakura, The Book of Tea, (Mineola, NY, Dover Books, 1964: originally published in 1906)



Figure 2. Movie stills from Rhonda Forever software, I created several animations that allow a look through drawn 3-D space. 2009-2010.

I first turned to the digital domain, because of its sheer range of possibilities. I became an early beta tester for the then-new Rhonda Forever software, an experimental 3-D drawing program that gives an uncanny look from inside, or through, a 3-D contour drawing.<sup>5</sup> I later experimented with Sonic Wire Sculpture, the companion mobile application of Rhonda Forever, which translates 3-D lines against a musical scale.<sup>6</sup> The resulting sounds can be uncanny, and I felt that they might serve as a voice for this wave of presence and absence that I sensed. Thinking that old cemetery stones might be interesting subject matter by which to extrude sound through contour drawing, I made several on-location drawings of aging monuments that yield remarkably erie sounds. I spent a fair amount of time in 2010 doing these cemetery drawings, thinking I was giving silence a voice, by proxy. Some sounded like a child's melancholy humming or men working on a chain gang, and many reminded me of the whale songs often heard on TV animal shows.

<sup>&</sup>lt;sup>5</sup> <u>www.rhondaforever.com</u>

<sup>6</sup> http://sws.cc/



Figure 3. Using an iPod, I draw a basic shape of the stone woman, which the software then renders as sound.



Figure 4. The 'singing drawing,' from the session shown in Figure 3 using an iPod and Sonic Wire Sculpture. 2010

Later, however, I discovered two holes in my idea: First, a drawing of *anything* done in the Sonic application yields captivating sounds because it is an amazing technology in action. Second, I learned (after trying to describe my idea to people who do know something about sound) that in the world of audio, saying something sounds "like a whale singing" is the equivalent of saying something "tastes like chicken," which is the equivalent of saying it tastes much like nothing in particular in itself.

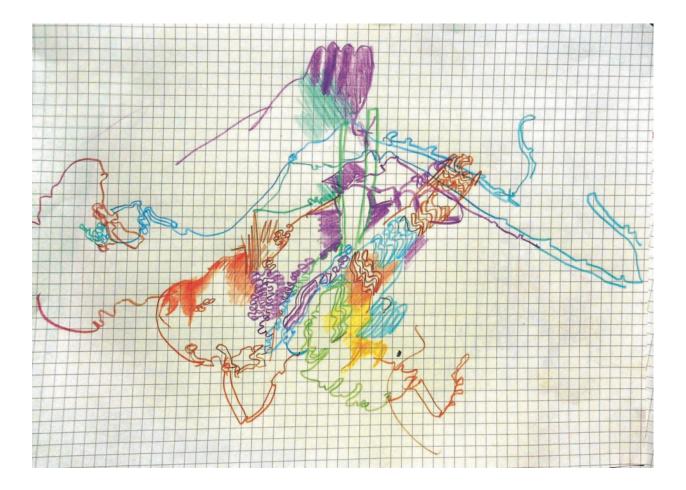


Figure 5. Insect 5, The study of an insect under magnification. 8" x 10", colored pencil on paper, 2011

I then returned to traditional drawing on paper, focusing on natural artifacts and evidence that suggest absence, such as hollow insect exoskeletons, fossils or footprints.

The idea was that a fossil, as example, is not the life itself, but it has *touched* the life and therefore serves as a firsthand witness, also a 'by proxy idea.' Similarly, I was inspired by the sarcophagus lids and masks of antiquity meant to represent the deceased in the presence of the divine. Specifically, the so-called 'mask of Agamemnon,' a death mask from 16th century B.C. Mycenae, inspired a series of large oil pastel drawings. I was also intrigued by the notion that the artisan who had fashioned the mask likely didn't know the high-ranking person for whom the mask was made, which added another level of separation into the mix.

To explore this notion, I 'stamped' sentimental personal items by wrapping them in tin foil, and then unfolding a mask, of which I then did drawings. For example, I stamped a drill that my father and I had often used while "carpentering" together, and then I made a drawing of the tin foil cast.



Figure 6. Drill, 36" x 70", oil pastel on plastic, 2011

The series seemed to hint at the strata of separation, a hall of mirrors represented as an impression of an impression of an impression. Yet, something was still missing, I felt. Was any of it real, for example, or was I simply still the scarecrow milling about, fixated on what C.S. Lewis described as "the Numinous,"<sup>7</sup> that

<sup>&</sup>lt;sup>7</sup> Lewis, C.S. The Problem of Pain, 1940, Harper Collins Books, New York, pp 5-13

age-old sense of awe or dread? I felt that there was something more; I was just missing it because no matter how clever all of my suppositions had been, ultimately the results depicted no real sense of presence or absence, nor the wave between them.

Then it hit me: this space *cannot be literally depicted*. If a viewer experiences it, they access it on their own. All I can might is trigger their journey. And therein lay my zen moment: The partial *evokes* the whole, just as the arc evokes the circle of which it is part. Seen in this light, everything material is a fragment that represents something beyond its own boundaries. For example, if you pass me on the street today, you'd see only one breath of my life, which is nothing compared to all of the breathing I have done over a lifetime. Understanding this arc/circle relationship became key, as this was the right metaphor for me, expressed with astonishing clarity and brevity.

The role of a symbol is obviously not new; it is that spark across the gap that fires all symbols. The significance is that in this leap from one thing to another, the mind has traveled. Additionally, the simpler the symbol, the greater is its capacity for idea conveyance. And since I longed to express a vastness beyond my ability name it, it dawned on me that I needed a symbol whose back door opened into the ether, where boundaries cease to have meaning.

Enter notan design.

Notan, a Japanese word that means the interplay of dark and light, is at least 2,000 years old and underpins much of gestalt imagery theory as well as the figure/ground exercises used in today's two-dimensional visual art classes.

The beauty of notan, as metaphor for space, is this: If two opposites, black and white (or positive and negative shapes) are placed in dynamic opposition, then a mysterious 'third space' is evoked. This 'third space' isn't there in any factual sense, yet is there in a way that cannot be denied. Therefore, it is the combination of presence and absence, bound by a tension much like my mysterious wave that vacillates between two far shores. One of the oldest and best-known notan symbols is the Yin and Yang mark, a circular balance of unity wherein two koi fish consume each other into eternity, yet neither lose because they also gain simultaneously. All of this is told by the by the interplay between two simple fields, light and dark.

I grew curious about the origins of notan and found as is very old, it is also very common – or, it used to be, at least. And why was it not so common now? I believe technology has increased the noise level to an ear-splitting norm in less than one century and we have been programmed to doubt and even mistrust any sort of silence, blankness, visual or audible or otherwise. We feel there should be a commercial between every segment, a piece of cotton in the top of every bottle. Author Barbara Brown Taylor has that in our automated era of machinery, we have reconditioned our minds to sense that silence usually means that something is broken.<sup>8</sup>

Curiously, indigenous cultures use notan for textural and spacial design practically from childhood, as if by instinct. For example, notan patterns are found in the beautiful mud fences in West Africa, in the regional craftwork of Appalachia and in remote cultures worldwide. Ironically, students in developed nations often struggle to acquire notan ideals, particularly the value of negative space as equal partner of positive space, which seems to signal a disconnect of rhythms, sounds and patterns rooted in primal ground.<sup>9</sup>

The compelling question, then, is how does one begin to 'see' notan? Here, I will invoke an old painter's advise, who once advised me to 'squint your eyes 'til they're almost closed and take a look." The idea is that, when squinting, you only see in a couple of values, and very little color. Suddenly, you are seeing shape relationships. How these shapes are arranged lies at the heart of all design. Curiously, nature seems to design everything very, very well, without having had the benefit of a higher education.

How is this possible?

<sup>&</sup>lt;sup>8</sup> Barbara Brown Taylor, When God is Silent, (Lyman Beecher Lectures on Preaching), (Lanham, MD: Cowley Publications 1998)

<sup>&</sup>lt;sup>9</sup> Dorr Bothwell and Marlys Mayfield, *Notan: The Dark-Light Principle of Design*, (Mineola, NY: Dover Books, 1991; originally by Reinhold Book Corporation, New York, NY. 1968) 75-77

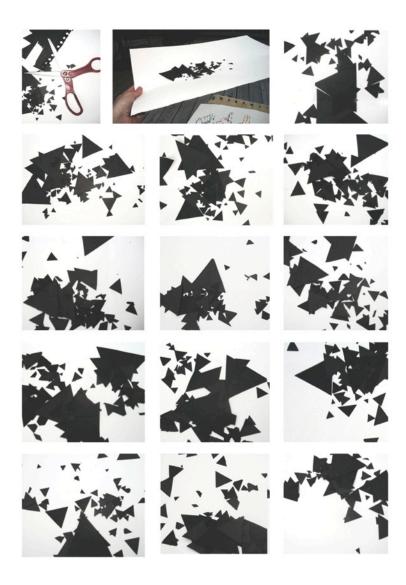


Figure 7. The rock piling effect. Randomly-tossed paper triangles rearrange themselves into dynamic patterns.

In Figure 7, you can observe how nature acts in such seemingly haphazard 'rock pile' logic that geophysicists study in pile design. In this 'rock pile' test, I cut varying-sized black triangles and placed them on white board. Then, I vigorously shook the board and let the triangles resettle themselves as they would. They always came up with a dynamic 'rock pile' sense of pattern that seems completely natural. The kicker here is that when I tried to create such dynamic compositions by hand, my efforts appeared painfully contrived. Looking back, I was trying to analytically place the triangles according to logic, which seemingly would create a well-designed space. Yet, the irony is that by allowing a certain randomness into the process, this dynamic mechanism is employed naturally.

Looking for a way to take this idea further, it dawned on me that notan shares a natural bond with watermedia painting, as both use positive and negative fields as expression of space. So it seemed that expressing notan *through* watermedia painting is a match made, if not in Heaven, at least in a motel with clean sheets. Both practices are tools of antiquity, suddenly relevant to me today – like finding a Bronze Age spear tip in the garden and discovering it is the exact fit to tighten a loose screw on the microwave. Like notan, watermedia also prompts one to think backwards, as the white, blank part of the paper must be envisioned first, and then painted around. "Save the white of your paper" is advice heard in most any watermedia classes. This 'saving the white' is a difficult way to work at first. It is perhaps like writing a symphony based on the absent space between notes, rather than on the notes themselves. The key is that absence is considered first, or at least equally – a true diversion from western analytical ideology.

That I eventually stumbled upon notan was inevitable. It felt like a homecoming when I read these wise words from the Ta Tao Ching, from around 500 BC:

We turn clay to make a vessel;

but it is on the space where there is nothing that

the utility of the vessel depends.<sup>10</sup>

In time, I have come to see the resulting white space left within an image as a special little house for the mystical, soulful absence and loss that I long to understand. I cannot say much about them, so I leave a space for them. Here, in this space, they dwell unhindered. This blank space often changes its

<sup>&</sup>lt;sup>10</sup> Lao Tse, Ta Tao Ching, as translated by Authur Waley in The Way and Its Power, (Boston: Houghton Mifflin Co.) 193

outer shape, but never its inner meaning. Like the religious icon, it evokes a space beyond itself, but itself is not that space, nor does it claim to be.



Figure 8. Woodruff Park. Using the basis of notan design coupled with watermedia painting on paper, 2011

# **Travelogue 1: Early Rumblings**

I did not come to such notions early in life.

Growing up in rural North Georgia Hill, I spent my teenage years enjoying scavenged liquor and Pall Malls, laughing about the lewdly-named products in the gas station men's restroom wall machine.

Still, in some deep recess of my mind, I sensed the far rumblings. It was a subtle haunting, one best not mentioned in a crowd. But occasionally, it happened. I'd make an off the wall remark, and I'd get the look that expressed a fleeting hope that one day they'd develop a drug to help me hold a basic job like wringing mops or helping wean hogs. As a young artist, I adapted. I copied what was popular, which in my realm meant Big Daddy" Ed Roth's 'Rat Finks' and muscle cars, or the colorful tattoos on guys back from "Nam." Learning this type of drawing earned marginal clout. "That little bastard can draw a Chevy!" someone would shout as he slapped me across my head, and I would gloat. Still, I was the 'out there' kid. When camping with my friends, I'd sit and watch the fire, pretending that the glowing coals cascading down were lava waterfalls on Saturn, and that I was an old fire god lighting his cigar on them – until someone called my name and reeled me back to earth amid raised eyebrows and smirks.

Later, I learned to draw more realistically, and my work came to exude the serious, forlorn gaze of a creature peering out the window of a taxidermy school during winter break. I later learned that this detailed style of working was not my nature. How could it be? I am a reckless soul; I have knots on my bones that reflect poor choices of youth. I began to turn to artists like Jim Dine and Larry Rivers, whose work bridled mastery and chaos on the steed Rudolph Arnheim termed "vagueness with a desirable precision."<sup>11</sup>

#### **Travelogue 2: The First Shape I Saw**



Figure 9. Negative (left) and positive triangles compared.

Negative: White, light, absence, what is not, what is left out, other, unbounded, evocative, silence Positive: Black, dark, presence, what is, what is included, here, bounded, descriptive, sound (Note: The above description assumes that the ground, whether paper, canvas or computer screen, begins as a blank white.)

<sup>&</sup>lt;sup>11</sup> Rudolf Arnheim, "Sketching and the Psychology of Design," *Design Issues*, The MIT Press, Vol. 9, No. 2 (Autumn, 1993), pp. 15-19

I remember the I first time I saw in notan. I'd stepped outside my apartment early one morning and spotted a white shape in the yard. What is that? I asked, studying its silhouette. That it was a plastic white chair blown over from my neighbor's yard was immaterial; I saw it as a shape first, and then as a thing.

This thinking-in-shapes, as opposed to thinking-as-things, is tremendously useful in painting, as well as graphic design, especially in areas such as logo development. Many of today's top logos use this basis of notan, such as those of Federal Express, The World Wildlife Fund (show below, figure 10) and the Girl Scouts.



Figure 10. The World Wildlife Fund logo

### Travelogue 3: The Case of the "Afro Panda'

Early in graduate school, I became curious of how people actually read symbols. As a test, I created a notan symbol using numbers, simply a white '3' on top of a black '8.' The resulting image looked to me much like a cat. I printed the symbol onto a large piece of paper and wandered downtown Atlanta. I held the paper up and randomly asked people: "What do you see here?"



Figure 11. "Afro Panda" made using a numeral 3 and an 8. Vector illustration, 2010

Of the 30 or so people I asked, all but two saw some type of animal, most often a panda, cat or dog, squirrel or teddy bear. One saw a "panda with an afro." The majority experienced some version of 'animalness.' And, paradoxically, no animal was depicted, but practically everyone saw it. Also, viewers experienced different animals in the symbol tinted by his or her varied life experiences and biases. Therefore, this suggests that the event is a moving equation, varied by the moment, the viewer, the symbol and its context. As artist/archaeologist Robert Wegner wrote: "When viewing a configuration, we never experience just the object or just the background context, but the interrelationship between the two."<sup>12</sup>

### **Travelogue 4: The Bounded and the Unbounded**

Notan may best be grasped by understanding its parts – although finally the image must be taken as a whole. There is precedent. Who hasn't shuddered at their own dreams and wondered from where such dreams emerge? The subconscious? But isn't the dream from the same mind that recoils from it? This sort of dualistic diagraming helps envision the whole and without which, it might prove difficult to envision. As Wegner noted: "There is a paradox, if not futility, in trying to map and capture in a frame an experience that is unbounded."<sup>13</sup> Futility, yes? Impossibility, no. Many of the world's greatest treasures began as unbounded: Pachelbel's *Canon*, Dylan Thomas' *The Force That Through the Green Fuse Drives the Flower,* Madam Currie's insight on radioactivity, Mother Theresa's calling, and the list goes on. I think it is the instant that Dylan Thomas dipped his quill in the ink and suddenly scrawled these sublime words:

<sup>&</sup>lt;sup>12</sup> Robert Wenger, "Visual Art, Archaeology and Gestalt," Leonardo, The MIT Press, Vol. 30, No. 1 (1997), pp. 35-46

<sup>&</sup>lt;sup>13</sup> Ibid., 35-46

And I am dumb to tell a weather's wind

How time has ticked a heaven round the stars<sup>14</sup>

Wenger compares the challenge of the artist in the studio and the archeologist in the field. The artist seeks a symbol greater than an image; the archeologist seeks a story larger than a grid of soil. Both quarries are 'out there.' Since these quarries cannot be caged, they can only be evoked or hinted at. If there is failure to evoke 'other,' the artist has no symbol, only an image. The archeologist has no story, only dirt. This suggests that notan is allographic by nature, that is, its art lies in the code within its visual description rather than being the description itself. Similarly, sheet music provides instructions for a song, but the song does not reside on the paper. Music is always elsewhere, always in otherness.

# **Travelogue 5: The Difference in Looking & Seeing**

Looking is a spectator thing; seeing is participatory. It seems that notan can easily be looked upon and understood by most everyone, but it requires seeing to assemble a notan design. And the difference between looking and seeing? Seeing transforms the viewer during the process because there is more of an investment in the action. For instance, I only look at the car passing by me in traffic, but I slow down in order to see my son's smile. In one action I am simply a bystander, and in the other I am engaged and thereby transformed in reaction. Joseph Campbell wrote of this depth of seeing: "The objective world remains as it was, but, because of a shift of emphasis within the subject, is beheld as though transformed."<sup>15</sup>

I believe that much of seeing has to do with the clearing away with distractions. For example, Jiddu Krishnamurti taught that the word, image or symbol we hold for a thing often gets in our way of

<sup>&</sup>lt;sup>14</sup> Collected Poems of Dylan Thomas, 1934-1952, (New York, NY: New Directions Publishing Corporation, 1937)

<sup>&</sup>lt;sup>15</sup> Joseph Campbell, The Hero with a Thousand Faces, (New York, NY: Pantheon Books, 1949) 28

actually seeing the real thing. "The word tree is not the actual tree..." he wrote. "We are slaves to words, slaves to ideas, images and symbols. To come into touch with something directly the word must not interfere. So one has to learn the art of seeing and listening ..."<sup>16</sup>



Figure 12. Greenish Self Portrait, watermedia painting, 20 X x 27, 2011

Georg Wilhelm Friedrich Hegel noted that in seeing, the subject becomes less of itself, and more of something else. "The crucial point is that on the return to subject we do not possess the same subject. It has been affected by the process of the movement, because now it is a subject that stands as something determined by its predicate."<sup>17</sup> Bertrand Russell wrote that when an observer sees an object, such as a stone, he is not actually seeing the object, but, rather, he begins to see the effects of the object upon himself.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> Jiddu Krishnamurti, Meeting Life, (New York, NY: Harper Collins Publishers, 1991), 127

<sup>&</sup>lt;sup>17</sup> Hegel's Absolute: An introduction to Reading the Phenomenology of Spirit, Hegel's Preface: By Donald Phillip Verene (Albany, NY,: State University of New York Press, 2007) par. 62

<sup>&</sup>lt;sup>18</sup> Bertrand Russell, An Inquiry into Meaning and Truth, (New York, NY: W. W. Norton & Company, 1940) .pp. 14-15

And the great pioneer of seeing, Jacques Derrida, noted that the viewer first sees the thing, then sees that he is seeing the thing. At that point, then, "seeing the seeing and not the visible, it sees nothing. This seeing eye sees itself blind."<sup>19</sup> Thus, the observer becomes the observed, and beyond this motion lies a stillness and piercing awareness. "It is as if a lidless eye had opened at the tip of the fingers....it is a miner's lamp at the point of writing, a curious and vigilant substitute, the prosthesis of a seer who is himself invisible.<sup>20</sup>

This still point is the summit of the mountain, as close as one gets to touching Heaven, Nirvana or Satori while still rooted in space and time. This is also the place where the self releases itself and is transcended. Now, I will agree that talk of transcendence is often associated with new age idealism or around-the-bong discussion – except that unfortunately life actually calls upon us to *do it* on occasion, or die. And history shows a remarkable ability in some to survive hideous circumstances by such a radical shift in the way they see things, by actually *moving* their point of view. For example, concentration camp prisoners that were able to make an inner disconnect from their circumstances were often the ones who survived. "The two basic human capacities, self-transcendence and self-distancing, were verified and validated in the concentration camps," wrote Viktor Frankl, Auschwitz survivor, psychotherapist and author.<sup>21</sup>

It is through this through this tiny pinhole in the sky that a strange glory pours, resulting in a different kind of seeing. "Spiritual sight, X-raylike, penetrates into all matter; the divine eye is center everywhere, circumference nowhere."<sup>22</sup>

 <sup>&</sup>lt;sup>19</sup> Jacques Derrida, Memoirs of the Blind: The Self Portrait and Other Ruins, (Chicago, IL: The University of Chicago Press, 1993) 57
<sup>20</sup> Ibid., 3

<sup>&</sup>lt;sup>21</sup> Frankl, Viktor, Recollections; An Autobiography, 2000, (New York, NY: Perseus Publishing Books, 2000), 97

<sup>&</sup>lt;sup>22</sup> Yogananda, Paramahansa, Autobiography of a Yogi, (Los Angeles, CA: Self-Realization Fellowship, 1946) 243



Figure 13. Anachronesia I, 20" x 27," watermedia, 2010

This deep seeing also reveals something else: Human consciousness exists just one flicker behind reality, so we are forever processing life *after* it occurs. Thus, we are *in* the past, which is already in ruin. If I wish to visit a ruin I don't have far to travel, I just look in the mirror: I am in the past. We may struggle to grasp the present, but cannot, except through this stillness, which lies outside of time, and thus, outside of ruin. Yet, paradoxically, this stillness is here, entwined with the visible, thought itself invisible. Or as Derrida wrote, "to be the other of the visible, absolute invisibility must neither take place elsewhere nor constitute another visible..."<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> Derrida, Memoirs, 52

In other words, it is all here and we cannot see it. Through the stillness, however, we may sense it in a sideways fashion, which brings to mind the words of Bernard Tschumi: "Taken to its extreme, the pleasure of space leans towards the poetics of the unconscious, to the edge of madness."<sup>24</sup> Perhaps it is this edge that most quickens the soul, because it forces us outside the bounds of time and space, just long enough for a brief glimpse back into it.

Or, as the poet William Wordsworth so succinctly wrote:

And now I see with eye serene

The very pulse of the machine 25

# **Travelogue 6: Saying and Not Saying**

Notan is an apt symbol for everywhere where limitations exist – and I do not know of any exceptions in life where they do not. This limitation is noted in many of the world's religions. In the *New Testament*, for example, Paul (Saul of Tarsus) wrote that we see only in part, as if "through a glass, darkly,"<sup>26</sup> but that one day the whole of it will be revealed. The *Bhagavad-Gita* sketches the difficult journey between from part to whole: "The difficulty of those whose minds are set on the Unmanifested is greater; for the path of the Unmanifested is hard for the embodied to reach."<sup>27</sup> And *The Tibetan Book of the Dead* describes the "dangerous straits of the between."<sup>28</sup>

<sup>&</sup>lt;sup>24</sup> Bernard Tschumi, "The Pleasure of Architecture," Architectural Digest, vol. 3 (New York, NY, Conde Nast Publications, 1977) 215-18

<sup>&</sup>lt;sup>25</sup> William Wordsworth, Selected Poems, (New York, NY: Outlet Book Company, Random House, 1993), 168, 1844

<sup>&</sup>lt;sup>26</sup> The New Testament (King James Version) I Corinthians 13 Verse 12

<sup>&</sup>lt;sup>27</sup> The Bhagavad-Gita, from the Twelfth Discourse

<sup>&</sup>lt;sup>28</sup> The Tibetan Book of the Dead



Figure 14. Circuit 12" x 12," watermedia, 2011

In Buddhism, the optimal state lies just beyond the pair of opposites, past the anguish of 'the between,' wherein lies unity and infinity. Likewise, notan visually suggests a certain open-ended 'back door' to this unity beyond the partial. There, perhaps it is by *not* saying something that we leave enough room for a thing to proclaim itself, in its native tongue and voice. This silence or blankness is needed for things for which words cannot express. Schopenhauer wrote that such emptiness is "a blank spot for knowledge, the point where all knowledge necessarily ceases. Hence for thought this can be expressed only by negations..."<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Arthur Schopenhauer, *The World as Will and Representation*, Vol. II, Ch. XLVIII, (Mineola, NY: Dover Publications, Inc. 1966; first published in 1818) 611

Here, I recall the words of Eiseley: "To tell the story of a life one is bound to linger above gravestones where memory blurs and doors can be pushed ajar, but never opened."<sup>30</sup> Once slightly ajar, however, one may reach in to touch some of the closest fragments. And I suspect this is what one does by rearrangement of shape, as with notan. Eiseley also wrote: "Everything in the mind is in rat's country. It doesn't die. They are merely carried, these disparate memories, back and forth in the desert of a billion neurons, set down, picked up, and dropped again by mental pack rats."<sup>31</sup> These fragments alone are simply artifacts or nostalgic clutter. "By themselves, they are of secondary importance to the clarity and understanding that comes from overall inquiry."<sup>32</sup> For example, the imaginative artist Piero di Cosimo "used to look at the stains on the walls and find there battle scenes and landscape..."<sup>33</sup> and Campbell wrote that even small constellations, seen just right, have the potential to "suggest truth or openness beyond."<sup>34</sup>

# **Travelogue 7: Science and the Science-Minded**

There is a inherent cultural tendency in the West that thinks to seize such ideas as notan and demand they yield themselves to logic, void of mystic overtone. Surely, in the 21st century, one argues, we can do more than talk of 'absence.' And we can. We can talk as long as the latte holds out. But dissection won't supplant understanding, which brings us squarely to the problem faced by all translators, so well defined by author Karen Armstrong: "If you seize upon a poem and try to extort its meaning before you

<sup>&</sup>lt;sup>30</sup> Loren Eiseley, All The Strange Hours: The Excavation of a Life, "The Running Man," (New York, NY: Macmillan Publishing Company, New York, 1975) 23

<sup>&</sup>lt;sup>31</sup> Loren Eiseley, All The Strange Hours: The Excavation of a Life, "The Rat that Danced," (New York, NY: Macmillan Publishing Company, New York, 1975) 3

<sup>&</sup>lt;sup>32</sup> Wenger, "Visual Art, Archaeology and Gestalt," 37

<sup>&</sup>lt;sup>33</sup> Rodney Palmer and Thomas Frangenberg, eds., *The Rise of the Image: Essays on the History of the Illustrated Art Book* 'The Outer Man tends to be a guide to the Inner'; the woodcut portraits in Vasari's Lives as Parallel texts, (Ashgate Publishing Limited, 2003) 57; This article references Leonardo da Vinci, On Painting, M. Kemp and M. Walker, eds. New Haven and London, 1989). 222; and Piero di Cosimo: Ficton, Invention, and Fantasia London, (1993) 26-28 and 35-36.

<sup>&</sup>lt;sup>34</sup> Campbell, The Hero with a Thousand Faces, 259

are ready, it remains opaque. If you bring your own personal agenda to bear upon it, the poem will close upon itself like a clam, because you have denied its unique and separate identity, its inviolate holiness."<sup>35</sup>

Ironically, it was science that pried open this particular clam for me. In the early 1990s, I worked as an illustrator at a large science museum, where I had the good fortune to share a workspace with a parttime technician. He was a retired chemist/inventor and also a dabbler in vintage wines, time-travel theory, jazz piano, geodesics and iambic pentameter poetry, among other things.

In the five years we worked together, he and I chatted daily, on everything from the statistical probability of aliens to harnessing 'selective' gravity. I learned to think in a 'what if' way due to his influence. And learned that the clockwork view of science I'd picked up from school was but a husk of Newtonian physics. I came to understand that we are not co-inventors of the universe. We do not understand it. Worse, we can detect but a tendril of it. For example, according to recent physics, it is probable that we occupy a universe of more dimensions and activities than we can ever be aware of. In the case of superstring or M theory, matter ripples across multiple dimensions as easily as a cat slinks across a piano keyboard. In fact, modern physics implies that our five senses are but a bony finger we tap against the darkness thinking it to be four coordinated dimensions (height, width, depth, time), while likely, it is twenty or more.

This forces a serious re-evaluation of the actual space we occupy, and consequently, that which *occupies us.* Some scholars suggest that everything we perceive is merely illusory, just a way that our brain paints a picture inside itself to explain the swarming rush of data coming at it. Recently, for example, physicists and Dutch Nobel laureate Gerard't Hooft and Leonard Susskind suggested that "the universe itself might itself operate in a manner analogous to a hologram."<sup>36</sup> Another study states that because "our

<sup>&</sup>lt;sup>35</sup>Karen Armstrong, The Spiral Staircase: My Climb Out of Darkness, (New York, NY: Random House/Anchor Books, 2004)

<sup>&</sup>lt;sup>36</sup> Brian Greene, The Fabric of the Cosmos, (New York, NY: Random House, 2003) 482

brain is the only access to reality...all knowledge, then, is metaphorical; even our most basic sensory perceptions of the world around can be thought of as an explanatory story created by the brain." <sup>37</sup>

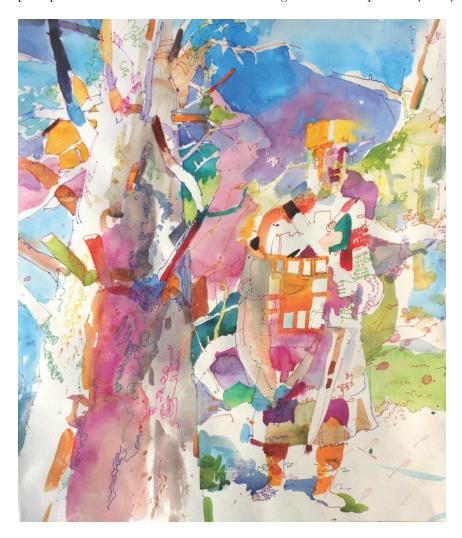


Figure 15. Anachronesia II, 15" x 22," watermedia, 2011

Whether accurate or fanciful, these ideas challenge us to even question our ways of measuring what is real. On that note, the use of measurement has, over the past few centuries, had staggering success in establishing standards that accelerate technological advances. Yet, a by-product of this success has been the tendency to adopt an "attitude of not only skepticism but outright rejection of what cannot be

<sup>&</sup>lt;sup>37</sup> Newberg, Andrew; D'Aquili, Eugene; and Rause, Vince. *Why God Won't Go Away: Brain Science and the Biology of Belief*, (New York NY: Ballantine Books, 2001)

measured," wrote M. Scott Peck, who also noted that by virtue of its success, "measurement has become a kind of scientific idol."<sup>38</sup>

In the 100 years, however, scientists seem to speak in less...scientific language. J. Robert Opennheimer, for example, the "father of the atomic bomb," wrote his explanation of the growing awareness of a paradoxical reality that doesn't fit well against any yardstick: "To what appear to be the simplest questions, we will tend to give no answer or an answer which will at first sight be reminiscent of a strange catechism...The Buddha has given such answers when interrogated as to the conditions of a man's self after his death..."<sup>39</sup>

The time I worked at the science museum with my friend freed me to understand that science is not a grid to splay things against, but rather, helps us question if the grid itself might also be an illusion – one that fronts a reality more bizarre than anything Hiernonymus Bosch could concoct on a wild Saturday night in old Haarlem.

It is likely that some people will always view notan and its ilk as but mystic stew. This seems highly ironic, especially when served on the same dinner table as the popular collegiate dishes of Utopianism, post-modernism, moral relativism and absolute indignation. Today, I recognize the ghost of Newtonian physics rattling its chains, and I suddenly feel nostalgic for its clockwork logic that rails against a reality that knows nothing of our clocks, nor our logic.

## **Travelogue 8: The Image, Once Loose in the Mind**

In order to better understand how to better utilize notan into my own image-making, it seems wise to look carefully at how the mind absorbs images. Surprisingly, studies show that simple line drawings of objects are recognized as quickly as detailed color photographs of the same objects.<sup>40</sup> Once in the

<sup>&</sup>lt;sup>38</sup> Peck, M. Scott, MD, The Road Less Traveled, (New York, NY: Simon & Schuster, 1979) 226

<sup>&</sup>lt;sup>39</sup> Oppenheimer, J. Robert, Science and the Common Understanding (New York, NY: Simon & Schuster 1953) 40

<sup>&</sup>lt;sup>40</sup> Jonathan Fish and Stephen Scrivener, "Amplifying the Mind's Eye: Sketching and Visual Cognition," *Leonardo*, Vol. 23, No. 1 (The MIT Press, 1990), 117-126

mind, though, what happens? Does the mind simply 'project' a flat image onto a blank cranial screen, like a miniature drive-in movie between two hilltops? Research shows that this mental imagery isn't flat at all, but rather, appears to "embody spatial layout and topography."<sup>41</sup> In other words, a mental 3-D space unfolds to accommodate the largeness of the image presented. For instance, the image of a gnat takes less topography than an image of an iceberg. "A topological shape stands for a whole range of possibilities without being tangibly committed to any one of them. Being undefined in its specifics, it admits deviations and distortions," wrote Arnheim.<sup>42</sup>

An additional curiosity to note is that the projection coming into the eye is not the only 'projection' illuminating or defining the scope of this topography. What comes into the mind by sight triggers another projection from visual inventory and memory. Together, these 'forward and rear' projectors create the full-on mental topography. This helps explain why no two people remember a single event the same way, even if both were present at the event (Especially given the variable of time).

Images have the elastic ability to pass unhindered through multiple dimensions and contexts and still remain intact. No matter the number of dimensions it crosses, an image instantly flexes to the context in which it needs be seen, bringing to mind the latest camper tents that virtually unfold themselves when touched, and then are packed down at a single touch.

This visual elasticity, as David Galloway notes, relies on the ability to see 'as' rather than seeing 'is.' Galloway offers the familiar duck/rabbit example to demonstrate:

<sup>&</sup>lt;sup>41</sup> Marlene Behrmann, "The Mind's Eye Mapped onto the Brain's Matter," *Current Directions in Psychological Science*, Vol. 9, No.2 April 2000, (Sage Publications on behalf of Association for Psychological Science) 50-54

<sup>&</sup>lt;sup>42</sup> Arnheim, "Sketching and the Psychology of Design," 71

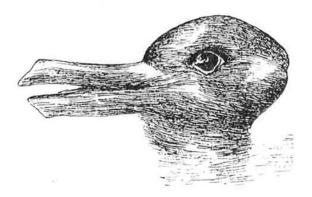


Figure 16, Rabbit or duck? Source: Jastrow, J. (1899). The mind's eye. Popular Science Monthly, 54, 299-312.

"a line drawing can be "seen as" a duck or a rabbit. Seeing it as a duck differs perceptually from seeing it as a rabbit, yet in each case your perceptual experience involves perceiving the same token."<sup>43</sup> In addition to mental topography, there is evidence it moves, too. In recent studies, or example, Frith and Law demonstrated that "in order to draw, we have to map inner representations of scenes onto inner representations of movements." <sup>44</sup>

This is a lot of words to say this one thing: If mental imagery is holographic in nature (as nature itself may be) then the inner conceptions of space are no different than the outer, and are both well suited for visual expression, by metaphor, as notan.

## **Travleogue 9: Arrangement & Rearrangement**

The shapes within a notan design are cobbled-together pieces that I cull from life. It really doesn't matter what the original shapes are specifically, because whatever is before me is of the same fabric as everything else. A face, a cloud, a gesture – all held together by a mysterious subatomic glue. The key is

<sup>&</sup>lt;sup>43</sup> David Galloway, "Seeing Sequences," *Philosophy and Phenomenological Research*, Vol. 59, No. 1, March, (International Phenomenological Society, The MIT Press, 1999) 93-112.

<sup>&</sup>lt;sup>44</sup> Chris Frith and John Law, "Cognitive and Physiological Processes Underlying Drawing Skills,, *Leonardo*, Vol. 28, No. 3 (Cambridge, MA, 1995), 203-205

how one rearranges these pieces. Every image I make by rearrangement, I think, is like my own personal little Frankenstein's monster. It holds some odd kernel of the mystery.

I love Milton Glaser's description at first seeing someone draw: "...it was the first time I had actually ever observed someone make a drawing that looked like the actual object – as opposed to my own rudimentary drawing. I was literally struck speechless. It seemed a miraculous occurrence, the creation of life, and I have never recovered from that experience."<sup>45</sup>

As artist Jenny Keller noted: "If you draw it, you'll see the whole thing. You're more thorough, you're thinking in a different way."<sup>46</sup>

I collect lines from the observations of life, and the resulting shapes are often far more exotic and evocative than anything I might envision. Perhaps they have the 'ring of truth' to them that is similar to the credence lent by an eyewitness in court. A line drawing that is recognizable as a cathedral is still recognizable as a line. As Arnheim noted, drawings done directly from life "show accidental features observed" while drawings from memory "rely on generalities."<sup>47</sup> Therefore, there is benefit in sifting nature for authenticity. These pieces, then, can be reconfigured into notan images that are at once new, yet have a feel of familiarity about them.

<sup>&</sup>lt;sup>45</sup> ISteven Heller, Innovators of American Illustration, (New York, NY: Van Nostrand Reinhold Company, Inc, 1986) 50

<sup>&</sup>lt;sup>46</sup> Jenny New, Drawing From Life: The Journal as Art, (quoting Jenny Keller), (New York, NY: Princeton Architectural Review, 2006)

<sup>&</sup>lt;sup>47</sup> Arnheim, "Sketching and the Psychology of Design," 71

# Travleogue 10: Light, Mother of All Shape





In the example of the cow skull illuminated by a moving light (Figure 17), the shape changes according to how the light strikes it. There is a white space, and a black space, and an ever-changing interplay between the two. Seeing shapes independent of the thing is beneficial because multiple shapes are made by the changing relationship of light and dark.

A closed line is a shape, and all shapes contain some value or another. For example, (Figure 18) in



## Figure 18, Value applications

the series of black and white boxes shown, based on a few simple values, there are numerous combinations of these values to individual shapes, and that each one gives the box a slightly different sense of space. The underlying principle here is that almost any shape will "read" as a shape – if the value assigned to it is clear. And here, it is worthy to note that notan needn't be strictly high-contrast black against white, but may be any subtly of value.

Here, too, is a good model to approach color, I think. It is tempting to say

the sky is blue and that the grass is green. But which green, exactly? It is often many greens, subject to change depending on the light source and the ambient atmosphere. Consider the photo of the plant in Figure 19. It is red, or is it? Actually, there is yellow and purple in it, and a number of reds.

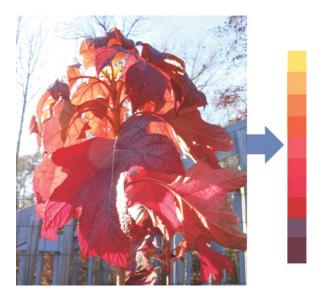


Figure 19, But what color red?

Consider a white house sitting on a green lawn. On a sunny day what color are the eaves of the house? Likely, they are greenish, because the green grass color bounces up into the eaves. While rational thinking proclaims 'the house is white,' actual seeing tells us it is green-tinted. Personally, I exploit this rule to its fullest extent, and say that the white house can be any color I say it is, including nuclear pink.

This leads to the unique quandary of painting people, which deserves comment: The problem with painting pictures of people is that people are in them, many of whom are disagreeable and won't appreciate having a green face. So most of the people in my work are either people who do not know they are in it, or are self portraits, in which case, the sitter likes the green and purples in the face.

So, if clear-reading shapes and clear values are used for painting via notan, then almost any combination of color is possible. The key word here is "almost," as obviously some combinations sour together. I often pick up colors at random to see what happens. Sometimes, a wonderful and unexpected chemistry takes place; other times it just means one more thing to take to the dumpster. As Martha Boles

and Rochelle Newman noted "The work of the visual artist involves defining, bounding and subdividing portions of space. But not all subdivisions provide harmony."<sup>48</sup> The only way I find solutions in color are by making a mess and seeing what happens. I have tried to work systemically with color, but find it is not the right choice for me. Haphazard color seems closer to my nature, and seems closer to the earlier-mentioned example of the black triangles making rock piles.

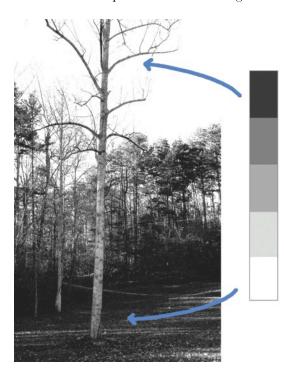


Figure 20. When notan acts as a gradient

Much of the notan in the natural world falls into a strict checkerboard pattern, like the Yin Yang pattern, with abrupt changes from positive to negative fields. However, in the case of long objects such as telephone poles or rooftops, things often start as a positive shape and gradually end as negative shape. In the photo of the tree shown in Figure 20, the tree trunk is darker than the surrounding sky at its top, yet lighter than the surrounding grass at its bottom. This subtle shift is valuable to emulate, as it pleases the eye, if used sparingly.

<sup>&</sup>lt;sup>48</sup> Martha Boles and Rochelle Newman, "Art, Mathematics and Nature in the Interdisciplinary Classroom," *Leonardo*, Cambridge, MA, 1988) 182-186

On the idea of what to take as subject matter, I very much like the idea presented by David Hockney: "I had found that anything could be the subject of a painting: a poem, something you see, an idea you suddenly have, something you feel – anything was material you could use."<sup>49</sup> By observing and deconstructing the world, one can reconstruct new, private worlds using simple shapes with notan strategy. Artist Carol Rambo wrote that she described with lines "what was there and not there, presence and absence. The picture emerged out of juxtaposing the parts that were my subject, the parts that were not, and the frame."<sup>50</sup>

It is my conviction that whatever attracts one, visually, is likely to be worthy or deconstruction and reassembly. Therefore, whatever interests me, I draw if possible.

In our post-modern era, this thinking may be viewed as somewhat geriatric, best treated with salts or gout rub. I wrestled with this quandary early in graduate school, until I came to the conclusion that I am probably not a contemporary artist. This means I won't be writhing naked on the floor in performance before a live gallery audience any time soon. I still focus largely on drawing and painting.

Admittedly, there are artists doing much more inventive things. I think of the humorous description by author David Sedaris: "Here were people who made a living pitching tents or lying in a fetal position before our national monuments. One fellow had made a name for himself by allowing a friend to shoot him in the shoulder."<sup>51</sup>

All humor aside, I think the key lies in following one's inner convictions, no matter where they lead. As James Hollis so succinctly wrote of the plight all face in this ever-accelerating world: "The modern is obliged to pick through the rubble of ancient civilizations, here or there finding a shard worth

<sup>&</sup>lt;sup>49</sup> David Hockney, Travels with Pen, Pencil and Ink, (Petersburg Press, 1978)

<sup>&</sup>lt;sup>50</sup> Carol Rambo, "Sketching as Autoethnographic Practice," *Symbolic Interaction*, Vol. 30, Issue 4, (University of California Press, Fall 2007) 531-54

<sup>&</sup>lt;sup>51</sup> David Sedaris, *Me Talk Pretty One Day*, "Twelve Moments in the LIfe of an Artist" (New York, NY: Little, Brown and Company, 2000) 45

retaining. And how does one know which shards to carry forward in the infinite jigsaw puzzle of the soul?"<sup>52</sup>

For me, I prefer to stumble ahead toward my own convictions and later be found to be wrong, rather than to be lauded as correct initially, and then later hearing that I had been wrong all along. The first alternative makes for a much more interesting trip of life as an artist, which, seems to me, to be the whole point.

# Conclusion

As I conclude my three-year MFA journey and take leave of academia, I think of my classmates and professors, feeling admiration at their diverse lives and work. It was a joy to walk a ways with them, and I pause here momentarily to honor them.

This much I have learned from the trip: I am steadily pulled by unseen tides to far shores where all things hidden will one day stand boldly in the light of a strange glory. There is much to understand in this short life, and perhaps it is in this new light that things do somehow become clearer, so that there is suddenly no longer reason to fear the shadows, nor reluctance to step fully into the waters.

It is here I begin anew.



<sup>&</sup>lt;sup>52</sup> James Hollis, Creating a Life, Finding Your Individual Path (Toronto: Inner City Books, 2001)

# **Bibliography**

Bradbury, Ray Fahrenheit 451, New York, NY: Ballantine Publishing Group, 1953

Eiseley, Loren The Unexpected Universe, (San Diego, CA: Harcourt Brace & Company: 1969)

Einstein, Albert *Ideas and Opinions*, New York. NY: Bonanza Books, 1988; originally p ublished by Crown Publishers, 1954

Kakuz Okakura, The Book of Tea, Mineola, NY: Dover Books, 1964

Lewis, C.S. The Problem of Pain, New York, NY: Harper Collins Books, 1940

Brown Taylor Barbara, When God is Silent, Lanham, MD: Cowley Publications 1998

Bothwell, Dorr and Mayfield, Marlys *Notan: The Dark-Light Principle of Design*, Mineola, NY: Dover Books, 1991

Waley, Authur The Way and Its Power, Boston: Houghton Mifflin Co., 1935

Arnheim, Rudolf, "Sketching and the Psychology of Design," Design Issues, Vol. 9, No. 2, Autumn, 1993

Wenger, Robert "Visual Art, Archaeology and Gestalt," Leonardo, The MIT Press, Vol. 30, No. 1 (1997), pp. 35-46

Collected Poems of Dylan Thomas, 1934-1952, New York, NY: New Directions Publishing Corporation, 1937

Campbell, Joseph The Hero with a Thousand Faces, New York, NY: Pantheon Books, 1949

Krishnamurti, Jiddu, Meeting Life, New York, NY: Harper Collins Publishers, 1991

Verene, Donald Phillip Hegel's Absolute: An introduction to Reading the Phenomenology of Spirit, Albany, NY,: State University of New York Press, 2007

Russell, Bertrand An Inquiry into Meaning and Truth, New York, NY: W. W. Norton & Company, 1940

Derrida, Jacques Memoirs of the Blind: The Self Portrait and Other Ruins, Chicago, IL: The University of Chicago Press, 1993

Viktor, Frankl Recollections; An Autobiography, New York, NY: Perseus Publishing Books, 2000

Paramahansa, Yogananda Autobiography of a Yogi, (Los Angeles, CA: Self-Realization Fellowship, 1946 William Wordsworth, Selected Poems, New York, NY: Outlet Book Company, Random House, 1993, 1844 Tschumi, Bernard "The Pleasure of Architecture," Architectural Digest, vol. 3, New York, NY, 1977 The New Testament

The Bhagavad-Gita

The Tibetan Book of the Dead

Schopenhauer, Arthur *The World as Will and Representation*, Vol. II, Ch. XLVIII, Mineola, NY: Dover Publications, Inc.1966; first published in 1818)

Eiseley, Loren *All The Strange Hours:* The Excavation of a Life, New York, NY: Macmillan Publishing Company, New York, 1975

Palmer, Rodney and Frangenberg, Thomas, eds., *The Rise of the Image: Essays on the History of the Illustrated Art Book* (Ashgate Publishing Limited, 2003

Armstrong, Karen The Spiral Staircase: My Climb Out of Darkness, (New York, NY: Random House/Anchor Books, 2004

Greene, Brian The Fabric of the Cosmos, (New York, NY: Random House, 2003

Newberg, Andrew; D'Aquili, Eugene; and Rause, Vince. Why God Won't Go Away: Brain Science and the Biology of Belief, New York NY: Ballantine Books, 2001

Peck, M. Scott The Road Less Traveled, (New York, NY: Simon & Schuster, 1979

Oppenheimer, J. Robert, Science and the Common Understanding, New York, NY: Simon & Schuster 1953

Fish, Jonathan and Scrivener, Stephen "Amplifying the Mind's Eye: Sketching and Visual Cognition," Leonardo, Vol. 23, No. 1, 1990

Behrmann, Marlene "The Mind's Eye Mapped onto the Brain's Matter," Current Directions in Psychological Science, Vol. 9, No.2 April 2000, (Sage Publications on behalf of Association for Psychological Science

Galloway, David, "Seeing Sequences," Philosophy and Phenomenological

Research, Vol. 59, No. 1, March, International Phenomenological Society, The MIT Press, 1999

Frith, Chris and Law, John "Cognitive and Physiological Processes Underlying Drawing Skills,, Leonardo, Vol. 28, No. 3, Cambridge, MA, 1995

Heller, Steven Innovators of American Illustration, New York, NY: Van Nostrand Reinhold Company, Inc, 1986

New, Jenny Drawing From Life: The Journal as Art, (New York, NY: Princeton Architectural Review, 2006

Boles, Martha and Newman, Rochelle, "Art, Mathematics and Nature in the Interdisciplinary Classroom," Leonardo, Cambridge, MA, 1988

Hockney, David Travels with Pen, Pencil and Ink, Petersburg Press, 1978

Rambo, Carol "Sketching as Autoethnographic Practice," Symbolic Interaction, Vol. 30, Issue 4, University of California Press, Fall 2007

Sedaris, David Me Talk Pretty One Day, New York, NY: Little, Brown and Company, 2000) 45

Hollis, James Creating a Life, Finding Your Individual Path, Toronto: Inner City Books, 2001

Goldschmidt, Gabriela "The Dialectics of Sketching," Creativity Research Journal, Vol. 4, No. 2, pp. 123-143, 1991, Israel Institute of Technology,

Purves, Dale, et al. "Why We See Things the Way We Do: Evidence for a Wholly Empirical Strategy of Vision." Philosophical Transactions: Biological Sciences, Vol. 356, No. 1407, 2001

Koch, Gertrud "Arnheim, Rudolf: The Materialist of Aesthetic Illusion: Gestalt Theory and Reviewer's Practice", New German Critique, No. 51, Special Issue on Weimar Mass Culture, Autumn 1990

Larsen, P.E et al, "Supplementary Motor Area and Other Cortical Areas in Organisation of Voluntary Movements in Man," Journal of Neurophysiology (1981)

Maslow, Abraham The Creative Attitude, Explorations in Creativity, New York: Harper & Row, Publishers, 1967

Guilford, J.P. "Intellectual Factors in Productive Thinking" Explorations in Creativity, ed. Ross L. Mooney and Taher A. Razik, New York: Harper & Row, 1967

Siegler, Robert "Unconscious Insights," Current Directions in Psychological Science, Vol. 9, No. 3, June 2000

Caiserman-Roth, Ghitta and Cohen, Rhoda Insights, Discoveries, Surprises: Drawing from the Model Queen's University Press, Montreal & Kingston, London 1993

Chase, James H. "Chance and Creativity: The Lucky Art of Novelty," Austen, New York: Columbia University Press, 1978

Glaser, Milton Drawing is Thinking, Peter Mayer Publishers, New York, 2008

Behrens, Roy R. "Art, Design and Gestalt Theory," Leonardo, Vol. 31, No. 4, 1998

Edwards, Betty Drawing on the Right Side of the Brain, Penguin Putnam, 1979