# Supercalifragilistic-Sick Imagination: The Experience of Generative Imagination in the Creative Process of Pathological Drawing

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#### Abstract

The contemporary art world is one of the main places where excessive imagination, otherwise feared as delusional, is lauded. This will be a hermeneutic exploration of ideas of creative, or generative, imagination as applied to phenomenological and existential aspects of the artistic process in drawing and an examination of the recurring motifs in drawings by autistic savants and unmedicated schizophrenics who spontaneously, often compulsively, start to draw. The imaging process in art-making is a way of orienting to the world of experience. Art objects exist as the embodied gestural and tangible residue of a process of active imaginative engagement. Schizophrenics are perhaps the most adept at an extreme form of divergent thinking - a high degree of which is considered necessary for novelty and creativity. In fact, studies have found that among first order relatives of schizophrenics are a significant number of professionals recognized for brilliance in their field. On the other hand, the acute observational skill of autistic savants, who draw in photographic detail scenes only glanced at once, is studied as holding the answers to creativity. Accurate rendering may be enticing but is not sufficient for the creative enterprise. The prehistoric evolutionary shift from manufacturing objects, whether tools, beads, etc. to drawing images on cave walls was an extraordinary leap in the mental imaging process. Drawing is one of the oldest activities of humanity, with drawings of animals on cave walls, many of the earliest found to date at 32,000 years old, executed with uncanny accuracy. The markers for schizophrenia have been in the human genome at a consistent rate for a very long time as well, suggesting a stable evolutionary purpose.<sup>2</sup> Drawing together observations from a number of disciplines will help to illuminate this primary relationship between the compulsion to draw images and human intentionality in the creative process.

**Key Words**: Creativity, imagination, art-making, drawing, schizophrenia, autism, phenomenology.

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### 1. The Evolution Of Our Dreams

To my knowledge, we are the only species on earth that is fascinated by visual puzzles, seeking out creatures or scenes in undulating smoke, random splatters, ink blots or coffee stains, finding faces in the wallpaper or patterns in the stars. Over the millennia, we have divined the intentions of the gods through practices

involving just this kind of speculation—augury, extispicy, haruspicy—and it has been suggested that this nonhierarchical, qualitative, animistic untangling of animal entrails and such may have been the first non-decorative painting configuring revelation in the patterns and shapes as they took form through suggestive movement on an amorphous ground.<sup>3</sup> Our brains have developed in a highly camouflaged environment, and quick assessments of situations good enough to act upon were essential to make basic survival choices—feed, fight, flee, or procreate. Since we only have clear vision in about four degrees of visual arc on the fovea of the retina, the brain fills in the rest with *plausible guesswork*, but since the world we perceive is concrete and specific, our mental imagery mimics its particularity. We end up hallucinating a great deal of what we experience as vivid, detailed, indisputable reality.<sup>5</sup> A number of neuroscientists now agree that the mind's constant chatter between the cerebral cortex and the thalamus means that imagistic brain states we call dreams, fantasies, or hallucinations occur when there is no sensory input from outside of the self,<sup>6 7</sup> 'Thus waking consciousness is dreaming—but dreaming constrained by external reality.'8 The mind's guesses become questionable only when deprivation of sight allows the mind to fill part of the visual field with the implausible, such as grotesque creatures or cartoon characters.9

Despite the fact that constraints of exterior reality in consciousness barely suppress our continual flights of fancy, we have attempted throughout history and across cultures, in large numbers or in isolation, to manifest visions. We have pursued altered states of consciousness through the use of hallucinogens, the induction of trance or possession states or with rhythmical drumming and chanting. We meditate, starve, inflict pain, overindulge and deprive ourselves to see beyond reality. At a certain point in childhood development, the effects of imagination are so great that the intrinsic properties of the toy become moot – a stick becomes a hobbyhorse, a box becomes a ship. 10 The first drawings of childhood may not look at all like what they represent even though the child is satisfied with the representational power of the result. 11 The mind needs to imagine, and whether a conscious self is present is a matter of degree. Ordinary people with sleep deprivation will hallucinate, essentially dreaming while awake. Regular dreaming may have evolved for the safe rehearsal of various strategies toward life events which could then be used as a basis for adaptation to an unforgiving world. 12 It is quite likely, therefore, that for us the un-illuminated life is not enough: we must encounter the imaginary to survive.

Like Hammurabi listening intently to his god Marduc, in blind expectation, we see what we allow ourselves to see and we sense its truth, without debate. <sup>13</sup> This forms the very basis of our sensibilities, dictating how we make sense of what the world offers, and why we would salivate over the sight of charcoal broiled steak but gag at the wriggling of live grubs though both would satisfy the need for dietary protein. When an image emerges in sensory experience and coalesces from

an unarticulated cloud of potential meanings, like a dream, it rarely remains stable, continuously oscillating between unmitigated experience and sense-making or *seeing-as*. Once a stable mode of comprehension is fixed, the point of view on the image and its context produce a picture which releases us from the discomfort of confronting the contingency inherent in the image. Images, in this sense, are inescapable and emotionally arresting, but not pictures. Picturing is that first step in exercising control over visual information, naming and narration each stabilizing the experience a step further. Is

Optical illusions point directly to the perceptual confusion involved in making sense of a senseless array, or *seeing-as*, interpreting aspects of pattern from which things emerge. Possibilities are reduced significantly when the motley black and white blotches on the page miraculously become a Dalmatian dog in dappled sunlight, or we see the same picture as a duck one way and a rabbit the other. Once we realize the duck, or the rabbit, or the cat in the underbrush, or the constellation Orion, it becomes nearly impossible to un-see – to embrace the inchoate flux. The sequential nature of perceptual tricks like the duck/rabbit illusion means we can only apprehend each alternately. This *aspect blindness* causes the unattended aspect not only to recede, but to disappear altogether. As exemplified by this serial recognition, seeing is an active interpretation of what we experience. It becomes inevitable that through the choice and conflict of my perceptual intention, embracing one part negates another. This forms the foundation of my consciousness which subsequently leads to a sense of identity through action. As have formed a Gestalt in each instance, and this evolutionary trade-off is designed to push past ambiguity expediently because it is necessary for survival.

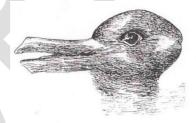


Figure 1: J. Jastrow, 'Duck/Rabbit Illusion.' 'The Mind's Eye.' Popular Science Monthly 54 (1899): 312.

A great amount of effort is required to reverse this process and to allow a less focused overall awareness of array and a less coherent imagistic setting, both of which are extremely attractive to artists because of their generative imaginary potential. Rather than try to *solve* the camouflage, the artistic temperament becomes entranced by suggestive possibilities. As human developments go, though, being caught up in possibilities of meaning when one should be

considering escape does not demonstrate the most expedient survival strategy but it is essential for innovation.

## 2. Imagination

According to the Oxford English Dictionary, imagination may be defined as 'the ability to form ideas or images in the mind,' or as 'the ability of the mind to be creative and solve problems.' 19 As an artist, I am drawn towards the second choice, but I also realize that it would be impossible to solve problems, creative or not, without first having something in the mind with which to work. Contrary to merely completing or reproducing an image without change, generative imagination conjures something that did not previously exist through a dialectical synthesis. Although recent developments in neuroscience emphasize that what we experience as imagery are electro-chemical impulses with no images per se, I am compelled to insist as one of a species that experiences a vivid stream of highly articulated, sometimes inventive imagery, awake or asleep, that meaning cannot be explained away by science. Ironically, associative logic and divergent thinking—the very litmus tests of creativity—are the acclaim of people labeled psychotic in delusional thinking. Delusion itself is a significant cultural taboo attended by societal fear, but psychological signs can be significantly tempered by context. What may be considered undesirable delusion under some circumstances becomes significant cultural ritual, contemporary art practice, or online gaming under others.

# 3. Picturing Processes of Autistic Savants and un-medicated Schizophrenics

Autism and schizophrenia demonstrate *pathological* picturing processes at either end of a continuum. Autistic savants' spontaneous drawings from memory of a world only glanced at feature detailed literal rendering as a Gestalt with *photographic* perspective, even though they often lack the ability to name or conceptualize the content of the resulting picture. Autistic savants who draw are often attracted to photographs, and some draw almost exclusively from photographs. Their drawings are often compared to photographs even though



*Figure 2*: Drawing of a photograph of a horse in a magazine by Nadia, age 7, as reported by Lorna Selfe, 1977. Accessed September 20, 2012 <a href="http://scienceblogs.com/neurontic/2007/02/03/visual-acuity/">http://scienceblogs.com/neurontic/2007/02/03/visual-acuity/</a>

normal sight is not photographic nor is all photographic seeing similar due to the differing optics of lenses. To maintain a mechanical way of seeing the world would suggest that there is no conscious self making the perceptual adjustments that are normal to human vision. Some common symptoms of autism include impoverished language, pronominal deficiencies with an inability to point, complete disinterest in people and an aversion to being touched, fascination with photographs, the inability to imagine or pretend, selective attention, and a lack of will in choosing. Conversely, schizophrenics' capacity for extreme divergent thinking results from their inability to filter out irrelevant sensory information. Generally, their picturing style is a dense, flat, schematic conglomeration and conflation of overworked disparate figurative elements, repetitive patterning, and rows of written text or numbers. In a textbook example of horror vacui all surfaces are filled with a daunting tenacity and represent a running, if skewed, usually fantastical and grandiose, narrative. Discreet objects are juxtaposed into contrived scenes illustrative of inner speech and labeling. Schizophrenics can describe the elements of the drawing and their relationship to each other in narrative form. Essentially, these creations are speculative, the process serial, the person desperately trying to develop an understanding of the world without the capacity for Gestalt. These two diametrically opposed drawing styles, of the autistic savant and the un-medicated schizophrenic, reflect their contrasting mental traits.



*Figure 3*: Adolf Wölfli *Strichnin. Milk. Vitriol, Gasoline. The Wölfli Family at Table*, 1909. Accessed September 20, 2012 <a href="http://www.adolfwoelfli.ch/index.php?c=showPic&lang=e&level=3&sublevel=2&id=135&parent\_id=86">http://www.adolfwoelfli.ch/index.php?c=showPic&lang=e&level=3&sublevel=2&id=135&parent\_id=86</a>

The onset of autism occurs early, with drawing beginning between the ages of three and ten. Because savants' capabilities are startlingly realistic, they are often put into special programs or have tutors, as was the case with Nadia who started

sophisticated lifelike drawing at three and a half years, or Stephen Wiltshire at five, both exhibiting classic autistic symptoms including language deficit.<sup>22</sup> By contrast. the onset of schizophrenia is generally late teen to early adult, with spontaneous drawing linked to the deterioration of their condition in an attempt to orient themselves despite dissolution of their experiential world. Such was the case with Adolf Wölfli at the Waldau Sanitorium in Bern, Switzerland. It appears that although schizophrenics' drawing begins spontaneously, it is often undertaken significantly after the onset of the condition. Among the psychotic patients in reports by early twentieth-century psychiatrists Prinzhorn and Morgethaler, August Neter started drawing after six years of incarceration, Adolf Wölfli after a decade, and others, like the clockmaker, after thirty years in a mental institution. 23 24 It became quite apparent that Wölfli's drawing activity was a way of quieting the voices with which he constantly bickered and lessened his onslaught of violence towards other inmates usually over their noise and other real or imagined affronts.<sup>25</sup> According to Rose, the rhythm of drawing highly repetitive decorative patterns was the general ordering principle that helped Wölfli from destabilizing and essentially replaced his ego for the duration of the activity. <sup>26</sup>



*Figure 4*: *Miracle Shepherd*, August Neter. from the collection of Hans Prinzhorn of the Heidelberg Psychiatric Clinic, 1921. Collection now housed at the University of Heidelberg, Germany.

One early twentieth century psychotic patient, August Neter, described the hallucination that was the genesis of his drawing entitled *Miracle Shepherd*: 'At first a cobra was in the air iridescent green and blue. And then came the foot (along the snake). Then the other foot came. It was made from a turnip'.<sup>27</sup> It is typical of schizophrenic hallucinations that images appear, shift and reassemble, illustrating two opposing mental approaches: recombination through associative qualities of disparate objects and the subsequent desire to make meaning from the experience.

Another description begins: 'Once there was a beautiful skiff, this skiff had a feather as a sail; then a storm came and the skiff was upset, but it did not come to any harm' followed immediately by an explanation, 'One can compare the skiff to the small boat in which the disciples of Jesus were and from which they fished....' 28 29

#### 4. The Calcite Canvas

Drawing is one of the oldest creative activities of humanity with pictures of animals daubed onto cave walls, the oldest to date recently discovered in Chauvet cave, France. Many of these 32,000 year-old drawings are executed with a realism, arguably, rarely again achieved in the deep caves of the Upper Paleolithic. In a contested archeological paradigm shift, this 1994 discovery at Chauvet advanced the idea that highly realistic drawing came first, followed by the trail of slow but steady stylization and abstraction that marked the *creative explosion* of the Upper Paleolithic in Europe until parietal art was quite suddenly abandoned circa 11,000 BCE. Thereafter, some of the first clear narrative scenes containing stick people chasing stick animals with sharpened sticks are painted and carved on open-air sites.<sup>30</sup> This later open-air development illustrated hunting scenarios in a similar manner to the figures in drawings of many schizophrenics, and follows 'the general rule that the closer an image is to magical thought, the less the semblance with the depicted is required.<sup>31</sup>

Creating drawings deep inside caves is a significant shift in intention from the previous fashioning of mobilary objects such as tools and beads. The nature of these drawings, almost entirely of large animals, is a hotly contested topic. The animals painted were rarely eaten, and so presumably only seen from afar. Nicholas Humphrey first made the connection between the artistic mind capable of the animal depictions in Chauvet cave and the picturing ability of the autistic



*Figures 5*: Drawing circa 32,000bp. Chauvet Cave, France. photo copyright Jean Clottes. Accessed September 20, 2012 < http://www.culture.gouv.fr/culture/arcnat/chauvet/en/zmpt24-01bis.htm>

savant Nadia, whose drawings were systematically studied in the early 1970s. The ensuing arguments engendered by this analogy placed language as a key problem. If, as many accounts suggest, anatomically modern humans (*Homo sapiens*) used propositional language similar to that of the present day, what function would such an *autistic* person fulfill and what need do drawings satisfy where words could suffice? Although I am unable to address the extensive language debate here, I agree with Humphrey's assessment of the presence of an essentially autistic mind, based mainly on the eidetic ability to render mental images with incredible accuracy. Autistic savants are currently the only ones besides those with artistic training and years of practice, who are able to recreate images from memory precisely and they do so most often at the cost of language.

Because of the astounding accuracy of so many of the animal images deep in Chauvet cave, the one main composite picture of a bison, woman and lion is not given due consideration. Since it resembles so strongly a schizophrenic mode of picturing I believe another kind of artistic mind was active in Chauvet cave and responsible for similar creations in caves throughout the Upper Paleolithic period. The composite drawing on a stalactite in Chauvet combines the depiction of a central female pubic triangle with the leg, head, and shoulder of a bison in profile to its left and the head, shoulder and front leg of a lion in profile to the right. All three conform stylistically to the object they cover, to each other and share legs in the process. For Homo sapiens to picture animals on the cave walls in the first





Figure 6: (left) Bison, pubic triangle and cave lion on stalactite in Chauvet Cave, France. Dated 32,000bp. Photo copyright Bradshaw Foundation. Accessed Feb. 10, 2014 <a href="http://www.bradshawfoundation.com/chauvet/images2/venus.jpg">http://www.bradshawfoundation.com/chauvet/images2/venus.jpg</a>
Figure 7: (right) Cellar, Inn, Salon Stable, August Klotz, 1915, pencil & watercolour drawing, 23x30 cm., from the collection of Hans Prinzhorn of the Heidelberg Psychiatric Clinic, 1921. Collection now housed at the University of Heidelberg, Germany.

place was in great part through seeing-as. Coaxed by fire light and the undulating surface of an extra-ordinary place, it would be fairly easy to see a bulging shape as a haunch or a flank of an aurochs, with strong evidence in many drawings of this exact situation, the environment aiding in an externalization of mind. Given that the markers for schizophrenia in the human genome have remained at a consistent rate for a very long time, there appears to have been a stable evolutionary purpose, and that purpose may be indicated in composite drawings such as the bison/pubic triangle of Chauvet cave. 32 I would suggest that the capacity for divergent thinking, finding affinities between aspects of unrelated things based on the similarity of sensed qualities, that which forms the very foundation of generative imagination, was the evolutionary advantage. Bringing together disparate elements into a cohesive picture sits at the intersection between experiencing an image and meaning-making. An associative orchestration of elements in a serial construction where one component of a figure is conjoined with a section of another figure in such a way that the portion of the first figure functions in two distinct ways, no matter how different the figures, perspectives, or, how bizarre the hybrid, expands the world of possibilities. In a man's portrait where his stylish windswept pompadour may also function as a flapping fish or the wing of a bird, it asks the viewer to consider an extraordinary world, a changed world.

If dreaming did evolve as a survival mechanism for an unpredictable and unforgiving world, then the externalization of the picturing processes of our dreams through drawing has allowed us to capture, record, understand and share the results. The autistic mind that drew in Chauvet cave with such amazing accuracy has caught the social imaginary of the early twenty first century, perhaps because of a kind of realism perpetuated by photographic technologies. Nevertheless, it is the hybrid creature, part-bison, part-woman, part-lion that originates a thread of hybrid creatures throughout our history that have illuminated our myths, helped us transition into new states of consciousness through rites of passage, and allowed us to transcend the everyday. The mind that pictured hybrid creatures of the Upper Paleolithic foreshadowed the Mesolithic mind that depicted stick-figure hunting narratives, so much like the imaginary stick/gun of the child, that have covered open air sites the world over. The capacity to hold a fairly elaborate picture in the conciliatory space of the mind would have made the caves obsolete as an extension of mind. According to Crow, schizophrenia may have been the price Homo sapiens paid for the development of language. 33 Rather than the spoken propositions with which humanity has imposed order on the world, communicating and recording it as knowledge, schizophrenics, instead, are incapacitated by the over-interpretation of the minutia of sensory experience and live in a disordered world. However, among first order relatives of schizophrenics there is a higher than normal proportion of professionals recognized for their brilliance in their field, as well as 'an increased risk of psychosis and related disorders in those who become eminent in the creative arts'. 34 35 The compulsion to

draw may very well have been an absolute evolutionary necessity to order thought in an external, concrete way as our imaginations began picturing a more complex world.

# **Notes**

- <sup>1</sup> Jean-Marie Chauvet, Eliette Brunal Deschamps and Christian Hillaire, *Dawn of Art: The Chauvet Cave: The Oldest Know Paintings in the World* (New York: Harry N. Abrams, 1996) 114.
- <sup>2</sup> T. J. Crow, 'Schizophrenia as the Price That Homo Sapiens Pays For Language: A Resolution of the Central Paradox in the Origin of Species', *Brain Research Reviews* 31 (2000): 118-29.
- <sup>3</sup> Gilbert Rose, *The Power of Form: A Psychoanalytic Approach to Aesthetic Form* (New York, International Universities Press, 1980), 108-9.
- <sup>4</sup> Barnard J. Baars, *In the Theater of Consciousness: The Workspace of the Mind*, (New York: Oxford University Press, 1997), 40.
- <sup>5</sup> Baars, In the Theater of Consciousness 40, 77.
- <sup>6</sup> Oliver Sacks, An Anthropologist on Mars (Toronto: Alfred A. Knopf, 1995), 57n.
- <sup>7</sup> V.S. Ramachandran, *The Tell-Tale Brain: A Neuroscientist's Quest for What Makes Us Human* (New York: W. W. Norton & Company, 2011), 57, 229.
- <sup>8</sup> Sacks, Anthropologist on Mars, 57n.
- <sup>9</sup> V. S. Ramachandran and Sandra Blakeslee, *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (New York, William Morrow, 1998), chap. 5.
- <sup>10</sup> Ernst Kriss, *Psychoanalytic Explorations in Art* (London: George Allen & Unwin, 1953), 77.
- <sup>11</sup> Lorna Selfe, *Nadia: A Case of Extraordinary Drawing Ability in an Autistic Child* (London, Academic Press, 1977), 99.
- <sup>12</sup> Antti Revonsuo, 'Dreaming and the Place of Consciousness in Nature', *Behavioral & Brain Sciences*, 24 (2001): 1000.
- <sup>13</sup> Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge & Keagan Paul, 1962), 153.
- <sup>14</sup> Michael Beaney, *Imagination and Creativity*, Milton Keynes, England: The Open University, 2005), 141-2.
- <sup>15</sup> Alfred Douglas, *The Ephemerality of Things*, unpublished manuscript, no date.
- <sup>16</sup> Richard L. Gregory, *Odd Perceptions* (New York: Methuen & Co., 1986), 237-238.
- <sup>17</sup> Beaney, *Imagination and Creativity*, 141-142.
- <sup>18</sup> Rollo May, *Love and Will* (New York: W. W. Norton & Co., 1969), 236, 244.
- <sup>19</sup> Catherine Soanes, ed., *Oxford English Dictionary* (New York: Oxford University Press, 2002), 414.

<sup>21</sup> Lorna Selfe, *Nadia: A Case of Extraordinary Drawing Ability in an Autistic Child* (New York: Harvest & Harcourt Brace Jovanovich, 1977) 13.

<sup>22</sup> Sacks, An Anthropologist on Mars, 197-98.

<sup>24</sup> Ibid, p. 90.

<sup>26</sup> Rose, *Necessary Illusion*, 105-107.

<sup>28</sup> Ibid, 166.

<sup>29</sup> Ibid.

<sup>31</sup> Kriss, Psychoanalytic Explorations in Art, 77, 168.

<sup>33</sup> Crow, 'Schizophrenia as the Price That Homo Sapiens Pays For Language: 118-29.

<sup>34</sup> Daniel Nettle, *Strong Imagination: Madness, Creativity and Human Nature*. (New York: Oxford University Press, 2001), 150.

<sup>35</sup> Ibid, 147.

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<sup>&</sup>lt;sup>20</sup> Bernard Crespi and Christopher Badcock, 'Psychosis and autism as diametrical disorders of the social brain', *Behavioural and Brain Sciences* 31 (2008): 241-320.

<sup>&</sup>lt;sup>23</sup> Hans Prinzhorn, *Artistry of the Mentally Ill: A Contribution to the Psychology and Psychopathology of Configuration* (2nd edition), trans. Eric von Brockdorff (Vienna and New York: Springer-Verlag, 1995), 163.

<sup>&</sup>lt;sup>25</sup> Walter Morgenthaler, *Madness & Art: The Life and Works of Adolf Wolfi*, trans. Aaron H. Esman (Lincoln: University of Nebraska Press, 1992), 10-9.

<sup>&</sup>lt;sup>27</sup> Prinzhorn, Artistry of Mentally Ill, 169.

<sup>&</sup>lt;sup>30</sup> Jean Clottes, 'Art of the Light and Art of the Depths' in *Beyond Art: Pleistocene Image and Symbol: Memoirs of the California Academy of Sciences*. eds. M.W. Conkey et al. 23 (1997): 205.

<sup>&</sup>lt;sup>32</sup> T. J. Crow, 'Auditory Hallucinations as Primary Disorders of Syntax: An Evolutionary Theory of the Origins of Language,' *Cognitive Neuropsychiatry* 9.1-9.2 (2004): 133.

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