

Portrait of the Artist

Word is a symbol...Words symbolize only concepts...how should a word-symbol correspond to that innermost nature of which we and the world are images? Nietzsche

Exchange word for projected image (the product and language of visual art) in Nietzsche's question for an equally valid question of the relationship of projected image-symbol to the experience of being. What words and projected images have in common is that they are both projections of the mind and have real existence without material form. Both words and visual symbols offer communications between beings, but as Socrates pointed out, constructed concepts lack a true core meaning and existence from individual to individual. If two artists were to say "I am an artist," the meaning would be different for each individual artist. They could agree on the learned word-symbol of artist, but the experiential, true definition is how the word-symbol directly relates to the individual. To the non-artist, the word-symbol "artist" has no inner knowing and the relationship to the individual remains formless, without any real meaning or true understanding because they lack the experiential knowledge that can be defined only by the ability to think and self-express in the visual system. This would suggest that "artist" is something other than a word-symbol and is something that cannot be wholly communicated.

Wassily Kandinsky, in his book *Concerning the Spiritual in Art*, suggests that art becomes the spiritual center of the artist and thus an integral part of being. Gardner's ideas regarding intelligences can be viewed in support of the idea of art forming at the core of being. Howard Gardner's spatial intelligence is the dominant component of the operating system of the artist, and since the operating system is not a conscious choice, it can be assumed that it is also part of the core being of the artist.

To borrow from quantum theory observational thinking, one could view the formless words of "art" and "artist" as intuitive ideas that take form only during direct observation to fulfill the preconception of the observer. The Nietzsche quote above reiterates the dichotomy between the objective formal and subjective experiential learning discussed in the first chapter. A quote from art theorist and perceptual psychologist Rudolf Arnheim, "Direct vision is the first and final source of wisdom," suggests that true meaning is the subjective interpretation of experience by the individual. In defining art, I am choosing words to form concepts that best describe visual art and artists based on the synthesis of inner intuitive reasoning and the resources cited in this chapter.

Myth

The non-artist, without an inner experiential meaning of the word *artist*, cannot refrain from using the words *talent* and *talented* to express their lack of understanding of the core skills and knowledge that comprise the individual associated with the word *artist*. What separates the non-artist and artist is the way they process and respond to sensory information. The word *talent* is an acknowledgement of the

artistic skill the non-artist can visually experience, but at the same time dismissive of the learned knowledge required of the artist. An artist becomes an artist not because of “talent,” but because of the learning system they possess and the knowledge they acquire through disciplined learning.

Operating System

Operating system is not a concept used in the cognitive sciences and neuropsychology. It is a term I have synthesized from reading various sources on cognitive functions of the brain. As an artist, I was interested in learning how the brain works so that I could use the knowledge of brain function to improve and enhance creative thinking and production skill. My major resource books were *Consciousness Explained* by Daniel C. Dennett, *Consciousness a User's Guide* by Adam Zeman, *The Act of Creation* by Arthur Koestler, *Multiple Intelligences* by Howard Gardner, *The Field* by Lynne McTaggart and various articles and documentaries. Since I am an artist and not a scientist I am allowing myself the artist's trait of intuitiveness based on the awareness of how my mind operates in relation to the information I have read. It is much easier to understand how artificial intelligences such as computers operate because they are constructed by the human mind. The brain, on the other hand, is still very much a mystery and, for this reason, I will refer to cognition and sensory processing by using the computer term *hard drive operating system*.

What is unknown about consciousness, which is who we are and how we operate as individuals, is far more substantial than what is known. The concepts and ideas generated by cognitive science are in constant change and its investigative methods are continually evolving with new technology. Accepted facts can be disproven, labeled myth, and replaced by the current perceived truth. The theory of right or left brain dominance has been placed in the myth category and has been replaced by “the theory of cognitive modes”. Instead of the right and left hemispheres divided by corpus callosum, the cognitive modes divide the brain along the Sylvian fissure that separates the top and bottom brain.

In comparing the two theories, it appears that the majority of the characteristics attributed to the right hemisphere are now in the bottom brain and the majority of the attributes attributed to the left are in the top brain. Instead of using the right/left word “dominant,” the cognitive mode theory uses the words “highly utilized”. What both theories agree upon is that all parts of the brain work as a unified system, regardless of the terms highly utilized or dominant.

From a 2013 report published in the journal *Brain*, a new study of Einstein's brain revealed he had more extensive connections between the right and left hemispheres than are found in a normal person. Scientists postulate (the scientific word for intuit) that the ability to use the right brain creativity and the left brain logic simultaneously was a major contributive factor to his genius.

Another agreement between right/left and cognitive mode theories is that the precedence of certain characteristics over others determines how an individual functions. The only way to slay the jabberwocky is with Aristotle's subjectivism - “we can only know what can be known,” which is what we experience. “Know thyself” becomes the means of identifying one's operating system and understanding one's strengths and weaknesses in cognition and behavioral function. The characteristics

of intuition, randomness, subjectivity, holism, creativity and synthesis of the old right hemisphere and partial new bottom brain best describe how I as a visual artist process information. These right hemisphere attributes, plus Gardner's spatial intelligence, are the core operating systems of the visual artist. To a lesser degree, I do have the analytical, logical, sequential, objective and rational characteristics of the left hemisphere and top brain, but they are subordinated to the control of intuition, which is part of the "highly utilized" processing characteristics of the right hemisphere and new bottom brain. It is the spatial intelligence that provides direction and purpose to the operating system of the visual artist.

Gardner defines spatial intelligence as the ability to think in three dimensions with core capacities that include mental imagery, spatial reasoning, image manipulation, graphic and artistic skills, and an active imagination. All the characteristics of Gardner's other intelligences exist within the individual, but they are governed by the operating system and subordinated to the supportive needs of the spatial intelligence visual thinking skills of the visual artist. For example, the artist has a highly specialized kinesthetic intelligence and memory developed by the attributes of his spatial intelligence to manipulate materials to create visual productions.

Visual artists share a similar kinesthetic intelligence with other artists; however, it is entirely different from the kinesthetic intelligence that basketball superstar LeBron James would possess. Mr. James would also have a highly developed spatial intelligence subordinated to his kinesthetic intelligence, which would be very different from that of the visual artist. For example, if the sports artist Leroy Neman were still alive, he would use his spatial intelligence operating system and subjugated kinesthetic intelligence to translate and illustrate the three dimensional, moving LeBron James to a two dimensional format that represents dimensional space, action movement, and the visual characteristics of LeBron James. Mr. James would use his kinesthetic operating system and subjugated spatial intelligence for navigating through space in a very complex kinesthetic intelligent manner few could match. Sensory information is processed differently, and the way we process information determines who we are and what we do. There are varying degrees of the characteristics of Gardner's intelligences in each individual being, processed differently by each individual being. Combine all these variables together and it is easy to understand why standardized systems such as education fail to meet the learning needs of all students.

Despite the fact that we process information differently and learn differently, we still possess all intelligences and characteristic traits of higher cognitive function in varying degrees. This means each individual can learn to read and write, read and play music, learn mathematics, understand scientific principles and concepts, engage in athletic activities, and communicate effectively with others in varying degrees of proficiency. A determining factor in how well the brain functions with a task is based on how often the task is practiced. What is exercised is strengthened and what is neglected is forgotten.

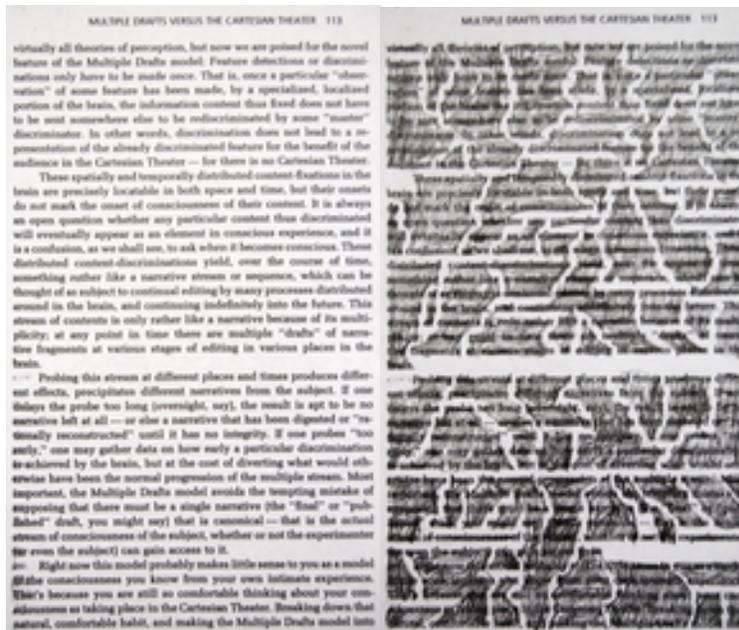
For example, with my operating system, I process visual information in patterns. Upon seeing written words, I first see the patterns the words create and have to strain to narrow the focus of my vision to a narrow, linear, left/right eye focus necessary for word recognition.



The above right picture is a drawing of the pattern the words create when I look at the electric bell on the left. Because I see in patterns, I am able to free associate to similar patterns stored in memory. The image from memory is used to complete the pattern seen on the bell. A person without my visual thinking and memory and who does not see in patterns could not associate the arrangement of words and hex bolt into a three quarter view of a face looking through a porthole. Leonardo da Vinci's description of seeing recognizable images appear in textured plaster on walls and ceilings is the exact same visual free association between visual pattern and visual memory that is described above.



Above is an example of the free association of visual pattern to visual memory from textured wall plaster as described by Leonardo da Vinci.



Above left is a printed page and above right is how I see that printed page. The patterns on the right are not static, and the patterns often change as my eyes shift focus. In this pattern I see Wisconsin, Oklahoma, New Jersey, Missouri, Arkansas, Virginia, Illinois, Vermont, Louisiana, Rhode Island, Tennessee, and Indiana.

Normally, I can read for a few minutes before reaching eye and mental fatigue. Reading is necessary and essential for acquiring knowledge to synthesize into visual ideas, so I read every day. The exercise of reading strengthens my ability to maintain the narrow left-right linear eye movement for longer periods of time. If I stop reading, the length of time I can read will diminish. The point of this example is, regardless of the operating system and learning style one has, all learning is dependent upon disciplined practice. I use mathematics that is essential for artists, I read what is essential for being a productive artist, and I exercise my kinesthetic intelligence necessary for the production of my visual intelligence and visual thinking. Essentially, all of my learning is self-interest learning, processed by my visual operating system for productive use in my domain discipline of Visual Art.

For ease of familiar clarity, not correctness, I may at times refer to the visual artist's operating system as being the right hemisphere, referring only to the characteristic traits formerly attributed to the right hemisphere. I also admit that I am more intuitive than scientific, but fortunately I defer to William Blake, who defines intuition as the artist's reality.

Visual Artist

To be a visual artist you must be capable of visual thinking. Visual thinking is a term from art theorist Rudolf Arnheim. In his book *Visual Thinking*, the key concept is in the utilization of spatial intelligence for the production of expressing visual ideas, termed visual thinking. Visual thinking would both require

and build a visual intelligence to be used in the production of visual art. This would necessitate the visual artist to be a visual learner with visual images providing the clearest forms of understanding in the learning process. As previously stated, based on my own awareness of seeing and the countless interviews I've conducted with art students and colleagues, our seeing and consequently our thinking is nonlinear and visual priority is given to pattern. This makes learning in the linear mathematical/logical based educational systems difficult for many visual learners.

Gardner's spatial intelligence identifies the visual learner as being an imaginative day dreamer. There is something about the visual learner's operating system that places him or her closer to the unconscious mind that allows for nonlinear free association of conscious stimuli to stimulate imaginative dreams, which become key components of the creative process. The visual artist is also capable of processing and understanding a broader spectrum of visual information than the non-visual learner.

In the process of seeing, the brain can imprint 400 billion bits of information, but most individuals are only consciously aware of around 2000 bits of information. Based on my experience of teaching non visual learners, and through their drawings, I am able to see what it is they are not seeing and understanding visually. They don't seem to process as much visual information as I do. I liken this to the idea of having a dog whistle and blowing it. The whistle can be heard by the dog and not by the human. The forms placed in front of the visual learner can be seen and understood in greater detail than they can be by the non-visual learner. The two types of individuals see very differently and a trained visual artist can free associate and access stored visual information and knowledge to employ visual thinking to achieve a far greater potential of understanding than is possible for the non-visual learner.

The attributes of the right hemisphere and the bottom brain responsible for spatial intelligence and visual learning are highly utilized in the visual learner. This translates into the visual learner having a far more extensive visual than linguistic vocabulary. From what I understand of neuroscience, because of the greater learning activity and use for visual information, more of the brain is dedicated to the processing of visual information. For example, in Dennett's book, *Consciousness Explained*, if a sighted individual becomes blind, some parts of the brain once dedicated to vision will change function and become dedicated to the remaining sensory functions. It is not that I expect areas of the brain to change function, but what I would expect is the parts of the brain associated with visual learning and necessary for visual production would be more developed than the parts not associated with it. The brain's development involves what is and isn't being exercised. For example, in the research article on Einstein's brain, the researchers found that the somatosensory cortex, which receives sensory input information, was increased in magnitude in an area that corresponded to Einstein's left hand. Einstein was a master violinist and his left hand manipulated the strings of the violin to play notes and chords.

The self-interest visual learning priority may not be beneficial to the goals and objectives of the logical mathematical education system that depends heavily on reading and word vocabulary. However, the operating systems Gardner identifies as intelligences are not conscious choices to be made by individuals, which necessitates that square-pegged intelligences fit into the round-holed educational system. There are also varying degrees of visual intelligence among the visual artists that range from the novice to the highest professional level at the apex of visual art. Success at the professional level is

not determined by learned skill alone but by the clarity of vision and idea used in the application of learned skill.

The determining factor of success within the arts is defined by Gardner's interpretation of the act of creating. Gardner terms creating as an act or product that changes the way others within the same discipline think or act. I would describe these visual art professionals as synthesizers. Through their art, creative individuals are capable of mediating past and present artistic achievement to form a socio-cultural view that is relevant to both art and society in the current historical moment. An example is to apply Leonardo's production philosophy "everything must flow" to the drip paintings of Jackson Pollock. The line of thought production flows from Leonardo's drawings to el Greco's energetically flowing composition, to the challenging nature of Dadaism and abstraction to the direct introduction of Max Ernst's drip paintings. In the 1950s, Pollock's creative thinking was a part of the flow of art and cultural history aligning past ideas to present practices that change the way we think about art and art production.

Creating Minds

Gardner's definition of creativity is cross-disciplinary, making the creative process viewable and available for study as a means for patterning idea synthesis and creative thinking. Gardner offers this study in his book *Creating Minds*. In this book, he chronicles the lives of seven creative individuals of different disciplines. Gardner's purpose is to give the reader insight into the personal characteristics of creative individuals in relationship to biographically experienced events and influential interactions with mentors, colleagues, and personal relationships that become a part of the catalyst that sparks and supports the creative production of the creating mind.

Parallel to Gardner's *Creating Minds* is Psychiatrist Anthony Storr's book *The Dynamics of Creation*. Similarly, Storr uses biographical and cultural analysis, but adds a psychological profile to assist in the viewing of the creative individual. For example, he would identify Einstein as having a schizoid personality disorder, and describe the characteristics of the disorder and how the disorder could be utilized to benefit the creative individual. Storr's book covers a variety of disorders, while *Touched with Fire*, by Kay Redfield Jameson, and *Flight of the Mind*, by Thomas C. Caramagno and Kay Redfield Jameson, focuses primarily on the highly creative individuals who have the manic depressive disorder. The point of Jameson's book is to make a case that most creative geniuses did and do have the manic depressive disorder. Jameson's claims are largely supported by the fact that well over 90% of highly successful creative individuals in all discipline domains describe symptoms of mania. It would appear that mania is a major contributor if not the driving force of creative thinking that requires what Arthur Koestler termed "bisociating" and Gardner refers to as synthesizing.

In the book *Act of Creation*, by Arthur Koestler (who had the bipolar disorder), the creating individual has a revolving door to the subconscious mind. Those who can experience mania have access to the cryptic, nonlinear, and irrational world of the dream to find imaginative solutions that cannot be

imagined or seen by the conscious mind. Koestler also gives examples of creating individuals who have found solutions to complex problems, not while directly working on them, but through dreams in their sleep.

I have encountered several sources indicating that problem solving is often the property of the subconscious mind where stored information can be mixed, matched and categorized in a nonlinear process to find patterns and solutions the conscious mind cannot see or find. This process of sorting stored information has some similarities to the attributes given to the bottom brain in the cognitive mode theory. This process always occurs when the conscious mind is occupied on a different task, or unconscious in sleep. $E=MC^2$ came to Einstein while he was riding his bicycle, not while he was at his desk working directly on the theory. The best way to find a solution is to work intensely and consciously on a problem and then either completely engage the conscious mind in some other task or sleep to give the unconscious mind time to sort and find a solution. Many of the writers and artists I have studied do not wait for a complete idea to start a new project. They simply begin with the understanding that a solution from the process of conscious work and subconscious interaction will allow a solution to find them during the working process.

Another key to creativity is to think like a child. A child, due to lack of experience and knowledge, has limited critical reasoning and thinking capabilities. Without the self-editing restraints of rational, logical thinking, all solutions are viable and possible. The drawing of Asher's cow in chapter one is made possible by that fact there is nothing in Asher's mind that would indicate his drawing is not of a cow. Until he develops critical reflective thinking, he will always be able to freely create whatever he wishes. To a certain extent, mania diminishes the restraints of self-reflection while increasing the ability to consume analytical information, which permits creative thinking to proceed at an accelerated rate to produce new ideas and solutions that otherwise would not have been possible in a more rational, reflective mind. But at some point after the creating process, critical and reflective thinking must be employed to make sense of and learn from the creative experience. The reason this occurs in the bipolar creating mind is that the connectivity between the right and left hemispheres is diminished during the cycles of depression and mania. During the depression cycle, the individual is operating predominately in the right hemisphere and critical self-reflection becomes self-destructive to the individual and inhibitive to the creative process. During the mania cycle, the individual is operating primarily in the left hemisphere, and the critical self-reflecting right is greatly diminished or eliminated, giving free reign to all forms of expression unimaginable to the normal mind. In the normal mode, connectivity between the hemispheres is restored, but differently than before the cycles. This occurrence may produce greater creativity in the individual who now thinks and connects thoughts differently.

Both Storr and Jameson emphasize the fact that we are studying creative individuals that have a disorder. Though they are inseparable from the disorder, the disorder itself is not the cause of their creative intelligence. A major significance of Storr and Jameson's books is that they put an end to the merciless word *normal*, as it refers to thinking and behavior. Each disorder defines normal differently in thinking and social interaction, and it is best to learn and understand what is normal for one's own individual psychological profile. Understanding the characteristics of a disorder allows the individual to

coexist more comfortably within a redefined idea of what is normal for a specific individual with a specific disorder.

As an artist with the bipolar disorder, I can attest that, when undiagnosed, production and artistic progress slows or is reversed by the destructive cycles. I view psychiatric professionals as having the learned clinical knowledge but lacking the experiential knowledge of the disorder. This is the difference between formal and experiential learning. Formal learning can be acquired by anyone, but true meaning comes from individual experience. A disorder is an adversary that can contain benefits, providing one has complete knowledge of the disorder and the discipline to exploit it. It is best to seek professional help when it is needed; however, it is always the responsibility of the individual to be as knowledgeable as possible and take responsibility for his choices.

When Do You Know?

One question most often asked by students is: *When do you know you are an artist?* An example of consciously knowing is provided by kindergartner Arthur Köstler, who responded to his teacher's inquiry as to why one learns. His answer was "to become famous," and by the end of the school year, he announced he was going to be a writer. He became known as journalist, writer, and intellectual Arthur Koestler and author of the book *The Act of Creation*. There are individuals like Koestler, Mozart, and Michelangelo that knew who they were at an early age, but for most individuals there is no formal recognition or point in time when such a proclamation is made

Howard Gardner asserts that an artist is born with a specific intelligence, while Anthony Storr suggests that an artist may be formed by social environment. Storr provides an environmental software scenario where the child is in a situation where the world around it does not make sense. The child will escape the outer world by turning inward to a more stable and controlled inner world where experiences can be processed. This could lead to withdrawal from others while primary information processing switches from language to sight. Storr suggests that this action usually occurs before the age of five, and that the home environment is most often the cause of the child turning inward. As an individual becomes more visual-processing oriented, it is likely he will spend more time alone, even while in large gatherings of people.

The individual is dependent on visual information and consciously sees far less when talking. Even with visually-oriented individuals, when talking, the linguistic centers in the left and right hemispheres take precedence over all other functions, visual processing is diminished, and thinking processes are tied to word comprehension. This is one explanation as to why artists need considerable time alone where the inner processing of external conditions can be transformed into introspective, interpretative expressions also known as art. The answer to the "when" question is that individuals like Koestler, Beethoven, Michelangelo, and Einstein do not have a choice because their intelligence and domain discipline is at the core of their being. If one can make a conscious decision not to be an artist then one never was an artist and would be making the right decision by not pursuing a life and career in the arts.

Characteristics of Creating Minds

The resource reading material of Koestler, Gardner, Storr, Jameson, Robinson and a large volume of documentaries on art, music, science, and political and social history reveal that some common personal and behavioral traits are apparent in many successful creating people. The creating individual has a work ethic that most normal people would term obsessive. Nietzsche also identifies excessive envy as a necessity to sustain the obsessive creative drive to succeed and to exceed standards and expectations within one's primary discipline domain. The root of this obsession is the lack of separation between the identity of the person and the product of the person. Success or failure of the creating individual relates directly to the self-worth of the individual, or, essentially, there is no self... there is only an artist or creative being. It is not uncommon to hear of graphic artists, animators, and fine artists virtually living in their studios, inseparable from their work because they cannot stop working. Similarly, upstart creative technology companies don't punch a time clock when it comes to their creative work. The creating individual usually has a stratified, compartmentalized schedule with a lengthy period or periods of the day dedicated exclusively to creative, disciplined production. Many artists and creating individuals find the late night to early morning hours to be the most productive time for their work. The creating individual's rigid schedule often includes a set time for social interaction.

Both Gardner and Storr point out that the creating individual may have many acquaintances and colleagues, but very few close friends and lasting personal relationships. The creating individual is usually a needy person who requires emotional and creative support and socializes with those who best fulfill their needs, which is usually a part of their creative process. They can be emotionally exhausting and often very contentious in their interactions with others. There are many more idiosyncratic, unpredictable and neurotic behaviors that vary among creating individuals that are easily visible in our "Superstars" that are frequently in the spotlight of public attention. However, those with creative minds would probably view the same creative superstars as normal. It would seem that creating minds are very different from the minds of noncreative, so-called *normal* individuals.

Summary

The visual artist is more than likely born with the spatial intelligence/right hemisphere/bottom brain hard drive operating system, or environmental conditions hardwire the brain into this operating system by the age of five. The child becomes a visual learner, developing a right hemisphere and bottom brain dominance, bringing the potential artist closer to the dream reality of the subconscious mind. This allows free association, what Koestler refers to as bisociation and Gardner terms the ability to synthesize. With obsessive dedication to learning and disciplined practice, the visual learner develops a visual intelligence used for visual thinking in the production of the creative work of an artist.

It should be noted that the references to the theory of cognitive modes and the lateralization theory of the right and left hemispheres of the brain are generalizations of proposed theories of how the brain functions. The same is true for the manic depressive illness. It is incorrect to state that depression or mania resides in only one hemisphere or one part of the brain.

For further reading there are many articles on the subjects on the internet. My resources include the writings of Kay Redfield Jameson listed in this chapter, *Progress in Neuro-Psychopharmacology and Bio Psychiatry*, volume 28, Issue 1 January 2004, Pages 1-13, *New Theories of Depression Focus on Brain's Two Sides* by Sandra Blakeslee, and *The Bipolar Brain: The Fight for Domination* by Robin Mohilner.