CROSS DISCIPLINARY STRATEGIES TO RECREATE AND REMEMBER: ONE PAINTER’S LOOK AT HOW MEMORIES CAN BE CAPTURED AND PLAY A CENTRAL ROLE IN STUDIO PRACTICE

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With the advent of photography, practitioners in the arts and sciences were quick to use the medium in their particular fields. Visual artists had a new art form. Additionally, painters quickly recognized the potential of photography as a sketching tool, as an active way to explore composition, light and color, or to collect information to bring to the studio.

The computer and digital technologies continue to facilitate dramatic revolution in studio practice. With the appropriate equipment, we can now access visual information from personal memorabilia, film, video, the web, and archival sources across time and cultures; as artists we are not “bound” to our specific time or location and can relate to art forms, movements and/or historical events in any way our work demands.

The “decontextualized” image is a recurring element in every discipline of contemporary art: in paintings, prints, drawings, installation, sculpture, photography, and mixed media. The ability to access, investigate and generate this kind of information plays a key role in the generation of new art works; the taking of images from one context and reconfiguring them in another is key to how artists are using the new technology. Artists can access museum and gallery collections from their computers, use family photographs, video, still images off DVD’s, scan from books or newspapers. Clearly, the collective body of work growing out of the process and activity of using these new technologies to access images and as art-making tools, is in its’ infancy.

Excited by the possibilities, my own work has taken a reinvigorated turn back into a realm of imagery dominated by memory. Through combining paint with personal, cultural, geographical and/or political images, I create subjective “realities,” based on personal memories that, hopefully, speak to our common concerns. For me, assembling the (initially) unrelated elements of a collage, is akin to connecting to the disparate elements in dreams. Identifying and assembling the visual elements becomes the first step in a long process of bringing order out of chaos, in developing images that respond with a full range of emotions to my experience in the world.

My earlier work prepared me for my current studio work; I feel I’ve been “in training” for working across disciplines since I entered art school though it was not encouraged or supported by the curriculum. As a young artist, I often felt constrained to fit into one neat category or another. Though a painting major, I spent a great deal of my time working with other media, first in sculpture and then in printmaking. I loved the logic and rigor of working in clay with bas-relief. Later, I brought that experience to working in intaglio. Having many “states” of the same work informed my direction in both form and content; using the physical layers of the metal in tandem with viscosity printing and multiple plates, played a key role in my understanding of color as I returned to painting.
Though I never worked formally in photography, I maintained an active involvement with the medium through informal study and practice. Years ago, I read John Berger and Jean Mohr’s *Another Way of Telling*. Berger wrote, “Among the ancient Greeks, memory was the mother of all the muses and perhaps most closely associated with the practice of poetry.” In all my work, I have sought the poetic and worked to avoid the narrative; I have sought to honor memory by using it as shape and texture along with other shapes and textures. I see “memory” as inspiring the making of art as well as playing a significant role in informing the development of each piece in particular; it is the subtext and story that underlies the formal orchestration of each work.

Berger went on to write in the same essay, “Both the photograph and the remembered depend upon and equally oppose the passing of time. Both propose their own form of simultaneity, in which all their images can coexist. Both stimulate, and are stimulated by, the interconnectedness of events.” I remember thinking this latter statement expressed my intentions as an artist, as an artist/painter. As an artist manually orchestrating compositions, I wanted my work to both “depend upon and equally oppose the passing of time.” I worked to assemble the formal elements, to connect the seemingly disparate parts in such a way that “timelessness” was achieved. Though guided by this ambition as a young artist, I felt my work most often fell short of this goal.

Certainly, as I drew upon my personal experiences, it was difficult to assemble the parts of my life into any kind of coherence or to use and somehow transform that experience in my artwork. I grew up in the fifties and sixties in the shadow World War II, of the Holocaust and the direct effects on our close and extended family. Dramas were sensed not articulated, anxieties acted out, yet unrelated to the events at hand. Life on the surface was placid and unrelentingly cheery, jarringly at odds with the currents felt running below. In adolescence, the war in Vietnam was dominant, and as a young adult I chose to marry my high school sweetheart. In my early to mid-twenties, I found myself living with his mental illness and, ultimately, his suicide at the age of twenty-six. The paintings, prints and drawings in “Hysterical Fugues,” my first solo exhibition at the Bromfield Gallery in Boston, spoke to these experiences, to my desire to bring order out of chaos, to honor memory, to make meaning through making art. The subjective, dream-state images of those paintings, prints and drawings, of the mixed media work of the period, concerned the orchestration of dissonant elements, of abstracted figures and landscapes that spoke to these personal experiences.

The upheaval in my twenties was followed by a period of productivity and relative calm in my thirties. I remarried, had children, taught full-time and worked in my studio. I began taking art students to Italy each summer, and in 1986, established a small non-profit organization dedicated to visual arts study abroad. During the next ten years, I served as the Director of our Summer Intensive Studio programs in Trieste and Viterbo, Italy. One summer there, in Viterbo in 1991, I broke my leg hiking around my favorite Etruscan site. Perhaps, because of this event and my inability to “run around” in my usual manner, abruptly, found myself confronted by the Italian landscape and quite fascinated by the formal and expressive possibilities of working directly on site. Throughout that summer and in succeeding years, I found myself moving away from the earlier subjective imagery to a disciplined observation of the Italian countryside. Engaging in this new “actual” rather than “emotional” landscape became an overriding passion. Though much of the subtext of the earlier work is present in the landscape, these paintings catalyzed a relearning of color, media and composition. Instead of the complex
layering of dissonant imagery of the earlier work, I engaged with paring the imagery to its' most essential forms and colors.

The Italian and more local landscapes continue to be a vital part of my studio work. It has also proven to be the training ground for the subjective imagery of the mixed media collages; these collages exist in the context of landscape space and are informed by the discoveries I have made there.

Memory and “subtext” are coordinating elements in both the landscape and the collages. When involved with the landscape, I am an explorer investigating potential picture ideas. As I work on a particular motif, I come to live in the space through the painting. I am most often drawn to hillsides, barns, farmlands, roadways, and water; I search out locations where man’s hand is evident, yet are solitary, meditative. I'll return to a particular site at different times of day, hike to different eye levels and vantage points. Once there, I'll take photographs and sketch with watercolor, pen or pencil. Once back in the studio, preliminary studies and photos provide much of the necessary “mechanical” information such as the specifics of the terrain, the spatial relationships that exist between one area and another. Sketches and photographs help me to analyze and simplify the various parts that make up to the composition. Once work is progressing in the studio, memory and invention, along with subtext, return to play the dominant role in orchestrating color, stroke, shape, air and temperature—in creating the physical sensation of being in a specific time and space.

When working on the collages or the landscapes, I often think of the book, *Painting: Some Basic Principles*, by Frederick Gore. It is a brilliant little book that I have returned to often through the years and read to my students. Gore wrote, “The forms in painting cannot be copied from nature, but must be equivalents to nature, plastic signs and images built up from simple formal ingredients which both separately and together have intrinsic meaning—that is the meaning of red or black, curve or straight, smooth or tough, of swift movement or slow, dark or light—and which, while they indicate events, are also composed musically.” Whether building the composition from paint alone or using collage elements as shape, texture and color along with paint, it is the “musical” or “poetic” orchestration of a composition that, in its arrangement, creates an experience far different than an acknowledgement of its’ discreet parts.

Gore writes, “But whatever we paint, we are committed to an abstract activity. It is then the total of interacting lines and shape and colors, of planes and rhythms, of plain and patterned areas, of mass and weight and movement, of space and solid, which make manifest at one and same time the visible drama and the thoughts and emotions which lie behind—the overriding idea which gives coherence.” In the collages, captured memories provide the shapes, colors as well as key figural elements in my quest to honor memory. These elements come from family and tourist photographs or are appropriated memories from friends; there are also old passports and caches of material (letters, documents, photos) of people who have lived in our house, photographs and memorabilia bought at antique shops, art invitations, newspapers, magazines, images printed off the web or DVD’s. These materials are contrasted with and activated by paint—so different in its nature—from a photograph or receipt or cut shape.

As I coordinate the collage elements on a canvas or board, I work intuitively. Some images are used whole, others in part as some material provides shape or color or rhythm. Often, a number of collages are assembling at the same time in a rather unpredictable way until I believe the
elements are ready to be secured. Once the collage elements are secured and protected, the images continue to be painted and re-worked until their elemental “rightness” is assured. The subtext of the collage—in various turns—includes loss, mourning, childhood, love, coming of age, rage, frustration and my response to the political and social realities around me.

It is ironic that as I pursue my studio work, it once again has difficulty fitting into one neat category or another. Recently, the mixed media collages have been included in photography shows and the more traditional landscapes have continued to be shown in galleries devoted to painting. Though I can understand why particular galleries have been reluctant to show the work together, I see both bodies of work as cut from the same cloth and I hope to exhibit them together in the near future.

Once again, I am reminded that there is no ‘pure’ art and the distinctions between media arise out of custom and convenience. Gore wrote, “In every age new techniques have been invented, old forms forgotten, still older ones revived, new and old combined. Art forms are continually changing. There is nothing absolute about their nature.” Digital technologies presented me with new ways to make art and the new tools prompted me to think in new ways about images I want to make. Artists use whatever tools are available and quickly learn to think in that medium—and advance the many ways the medium can be used—as they gain experience with it. As excited as I am about the development of my own work, I look forward to seeing how other artists will push the boundaries of form, content, and expression in the coming years.

There is no narrative that accompanies the slides. Rather, as I show the slides, I think it is important to note the specifics of the collage elements are less important than their abstract orchestration. I believe that a work of art is the creation of both the artist and the viewer. If a work is effective in its formal orchestration, the viewer enters the composition and relates to the work with and from their personal experience, culture, ideas, emotions and latent imagery. Discussion of the particulars as I show the slides—of the “parts” and my associations and/or subtext would only muddy this process. I am, however, happy to address any questions you might ask about form, content or process.

For those of you interested in seeing the collages and the landscape paintings, you can visit the following sites:

http://www.studiosoto.org/home92.htm
http://www.fine-arts-unlimited.com/jb1.htm

You can also email me directly at jbbrown@montserrat.edu and I’ll be happy to send you additional examples of the work or respond to any inquiry.

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“The story of memory is the story of seeing.”
—Paul Auster

“But what do you want us to write about? What do you want in this essay?” they implored. A roomful of seniors and juniors sat glowering at me, their desks encircled like a defensive wagon train in a 1950s B-Western.

“I want a good essay,” I replied placidly, waiting for the groans.

It was March 2001, and I was standing before my students in a course I’d just designed, Literature and the Other Arts. We were examining Modernism, and the students—most of whom were political science majors, with a few engineers, marine scientists, and management majors thrown into the mix—no doubt felt they’d already been challenged enough by T. S. Eliot, Virginia Woolf, Henri Matisse, and Pablo Picasso. They didn’t need me ambushing them as well.

I had asked them to write a personal essay in which they reflected upon their response to a work of art they viewed outside of class. The parameters of the assignment I had provided in the course syllabus, but I’d not specified a minimum page requirement, and the deadline was a little fuzzy. Used to assignments with explicit requirements, the students were anxious about their ability to complete such an unstructured assignment successfully. Clearly, as I stood before them, they resented me for making them grapple with ambiguity.

What did I want from them? I wanted a well-written essay, a well-written personal essay, or the “Fourth Genre” as Robert Root and Michael Steinberg have termed it. Not exactly expository, analytical, argumentative, or narrative, the personal essay combines all these modes of writing to examine its subject—the ruminations of the writer. Montaigne created the form, collecting his prose lyrics in a book that covers a range of topics no less encompassing than the canopy of human life itself. Voice, or authorial stance, in the personal essay is unlike that of other writing. Rather than consciously creating a persona, the essayist does his or her best to present the self. Montaigne described this feature of his writing by describing his book as “consubstantial with its author, concerned with [his] own self, an integral part of [his] life” (II: 504). In this way, the personal essay feels conversational. In fact, for Montaigne, writing served as an imperfect substitute for the conversations he had shared with his dear friend, Etienne de La Boétie, whose death had prompted Montaigne to express his thoughts on paper (Frame v).

I didn’t have time in the semester to teach my students how to write a personal essay, however. Our topic was Modernist literature and art, so, though it was not my intent, I forced them to discover the form for themselves, as Montaigne had done. We went through a series of drafts. Their first drafts focused almost exclusively on the works of art that they’d viewed: line, color, pattern, balance. I told them repeatedly, “The subject of the essay is not the work of art. You
are the subject of the essay. The work of art serves as the catalyst, if you will, for your reflections about your own life.” They rewrote their essays and brought their revisions to me. We sat in my office while I read their essays aloud, a torturous experience for most of my students. “Okay. You aren’t saying enough about yourself yet.” Then I’d repeat the dictum of Carl Klaus, one of the first theorists of the personal essay, “There need to be two stories: ‘the story of the event and the story of the mind.’ You are narrating the story of the event—that is, seeing the work of art. You aren’t yet telling me the story of the mind. What did the art make you think and feel? And what, in turn, did those thoughts make you think and feel? What did this work of art teach you about yourself and others?”

In other words, what does the art make you remember?

Writing a personal essay engages memory. When Montaigne wrote, he spoke to the memory of his friend. When we write, we typically speak to an invented reader who inhabits the memories animating our personal histories: events, people, places, snatches of images that burn through the fog of our past like flickering film projected onto a wavering screen. Wordsworth called such a moment a “spot of time,” a memory “recollected in tranquility” (608). This is what I wanted my students to do. They weren’t art history majors or fine arts students. They were cadets at the U. S. Coast Guard Academy, one of the five federal service academies, like West Point or Annapolis. What meaning would art have for them if I’d limited their thinking about it to its elements of design or Modernist features? These considerations are fundamental, of course, and class discussion built on them. But when my students were back in their own rooms, facing their computer screens, I wanted them to engage the art in a less objective manner. I wanted them to take what they had seen and connect it to memories about their life, in the hope that through this process of reflection they would learn something about life and the role of art in teaching us those life lessons.

In The Invention of Solitude, Paul Auster connects the three acts I wanted my students to perform—seeing, remembering, and writing—showing inextricable links among them. His analysis suggests that personal writing should inhabit a fundamental place in the study of art. Auster recounts visiting the Van Gogh museum in Amsterdam as an adult. As he stood seeing the canvases, he remembered an April day when he was sixteen and had skipped school to go with his girlfriend to a Van Gogh exhibit in New York City. Seeing the art with her had inspired him to write his first poems, each titled after one of the paintings. The memory had been lost—indeed, the poems were lost—until he stood in front of the paintings again in Amsterdam (141-42).

Auster’s story testifies to the fleeting nature of memory, perhaps, but it also links memory with vision. He remembered as he saw the paintings. If he had only glanced at the paintings when he was sixteen, if he had not seen the paintings, he would not have remembered them as an adult. The entire memory of the day with his girlfriend, his first poems, and what had inspired them would have been irretrievable. Seeing had to come first, and this act requires, as Auster says, forgetting oneself in order to observe one’s surroundings: “from that forgetfulness arises the power of memory” (138). For Auster, then, there is no difference between “the work of writing and the work of seeing” (138). Writers must be able to see—their writing translates images into language. But if what one writes reflects what one has seen, then writing is also intimately connected to the act of memory. Writing does not merely translate images into language: writing translates memory into language (136).
When I asked my students to write personal essays about art, I wanted them first to see the art—to engage with the artist in that unique dialogue that occurs in the space between viewer and object. That silent conversation is at the heart of the assignment, for it requires the students to engage with the other in an open-ended and inherently ambiguous situation. As they looked, they also talked, and as they talked, they remembered—but because their memories arose in the context of this relationship with the art object, they recalled more than their own personal histories. “Memory,” Auster says, “[is] not simply […] the resurrection of one's private past, but an immersion in the past of others, which is to say: history—which one both participates in and is a witness to, is a part of and apart from” (139). While I was not surprised that the students were drawn to works of art that spoke to something urgent in their lives, I pushed them to think about history they both participated in and were witnesses to. For many students, this history was familial, but for some students this history also encompassed observations and ruminations about the culture in which they live, which is where I gently tried to push all of them.

Despite their grumbling about the assignment, my students wrote wonderful, moving essays. I have time now to talk about only one of them. I hope that as I describe the essay, you’ll get a better sense of how writing, seeing, and memory connect in a meaningful way in a personal essay. John Kousch was a senior when he took my class. He struck me as a student not fully invested in his major, Government, and as a young man uninterested in writing as a pastime. John’s sister was living in North Adams, Massachusetts at that time, so one weekend when he went up to visit her, he also visited MASS MoCA. There he saw Slumber (1994) by Janine Antoni, a sculpture/performance work comprised of a loom, bed, nightgown, yarn, EEG machine, and Antoni’s REM reading. Antoni slept in the bed, having connected the EEG machine to herself. In the morning, she took the REM reading of her sleep, and using thread from her nightgown, wove the REM pattern into the yarn of the blanket.

John saw the work as the translation of a dream. But his essay ultimately explored the relationship between his mother and his grandmother, as he perceived it. John had grown up in a small town in Massachusetts, where from his living room, he could see his “grandparents’ ivy-covered porch down the street” (15). I think many of the stereotypes we attribute to small towns come into play here; as John observes in an understated way, “my mother took sound advice from Grandma on many things, especially childrearing” (15). John’s grandmother was a part of a generation of women who broke rules and defied convention—a peer of Betty Friedan. Not only a wife or mother, she graduated from Brown University with a Master’s in mathematics. She played the organ and tuned Woody Guthrie’s piano. She sounds as though she was a bit of a character—and a very strong personality. John’s mother is also an artist: she’s a quilter. In his essay, he describes the quilt she made for him, noting the colors, the pattern, and even the stitching. At night, when he crawls under it, he tells us, “The quilt opens up as if I were turning pages of a book, each fold revealing a more intricate emotion of love from my mother” (15).

John’s grandmother now has Alzheimer’s. When he wrote his essay, she had lost the power of speech, and she was beginning to forget how to move her body. What I love about his essay, though, is the way in which he seamlessly shifts from enumerating the symptoms of his grandmother’s disease to a reverie of his mother weaving his grandmother a blanket, using the thread from his grandmother’s nightgown. The thread becomes a metaphor for his
grandmother's life, and his mother's art—her weaving—a metaphor for the impossible desire, or
dream, of children to keep their parents alive. As his mother weaves, she translates her love for
her mother into the blanket, but the more she weaves, the shorter the nightgown becomes.
John transcribed into his essay the zig-zag lines of an EEG reading. The words dart down the
page, one per line, creating the visual image of his grandmother's sleeping dream, a dream that
his mother concentrates on keeping alive. The essay ends in blue, literally, a vertical blue line
of text representing the inevitable: a

peaceful,
blue,
straight
line.
The
Slumber
has
run
its
course. (15)

Paul Auster says, “The story of memory is the story of seeing” (154). When we ask our students
to see art, we are also asking them to remember what they see. But we don’t want those
memories to hang loose from the fabric of their personal histories. When we require our
students to write about their experience with art, we invite them to weave that experience into
the full tapestry of their lives, where the experience—the memory of seeing—will become an
indelible part of who they are, and perhaps a small part of how they see their world. It is in this
way, through the use of the personal essay, that we can engage in an art that remembers
through our memories translated into writing.

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“There are two ways of disliking art... One is to dislike it. The other is to like it rationally.”

—Oscar Wilde, *The Critic as Artist*

Since there may be nothing quite so irrational in the arts as opera, I am going to begin my presentation with a couple of brief interdisciplinary excerpts, one from Puccini and one from Mozart, each having to do with portraiture.

Puccini’s opera “Tosca” opens in a church with Cavaradossi, a painter, working on a portrait of Mary Magdalene. The model is a blonde and blue-eyed penitent who is so devout in her prayers that she is unaware she is being painted. Unfortunately, Cavaradossi is executed by firing squad later in the opera, another example of how portrait painters get no respect.

By contrast, in this aria from act one of Mozart’s “The Magic Flute,” handsome Prince Tamino has been given a portrait of Princess Pamina, daughter of the Queen of the Night. He instantly falls in love, for the bewitching portrait is a close likeness of the beautiful princess. Thus begins the dramatic action, as Tamino tries to rescue his heart-throb from the demon who has kidnapped her.

These two musical examples represent two different traditions in the history of portraiture: the first involves creating a portrait type, often symbolic, with little regard for what the person depicted actually looked like; the second is the observance of verisimilitude, a search to capture an actual likeness and to immortalize an individual.

For the classical Greeks, the abstract concept was more important than the concrete reality. They tended to sculpt their portraits of heroes, often long after their deaths, as part of encouraging public virtue, and these instructive (as opposed to descriptive) portraits were consequently designed for public places. As Richter said in his extensive analysis, *The Portraits of the Greeks,*

The heroizing element remained inherent in Greek portraiture throughout its history. Even in the realistic portrait of the Hellenistic age the feeling for the type as against the individual often remained.1

By contrast, Roman portraits were usually to be found in the home and were part of a more private ritual of ancestral veneration borrowed from the Etruscans. In an essay on Graeco-Roman portraiture, Kurt Gschwantler cites Polybius, a Greek historian, who described the Roman funerary ritual:

This image consists of a mask, which is fashioned with extraordinary fidelity both in its modeling and its complexion to represent the features
of the dead man. . . . And when any distinguished member of the family dies, the masks are taken to the funeral, and are worn by men who are considered to bear the closest resemblance to the original, both in height and in their general appearance and bearing.  

These visages were likely of wax, pulled from death masks. Their fragility led eventually to the practice of copying the features in marble.

In the Renaissance, these two traditions were married as both the philosophical Greeks and empirical Romans were resurrected. Because painting had replaced sculpture as the dominant medium for portraiture, artists could both capture a likeness and put the figure in an environment with symbolic references to the subject’s character, profession, or lineage.

Portraits from this period often create an affecting sense in the viewer of being in the presence of a particular sitter, while less immediate clues which identify that individual may be coded in the painter’s iconography or may simply be bound up in a curious but long dead fashion (wigs, for instance). These elusive clues often require the sleuth-work of the art historian, but the forthright commemoration of an individual is why we care about the depiction in the first place.

The relative dominance of these two qualities wax and wane inversely to one another: The romantic nineteenth century felt strongly that an individual was immortalized in a portrait and “spoke” directly and universally to posterity. The more skeptical late twentieth century had doubts that any image speaks directly, and that posterity could only understand the message of the sitter by understanding the artistic conventions and social customs of the sitter’s time. As an extreme and current example, Marcia Pointon in Hanging the Head /Portraiture and Social Formation in Eighteenth-Century England, writes, “‘Likeness’ is that which enables the viewer to match a representation with a given human subject. But this is never an isolated activity; such processes of reading are culturally determined.” For this late twentieth century author, not even a likeness is something a viewer can glean directly from a portrait. I shall return to this.

To understand one reason why the pendulum has swung so far in the direction of the theoretical Greeks and away from the pragmatic Romans requires delving into the modern discipline of psychology. For most of the twentieth century, the field of psychology was dominated by behaviorists. In fact, “dominated” may be too kind a word. According to psychologist Erika Rosenberg, those such as herself who studied the human face for direct insights into emotional states “risked expulsion from the behavioristic mainstream. Conducting research on internal states was not only looked down on during the early part of this [20th] century, it was a career-ending decision.”

Why such hostility? As Paul Ekman confessed early in The Face of Man, “I began to study facial expressions of emotion in 1966. Trained in traditional American Psychology, my bias was that anything important about social behavior was entirely the product of environment, not heredity.

Facial expressions of emotion would be the product of learning, not evolution, and therefore would differ across cultures.” Ekman’s trip to New Guinea changed his mind, however, and he went on to become the foremost authority and proponent of the universal nature of basic
emotional expression in the human face. In spite of his well documented research, Ekman ran into a great deal of resistance from established social scientists who believed human behavior was culturally determined, and that each culture developed along its own line; for them, there could be no such thing as universal human facial expressions. In his “Afterword” to a recent reprinting of Charles Darwin’s *The Expression of the Emotions in Man and Animals*, Paul Ekman describes the one-sided embrace of cultural relativism by one of his critics, the prominent anthropologist Margaret Mead, as “a backlash against Social Darwinism, eugenics and the threat of Nazism. Looking back on her life in 1972, Mead explained how she and other anthropologists explicitly decided not to consider the biological aspects of behavior because of the political problems it would cause.”

The well-intentioned avoidance of biology as a source of behavior in preference for a culturally determined source of behavior seems to have permeated the social sciences in the first half of the twentieth century, reinforced by the politics of World War Two: The choices for many in Europe at the time of the war were between Fascism (and what would become its experiments in eugenics) and Communism (and its associated belief in the power of culture to change human behavior). Hitler made it easy for those in the arts to choose sides: His rabid persecution of modernism practically assured modernism’s embrace by the Allied nations. Repelled by the far right, the academic side of art slowly began its move to the overtly leftist _new_ art history, with its focus upon social dynamics, insiders, outsiders, the _other_, and the cultural aspirations of patrons.

The Introduction of Joanna Woods-Marsden’s *Renaissance Self-Portraiture* begins, “[This] book explores a series of visual constructions in Renaissance Italy as these can be said to relate to a given social construction. . . . One of the primary functions of these works was to record, or rather construct, the appearance of their makers.” The author fains a slip in order to correct herself instructively, pointing out that artists did not “record” their own images, since that would imply a relatively objective translation of the reflections found in their studio mirrors; instead, they “constructed” images, in the context of their equally constructed society. Her thesis is that painters at this time were redefining the role of the artist from manual laborer to thinker, “constructing” their self-portraits toward this end—but what good would such a metamorphosis be if the subject of the painting (especially shorn of such clues as palette and brushes) was not identifiable as the artist? Cultural constructions aside, the person in the painting had to be recognizable.

In “The Meaning of Likeness: Portrait Painting in an Eighteenth-Century Consumer Society,” T. H. Breen suggests, “speculate here, for example, that for provincial Americans the central element in these [portrait] paintings may have been the sitters clothes, the character and quality of the fabric, and not—as we have sometimes been led to believe—the posture of the body or the details of the face.” Breen continues,

The eye is drawn in these mid-century portraits not to the faces, but to the garments the people wore. However poorly a painter handled a sitter’s physical features, he almost always managed to capture the brilliance and luster of the clothes . . . and none seems to have succeeded better than John Wollaston. This itinerant artist painted at least three hundred portraits in the colonies. Modern critics who have viewed this scattered work have expressed considerable
ambivalence about Wollaston’s artistic achievement. Though the faces of his sitters possess a dull sameness, their garments are painted brilliantly.⁹

Of course the thesis that colonial patrons cared not a fig for the face, but as ardent capitalists were solely engaged by the attendant splendor of the outfit, begs the question: “What social advantage could a sitter enjoy from his sumptuously-clad portrait if viewers could not tell who was depicted?”

While art academics were thus caught up in identifying modes of production and the signifying practices, changes were afoot elsewhere: In psychology, Ekman and his followers won the day, and as a result of their careful and extensive research, the universal nature of basic human expressions is now the status quo; Ekman has pointed out, perhaps to reassure those who wrongly associated any biological basis for behavior with racial supremacy movements that his research indicates just the opposite, that the universal nature of human expression suggests we are all essentially the same.

More broadly than that, and of special significance for portraitists, there is substantial evidence that the temporal cortex of the brain contains neurones which are evolved specifically to respond to facial patterns, and that this sensitivity extends to non-human primates, in which such cells have been found. Further, the sensitivity of these neurones is sufficient to extend to the recognition of faces in line drawings, even among monkeys.¹⁰

In biology, the big news has been the human genome project, wherein various behaviors are now being associated with various genes. The pendulum has swung again, and the primacy of the cultural behaviorists has begun to erode.

What does this swing portend for art? For one thing, it suggests that writers like Jean Alazard from half a century ago, struck a better balance than many of today’s writers. In The Florentine Portrait, Alazard pointed out that there is more misattribution in portraiture than in any other domain of art:

In an imaginative work or in a genre painting, the personality of the painter shows up more . . . a portrait is not so much of a revelation; even in the romantic portrait . . . there is a struggle between the artist and the model . . . in any case the personality of the painter is limited to a certain extent by the very existence of the model whose essential features at least must be rendered.¹¹

Perhaps we can bring a reconciliation between the academic over-reliance upon the intellectualism of cultural relativity, and the profession portrait artist’s reluctance to engage academically at all: Symptomatic of the division, both these books are about portraiture—This one, The Art of the Portrait, by Norbert Schneider, outlines the history of portrait painting between the late Middle Ages and the seventeenth century and tells the stories behind several dozen works from that period without ever mentioning anything about how a portrait painting is made; this one, Portraits from Life in 29 Steps, by John Howard Sanden (a prominent New York portrait painter), describes Sander’s method of painting in great detail without ever getting into the history or theory of portraiture. What we need is a synthesis which acknowledges the fundamental and universal realities of creating a likeness while pointing out the importance of cultural influences, past and present, upon portraiture.
A first step might be a rejection in the academic community of the bogus notion that culture determines likeness. That error is the residue of cultural relativism’s excesses, of hard-core behavioralists who believe that visual perception has no universality beyond the fundamental physiology of the eye. If likeness was culturally dependent, as they suppose, then the computerized facial recognition systems set up in airports to detect terrorists could not function; yet “Face It” technology, by Visionics, is advertised as having an error rate of less than 1% under optimal conditions. Further, as Jan B. Deregowski noted in “Illusion and Culture,” “an analysis of pictures suggests that there exists an optimum way of depicting an object, which can be arrived at by consideration of purely physical principles of propagation of light.” The author goes on to point out how systems such as traditional perspective are not merely cultural conventions, but approximate reality as the eye sees it. Depictions which approximate the universal retinal display of the eye, are culturally independent, which is why trompe l’oeil images can “fool the eye,” anyone’s eye, from any culture.

That said, although capturing a likeness by hand is a demanding craft, it is not sufficient for art. In the judgment of John Pope-Hennessay, Gentile Bellini, for example did not come up to snuff: “The limitation of his portraits is that they are destitute of the pictorial ideas which effect the mysterious act of transubstantiation from history to art. . . . [The] portrait of Caterona Cornaro at Budapest reveals, in its deadly evenness of emphasis, the mind of a cartographer.”

Life is short and art is long, and the accuracy of the great Renaissance portraits is generally now beyond verification. These images continue to move viewers for reasons beyond verisimilitude, or their careful mapping of features. Further, while some old masters seem to have been merciless in their veracity, others found discretion to be the better part of valor: Richard Wendorf, in his fascinating study of Sir Joshua Reynolds as a society painter, indicates Reynolds _made the tall short and the short tall as the wishes of the sitter wavered._

Aspiring portrait painters should be welcomed into the university, where they could learn a great deal about their art from the liberal arts: In psychology class, they could study not only the universal nature of fundamental human facial expression, but also the basics of human visual perception. Sociology classes can help with culturally significant gestures and the wide range of behaviors (including fashions) which identify individuals as being part of a particular group. Biology can assist with cephalic anatomy. And, of course, art academics have a wealth of knowledge about iconography, composition, thematic unity, significant gestures, and visual traditions in general that today’s portrait artists sorely need.

In exchange, perhaps those art academics who have wrapped themselves in constructs, period modes of production, and signifying practices, can strip off their cultural strait-jacket, stare into the face of some marvelous portrait from the past, and rediscover what it means to be a human being.

NOTES

2. p. 20, _Ancient Faces /Mummy Portraits from Roman Egypt_, essay “Graeco-Roman Portraiture,” by Kurt Gschwantler.


8. p. 39, Ibid.


10. When line drawings of monkey faces depicting particular emotions (anger, fear, etc.) were shown to the macaque monkeys, the monkeys showed the same kind of behavior as they did to pictures of real faces. p. 106, “When is a face not a face?” David Perrett, P.J. Benson, J.K. Hietanen, M.W. Oram, and W.H. Dittrich, *The Ariful Eye*, ed. by Richard Gregory, John Harris, Priscilla Heard, and David Rose, Oxford University Press, Oxford, 1995.


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Significant discoveries are often the result of painstaking research performed by a specialist within a scholarly discipline. Specificity allows for depth of understanding within an academic discipline. While each academic discipline has its specialists, all too often there is little cross-disciplinary conversation among specialists. Within the world of art, the work of art historians may be enhanced by conversations with scholars in other disciplines. This paper has a modest goal. It will take a concrete work of art with its traditional understanding by the discipline of art history and offer supplementary interpretive perspectives from current biblical research and interpretation theory.

The Medieval Gallery of the Cleveland Museum of Art contains a fourteenth-century woodcarving entitled “Christ and St. John the Evangelist.” This woodcarving, and a recently published article on it serve as the catalyst for my reflections. The traditional title for this woodcarving has been accepted by the scholarly community without question. However, recent research in the study of the Gospel of John, as well as in the field of interpretation theory, invite a review of the traditional approach to the issue of the title of this work. This review will not impact the aesthetic understanding of the piece, but will impinge on the didactic dimension of the work.

This essay argues generally that the didactic dimension of a work of art may be a sufficient reason to consider changing the traditional name or title of that work. The argument proceeds by way of a concrete example: the woodcarving traditionally entitled “Christ and St. John the Evangelist” might more adequately be named today “Jesus and the Beloved Disciple,” I will present the case for rethinking the title and offer reasons why such a change would be important.

A. BIBLICAL EXEGETICAL CONSIDERATIONS

“Exegesis” (a Greek word taken over into English) literally means “to read out of.” Its opposite is “eisegesis” or “reading into.” Students of the biblical text make every effort to allow the text to disclose itself through its vocabulary, syntax, metaphors and any other grammatical or literary clues that may be present within the text itself. “Exegetes” try not to allow later historical interpretations or their own subjective viewpoint to influence their reading of the text. In general, there is a keen effort in exegesis to allow the text to speak for itself rather than to read one’s subjective predispositions into the text (i.e., “eisegesis”).

“CHRIST” OR “JESUS”?

Why change the name of “Christ” to “Jesus”? Biblical and theological research over the past several decades has drawn a helpful distinction between two titles: the “Jesus of history” and
the “Christ of faith.” This distinction articulates two very different moments in both history and Christian faith: (a) the historical period of time when the person Jesus of Nazareth lived his human life and during which he may have been believed to be the messiah (Christ) in only an implicit or incipient way; and, (b) the period of time after Jesus’ historical life on earth when he was more explicitly believed to be the Christ by his followers. While the event of Jesus’ death and resurrection involved a transition from the Jesus of history to the Christ of faith, “[t]his relationship is one of personal continuity. The person referred to in the concrete historical life of Jesus is exactly the same as the person contained in the living reality of the risen Christ of faith.”

The upshot of the distinction between the “Jesus of history” and the “Christ of faith” is that many scholars suggest employing the name “Jesus” for references to his historical existence—what is typically called his “public ministry.” The stories in the Gospels generally refer to “Jesus.” By contrast, the word “Christ,” a title attributed to Jesus by the early Church, would be used when referring to the time following his resurrection. “Christ” is a title ascribed to Jesus by those believing in his resurrection. This title, then, would be reserved for the discussion of the post-resurrection period and the faith that emerges from the primordial belief by Christians in the resurrection from the dead of Jesus of Nazareth.

There is a good deal of debate within the biblical field as to whether the title “Christ” was given to Jesus during his public ministry, or whether it was a title attributed to him by the early Church following his resurrection. The four Gospels were not composed until some thirty to sixty years after Jesus’ death. It is therefore unclear whether the use of the title “Christ” in the public ministry section of the Gospel (e.g., Mark 8:29: “You are the Christ”) is a historically accurate reference to Jesus’ lifetime, or is rather a proleptic bestowal of a post-resurrection title onto the Jesus of history.

This debate is further complicated by a shift in the scholarly understanding of the literary genre of the four Gospels. Traditionally, the Gospels were thought to be historically accurate biographies of Jesus’ life. Twentieth-century critical biblical scholarship, however, has shown convincingly that the Gospels are primarily theological statements composed by various writers and communities in the early Church to express their faith in the person of Jesus Christ.

Given the complexities described above, what can we learn from the Cleveland woodcarving? What does it disclose to us? Jirousek’s careful research shows that this piece does not derive from the Last Supper narrative in John 13. If the artist’s inspiration for the piece springs from another point in the historical (pre-resurrection) life of Jesus of Nazareth, then the name “Jesus” would be more biblically and theologically appropriate for the piece. On the other hand, if some evidence indicates that this piece describes a post-resurrection moment, then the title “Christ” would be the more adequate appellation.

There is a significant piece of evidence portrayed in the woodcarving itself: the figure of Jesus does not exhibit the stigmata, or wounds of the crucifixion, typically found in works of art depicting his post-resurrection period. Neither the hands nor the feet show the nail-marks of a crucified body. It is reasonable to assume that the artist intended to portray a moment during the public ministry of Jesus. With this evidence as support, the more appropriate name to use is “Jesus.”
“ST. JOHN THE EVANGELIST,” OR “THE BELOVED DISCIPLE”?

The general approach to the study of the second figure in the work of art parallels our examination of the figure of “Christ” or “Jesus.” In the medieval period in which the Cleveland piece was produced, there was a common understanding concerning the identity of the second figure. It was undoubtedly St. John the Apostle-Evangelist. The hyphenated term indicates the general assumption of medieval Christians that it was indeed the very same John, son of Zebedee, who was called by Jesus to be one of his Twelve Apostles, and who also wrote the Gospel known as the Gospel of John. This general assumption has roots that date back to perhaps the second century.

Like all scholarly disciplines, the field of biblical research continues to progress in our day. Some of this research has ‘trickled down’ into popular understanding; much has not. The past forty years have witnessed great strides in research on the Gospel of John. In particular, the work of Raymond E. Brown has been instrumental in shaping many current scholarly debates concerning the Gospel of John. It is Brown’s approach to John’s Gospel that I bring to bear on the discussion of “Christ and St. John the Evangelist.”

Early in his career as a scholar of the Johannine Gospel, Brown affirms the traditional position “associating the Fourth Gospel with John son of Zebedee…” However, some years later Brown presents evidence that leads him to change his mind and conclude that the writer of the Gospel of John should probably not be identified with the apostle John, son of Zebedee. There is no evidence internal to the Gospel of John to suggest this identification. The traditional interpretation that “the disciple whom Jesus loved” (John 13:23) was the apostle John cannot be textually substantiated. This identification is the result of an inference made quite early in the history of the Church. The interpretive inference involves 2 steps. First, an inference is made that the unnamed disciple of John 13:23 is John, son of Zebedee, the apostle himself. The argument is that the author modestly speaks of himself without overtly naming himself and without employing the first person pronoun: instead of writing “I leaned over…” the author more humbly refers to himself in the third person “he leaned over…” (John 13:25). The grammatical referent of “he” is “the disciple whom Jesus loved” (John 13:23).

A second step in this association of “the disciple whom Jesus loved” with John the Apostle arises from the text of John 21:20-25. Verse 24 of this text states: “It is this disciple who testifies to these things and has written them, and we know that his testimony is true.” There is an apparent identification of “the disciple whom Jesus loved” with the writer of the gospel. While this association appears clear, it does not follow that “the disciple whom Jesus loved” is the same person as the apostle John, son of Zebedee.

It must be pointed out that this inference identifying the writer of the Gospel of John with the apostle John cannot conclusively be proven to be false. However, Brown’s study of the Johannine text as a whole, as well as the text’s place within the broader context of the history and literature of the entire New Testament, point to a different conclusion. Brown argues that the community of Christians that traced its lineage back to the “Beloved Disciple” was different in many respects from the other early Christian communities that linked their existence to one or other of the “twelve apostles.”
One difference emerges in the very vocabulary used in John’s Gospel. It is instructive to realize that unlike the other three Gospels, the Gospel of John never uses the word “apostle.” Instead, the author of this Gospel employs the word “disciple” exclusively. Given this textual reality, we return once again to the question of fidelity to the intention of the original artist: here, however, the artist is not the woodcarver, but the writer of the gospel text. Why did the author not use the word “apostle” as the other three already-existing Gospels had?

According to Brown’s analysis, the Gospel of John was composed near the end of the first century. By this time the early Christian communities, most of whom traced their origins back to one or other of the “twelve apostles,” had evolved into structured communities with authority invested in “bishops.” Brown sees the community that gave birth to the Gospel of John as quite different in its thinking: there appears to be no human authority that structures this community. Rather, there is but one Lord and Master, the exalted Savior, Jesus Christ; all others are equally dignified as “disciples.” There is no hierarchy of priests and bishops that stratifies (or gives order to) the Johannine community. Brown argues that this community differs from the many other early Christian communities because it traces its origins back not to one of the Twelve, but rather to a member of Jesus’ wider circle of friends and acquaintances—to a person the gospel identifies only as “the Beloved Disciple.” How does Brown make his case?

Brown explores the passages in the Johannine gospel that refer to the character that he names the “Beloved Disciple” (BD). This phrase is found in five texts, all of which are located in the second major part of the gospel. Brown calls this second ‘half’ of the text (John 13-21) the “Book of Glory,” in contrast to the “Book of Signs” which designates John 1-12. Further, in each of the five scenes, the BD is not alone with Jesus; Peter is also present, or obvious by his absence. Brown effectively argues that the theme of intimacy with Jesus is of vital importance in the composition of these passages. In each of the five, the BD is always in closer proximity—either physically or spiritually—to Jesus than is Peter. In the Last Supper scene (John 13:23-26) it is Peter (evidently at some distance from Jesus) who indicates for the BD (right next to Jesus) to inquire about the betrayer’s identity. What follows is the well-known verse stating that the BD leaned over onto the breast of Jesus to ask “Master, who is it?”

This pattern repeats itself in the other four texts in which the BD is found. In the trial scene, the BD is inside the building—closer to Jesus—while Peter is outside in the courtyard (John 18:15-16). At the crucifixion, the BD is at the foot of the cross; Peter is nowhere to be found (John 19:26-27). The resurrection scene (John 20:1-10) finds the BD and Peter running to the tomb together. The BD arrives first, but waits for and allows Peter to enter the tomb first (perhaps an early indication of deference to Peter or to the Twelve in general). Interestingly, the Gospel of John then reports that Peter went in and “saw” that the tomb was empty. The BD, by contrast, both “saw and believed” (John 20:6-8, italics mine). The BD already evidences a faith in the resurrection that is not yet present in Peter. Finally, John 21:1-14 tells the post-resurrection story of some of the disciples fishing. A shadowy figure appears on the beach. It is the BD who first recognizes this figure: “It is the Lord.” Only after this does Peter swim toward the shore.

The five scenes in which the BD (and Peter) are found all manifest a similar pattern: the BD is always closer to Jesus while Peter is always more distant. This locational pattern is suggestive of a relational, or even spiritual, pattern: the BD has a closer, more intimate,
relationship with Jesus than does Peter. Brown argues that this textual data leads to the conclusion that the BD referred to by John’s gospel is more probably not one of the Twelve, but rather an otherwise scripturally unknown, unnamed, intimate friend of Jesus. It is this BD who stands at the origin of the tradition and community that gave to the Christian Church the Gospel that we now refer to as the Gospel of John.18

This exegetical evidence has several implications not only for our understanding of Scripture, but also for our assumptions concerning our interpretation of art. Given the results of Brown’s research, it may be more appropriate to refer to the second figure in Cleveland’s “Christ and St. John the Evangelist” as the “Beloved Disciple.” And, given our earlier study of the first figure in the work, a more theologically and biblically appropriate title for the work as a whole would be “Jesus and the Beloved Disciple.” However, at this point we encounter another critical question that engages both art historians as well as scholarly biblical interpreters. This question is one of hermeneutics, interpretation theory.

B. HERMENEUTICAL CONSIDERATIONS

To be clear, my interest in “Christ and St. John the Evangelist” does not concern aesthetics. I am not concerned with the criteria by which the woodcarving would be considered beautiful or ugly. Rather, I envision the moment of encounter when an individual viewer walking through the Cleveland Museum of Art stops in front of this piece and beholds the work. After this aesthetic moment, I imagine such a viewer approaching the label-card to read its message. It is this moment that attracts my attention. What happens at this moment when the viewer reads the label-card?

Broadly speaking, this moment involves the didactic dimension of artwork. This didactic aspect complements art’s aesthetic reality. This educational dimension of art is multifaceted. An aspiring woodcarver can ponder the work and learn about the techniques of the process. An inquisitive religious person might view the work as an object of piety and religious devotion. An art historian will want to learn this piece’s place in the chronological development of woodcarving. There are many ways that art can educate.

The educational perspective I wish to pursue is more general. A citizen walking through an art gallery encountering works of art: to what is this experience comparable? Perhaps it is like paging through a dictionary seeking the definition of a word. The label-card which states the work’s title is like the definition of a word found in a dictionary. This dictionary definition is laden with authority because of its context: there is an implied social submission to “Webster’s” definition as authoritative. This same sort of authority is present in the museum label. A typical viewer reads the label and takes its content as authoritative and factually true because of that same social submission to the museum and its agents.

My question, then, involves the authority of the museum curator with respect to the content of the label. The words placed on the label-card establish a link among artist, work of art, and viewer. This link is most significant to the viewer in that the label-card informs her verbally about the artwork. This verbal information supplements her aesthetic experience of the piece. The information on the label-card “names” the viewer’s aesthetic experience.
This “naming” is educational. Accurate information is crucial to good education. Classrooms today must have globes that portray the current geopolitical realities of our world. Using “cold war” era globes to teach geography today would be confusing and inaccurate. Granted, one would need to use a “cold war” era globe to teach the history of the cold war period. So my question returns: how are we to describe the moment of the viewer encountering the label-card next to the Cleveland woodcarving? What sort of educational moment is this?

This question becomes, I believe, a question of authority. Where does authority lie with respect to the issue of “naming” something? For example, did the artist who sculpted the Statue of Liberty name it such? Did the author even name the work at all? If the artist didn’t name it, who did? On what/who’s authority? Who was the “naming authority?”

Historical circumstances will sometimes move authorities to change the names of things. Only following the presidency of Ronald Reagan was National Airport renamed Reagan International Airport. Appropriate authority has the power to change the names of streets, buildings, the way dates are identified: streets and buildings are renamed after important public figures; the status of calendar dates is changed to reflect altered historical realities such as the addition of M. L. King, Jr. Day as a national holiday. Names emerge out of the historical situation; re-naming is historically based.

Why do we re-name things? There is an educational dimension here. Names can teach: Memorial Day, Independence Day, Labor Day, Armistice Day. But does this apply to a work of art? Can a work of art be re-named? If not, why not? If so, under what circumstances?

The biblical tradition provides an interesting example which may illuminate our question. The text of the book of Exodus reflects a long period of development in its composition. It probably reaches its final, fixed (i.e., as we have it today) during the fifth century BCE. Exodus speaks of “plagues” afflicting the Egyptians due to Pharaoh’s refusal to allow the Hebrews to leave Egypt. Some three-to-four hundred years later, the author of the book of Wisdom (found in Bibles in the Catholic tradition, though not in Hebrew or most Protestant Bibles) re-reads Exodus. The author of Wisdom re-names the plagues “signs.” In fact, Wisdom re-interprets the 10 plagues into a 6+1 formula based on the creation story in Genesis 1.

Commentators on the text of Wisdom speculate that the word “signs” brings a stronger emphasis on the present into the traditional story of the exodus from Egypt. I believe this interpretation basically argues that the author of Wisdom re-interpreted Exodus for didactic reasons: how can our reflection on the past help us to better understand the present? The plagues are ancient history, but signs are all around us now!

The author of Wisdom did not confine himself to simply restating the traditional word “plague,” even though that was the word used by the artists who composed the text of Exodus. There is, within the biblical tradition itself, a sense of an organic, developmental character. Is this not like our situation with the Cleveland woodcarving? If indeed the common understanding of the past would have been to name the figures Christ and St. John the Evangelist, would it not be reasonable to re-name them given the information of current biblical scholarship?
There are several different philosophical theories concerning the interpretation of a work of art. Traditional interpretation theory has argued that the intention of the artist is of utmost importance in the appreciation of that work. If an artist has explicitly given a title to her work, then the case is closed. This does not seem to be the case with respect to the Cleveland woodcarving. We have no evidence that the artist explicitly gave the title “Christ and St. John the Evangelist” to his work. Nonetheless, we do have evidence from the 13th century that connects St. John the Evangelist with “the disciple whom Jesus loved.”

It is reasonable to suppose that at the time when the artist of “Christ and St. John the Evangelist” produced the work, the words “Christ” and “Jesus” were used interchangeably and without distinction, and that there was an identification of the “disciple whom Jesus loved” with the apostle John, son of Zebedee, who was also thought to be the evangelist of the Gospel of John.

The evidence is clear that for centuries John the Evangelist was thought to be the “disciple whom Jesus loved” spoken of in the later chapters of John’s Gospel. However, just because an interpretation is an old interpretation does not mean or guarantee that it is an adequate interpretation for today. For centuries humans held the idea of a geocentric universe. Galileo’s heliocentric reinterpretation was not initially well-received. In fact, it was only a few years ago that the Church formally removed Galileo’s name from the restricted list. Yet even today vestiges of geocentric thinking survive: our weather forecasters do not speak in the more appropriate heliocentric terminology of “earthrise” and “earthset,” but continue to use the geocentric “sunrise” and “sunset.” We know that it is not the sun that is moving (rising or setting), but the earth. Yet, we remain quite comfortable in retaining the traditional language. Given the information of recent critical biblical scholarship on the Gospel of John, it appears reasonable to move beyond the medieval interpretive universe which identified the BD with John the Evangelist.

In contrast to the traditional artist-centered theory of interpretation, there is today a strong school of thought that argues for a heavier emphasis on the role of the perceiver of the work. The work of Umberto Eco manifests an approach to the interpretation of literary works that can be applied effectively to other art forms as well. This approach reasons that while the role of the artist is crucial in the composition or creation of the work, once it is completed and released by the artist into the public realm, the artist’s own particular interpretation of that work becomes simply one of the potentially many and diverse interpretations of that work given to it by its viewers. The artist has little, if any, control over how the work will be interpreted by those who will perceive it.

History is replete with examples of interpretations of works of art that differed from the intention of the artist. The bronze statue of Marcus Aurelius on horseback found on the Capitoline Hill in Rome was thought by later generations of Christians to be a figure of the Emperor Constantine. This social (mis-)interpretation is the likely reason why the statue survived destruction: it was thought to be Christian rather than pagan art. Christian perceivers, though in this case ignorant of the intentions of the artist, gave the bronze a new name.

Today similar experiences occur in the authentication of works of art. Just recently a chalk and wash drawing was found and authenticated as being from the hand of Michelangelo. The authentication resulted in a change in the titling of a work. The sketch was formerly labeled “Italian, circa 1530-1540.” However, today’s Italian Renaissance scholars are convinced it is a Michelangelo. Their authority is sufficient to change the label of this work.
Is it important to change the label of this sketch based on today’s knowledge? I doubt that anyone would oppose the changing of the label based on the criteria used by scholars in the field. Similarly, it would seem important to do the same with the Cleveland woodcarving based on today’s knowledge of the Bible. Accuracy is important in any discipline. Perhaps the more cogent question is: who would be the authority to authenticate a change in the label of the Cleveland woodcarving? And, what process would be followed to move toward such a change?

If we simply continue to name the Cleveland piece “Christ and St. John the Evangelist,” will we ever be able to integrate modern biblical scholarship into the continuing education of the art-viewing public? I fear that we will be losing an opportunity to do just that.

When we consider the issue of modern biblical research and its relationship to the history of art, how are we to integrate the two appropriately and adequately? Raymond E. Brown puts the (biblical) issue this way: how are we to deal with the “popular communication of modern critical views”? This manner of formulating the question has merit for our inquiry into a work of art and its interpretation today.

On one level, the results of modern biblical criticism need to be shared with art historians in a scholarly, systematic, and collegial way. Like all people, art historians bring their assumptions to their interpretation of works of art. An example of this is a statement such as “St. John referred to himself a number of times in his Gospel as ‘the disciple whom Christ loved’, ....” The traditional theory of the authorship of the Gospel of John is apparent here. The inference made is that “the disciple whom Jesus loved” is in fact the same person as the apostle St. John, and indeed is the same person as the evangelist. Given the results of modern critical research, is this still an appropriate inference to make? Or, does it perhaps need to be seen in the light of contemporary theories of authorship? A second example of an assumption that may no longer be critically accepted is the simple statement that refers to “[t]he young apostle.” If the Gospel of John never uses the word “apostle,” is it appropriate for us to use it in a scholarly, critical context?

On a second level, the results of modern biblical research need to be shared with the general art-viewing public. Certainly the traditional name given to a work must be taken seriously in the dialogue concerning the naming of works of art today. However, the results of current scholarship must also be brought into this dialogue. This conversation between two different voices ought to be not so much a competition in which one voice conquers and silences the other, as much as an interplay of the two voices such that the values of each are preserved and integrated into a new whole.

Amy Tucker puts the issue this way: “The challenge for art communities … is to maintain the institution of art history as an open forum, rather than an impregnable palace or tomb, while still respecting the original sacred or private meanings of art objects.” With respect to the Cleveland woodcarving, we might wish to indicate its traditional title off to the side of the label, as we give the history of ownership of the work.

If one assumes the perspective of the history of art, then it will be quite clear that the work of art ought to be titled according to the author’s intention. In situations where the work is explicitly titled by the artist, this is a moot point. However, what is to be said when the work
has not been explicitly named by the artist? Two possible approaches can be distinguished: in the first approach, the title of the work would be derived from the general cultural (in this case biblical) understanding of the time when the work was created; or, one could appeal to the earliest known titling of the work to appear in the history of the work. In our present case, such an approach would argue that the Cleveland piece ought to remain named as it has been traditionally titled: “Christ and St. John the Evangelist.”

On the other hand, if one assumes a stance toward interpretation that integrates the findings of current (in this case, biblical) research as well as the contemporary valuing of the role of the perceiver in the appreciation of a work of art, then one will argue for a change in the title of the piece to: “Jesus and the Beloved Disciple.”

NOTES

3. The Hebrew “messiah” is translated into Greek as “christos,” from which comes the English “christ.” The term means “anointed one.”
4. Lane, 154.
6. Tatian the Syrian (fl. ca. 160-175) produced the Diatessaron (literally, “through the four”) in which he blends the accounts of the four canonical gospels into one continuous biographical narrative of the life of Jesus. See Joseph. F. Kelly, Why Is There a New Testament? Wilmington: Michael Glazier, 1986, 86.
11. None of the other three canonical gospels makes any reference to a “disciple whom Jesus loved.” This is peculiar to John’s Gospel.
13. The English “apostle” derives from the Greek “apostellos,” literally “one who is sent,” while the English “disciple” comes from the Greek “mathetes” and means “one who follows.”
14. “Episcopoi” in Greek is rendered literally as “overseers.”
17. For the argument that the “other disciple” of John 18:15-16 ought to be identified as the Beloved Disciple, see F. Neirynck, ETL 51 (1975) 115-51.
18. In his 1979 *Community of the Beloved Disciple*, Brown puts it this way: “I am inclined to change my mind (as R. Schnackenburg has also done) from the position that I took in the first volume of my AB commentary identifying the Beloved Disciple as one of the Twelve, viz., John son of Zebedee. I insisted there on the combination of external evidence and internal evidence which made this the strongest hypothesis. I now recognize that the external and internal evidence are probably not to be harmonized.” 33-34

Brown’s most mature statement on the issue comes from his *Introduction to the New Testament* (1997) in which he states: “still other scholars (with whom I agree) theorize that the Beloved Disciple was a minor figure during the ministry of Jesus, too unimportant to be remembered in the more official tradition of the Synoptics. But since this figure became important in Johannine community history (perhaps the founder of the community), he became the ideal in its Gospel picture, capable of being contrasted with Peter as closer to Jesus in love.” 369


19. The narrative of the plagues is found in Exodus 7-12.

20. The English “re-reads” follows the French “relecture” used by Maurice Gilbert in his work on the Book of Wisdom.

21. The Greek word for “signs” is “semeia.” Interestingly, the writer of John’s Gospel employs this term for the deeds of Jesus rather than the word “dunamis” (literally, “powerful deeds”) used by all three of the Synoptic writers!


24. The drawing was discovered in a box of designs of light fixtures at the Cooper-Hewitt National Design Museum in New York City.

25. From the article in the Cleveland Plain Dealer, 7/10/02, A-12.


I begin this writing inspired by an aesthetic insight from my study of divination, from ancient Tibetan palmistry and Chinese face reading, that I have for many years now applied to art: That my art works like the palms of my hand are a kind of memory that speaks of my “Nature” and “Nurture,” even revealing the alchemy of my genetic potential, revealing who I am, my thoughts, my feelings and history as a human being. It is an aesthetic that bridges my emotional, bodyfelt and abstract cognition in memory, an aesthetic within which the marks, bridges, creases and scars of my palms like all the drawing marks, color and textures of my art work similarly contain embedded memory of my imperfections and contradictions, memory of my hopes, successes and failures, memory of feelings that so often contradict my memory of fact. Of course this aesthetic has always posed complicated question, such as if my art is embedded—memory is my memory an embedded art, and if so does the process of one reveal the process of the other.

It is out of a desire to answer the endless questions that lie buried in this aesthetic, to understand its meaning in cognition that I search cognitive science itself and share the research with you. Thinking it would be simple, it was not, each answer led me to yet other questions. Such as what are the origins of memory and art? What was the relation in kind and process, to memory and art, of the bio-brain system-developments and resulting cognition, within the various stages of our evolution as a species? What is the relation of remembering and the documenting of remembrance in each of those stages of our evolution as a species? How does memory and therefore art assert itself beyond an individuals remembering to others? How did our species come to distinguish between the real and the imagined, between the self and the other, in memory, cognition and art? What is their relation to each other? What role does memory and therefore art play in the construction and de-construction of ones personal, and ones larger social culture and tradition? And the question the answer to which for me as an artist and artist-educator is of special importance: How does memory, its kind and process in cognition and therefore process of embedded meaning, the art inherent to all processing of information, contribute to or inhibit realization and expression of the memory and cognition inherent to each of our species stages of bio-brain system evolution?

Endel Tulvil in *The New Cognitive Neuroscience* states that memory is the capacity of nervous systems to benefit from experience, which reaches its culmination in human beings. He states that it is a vast domain with a vast diversity. There are kinds of memory, tasks, kinds of memory process and memory systems. Memory he states is best understood as we understand observable behavior and reportable experience, as we understand the relation between brain and behavior, between brain and mind.

Its important to remember that memory is cognition and that the various kinds of cognition produce various kinds of memory, each with their own degree of veracity. We must also not forget to remember that the various kinds of memory each within there various degrees of veracity serve the potential in cognition of a bio-brain system, or suppress its potential in cognition. Further we must not forget to remember that within evolution, our species various
stages in bio-brain system evolution over some 6 million years, has resulted in an ever evolving inherent potential in cognition and memory. Unfortunately for us our species micro and macro culture has over these millions of years insisted in remembering and asserting its limbic past in cognition out of the less prefrontally evolved bio-brain system times.

Memory has a history of memory that in its memory of somaticness, out of a bio-brain and or cultural limbic-dominance in cognition, has somatically, hormonally insisted, and we conceding have cooperated, creating limbic dominant and limbic led cultures for its expression and continued dominance in memory. Even with our Sapiens Sapiens 6 times more prefrontal development than our ancient relative the Chimpanzee, our memory like a prophet of old insists on voicing the limbic-truth of our ancient times in cognition, undermining our prefrontal-destiny in truth, a “truth” in cognition overdue by some 100,000 years.

I argue that this archetypal, ancient memory that has inserted itself in culture process since the beginning, is still suppressing and inhibiting our species inherent potential in cognition, in abstraction, and free-will in intellect.

2 million years ago “Nature” introduced in the experiment our species is, an ability to create syntactic speech. As Howard Bloom put it in the book he authored, Global Brain, in chapter 6, entitled “Threading A New Tapestry”:

knitting nodes of humans was long-distance trade, which first pulled together the campsites where Homo habilis made deals for rare and workable stone—a crucial aid was added to the give and take of craft and raw materials, a transmitter capable of threading whole new kinds of intricacy from one mind to another. More than wrs and chatters of monkeys—Syntactic speech: noises linked in structured strings of verbs, adjectives, and nouns—One bit of evidence stands out with clarity—a 2-million-year-old skull from Koobi Fora Africa indicates that Homo habilis possessed a patch of brain unknown till then in any family tree. This new cerebral curio was Broca’s area—an apparatus vital to fluid, nuanced speech, language, trade, migration, and the imitative of men and women, birds, and pasture beasts—Earths new ways of dreaming and scheming had begun.


But let’s not get carried away, syntactic speech still is organized by the cognitive mode that dominates cognition and memory, and there is no question that Homo habilis was limbic dominant in bio-brain system and therefore limbic-dominant in cognitive-mode and memory in cognition.

Despite H. habilis potential they were not much more conscious of being conscious than the Chimpanzee. I would argue that the wall between reality and fantasy was paper tissue thin, that their sleep dreams however more complex were still as much a reality to them as their reality was an awake dream.
Dreaming without lucidity of any kind, without the bio-brain system potential in memory and cognition for awareness that one has dreamt, no less is dreaming, not distinguishing between reality and the dream, these are the primitivisms of memory and cognition, operating in and dominating the psyches of our species earlier stages in bio-brain system evolution. Certainly this was the case prior to 400,000 years ago.

We can assume that the evolving language in abstraction of Archaic H. sapiens, with the increased prefrontal-lobe development serving Broca's area, and less limbic dominance in bio-brain system architecture, that the dream and for that matter all imagining would begin to be remembered as something separate from the materiality of awake reality.

I argue that despite our post-H. habilis progress in bio-brain system evolution, even with our species beginning to distinguish our dream and other imagining from reality, that the same limbic primitivisms in memory and cognition that dominated the less bio-brain system evolved branches of our family tree, also dominated more or less all succeeding branches through acculturation.

Research leads me to conclude that acculturation in limbic traditions in cognition, in imitative-meme memory, out of earlier times of minimal prefrontal bio-brain system evolution, from times before our species H. habilis development of Broca's area, through some 3 million plus 250,000 years after, from generation to generation, from branch to branch of our species family tree, has subverted our species progress in abstraction in memory and cognition.

Educational experiments asserting the further potential in abstraction of the chimpanzee, teaching the chimpanzee to sign confirms this.

The history of our species stasis in fulfillment of the potential in cognition and memory inherent to each of our stages in bio-brain system evolution bears out the role of culture and acculturation as the subverting factor. The fact is that through the millions of years of evolving prefrontalness and potential in abstraction our species has preferred to remain limbic dominant in memory and cognition, inhibiting development of the inherent potential in memory and cognition in abstraction of each of our species stages in evolving bio-brain system hardware.

It is this millions of years of culture and acculturation that today in their continued limbic dominance, obstructs development of memory and cognition in abstraction and in turn free-will in intellect.

By placing our species cognition and memory within a larger historic perspective, we can more clearly separate out the complexity of layers that comprise the limitations and biases in memory and cognition we continue to impose on ourselves and each other, through the culture and art we create and experience.

We should remind ourselves daily that our memory and cognition has had this up hill battle within all our species bio-brain system stages in evolution, since our beginning some 6 million years ago. It was then that we first took the fork in the road away from our Chimpanzee cousin, bringing with us in traditions of cognition their memory with all its cultural dead ends.
Steven Mithen in *The Prehistory Of The Mind*, breaks it down into (4 Acts). Mithen outlines the fossil evidence, beginning 6 to 4.5 million years ago with his list of a variety of actors in the drama of our species evolution, with names like A. ramidus, A. afarensis, A. africanus, and H. habilis, the list goes on through H. erectus to the 100,000 years ago (act 4) appearance on the scene of all of us, the Sapiens Sapiens, the 15th and present character on the scene. The first character is called the missing-link and is not listed. So, there are at least 16 characters to the drama of our evolution to Sapiens Sapiens.

By understanding our species bio-brain systems inherent potential in cognition and memory and the role of acculturation in the process, we can better understand the context within which our species awake dream, our art, and our asleep art, our dream evolved and operate today. We can then better understand the kind of cognition and memory that the awake time art, and the asleep time art, flow from, that it is the cognitive mode within which they each operate that directs, that determines their influence in meaning as they process as opaque or transparent in meaning-relationships.

I reference the research of Deacon, Dawkins, Fiorito and Scotto, Caporael, Ekman, Brunner, Hood, and colleagues and Galef and colleagues as serving this understanding. Terrance W. Deacon’s explanation in his work entitled *The Symbolic Species*, of the distinction between different forms of referential and meaningful relationships, is of special importance. Deacon discusses two sets of elements of signifier, one comprised of signs, words and pictures and the other of signified objects which are associated by a semantics, by a conceptual relationship. What comprises this semantic relationship or semantics is critical, since it maps the individual elements of one set of signifiers of signs, words and pictures with another, as well as those of the signified object. Deacon discusses transparent and opaque as the two semantic or meaning relationships, in cognition that link signifiers and signifieds.

A transparent relationship or linkage occurs to the extent that no additional knowledge is necessary to associate one through an experiencing of the other. An opaque relationship occurs when the processes of cognition, applying abstraction are led by a seeming arbitrary coding or mapping. I use the term seeming because an applying of abstract-cognition deciphers the code that forms the semantic linkage. A transparent signifier within this framework is an icon; while the opaque signifier is a symbol.

Physical or mechanical relationships with other objects irrespective of semantics, have been designated signals. An example of this would be the red light on an automobiles dash board signaling that the engine oil levels are low; being electronically linked to an oil pressure sensor.

Richard Dawkins book, *The Selfish Gene*, published by Oxford University Press in 1976, outlines his theory of “memes”, what he refers to as a cultural analog to a gene: A response to constraints imposed by a common adoptive context, which may or may not still exist. But existing in limbic memory, in the nervous system circuitry serves as a platform, a foundation for a similar contextualizing of other signifiers, and signifieds.

The role of culture and acculturation within the history of our species inhibition of inherent potential in a higher order of semantic in memory and cognition is understood as we join the distinctions Deacons makes between the different forms of referential and meaningful relationships with Dawkins theory of memes and Fiorito and Scotto’s research in
imitative learning.

Grazio Fiorito and Pietro Scotto’s work published in Science, April 24, 1992: pp. 545-547, titled Observational Learning in Octopus Volgari, centers on an experiment wherein octopus (A), observes from a separate tank, octopus (B) retreat from a teddy bear responding to the teddy bear as dangerous. Octopus (A) has no knowledge that octopus (B) has previously been conditioned to the teddy bear as a dangerous thing, through electric shock into the tank water containing octopus (B). The procedure involved the teddy bear being placed in front of the tank of octopus (B) as each burst of electric current surged through its water to shock it. Observing the retreat of octopus (B), octopus (A) in a separate tank from octopus (B) throughout the experiment, and not having in any way observed the electric shock conditioning procedure of octopus (B), or in any way itself exposed to electric shock, having been permitted only to observe octopus (B) repeatedly retreat from the teddy bear placed in the proximity of octopus (B)’s tank, octopus (A) similarly retreats from the teddy bear as a danger to it, when ever the teddy bear was placed on the glass wall of its tank.

This speaks clearly to the existence of a limbic-memory, of a cognition of pure imitation, a reflex-conditioning that in process conforms to an unconditioned-reflex. This conforms to the limbic-bio-brain system architecture of the octopus, that like the chimpanzee and pre-H. habilis members of our species family tree, absent the necessary degree of prefrontal bio-brain system development and linkage in cognition with which to separate objective-truth from subjective-truth.

There is not the prefrontal-bio-brain system development through which to separate the unconditioned-reflex, from the conditioned-reflex, to have the self reflective capacity to separate the memory and cognition the drives impulse, from the memory and cognition with which to control impulse. Limited in evolution and culture the necessary separation of a biased response, from an unbiased response, a transparent signifier, from one that is opaque is not possible.

In other words free-will in memory and cognition was not possible in evolutions earlier bio-brain-system architectures with their minimally prefrontally evolved, limbic-dominant bio-brain systems, dominated and driven as they were by limbic reflex, meme and imitative memory and cognition. Keep in mind that it is the degree of free-will in memory and cognition that determines the degree of ones veracity in truth.

It is a chain of causation within which free-will in cognition and memory demands free-will in intellect, which in turn demands a development of abstract-cognition and a semantic process led by a memory and cognition in abstraction free of limbic dominance.

The point I wish to make here, is that not only is the degree of free-will, but its very existence, dependent on its veracity in intellect. Now veracity in intellect in turn depends on the truth in objectivity, of the facts and theories of the research through which one determines the truth.

Free-will, which only makes sense within the context of intellect, is a mobius-strip of sorts, since without truth in intellect, there is no free-will, and without “will” free of bias, there is no truth in “will” or intellect. It is easy to see how conditional-will and will-in-bias evolves, how its
roots in intellect, in cognition and memory in abstraction dominated by limbic process imprisons even the most intellectual of “will”.

Free-Will is then dependent on a science that is itself free and freeing in “will”. A science that is itself freed in cognition and memory of all limbic dominance, that makes a priority of freeing us all through an ever evolving abstraction and objectivity in memory and cognition, in research and theory. Such a science gives us the objective tools through which to deconstruct all dominance of limbic paleo-logic, all dominance of meme and imitative memory.

In combining these ideas I give special importance to linkage, to the transparent or opaque kinds of cognition, semantics and conceptual relationships within which linkage can occur.

I argue that however expedient or better-safe-than-sorry the linkage limbic-cognition is, it is in its transparency in process, stored as it is in the nervous system circuitry, able to contain little if any opaqueness and therefore abstraction in cognition. As such it is open to all kinds of error within the narrow corridor of truth in cognition the limbic is. There is no distinguishing of fact from fiction, as the octopus certainly could not distinguish within the teddy bear experiment.

A free-will in intellect would have deciphered the danger as the laboratory technician and not the teddy bear.

The point here is that we Sapiens Sapiens with all our bio-brain-system evolution in prefrontalness, with all our potential in cognition, in linkage that is abstract-cognitive dominant, we despite that potential create cultures within which we are acculturated to cognize as if our potential in cognition did not exceed that of the octopus.

The problem with our acquiring large stores of memory out of limbic-linkage, is that so much of it organizes itself around the dis-information and error inherent to the bias of its retributive logic in emotional-bodyfeltness. Especially when such bias in logic seeks to manipulate, control and exploit. Keep in mind that limbic-memory is conditioned in many subtle and cruel-abusive ways within the amygdala, hippocampus, hypothalamus, somatics of meaning-relationships dominated by memory in retributive-bias.

The foundation of this process is of course cultural, and is driven by an acculturation that begins in the environment of the womb which speaks to the quality of life experienced and bio-chemically remembered by the mother. It is these bio-chemical memories as they are tainted by pollutants and trauma, that Lipton in his theory of the Biology of Consciousness, outlines as negatively effecting the mitochondria and therefore chromosomes and genes as they organize the forming fetus.

Similar conclusions are voiced by Matt Ridely in Genome, and in Our Stolen Future, by Colbrn, Dumanoski and Meyers. In a review of Our Stolen Future Pat Cody writes:

> Harmonally active synthetic chemicals are thugs on the biological information highway that sabotage vital communication. They mug the messengers or impersonate them. They jam signals. They scramble messages. They sow disinformation. They wreak all of havoc. Because hormone messages orchestrate many critical aspects of development, from sexual differentiation to
brain organization, hormone-disrupting chemicals pose a particular hazard before birth and early in life.

It is by analogy that a societal culture in limbic dominance, similarly pollutes and sabotages all development of memory and cognition with limbic-logics inherent retributive-phobic notions of survival.

These chemical and psychological hormonal disruptions of cognition and memory that begin in our fetal stage, find their way into our infancy and early childhood. They are reinforced through adolescence and young adulthood, by all matter of yet more pervasive interpersonal and societal mental, physical and spiritual abuse, abusing, disfranchisement and disfranchising, as limbic-driven notions of survival assert themselves in the world of those we limbically-retributively love and hate.

The psychopathic-retributive entertainment, the video games, the movies, the novels, their messages orchestrate our imagination from childhood to adulthood. All their sadistic, masochistic, abusive retributive content inspiring our Id guiding all our potential in abstraction and intellect, to limbic solutions. All are thugs on our information processing highway mugging us in memory and cognition to phobic helplessness and counter-phobic domination.

Like the octopus in the tank, the limbic dominant culture traps us in its retributive tank conditioning our memory, our identity and reality to error in adaptation and survival. It is easy to see especially in our limbic-dominant, linkage in cognition of infancy, how we in our most nervous system circuitry imitativeness in memory and learning like the octopus can get it all wrong.

Instead of the laboratory technician we have the parent, the family, the society. We have the culture of each to shock us into error. Linnda R. Caporael points out how we Sapiens Sapiens when less than a week old begin imitating others, imitating our mothers facial expressions. Hood and colleagues observed how infants will turn around to look at what the parent is looking at, and that a baby chimpanzee will do the very same.

Paul Ekman’s research shows how the facial expressions we make out of our limbic memory of imitation of faces made at us by parents and others recasts our moods, resets our nervous system, filling us with the emotion the facial expression in fact represents. This research is published in Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences, January 29, 1992: pp.63-69.

Just as the teddy-bear, electric shock experience of the octopus in meaning-relationships reveals the extremes in cruelty with which meme and imitative, limbic-conditioning in reflex can be understood to occur from our most somatic limbic-driven developmental stage of infancy. So to can we understand the meaning-relationships of the facial expressions of the mother as a key to many other subtle conditioners in limbic-reflex, that in transparent-linkage forms the infants visceral-vision of identity and reality.

It seems to me that our Sapiens Sapiens memory as it is today, is the result of an acculturation that to this day remains dominated by our ancient bio-brain system in limbic-memory with its
penchant for error and cruelty. How could it be otherwise, this ancient-memory in error and cruelty is affirmed through infancy and childhood, through adolescence and adulthood, within various kinds of disfranchisement, and retributive-notions of enfranchisement, organizing in error and retributive bias all our inherent potential in abstraction in cognition.

Is it any wonder that it is impossible for the disfranchised of abstraction in their anti-intellectualism in memory and cognition to be stuck in limbic-will with little if any intellect, with no intellect in free-will. Is it any wonder that it is near impossible even for the enfranchised limbic-led intellectuals to evolve intellect free of retributiveness, intellect free in “will” in objective-research.

We are as free of our limbic systems penchant to assert limbic-will with its retributive fallout, to the extent that we deconstruct in objectivity our culturally, limbically-conditioned memory and cognition. Then we are free of our penchant for retributiveness, then we are finally free of the limited, ego-centric retributive circumscribing of our and others lives.

By now its clear that memory is much more than recalling where you left those keys, or your glasses, memory is a code specific process occurring in layers of kinds of memory, out of kinds of cognition that represent like tree rings our history in cognitive development. Our infant earliest layers are comprised of the most transparent, isolated linkage of our most cognitively immature, dominance in limbic-cognition, with meme and imitation memory dominating. The later layers are of multiple and even contradictory transparent-linkages, or what might be viewed as cognitively contradictory opaque-semantics, that in their complexity of linkage of layers organize the kinds of narratives that the psychologist of the mid-sixties, R.D. Lange, in his book, entitled Knots dubbed knots.

In Knots, Lange describes it as an internal multi-layered convoluted, contradictory narrative process. For instance: I know you think I think I know that you know I know your secret; what you do not know is that I will never let you know that I think you know I know you think I know your secret, because that my secret, and I know you do not know my secret, and I will never tell you.

Lange makes clear that the semantics of intention is designed and driven in communication by our will in cognition. By a will that is either limbically-bound in a maze of illiteracy, of sub-predicate-coded layers of paleo-logic, or a will in memory and cognition that is freed from limbic-will through abstraction, and through abstraction in literacy to objectivity and free-will in intellect.

It is our acculturated will in memory and cognition, as it serves to realize or inhibit our bio-brain potential, in each of our various stages in bio-brain system development, from infancy to earlier and later childhood, to early and later adolescence, to early and later adulthood and old-age that determines what mode of cognition and therefore linkage, dominates each of our developmental-stages from infancy to old-age.

We are like a digital nonlinear 16 track recording, comprised of layer upon layer of data, of realities and identities each with a process in linkage driven by its own will in cognition and memory. Sometimes many of the tracks, many of the wills in memory and cognition play at
once, but most of the time it is a selective number of tracks that play. Each track or layer with a
cognitive mode linkage and coding that is specific to it. Each track or layer in more or less
transparency or opaqueness, in more or less will-in-intellect, bound more or less in limbic-will
in bias, and retributive error, or in will free in abstraction, free in will in intellect in objective-
research.

The dominances in cognitive-mode, in memory and process in linkage of the earliest
developmental stages being most influential, even dominating the cognitive function thereby
organizing the cognitive will of all other developmental stages to the extent that they through
acculturation are favored. In this way our most primal meme-imitative memory in cognition
serves to parent and co-parent all the will in linkage that follows.

In behavior, the final outcome is as predictable as the will in memory and cognition that has
been in acculturation embedded and compressed as cues and the dominances in will of the
various layers triggered by the cues. The cues and layers organize creating critical-masses,
foci of dominances in memory in cognitive-mode, in narrative and perceptual mode. The
clustering of layers behave like cliques each layer triggering a memory in dance through all the
layers that resonates at its shared frequency in will, creating a network of linkage of cognitive-
will, of layers of identities and realities in memory in cognition that then in conflict and
cooperation represent us in behavior. The reference here for “cliques” is outlined in the
footnote of p.122, of Global Brain authored by Howard Bloom. Bloom writes:

In 1998 Kelly K. Kissing, whose research focuses on a common North
American genus of spider, Dolomedes, completed a study of the fishing spider
Dolomedes triton and reported a resolute tendency to create differences between
cliques among these eight legged subjects. Groups with the same ancestry tend
to harrumph themselves into difference by embracing incompatible mating
rituals. Though the aquatic arachnids may continue to live in each others
vicinity, the clumps of quibblers refuse to mate with an outsider who does his
mating dance “all wrong”. This “reproductive isolation” is precisely the kind
which leads to genetic separation between groups. In the case of modern
humans, it also leads to cultural diversity.

I propose that these layers to the extent that they are limbic dominant, will through time, in
synaptic-patterning form relationships within their common cognitive will, each with a trigger
that links them, that associates them no matter the inherent potential in linkage of the bio-
brain developmental stage they represent. The result is a limbic-network of narrative, of
behaviors and symbols so psychosomatically layered and intertwined, that like the gordian-
knot, will not be easily untied.

Is this not the process in cognition and memory that we Sapiens Sapiens continue to be
acculturated to. How else to explain the extent and extremes in disinformation in bias that is at
the center of so much of our communications, that could not otherwise succeed as truth. Bias
and propaganda succeeds as truth because its limbic paleo-logic is compatible with the failure
in truth in memory and cognition inherent to the limbic-logic of our cognitive-immaturity.

To the extent that we are in cognitive-immaturity we have since infancy been acculturated to
limbic bias and propaganda in truth, and in that truth have run commercials of others and our
own design in our own minds and that of others since infancy. It is within this cognitive immaturity that any development of abstraction in cognition will occur with intention in will of abstractions subservience to our limbically dominated memory and cognition.

The purpose then of abstraction and abstraction in intellect in an immature-cognition is to in subservience to limbic memory and cognition construct more subtle, retributively functional topsy-turvy semantic structures than those possible with limbic logic alone. Abstraction in service of the limbic dominant immature-cognition makes possible an encoding of the limbic driven retributive memory within more complex semantic-knots of layers that are then the stealth protection for expression of our most archaic and retributive limbic history in “Nature”.

Unfortunately as the history of our species has so far born out, in all likelihood, as we organize more and more intellect in service of a limbic dominance, in will in cognition, we Sapiens Sapiens the only surviving brach of our family tree, will with even more intelligence in retribution than our ancestors in evolution assure our inevitable collapse into the churning alchemical pot of extinction that “Nature” is. For that is what the history of intellect in service of archaic-limbic “Nature” has been for all the branches of our family tree before us.

Clearly the cognition within which our memory forms is central to our building an identity and life in the world that is either liberated from or a prisoner of our archaic history in “Nature” with its cruelty and error, with all its inherent inhibition of our species bio-brain evolutionary potential in abstraction and intellect in free-will.

It was a critical point in our species evolution when its inherent potential in cognition in abstraction began to develop enough to make possible a memory in a kind of objectivity, a memory less dominated by the subjective logic of emotional-bodyfeltness. It was a leap in cognition that left our species more and more with one leg in limbic cognition while the other reached for our inherent potential in abstraction. I would argue that Neanderthal in their bear-cult and other shamanic ritual had an inkling but did not quite separate the dream from reality. It was Cro-Magnon and Sapiens Sapiens who were the first to begin to distinguish the dream as a reality of sleep that interfaced the awake reality of thought and imagination.

This ability to separate the world of thought, of imagination from that of concrete-reality, made possible the re-presenting in reality of thoughts, of imagined things, and the abstract measure of events in time and space. It inspired the development of language, the language of words and numbers, the spoken and the visual language, each with enough objectivity to serve reality, making possible, like the transporter of Star Treks Enterprise, the artistic re-presentation, the transporting of the imagined-remembered thing and thought, from its existence in the mind, time and space of the explorer in ephemeral thought-imagination, to concrete existence in the time and space of others and the community. Only then was a common-shared reality semantically and psychosomatically evolved in complexity enough to be capable of the bonding of individuals to collectivities of meaning supporting ever larger communities.

I would argue that only the newly evolving cognition in objectivity from H. habilis to Archaic sapiens, from Neanderthal to Cro-Magnon, to Sapiens Sapiens, with its evolving greater semantic complexity could support invention of the spoken and visual language. It was our
species evolving objectivity and long term memory that made it possible for our species to organize a culture of learning that more quickly imparted the larynx-tongue diaphragm and breath coordinations, that made more sense of the mind-hand coordinating that were all a part of the evolving transporter-devises.

It was an advancing cognition in abstraction mapped by artifact over millions of years, often in stasis for hundreds, upon hundreds of thousands of years, but with an inevitable progress permitting through each branch of our family tree options in self-expression beyond the limbic vocalizing, body and hand gestures.

Advances in memory and cognition in abstraction served to design more advanced means of materializations in transport from imagination and thought to a reality out of greater semantic complexity in encoding through abstraction, to speaking, story telling, sculpture, etching, drawing and painting, to the theory and thesis I present here.

Keep in mind that it is exactly this progress in cognition and memory that permits me to reach back to some 6 million years ago to our most ancient ancestor the Chimpanzee who transported their imagination to concreteness through a less evolved simpler more limbic bio-brain system absent Broca’s area, with 6 times less pre-frontal-development. So here we are today able to understand that theirs was a bio-brain system that permitted the construction of only the simplest meme-imitative-semantics through which to construct thought and imagination, permitting the construction of only the simplest of transport, of only the simplest imagined use of a leaf, a twig, a stick, and a couple of stones.

In the meantime through these 6 million years some 15 branches of our family tree 15 trials and errors, in cognition and memory of our family tree had failed. Not until 60 thousand years ago with 3 of the branches still duking it out, around the world, one of them Neanderthal in Europe almost extinct, by 35,000 years ago. Another Cro-Magnon a branch of Sapiens Sapiens with a bio-brain system development beyond that of Neanderthal, who it is assumed they drove to extinction in Europe by 30,000 years ago and by 10,000 years ago what ever numbers of Cro-Magnon not absorbed into the gene pool of the later arriving more cognitively evolved Sapiens Sapiens, being driven to extinction, unable to compete with us Sapiens Sapiens the third party and only survivors in this 6 million year history of survival of the fittest politic.

With Neanderthal extinct some 30,000 years ago and Cro-Magnon some 10,000 years ago we Sapiens Sapiens, proved the superiority of our visioning-out, of our concretizing imagination, of our projecting it out, in re-presenting it in language and community, in self-expression beyond any imagined by all the branches of our species family tree that did not make it.

There were 6 that had the most promise that fell, that were pushed into “Natures” pool of extinction, by those that succeeded them with an edge in evolution that had more potential in imagination. All had a Broca’s area development, the first to come and go was H. habilis, followed by H. rudolfensis, and H.ergaster, followed by H. erectus, Archaic H. sapiens, H. heidelbergensis, Neanderthal. The last to fall was Cro-Magnon. They all appropriated “Nature,” each exploiting more of the various material of “Nature”. Each in invention, in memory in cognition, evolving beyond their predecessor their “inner-visions” to concrete expression of embedded meaning, until Cro-Magnon and Sapiens Sapiens bio-brain system potential and
development in memory and cognition released their imagination into a burst of invention in technology and art that lay in stasis some 60,000 years.

So began the conscious awake dreaming, a coherent remembering, a self-conscious possession of things, beyond the ephemeral minds eye. And so here “We” are the last in the struggle with “Nature”, the last to survive or not, still making external, concrete and permanent what was previously a wisp of thought. It is a history within which my dreams have become the thoughts of our future shouting in my mind.

Joanna Schaffhausen in The Dreaming Brain discusses dreams as a way of remembering, a way that itself is remembered or forgotten according to when in the dream cycle one awakens. If we awaken from a dream during the rhythmic hippocampal-REM cycle, there is an 80% chance of remembrance, while only a 7% chance of remembrance if we awaken during the non-rem cycle.

This makes sense considering that dreaming is in its bio-brain and cognitive-process, brain stem, thalamus, auditory cortex dominant, abstraction and objectivity in process in memory are inhibited unless the dreamer is educated to lucid-dreaming, to abstraction and objectivity in dream process and dream memory. In other words the Rem dreaming cycle is sensory-emotional-bodyfelt-limbic-dominant in process and memory.

Within their limited bio-brain architecture one could imagine our cognitive and bio-brain limbic-dominant earliest Hominid and archaic-Sapiens ancestors reality dominated by the cognitive-processes we associate with unlucid dreaming with its inherent potential for error in cognition and remembering. We can extend this process of error to their recall if at all of only fragments of their dream memories, with fragments remembered as a reality. Their awake thinking, experience and remembering must have been much like that of the dream lacking as much lucidity.

I believe that is the case generally in the present, not only are we not lucid dreamers, we are not lucid thinkers. I argue that it is due to acculturation, to education’s failure, that despite our, as Sapiens-Sapiens, bio-brain-evolution, having for some hundred thousand years now the bio-brain-architecture with its prefrontal-lobe-system-development 6 times greater than that of the chimpanzee, our memory, our imagining, our dreams, our art and culture are still trapped in the ancient past of our unlucid limbic-cognition.

We have the abstract-cognitive potential to all become lucid-dreamers, to abstract-cognitively engage and direct our dreams to higher-purpose, beyond their limbic driven and directed cognition, with its inherent retributiveness. As lucid dreamers we can apply the same memory, cognitive and art skills to develop the ability to have a lucid relation to reality, moving it through lucidity in memory and cognition to higher purpose.

But rather than strive for lucidity, we Sapiens-Sapiens since our surviving the some 15 previous now extinct branches of our species family tree, have for some 30,000 years of generations socially-engineered a failure of cognition and memory within our larger society. We have in this history of limbic-retributiveness created classifications of cast, class, race, religion, gender, age, ethnicity, criminality and sexual identity, that in their bias in justice and their biased empowerment of intellect, engineered within a socially constructed survival of the fittest,
institutional frameworks and laws that have deprived most Sapiens-Sapiens on this planet of an unbiased justice and an abstract-cognitive development, that will make possible a free-will in intellect, that could authentically serve to achieve and safeguard a governance that in its higher purpose affirms life, liberty and the pursuit of happiness.

Something was not bio-brain system right from the beginning, an ancient, archaic imperfection, a limbic-system which through acculturation is easily conditioned to dominance in cognition over even our present stage in evolution in potential in abstraction. The first case study of feral-children should have made clear the danger of a limbic-acculturations compromise to our development in and dominance of abstraction in memory and cognition.

It is within the cognitive dynamics of our species ancient bio-brain system imperfection that we better understand all our notions of our species potential in free-will. That’s right free-will, meaning free-will in intellect is only a potential built into our bio-brain system, that fails when it is limbic-system dominated, compromising any potential to transcend the limbic-systems limbic-logic, with the later pre-frontal systems potential in abstraction, objectivity and free-will in intellect.

Even through all our many millions of years in evolution, no matter the degree of prefrontal development, and development of its inherent potential in abstraction the outcome has been the same, our semantics, all transporter-devices of cognition and memory, all creativity, all thought, imagining and behavior have been organized to serve the limbic-system with its inherent retributive-logic, continuing our species most cognitively primitive history in retributive-reconciliation.

From the time of our species branching off of the missing-link that branched off of our Chimpanzee beginnings, our species in imitation of the Chimpanzee culture have over our first 4 million years progressed little beyond the Chimpanzee world of limbic-phobic-logic with its inherent retributive-reconciliation.

Keep in mind that it was 2 million years ago wielding a gazelle leg bone that we began bashing skulls, killing everything that stirred our rage, our fear and fed our hunger, including each other. So to what purpose then the progress in bio-brain system architecture, and its inherent potential to create thoughts and imaginings if all the potential would do is serve our culture out of 4 million years of animal-reflexive retributive-reconciling.

It is within our species history and continued potential in and for animal-reflexive retributive-reconciling that H. habilis drove all its predecessor cousins to extinction, as did each succeeding branch of our family tree, until us Sapiens Sapiens who similarly exterminated the branches that preceded us.

It’s safe to say war invaded our species as a semantic reality 2 million years ago, and since that time to the present evolved in its semantic intelligence in limbic-retribution from gazelle thigh bone to all sought of weapons of mass destruction, including outer-space satellite launchable ballistic multiple warhead nuclear missiles.
This limbic-system logic of survival-of-the-fittest, of might-is-right, is our ancient heritage of culture our species lived and died by for 4 million years prior to H. habilis. H. habilis took the pre-Habilis little more than chimpanzee bio-brain system potential in a semantic in abstraction in consciousness, driven as it was by limbic phobic-reflex and rage, and gave it self-consciousness, gave it language, began development of its culture of intellect in limbic-retribution.

For 2 million years now it has been a culture and acculturation of our creation within a limbic dominant intellect with memory of being and beingness evolving in Machiavellianess, surpassing with each development in intellect our most ancient Machiavellian-limbic-memory link in the creation of our species, the Chimpanzee. It is we, in limbic-will in memory and cognition, us Sapiens-Sapiens, choosing not to transcend through our potential in abstraction, our bio-brain Machiavellian-limbic-nature.

It is less complicated to say, its our “Nature”, out of “Natures” nature, in its limbic-nature, with its inherent potential for chaos, that drives our limbic-archaic-mind, to dominate our lives. I argue instead that it is we who “will” to behave as if our gift of prefrontal-lobe and language bio-brain system architecture and development, had not occurred, a gift given to direct memory in abstract-cognition, to transcend our limbic-nature and that of “Natures”, nature.

There is within memory in sacred-scripture a covenant with creation, a sacred-memory that in its affirmation of our special place in evolution in creation, demands the specially gifted-highly-evolved-bio-brain-system that we as Sapiens-Sapiens all are, be fulfilled. It is know-thyself, something only possible in free-will in intellect.

We have instead chosen in our loyalty to limbic-retributive-logic, to create civilizations that in their process of retributive-disfranchising reconciliations, every day send more of its children into the world to make their way prepared only with the minimal cognitive-tools of our species most ancient less evolved bio-brain-system ancestors.

The issue of disfranchisement is evil enough within one pursuit of life, liberty and happiness when the issue is one of an acculturation to antiquated intellectual ideas, but when disfranchisement is one of denying one development of their inherent potential in memory and cognition in abstraction, that moves disfranchisement into the realm of criminality. Our bio-brain system evolution has made memory and cognition led by abstraction, objectivity in research and free-will in intellect the present reality evolution presents us with. Is there any more authoritative reality upon which to base ones process in memory and cognition. To not permit its realization, is to impose a clearly primitive archaic processing of memory and cognition out of our earlier evolution as a species.

Imagine forcing a population to wear a brace that did not permit them to walk upright forcing them to walk in a posture of an earlier state of muscular-skeletal evolution. Imagine such a culture employing the brace for so many generations that not walking upright becomes a norm insisted on by present generations who themselves not only seek the brace, but seek one that will stoop them to a less upright position. So it is with limbic-dominant memory and cognition.
Memories of the intellectual past should in their theoretical and cognitive obsolescence be forgotten, so implied Sir Frederick Charles Bartlett (1886-1969) in 1932 with the publishing of his ground breaking work entitled *Remembering: A Study in Experimental and Social Psychology*. In *Remembering* he proposed a theory of memory that is still applicable, linking memory directly to perception, stating that memory is as creative and susceptible to error as our processes of perception.

Keep in mind that our processes of perception are determined by our processes of cognition and cognition is determined first by ones bio-brain system architecture and secondly by ones acculturation in a tradition in memory and cognition that either affirms or negates our bio-brain systems inherent potential.

John F. Kihlstrom in his paper entitled: “Memory, Autobiography, History,” quotes Bartlett, Maurice Halbwachs (1877-1945) and Eviatar Zerubavel whose book *Social Mindscapes* was published in 1997. Each speaks to the formative influence of acculturation and socialization in all that comprises memory. Bartlett wrote that:

> Social organization gives a persistent framework into which all detailed recall must fit, and it very powerfully influences both the manner and the matter of recall.

He also wrote that:

> Remembering is an act of communications, of information sharing and self-expression, as well as an act of information retrieval. Accordingly our memories of the past are shaped by the interpersonal context in which they are encoded, stored and retrieved.

Halbwachs in (1925) argued that:

> The individual calls recollections to mind relying on the framework of social memory . . . there are surely many facts and many details . . ., that the individual would forget if others did not keep their memory alive for him. But, on the other hand society can live only if there is sufficient unity of outlooks among the individuals and groups comprising it. . . . This is why society tends to erase from its memory all that might separate individuals, or that might distance groups from each other.It is also why society, in each period, rearranges its recollections in such a way as to adjust them to the variable conditions of its equilibrium.

I would argue that Halbwachs overlooks those in society that empower themselves by perpetuating such xenophobic-xenotropic divisions as race, class, ethnicity and religion within the larger society.

Many today argue with Halbwachs that memory is a micro-macro-social-construction, that the concerns of the present shape the past and therefore our memory. In *Social Mindscapes* Halbwachs points out that it is others that help us as much to forget as to remember.
determining what we shall forget and what we shall remember, including much that comes to comprise a collective past we can never confirm.

Kilstrom concludes his paper with:

In other words, memory is simultaneously a biological fact, a faculty of mind, an exercise in rhetoric, and a social construction.

Today cognitive science grounds our errors in perception to error in cognition out of micro-macro-acculturation and or bio-brain-system damage. In what I reference as factors that comprise our forming a more or less mature cognitive process.

B. Dubrovsky in his article entitled, “Neuroscience and Memory,” begins by speaking of memory as a process bound to meaning in cognition, as achieving prominence at least in the west as early as Greek and Roman times. Praising Bartlett’s experimental departure from Ebbinghaus, Dubrovsky points to Bartlett’s insistence on subjectivity as essential for the true test of memory.

He quotes Bartlett:

Remembering is not the re-excitation of innumerable fixed, lifeless and fragmentary traces. It is an imaginative reconstruction, or construction, built out of our relation of our attitude towards a whole active mass of organized past reactions or experience, and to a little outstanding detail which commonly appears in image or in language form. It is thus hardly ever really exact, even in the most rudimentary cases of rote recapitulation, and it is not at all important that it should be.

Dubrovsky continues with Bartlett’s observation that memory and perception always seek to fill gaps. I assume that it is in the filling of the gaps that memory becomes especially inexact. But inexact remembering implies forgetting and lying, and the denial within one’s own mind, of both. I propose that to the extent that memory, that remembering is led by the limbic system, inhibiting abstract cognition, that this is the case. I propose that when memory and perception are led by abstract cognition in free will in intellect that poetic elaboration and therefore error is radically minimized.

Gerald Edelman the noble prize winning biologist in the early nineties provided a biochemical basis of memory, linking psychology and biology, with his theory of re-entry, at least within the bio-brain limbic-dominant monkey. Edelman’s theory speaks of a synaptic global mapping, wherein groups of neurons are selected in a map, simultaneously with others grouped in their separate re-entry connected selected maps, in a process wherein perception is correlated and coordinated and strengthened by the strengthening of the interconnections through the reentrant signaling. Dubrovsky extends Edelman’s theory, viewing the relation of memory to perception, as specific to our ability to re-categorize previous perceptual categorizations.
But an important variable is being overlooked here and that is the different kinds of memory and cognition inherent to the bio-brain-architectures of the various species and the changes that occurred through evolution, in particular to our species.

The monkey itself having changed little in some 60 million years has been and continues to be bio-brain architecturally very limbic, their processes of cognition and memory are and we can assume have always been very limbic meme-tation driven, what ever Hollywood’s revisions of evolution in *Planet of The Apes*. They are and have always been absent Broca’s area and still have less frontal-lobe development than even our earliest family branch A. ramidus and A. anamensis of nearly 5 million years ago.

All attempts to understand our Sapiens Sapiens processes of memory and cognition through comparisons made between us and other creatures must be stated within the context of evolution. Recall that we Sapiens-Sapiens are the further evolution of a branch called H. habilis of the family tree of our species 6 million years of evolution, of some 2 million years ago. It was then that our species acquired an important addition to our bio-brain system called a Broca’s area without which we would not have arrived to the status of Sapiens Sapiens.

Recall that in the prior to Habilis 4 million years our family tree within our then status as Hominid was in bio-brain-architecture, in design and wiring, which can be argued incrementally evolved to our Sapiens Sapiens 6 times more pre-frontal-lobe system development than the chimpanzee was absent Broca’s area.

All comparisons and analogy between us Sapiens Sapiens in the present and others of our species and other creatures must be done with caution. Always keeping in mind that evolution has gifted us with a pre-frontal, Broca’s and other language area advantages that in architecture and wiring permits in their inherent potential, an at least 6 times exponentially greater potential for cognition and memory in abstraction than the Chimpanzee, and the Chimpanzee is a genius compared to the Monkey.

What confuses the uninitiated about our inherent potential in memory and cognition, is that our potential in dominance in abstraction and free-will in intellect, is so easily lost, subverted in a disfranchising acculturation that is limbic-dominant, and inherently retributive in logic and intellect. It is not easily unraveled, this history of cultural subverting of our since post-H.habilis inherent potential in abstraction and complexity in semantic in language. Without which by the way there is no free-will in intellect, without which there is no authentic moral and ethical higher purpose.

Go ahead I dare you count the generation acculturated to an acculturation which in its loyalty to our pre-H.habilis species history of limbic-system dominance, has served to perpetuate this history. Recall now I speak of a loyalty of at least 4 million years of pre-habilis bio-brain systems inherent dominance in limbic-logic, in limbic memory and cognition and some 2 million years of an evolving inspired by abstraction limbic-complexity of loyalty.

Gerald Edelmans theory of re-entry, understanding its development within his exploring the bio-brain system processes of the limbic-dominant monkey, contributes much to our understanding of our species pre-H.habilis evolving history of “will” in memory and...
cognition. His theory points to a bio-brain-system-cognitive-structure of “will,” a “will” inherent to the bio-brain-system itself, a “will” that can be realized as it fulfills its inherent potential in categorization, in memory and cognition, of its bio-brain system, or subverted by the imposition of processes in categorization inherent to a cognitive-mode from a less evolved stage in bio-brain architecture.

“Will” is then, in kind, inherent to the evolutionary stage of a bio-brain system, and realized or subverted by experience in an acculturation that either serves an earlier in evolution or later in evolution bio-brain system potential in categorization.

Edelman leads me to conclude that diverse kinds of memory and recall are themselves an assertion of their specific kind of cognitive-will, an assertion wherein a kind of cognitive-will involves the activation of previous neuron-mappings which were themselves previously categorized within the context of the cognitive-will specific to it. I am also able to conclude that cognition, it’s kind, its logic and language, that dominated the processes of categorization in the past, to the extent that they were limbic, although not immutable, will dominate re-categorization in the present, and so on into the future.

Memory and recall of categorizations, their kind and cognition are central to culture process and as such to art. Art as a psychosomatics of culture process acculturates, and as such can serve traditions of culture and acculturation in the maintaining of group-biases in limbic driven categorizations or deconstruct them with categorization driven by free-will in intellect. There is no question that art process as it directs categorization can either evolve our potential in cognition to further abstraction and free-will in intellect or devolve cognition to more and more limbicness.

We Sapiens-Sapiens, have all the hardware, all the bio-brain-system connections within which to evolve and mature our processes of categorization, to mature cognition, memory and recall. But it is a promise waiting for us to meet its condition, a promise waiting for that software, for a pedagogy wherein abstract-cognition leads the limbic with free-will in intellect.

Art has so far failed this promise, art has instead in a dogmatic-academy notion of progress in culture and therefore cognition persisted in employing a pedagogy that educates us to intellect in limbic-will, to be led by and serve limbic-will well beyond the important experiment in an esthetics of art founded on the cognitive science of its time, releasing itself from Classicism as the cultural symbol of “Surplus-Repression.” It engaged all the disciplines and called itself modern-art in the visual arts there was Turner and then Impressionism, Modernism then spun through Expressionism, figurative and abstract, through Cubism, Futurism, Surrealism and Dadaism. From the 1860’s to the 1920’s inspired as it was by such figures as Jean Jacques Rousseau and Sigmund Freud, the cognitive primitivism of the art of the Indigenous colonial cultures, the art of the Insane, the Folk and Children.

By the early 1940’s as the world battled in its 2nd world war modern art had already migrated from Europe to America and here the experiment found its second, third and fourth wind. from the 1950’s to the present. Here the driving force until the early 1970’s was the less intellectual “freedom of expression.” Europe’s Semiotics of the 1950’s became America’s adventure in intellect and esthetics, becoming the esthetic foundation of the Post-Modern art movement of the 1970’s. From the 1970’s to the present the limbic anti-intellectualism of Modernism
surfaced again and continues to assert itself inhibiting all attempts at an intelligence of Modernism that is not driven by limbic-logic, inhibiting all attempts at research in the present of cognitive science that make clear its subverting role in our present potential in cognition in memory and recall.

A comparison can be made between the relation of a cultures focus in cognition in “Art,” in its awake art-process, which can be understood as the awake-dream-process and the cognitive process at work within that cultures sleep-dream-process which can be understood as the asleep-art-process. An analysis of the comparison of the cognitive processes at work in the awake culture and the asleep culture will reveal a cultures role serving either cognitive maturity and therefore the evolving of abstraction and free-will in intellect or immaturity inhibiting development of abstraction and free-will in intellect.

Dreaming reveals the bio-brain system inherent processes of expression and therefore art, processes that left to themselves are even more limbic-logic led and therefore in greater cognitive immaturity than the immaturity in cognition and memory that more or less left to itself limbically leads our awake expression of self to cognitive immaturity, no less than the processes in memory and cognition of our fine art in its form and content.

Within cognitive-science the problem is easy enough to understand, left to itself cognition and memory will be a limbic dominant process, any abstraction occurring will be subservient to limbic-systems logic, in all realms of self-expression. It is in this way, simply leaving it to itself that immaturity in cognition and memory is educated. Our dream art process its logic in cognition like that of our awake art is not only a gauge of the immaturity of the cognition and memory at work in our dream and awake art processes, but is the means through education in lucidity to serve their maturing in service of development of free-will in intellect.

By guiding our asleep and awake art within lucidity we are able to lead the art-process within intention in abstraction in memory and cognition freeing our asleep and awake art-processes of memory and cognition of limbic dominance with its inherent retributiveness. We are able through our intention in lucidity to design higher-purpose, deconstructing our art from its domination by our limbic-system and limbic organizing of our memory and cognition to serve retributive-reconciliations. Lucidity in art permits us to win back our cognitive-potential in intention in free-will in intellect, in memory and cognition inherent to our Sapiens Sapiens stage in bio-brain-system evolution.

By applying the techniques of lucid-dreaming to both our asleep and awake art-process, to both our asleep and awake memory and recall, we engage our art, our cognition, our memory and recall, within their role and process in creativity, within the lucidity and intention of abstract-cognition, in a free-will in intellect that serves our Sapiens-Sapiens stage in bio-brain system evolution.

I reference, *Dreaming and the Brain : Towards a Cognitive Neuroscience of Conscious States*, by J. Allan Hobson, Edward Pace-Schott and Robert Stickgold. Whether the reference is art, culture or acculturation, their lucidity in cognition in memory and recall depends on an objective-observer-mind. Lucidity needs a language-fluent-abstract-cognitive-dominant-mind, to engage, participate in, and abstract-cognitively direct to higher-purpose what would in limbic-dominance be a retributive-tainted-intention in memory and recall.
The lucid-cognizer is one who in abstract-cognitive-directed-intention with a clarity of the logic inherent to abstract, to emotional and to body-feltness in memory and cognition. It is a clarity that distinguishes the appropriate means, materials, art historicisms, manual and technological processes by which to translate and use narrative content within an encoding of narrative content meaning. It is a clarity that permits one to move through the inherent logics esthetics creating a coherent self-expressive-language-fluency in cognition, in memory and recall, that bridges, integrates, and evolves and therefore matures through abstraction in objectivity and free will in intellect, the body-felt, emotional, and abstract cognitive-modes.

It is within such an abstract-cognitively grounded lucidity in the present of cognitive-science, that art education is most able to make possible within all self-expression, within all our art whether of our awake or our asleep state those reconciliations that serve higher-purpose. Lucidity is essential for a self-expression that speaks to morals and ethics, that reconciles all memory and recall in a conscience that is in its higher-purpose life-affirming.

Keep in mind that conscience like narrative-content-meaning not only varies with the various cognitive-modes within which one is acculturated to encode experience, but varies as well with the cognitive-mode that dominates recall. Of course the limbic in its subjectivity in emotional-bodyfeltness is the least stable in conscience and therefore morals and ethics, being in meaning and intention retributive.

The cognitive-mode in abstraction, is on the other hand stable to the extent that abstraction serves to deconstruct the limbic-retributive-mode through a cognition and memory in objective-research. Since it is within a deconstruction of the limbic in objectivity that free-will in intellect which is not possible otherwise asserts itself and inspires conscience in meaning and intention in higher purpose.

It is within the layers of our history in memory, within our history of reconciliations, in more or less limbic dominance, in more or less abstraction, that we within remembering organize our conscience in grace or retribution, in higher or lower moral-ethical purpose.

An important point here, is that remembering is a process that as it occurs in our awake, or asleep state, is bound to the same layered history of reconciliations. In process, the layers of remembering assert their history of acculturated limbic or abstract dominant driven morals and ethics as a previous-coding, and the recoding of previous-coding, as cognitive-modes vary with intention in experience, and their recall through that history.


People are highly capable of fabricating vivid recollections that can be confused with reality. Once fabricated, there seems to be no limit to the preposterous false memories that some individuals are capable of accepting particularly when in the presence of a persuasive individual in a position of authority.
In an abstract of an article entitled, “Memory: A River Runs through It, in the same issue of *Consciousness and Cognition*, Maryanne Garry, Elizabeth F. Loftus and Scott W. Brown writes:

Two decades of research using repeated false statements and underhanded information have shown that people can easily be made to believe that they have seen or experienced something they never did. I would argue that the “some individuals” in Schooler’s study, and the “people” of Garry, Loftus and Brown study are representative of the cognitively immature, that population being limbic-dominant in memory and cognition that have the highest inherent potential for false-remembering and false-forgetting. I also argue that false-remembering and false-forgetting diminishes with the maturing of cognition with its dominance in abstraction in free-will in intellect.

The studies confirm that limbic extremes in psycho-somaticness awakened by recall of experience in trauma, and abuse contributes to a more pronounced false-remembering and false forgetting.

The limbic system in its dominance is the child of our early stages in evolution and as such is the bio-brain system child of our species history in consciousness, in memory and behavior, with all its inherent error in ‘truth’ in memory and behavior. It is our later adolescent post-H.habilis pre-frontal-lobe and bio-brain language system developments in evolution, that in their potential in the maturing of our cognition and behavior through abstraction that our consciousness and mentation as it remained subservient to the limbic-child became the adolescent bully-murderer, that as an adult Sapiens Sapiens remained captive to the child and adolescent history in evolution of cognition and behavior of our species in retributive error.

We have the hardware, the bio-brain system, we have the software, the cognitive-science and educational institutions with which to bring “truth” to our cognition, to our memory and behavior, to responsibly through the objectivity that free-will in intellect is, to in this Sapiens Sapiens adult stage of our evolution parent our inherent limbicness to cognitive maturity beyond that of our species ancient history as a less bio-brain system endowed limbic dominant child and adolescent of evolution. For only in cognitive-maturity will our species potential for ‘truth’ overcome our potential to “false-remembering” and “false-forgetting,” overcome our potential in self-expression for fabrication, our own, or a fabrication imposed by someone else.

Since art is in it very alchemy at the heart of the semantic process and logic of meaning, and therefore central to all self-expression, to all memory, cognition and behavior, the cognitive mode that drives art, is in its logic the character of its veracity in “truth.” Only such and understanding of art, as a process at the center of memory and cognition, can we begin to understand arts process relation to memory, to memories potential in spuriousness and authenticity, and therefore the veracity of one expression of self in art, however ephemeral or concrete, as thought, behavior or object.

Of course the art-process, or one could say the semantic or esthetic within which information is processed is inherent to all creation, to all created things invisible and visible. It began some 12 billion years ago this art we call the universe, a pinpoint of vacuum expanding beyond all notions of miracle, long before our species was a twinkle in “Natures” eye.
This marvel of processing of information, in micro and macro phenomena, of “Nature”, of events and experience occurs in ways specific to each kind of thing, to its system-architecture, to its bio-brain system wiring, organically within the organic, and inorganically within “things” inorganic. It is a processing of information that occurs in ways specific to specific creatures and animals, in ways specific to specific vegetables and minerals. Some “things” for example process experience, through a memory-in-art within the magnetic, others within the electrical, and others as chemical processes.

There are things in creation that combine magnetic, electrical and chemical processes in various ways. With each processing of information happening within a wide range of environmentally and culturally-conditioned, more or less spurious and more or less authentic semantic-esthetic variables.

Our species processing of information, of internal and external experience, within our some 6 million years of an evolving bio-brain system and wiring has included the genetic, hormonal, magnetic, electrical and chemical processes. It has included gesturing, vocalizing and sound signaling, and for some 2 million years now an evolving spoken language. Our writing demanding yet more development of cognition in abstraction did not occur until some 5,000 years ago.

All these processings of information inherent to our species, to our physical and cognitive forming have throughout our evolution served our memory, perception and cultural conditioning to dominance of our inherent potential in a more or less mature cognition. A cognition serving either an earlier bio-brain system architecture of more limbicness or the existing system architecture with greater prefrontal-lobe development and therefore greater inherent potential in abstraction.

It cannot be stated often enough: Memory in its art, its kind and potential in process, depends on the architecture, on the instrumentation, the hardware if you will, within which the perceptual processing systems operate. It is the relation of this hardware to the soft-ware, the architecture to the culture-process, the education within which those systems organize their operations that is the critical factor in the “truth,” in the veracity of each step in the acquiring and processing of memory in cognition.

These are all the factors, driven by the art-in-memory through which organic and inorganic elements, a particle of matter, a mineral, a cell or more complex collection of elements and cells organize. They are the factors through which a microbe, a puddle, an ocean, all organize, as a life form, as our species through all its branches of our family tree organized. All things in creation, within their authentic and or spurious memory in art, encodes and decodes information, through which it adjusts its place in time and space. It is an adjustment of “Nature” in “Nurture” that either fulfills or denies the inherent potential that is the “truth” inherent to all things.

Memory, and here I reference Bruce Lipton and his theories of the Biology of Consciousness, is a process the complexity of which encompasses our species inherent potential in cognition in memory within not only each of our stages in evolution, but those of “Nature” from proton to Sapiens Sapiens. It is then possible within each stage of bio-brain system evolution, as its inherent potential in “truth” in art, in memory and architecture then permits an organizing in
cognition in more or less dominance in extra-sensory perception, that in our potential to attune to and decipher a psychosomatic narrative from the magnetic, electrical, chemical and cellular processes is more or less successful in the “truth” in its potential in “truth.”

It is this extra-sensory-psychosomatic attunement and ability to decipher its narrative, that in our mother and ourselves effects and organizes both her and our hormonal and genome activity, from conception, to birth and through much of the psychosomatics in ease and disease of our entire existence.

If Lipton is correct, it makes sense to assume that throughout our species history some proto-equivalent extra-sensory-psychosomatic attunement and ability to decipher its narrative existed, achieving its potential in highest development in Sapiens Sapiens. It makes sense that it would be an ability that also evolved within our species bio-brain system evolution: That like H.habilis pre-frontal-lobe development and that of the Broca’s and other areas serving language development, that equivalent areas for extra-sensory-psychosomatic attunement and ability to decipher its narrative also evolved.

Within this evolutionary model our pre-H.habilis ancestors had a less refined extra-sensory psychosomatic attunement, than H.habilis and the branches of our species family tree that followed in our species evolution. Pre-H.habilis had a less bio-brain developed ability in abstraction, processing of language and self-consciousness, having a less evolved equivalent to H.habilis Broca’s and other language development areas in their bio-brain system hardware with which to attune to and decipher its narrative, in keeping with their then stage in evolution. I would argue for a yet simpler explanation, that the same areas in bio-brain system evolution serving language advancement also served the advances in extra-sensory-psychosomatic attunement and deciphering.

Looking back to our 6 to four and a half or so million years ago ancestors, to A. ramidus, and A. anamensis, and the four to two and a half or so million years ago A. africanus and A. afarensis, both Gracile Australopithecines, all of whom were at least as smart as the Chimpanzees that have been experimentally taught sign and symbol languages.

The Afarnesis who were bipedal and aboral are better known through the skeletal remains of a female nicknamed “Lucy” found in Ethiopia’. Lucy, has since been referred to as the biblical Eve’s great, great, great, great grandmother. Lucy in all likely-hood was a vegetarian who sometimes ate meat was probably a bit more prefrontal and less limbic-emotional-bodyfelt-retributive, as our first Hominid common ancestors, A. ramidus and A. anamensis that preceded her. Their memory being less prefrontal was, sparse, like “unlucid-dream-recall” without even the awareness of having dreamt. It was a memory with little veracity, rooted in minimal-limbic-language-encoding of narrative fragments, of sounds, gestures, images and vocalizations a bit more developed than that of our most ancient ancestor the Chimpanzee.

Keep in mind that the bio-brain-systems of our ancient ancestors were despite some prefrontal development just about entirely limbic in wiring, with development of Broca’s area and Wernick’s area, responsible for semantic complexity in language not occurring until H. habilis, our ancestor of 2 million years ago. Philip Tobias, Dean Falk and Terrance Deacon agree that H. habilis are the earliest of our species to have the bio-brain system prefrontal-lobe development capable of linguistic capacity, a capacity in memory and cognition nonexistent in
the Apes, the Chimpanzee, or Australopithhecines. It was no accident that H.habilis were the first of our species to extend tool use beyond the hand held tree branch, animal leg bone, jaw bone, and stone shard found-tools. It is no accident that they represent the beginning of a distinguishing of “truth” from “fabrication,” of our species struggle for lucidity and consciousness of “truth” and “veracity.” They were the first to struggle with our species ever evolving self-conscious realization of our species inhibition of inherent potential in memory and cognition by our acculturated loyalty to memory and cognition of an earlier bio-brain stage in our species evolution.

The additions in evolution of bio-brain system architecture to H.habilis of the Broca’s, Wernick’s and other language areas was a leap forward in “Natures” design of our species, out of the chaos in design in “Nature” from which our species arose. It made possible the beginning in memory and cognition beyond that of meme and imitation, with its inherent fabrication in error. Enough narrative content-meaning could now be constructed to make possible the remembering and teaching, evolving our species adaptation, consciousness of territory and technologies. Sharding and flaking of large pebbles to create more efficient hand held flake-stone tools, as well as the working with wood was introduced.

Our species limbic dominant less prefrontal bio-brain system evolution prior to H. habilis permitted only a cognitive expression, a remembering and “truth” telling dominated by the senses, by magnetic, electrical, and chemical processes, by emotional-bodyfeltness, by limbic-logic and its inherent fabrication. With H. habilis, advances in bio-brain-prefrontal development our species cognition and memory began our journey in towards free-will, a journey away from limbic-will in memory and cognition, away from a cognition and memory serving fabrication and “truth.”

Mark the date on your calenders 2 million years ago our species began it journey towards an abstraction in memory and cognition beyond the until then bodyfelt-sensory, limbic dominant, magnetic, electrical, and chemical autonomic system driven grunts and chatter, to, a proto-word, less limbic-driven, less fabricated ‘truth’ encoding in language.

In The Global Brain, Howard Bloom outlines Richard Dawkins idea of the “meme”, the ancient-cognitive-imitative-behavior, inherent to the memory and culture process of a variety of animals. I include in this variety of animals our Chimpanzee and earliest Hominid ancestors”. In practice the “meme” is a wordless- habit-stashing, which is at the core of all limbic-dominant, body-memory behavior. It is behavior out of memory organized and funnelled through the brains limbic centers, that part of our species bio-brain-system evolved long before there was a human-mind, from reptilian and mammalian times. They are muscle and emotion memories, sorted by the amygdala, passed for safe keeping to the striatum, stored away in the cerebellum, in the motor and sensory corridors of its widespread nervous system.

From our Sapiens Sapiens potential in cognition, it is our out of conscious-control, independent-conditioned-reflex, stubborn, ancient-nervous-system processing of memory and experience. It is called autonomic, because of its autonomy in process, outside our consciousness of self: The kind of memory in learning Octopus (A) employed in the Teddy Bear-electric shock experiment
This is a description of some 4 million years of our species memory process prior to the evolutionary development of Broca’s and Wernick’s areas, that gift of creations artfulness giving memory the bio-brain potential to take a very different route than that of autonomic-memory, extending memory to a sematic complexity through abstraction never before possible.

Steven Pinker describes our species 2 million years ago new potential in memory and cognition within a bio-brain system flow that pretty much describes what I point to as the root of our species inherent limitation within all succeeding stages of evolution in potential in cognition and memory. Pinker describes a bio-brain system that I argue since then as our species heritage in bio-brain system wiring, has built into it a potential in memory and cognition that in its processes of logic is still vulnerable to limbic-system dominance. The problem as I keep pointing out is that the logic of the limbic system is tilted to fabrication and retributiveness.

It is within this inherent limitation that I argue there is a need for a dominance of the pre-frontal system, a dominance of abstraction and free-will in intellect in memory and cognition, with intention to de-construction of all limbic retributive-logic in ‘truth’ in memory and cognition.

His description of the addition to our species bio-brain system of Broca’s area, with the few other added “verbal-twiddlers,” makes clear the bio-brain structural progress in evolution until then, explaining the pathways of limbic influences on our processes in communications, memory and cognition.

Here is how Howard Bloom describes it: Quoting Steven Pinkers, from his book *Language of Instinct*, published by William Morrow, New York, 1994:

They (memories) slide back to the curved prongs of the hippocampus, which flip them forward to the cortexes of the temporal lobes, accessible to manipulators like Broca’s area and two other verbal twiddlers which emerged in early Homo habilis—the supramarginal and angular gyri.

I mean you don’t have to jump up and down about it, but “holy-mackerel!” it took 4 million years for our species to acquire enough prefrontal and language-system-architecture. To despite the still bio-brain dominance by its limbic-system, and despite the new additions being compelled by the still limbic dominant architecture and acculturated cognition of our species, finally, finally dreams and imaginings had the potential to begin to become objective thought. That means less error, less fabrication, thought and consciousness of thought could begin to have veracity, intention in reality could be a more solid-concrete thing. Thoughts had the potential for a more complex semantic, making possible a limbic-logic-narrative bridge between the bodyfelt and emotional mind, creating the cognitive bases in reality for scripted story telling and acted-out-dreams which anthropologists have come to call ritual. It was the beginnings of a consciousness in behavior absent till then.

Our species evolution in consciousness to Sapiens Sapiens, is best understood within our evolution in bio-brain system because it is within that evolution of flesh, within its inherent potential in consciousness, that our potential as Sapiens Sapiens exists. As we look back over our evolution of some 6 million years, what we encounter is an ever de-evolving of memory and cognition, an ever increasing dominance in behavior and culture in limbic-retributiveness.
Sliding back to Cro-Magnon, back to Neanderthal, to H. habilis, to the pre-Habilis Hominids without a Broca’s area, or any other “verbal-twiddlers”, we witness also less, and less prefrontalness, in bio-brain system development, we witness in a downward spiral to more and more limbic meme and imitative-autonomic memory inherent to our species earliest limbic system dominant bio-brain system architecture.

Within each slide back we encounter an ever devolving, culture and acculturation, with each slide back in time through the branches of our species family tree there is a further regression in memory and cognition that is more and more limbic-paleo-logic, more and more bodyfelt-autonomic-sensory-associational.

Like the pre-frontally damaged of our present day who to the degree of that damage, are limbic-dominant in memory and cognition, our less pre-frontal-lobe-system evolved ancestors, as we look back to each less evolved branch of our species family tree, had at least the same difficulty in their ever increasing limbic-dominance making it more and more difficult for them to learn mazes, make plans, or spontaneously organize behavior. Like the pre-frontally damaged of our present day a slide back through each branch of our species family tree presents us with an ever increasing difficulty in our species forming, no less choosing from a variety of alternatives. Innovation which depends on abstraction, and abstractions transferring of objective information from one task to another, and one context to another becomes with each slide back more painfully slow, and finally as with unbiased consideration of others non-existent.

What is no longer arguable, is that within this “Nature,” nurture as each uniquely impacted on our species bio-brain-systems evolution that our memory and cognition in memes and imitative memory evolved to objectivity within its potential in evolution to the extent that our inherent potential in semantics in abstraction, in symbol encoding and recoding was nurtured. It is a history of evolving memory and cognition that also reveals that to the extent that the evolving inherent potential in memory and cognition were not nurtured, that the resulting limbic-dominance with its immaturity in memory and cognition, when exposed to development in objectivity in intention, there is a freeing of memory and cognition from dominance in limbic-subjectivity and bias.

Intention is then the critical factor in nurture, to the extent that intention involves the freeing of memory and cognition to objectivity, memory and cognition is within its inherent bio-brain system potential able to asserts itself through developments in intellect in objectivity, and within the inherent potential of Sapiens Sapiens to free-will in intellect, and higher-purpose in intention.

Unfortunately our species history, nurtures role in evolution mostly reveals that the limbic-system in its inherent limbic-logic has been permitted to dominate our species development in abstraction. The result has been a history of development dominated by a nurturing of memory and cognition wherein we have introduced with each educated generation more and more abstractly complex subjective retributive behavioral-memes in service of our memory in archaic-error in cognition.

In this history of nurturing limbic-dominance of abstraction we have succeeded in introducing into our world of culture process, into our species imitative-body-mind-memory, a more
complex semantic and syntax with which to serve retribution. By creating a culture-process so driven by our earliest archaic mind we have created a potential in memory and cognition such that it is capable of holding all our inherent potential in objectivity and therefore free-will in intellect hostage to our limbic-system.

It’s a simple enough process Ivan Povlov called such a psycho-somatic weave in behavior for good or bad, for higher or lower purpose a conditioned-reflex. Cognitive science takes us by the hand revealing that it is within this psychosomatic weave that memory operates and resides. The earlier in the family-tree of our species ancestry, the more bio-brain-architecturally, inherently somatic, body and less psycho, mind, our conditioning-in-reflex and therefore memory and recall.

I propose that despite our species bio-brain system progress in evolution, culture and acculturation continued through all those millions of years to behave as if that progress had not occurred. Culture simply continued to condition, to nurture our species to pre-prefrontal and less than pre-frontal limbic dominance in memory and logic in cognition. Of course abstraction as an inherent potential could not be entirely smothered, its assertion was permitted to occur only in subservience to the logic of the limbic-system.

It is within this larger context of memory and cognition that we need to understand our species place in the art creation is, and by extension, how in our process in creation we in our self-expression in art, create place, create culture and acculturation. It is within this larger context that we need to understand art as process in memory, cognition and behavior, that art as an alchemy, as a physics, is at the process center of all of them.

We need to better understand the psychosomatics of embedded-meaning that art is, its process in information, and its various concretizations in the physics and chemistry of “Nature”. For it is through these understandings that we have the potential to transcend “Nature”. It is then that we make sense of this history of billions of years of memory, of mind-less and mind-full alchemy, of the diversity of memory and cognition, that all creation is.

There are some 12 billion years of the memory-culture of “Nature”, the memory-culture of particles, of microbes, plants, of creatures, birds, insects, animals and Hominids, in an exchange of information out of whose memory of DNA encoding and re-coding from which we Sapiens Sapiens are the result. Billion of years of art, of culturing in memory, of the processing of information, with the development of communications within and between “Natures” organizations of memory of energy, and DNA, within all of limbic “Natures” alchemy of creation.

Hominid cognition, as memory, culture and art begins within all our species autonomic-processing of information, within all the sensory-signals, the sounds, tastes, smells and textures. It is a meme, imitative, informing that includes the cold, the hot, the wet, the dry, the rough and smooth. Included within these simple limbic-autonomic-beginnings of language’s encoding, of signs and symbols, is pattern and color, gesture, posture and of special importance, sound-vocalizations.
Keep in mind that all memory is an organization of information, and all information is a form of coding and all coding is a form of language, and that all language however primitive depends on memory, as memory represents within a potential in cognition, the conditional-means for the exchange of information. It is memory as a cognitively directed conditioned, and unconditioned reflex, as imitation, memes and abstraction, in a dynamic relation in affirmation or negation of abstraction and objectivity, that forms the alchemy, the art within which culture is the template.

Certainly within this very limbic-logic expression of self and art we can include the Chimpanzee who have been taught to paint, and the Bower birds who create mini installations. But once once we leave the bio-brain system realms of pre-Habilis and move up the evolutionary ladder from Habilis, we move beyond the autonomic system driven art to that self-expression within which abstraction, objectivity and free-will in intellect more and more serve the self-expression.

It is then that to the extent that self-expression by us Sapiens Sapiens is served by our inherent potential in abstraction, objectivity and free-will in intellect, in cognition and memory, that our self-expression achieves maturity.

Here I reference chapter 7 of Matt Ridley’s book entitled GENOME, chapter 7 is titled “CHROMOSOME 7: Instinct.” The publisher is Perennial of Harper Collins.

A simplistic but workable notion within genetic theory of our species progress in evolution, in memory and cognition, would find our species bio-brain-system and prefrontal-lobe development progressing in steps each million more or less years. It would be a progress wherein the areas found to exist prior to H.habilis as bio-brain areas corresponding to those areas found in Habilis called Broca’s, Wernick’s, and Insula areas, continued to evolve to our present Sapiens Sapiens bio-brain system architecture.

The evolving would have occurred in steps through the branches of our species family tree. Each million more or less years, there would be in wiring and capacity an additional one time greater volume in pre-frontalness in proportion to a receding limbic system. The result of such evolution would favor development in inherent potential away from limbic-system dominance, towards an increasing potential in dominance in pre-frontal system abstraction, objectivity and free-will in intellect, in memory and cognition. Keep in mind that 100,000 years ago Sapiens Sapiens pre-frontal-lobe system was already 6 times greater than that of our most ancient cousin the Chimpanzee.

The evolving of Broca’s, Wernick’s, and Insula areas discovered to have first existed in H. habilis as areas formed beyond their earlier development as corresponding areas in our Hominid-Pre H. habilis and more ancient genetic ancestral species links of less than one percent with the common chimp, to the 30 million years ago nearly eight percent genetic link with the old world monkeys.

Within a comparative analogy, within what bio-brain system gene research reveals of the monkey, as discussed by Ridley in chapter 7 of Genome, one can conclude that the Chimpanzee and our pre H. habilis Hominid ancestors, having areas in the brain that like the
monkey only correspond to the much more evolved Broca’s and Wernick’s areas first found in H. habilis, that the monkey, the chimpanzee and pre-H. habilis Hominids were similarly, dramatically limited in inherent bio-brain system potential in memory cognition and language development.

The term corresponding in bio-brain system architecture is employed to make clear that it is a less evolved primitive equivalent to what in H. habilis in its more evolved bio-brain system state came to be called a Broca’s area a discovery that includes the Wernick’s and Insula areas. In the monkey and by comparative analogy the chimpanzee and pre-H. habilis Hominids, the corresponding areas are the Broca-homologue which being a more primitive stage in development of the language system permits only a primitive control of the facial muscles, larynx, tongue and mouth, dramatically limiting language development, memory and cognition. This limitation in language development, memory and cognition was furthered by the less evolved Wernicke-homologue serving the recognition of sound sequences and the call of others of their branch in the family tree. The Insula-homologue plays a central role in the reading of signs and symbols and general use of language.

It is within our species bio-brain systems inherent potential in evolution, of memory and cognition, that arriving at 100,000 years ago as Sapiens Sapiens, we could finally having all the bio-brain system hardware to permit our species a knowing of empathy and humanity as higher purpose. Providing that is that our then culture supported the potential, and by the way that proviso has not changed. Keep in mind I said a progress in bio-brain system hardware with a potential to permit a knowing. What happened to that potential occupies much of my critique of culture and acculturation throughout this writing.

I agree with Jared Diamond that the flip of the culture-coin seems to have come up tails most of the time, with all our progress in evolution serving a limbic-system led abstraction, serving an ever evolving complexity of error in knowing, buried in an ever evolving cleverness and invention in service of retributive behavior.

Jared Diamond in The third Chimpanzee in his chapter titled “Epilogue: Nothing Learned, and Everything Forgotten?,” only confirms how as a species we have chosen since H. habilis to remain in servitude to our most ancient limbic, bio-brain-system-architecture, memory, cognition and behavior. How we have in our limbic-loyalty betrayed our potential in abstraction each millions of years of steps of the way.

He confirms our placing our evolving bio-brain potential in abstraction in stasis for hundreds of thousands of years at a time as we placed our evolving potential in abstraction in service of our limbic-system with its inherent primitivisation of all memory, cognition and behavior. He confirms how progress when it did occur, occurred with abstraction serving to empower retributiveness with more and more cleverness and invention in retribution.

Joseph Campbell in his Historical Atlas of World Mythology Vol I: The Way Of The Animal Powers, Part 1: Mythologies Of The Primitive Hunters And Gatherers, confirms that since H. habilis our bio-brain potential has resulted in a gruesome history wherein our species empowered by an evolving bio-brain-system, went from the wielding of a skull-bashing, leg-bone of a gazelle, employed by our between 2 million and 1 a _ million years ago H. habilis ancestors, in their driving Australopithecines to extinction to that of the more effective
hand-ax introduced by H. erectus about 1.8 million years ago in their assertion of their limbic led phobic-memory of survival and the reflex to kill that which triggered it. Of course it was often a common ancestor, that triggered the phobic-memory leading to their being hunted and even ending up on the menu.

It was not until the great leap forward, by Cro-Magnon and Sapiens Sapiens, some 40 thousand years ago, after some 60,000 years of acculturated ambivalence in bringing to realization enough of their inherent potential in abstraction, in memory and cognition to create a culture wherein their ancient history of limbic dominance in bio-brain system and culture process would permit it’s development.

I argue such cultural stasis is the result of a limbically acculturated loyalty to our species lesser evolved ancient memory and cognition in limbic meme-imitation of “Natures” lesser evolved creatures, behaviors and culture, creating within that imitation a variety of limbic-dominant proto-shamanic-cultures.

Not until 40,000 years ago did our species bio-brain systems inherent potential in semantics in abstraction overcome its acculturated inhibition in cognition in abstraction enough to spark the Cro-Magnon-Sapiens Sapiens, inherent potential for semantic-complexity with which to transport, thoughts and imagination to concreteness with greater complexity.

As if suddenly culture began to fill with all sought of thoughts and things imagined, everything from stone hand-axes and flakes. All kinds of tools of stone, wood, bone and bamboo emerged in cultures throughout the world to serve survival and give comfort. Rituals for burial of Cro-Magnon-Sapiens Sapiens became more elaborate than those of Neanderthal.

Invention and art burst forth like never before. Since the oldest dates of Europe’s cave art is some 38,000 years ago and since Cro-Magnon are an earlier wave of Sapiens Sapiens whose gene pool was around until 10,000 years ago, we must credit the earlier 60,000-10,000 years ago Cro-Magnon with the major developments in art and culture in Europe until some 40,000 years ago. It was then that they were joined by a later wave of Sapiens Sapiens who being more cognitively developed soon out competed Cro-Magnon, making their own contributions to the further developments in culture and art.

The cave art in the Franco Cantibarian province is dated some 38,000 years ago, and includes the historic Lascoux, Altamira and El Castillo caves. Cave art reached its heights in Europe between 19,000 years ago to 14,000 years ago. Keep in mind that by 30,000 years of their arrival the second wave of Sapiens Sapiens absorbed the Cro-Magnon gene pool driving them to extinction some 10,000 years ago.

It is between 10,000 and 6,000 years ago in the cave wall paintings of Northwest and Northeast Africa that we for the first time see groups of Sapiens Sapiens in the dress and body decorative painting of their clan and time. Cave wall painting of domesticated herds of long horn cattle appear for the first time.

As for Neanderthal no equivalent artifacts have been found at the earliest Neanderthal sites which extend back to some 220,000 years ago, or earlier Archaic sapiens sites which date back some 780,000 years ago. It is the later Neanderthal sites of some 70,000 years ago that have a
primitive ceremonial burial of some of their dead as well as ceremonial stone cabinets
containing bear skulls and thigh bones, serving their bear cult, and stone alters with opened
human skulls placed on them that speak of head hunting and cannibal shamanism.

Cro-Magnon and Sapiens Sapiens sites speak of an assertion of prefrontal cognition, memory
and semantic in language far in advance of Neanderthal. It was a progress that made possible
the craft skills and technology with which to introduce the art of beads, necklaces, pendants,
clay fired figurines, complex tools of worked bone, as well as create and map trade routes across
continents.

It is no chance accident or stranded UFO pilot whose art fills the caves of Altamira and
Lascaux, that made possible the large realistic sculptures of bear and bison made of clay, built
up on stone outcroppings in caves. Nor were the animals and realistic figures of nude women
etched into the stone walls of caves 38,000 or more years ago a prank of a late 1800’s or early
1900’s cave explorer, like the wheat field designs mythologized by science fiction and
hollywood, as being of other worldly origin.

Cognitive science makes clear that Cro-Magnon and the later wave of Sapiens Sapiens both had
the bio-brain system architecture and development in memory and cognition with which to
create the culture and art that became the first renaissance of our species. By 10,000 years ago
painting began appearing within all the overlay of paintings on cave walls, of large groups of
Sapiens Sapiens with bows and arrows hunting and doing battle. Each clan or generation of
Sapiens Sapiens immigrants to the area simply found free space on the cave wall, not finding
any overlaid the images of the previous group. I can’t help but be reminded of a graffiti like
process driving some of the cave art. Cave walls were covered with layers of paintings of
animals and figures some carrying spears others bows and arrows. Many appeared to have been
used for target practice.

The layers of paintings includes abstract shapes, earlier under-layers are almost entirely of
animals, with an image of a shaman in totem animal dress appearing here and there. There are
also female images some dancing in the earlier layers. The abstract diagrams seem to document
like a calender, cyclic events.

Their techniques evolved from the more limbic tactile relief sculpture and engraving to later
more abstract-cognition in service of the limbic-shamanic, re-presenting, possession and
controlling of reality, through the invention of the less limbic-sensory tactile, more abstract
in logic figurative painting.

The cave art itself, through each layer, can be understood as a shamanic-picto-graphic-speak
that speaks the memory cognition and shamanic concerns of each clan that inhabited the
territory.

It was a time that might be viewed as our species release from our first and darkest-age. The
promise of our species potential in cognition begun with H. habilis seemed till then almost lost
forever in the deepest recesses of our species limbic-Id.

Although not yet into the bright light of reason, not yet free of limbic-dominance with its
inherent retributiveness in memory and cognition, reason continued to favor the Id-darkness of
its beginnings. It is out of that favor of darkness in reason and the retribution inherent to it that we Sapiens Sapiens are our species only survivors.

It is within that archaic memory of survival of the fittest that we Sapiens Sapiens with an evolving development of abstract-cognition in service of the limbic, in service of our assertion that our Id conjured phobic-might is right, have imagined and invented ourselves beyond the bow and arrow, to deadly nerve-gas, deadly bacteria and viruses.

We have invented ourselves rockets that carry multiple war-heads of hydrogen bombs and through genetic engineering there is more vicious and deadly inventing to come. We have done all this and will continue to do this in our inherent potential in limbic-retributiveness, in our assertion of limbic-tantrum-conscienceless-might.

It is as if we Sapiens Sapiens in our loyalty to our limbic-nature have no choice but to join in a suicidal blind-faith with “Nature’s” conscienceless-limbic-nature, no choice but to join in “Nature’s” cycle of extinction and creation.

It took us only 20,000 years to get from the bow and arrow to the atomic bomb, and 6,000 years from the first wheeled vehicles to spacecraft, and star-wars technology. Dare we imagine, on a screen of conscience the many thousands of wars our species have fought, the many hundred of millions upon hundreds of millions that have died in all the limbic-phobic politics of might is right.

Dare we imagine how many have died in the collateral-damage, in the resulting famines, and diseases in just these 20,000 years of our Sapiens Sapiens inherent Potential in memory and cognition dragged to lower-purpose, dominated by our species most ancient-archaic, limbic-retributive memory and cognition.

It seems almost silly to speak of education as the solution to our species acculturated and therefore educated limbic-drive to extinction. But what more civil means within which to impart the skills through which one can as successfully practice free-will in intellect, as they have been taught to practice phobic-will in intellect. What more civil means does a society and a people have to overcome the limbic-driven, blind-faith and rush to retribution that more and more acculturates and educates our species, and organizes our planets cultures, societies and politics.

If within education, art is to accomplish anything of relevance to the evolving of our inherent potential in memory and cognition, such that it serves the survival of our species. Art education needs to organize curriculum to serve our Sapiens Sapiens potential to create a memory, cognition, art, and culture which in its dominance in abstraction in cognition and free-will in intellect, deconstructs our acculturated history of limbic dominance in cognition. Education can no longer see progress as simply an ever growing pool of cognition in abstraction, can no longer see progress as an ever growing development of intellect, that is blind to its, acculturated, inevitable-service to the limbic, especially with educations present focus on utility and vocation. Such blindness spells the inevitable extinction of our species, as more and more power of destruction comes to serve our acculturated loyalty to our ancient heritage of limbic-compulsion in desire and greed, with their retributive-machiavellian devices. I reference chapter 16 of The Third Chimpanzee, by Jared Diamond.