Towards a Cybernetic-Constructivist Understanding of Painting

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> Problem • This paper argues for the inclusion of a cybernetic-constructivist approach to the art of painting and for an understanding of principles that coincide with constructivism that operate within the creation of paintings and other works of art. It argues that an understanding of cybernetic-constructivist principles improves creative practice rather than merely analyzes outcomes. > Method • Written from the point of view of a longtime practitioner rather than from the point of view of an academic proponent of art theory or art history, the paper draws on insights of second-order cyberneticians whose principles help to understand what a painting is and to determine its status as an object among objects which communicates itself simultaneously as not-an-object. These principles form an outlook as they become enfolded in sensibility, and through this outlook, the problem of being a painter can be addressed, the range of invention can be apprehended and broadened, and creativity can be mindfully activated. It addresses how painting and explained and how painting can co-create meaning with a viewer. > Results • It is proposed that inquiry into painting may be of value in teaching us more about constructivism, as paintings provide stable, manifest and accessible physical outcomes of constructivist praxis, and that an application of cybernetic and constructivist principles to painting can advance the understanding of painting. > Implications • Understandings of painting as well as other art forms can be better understood through including a broad cybernetic perspective in examining painting as a process and as a medium through which conversation takes place between observers. These understandings may have value in improving creative effectiveness among viewers and producers of art works. These understandings may have value for practitioners of other creative enterprises, and have potential to expand understandings in art history and art theory by emancipating art from being in service as a cultural emblem.

> Keywords • Mannerism, impressionism, photorealism, plein air painting, style, sensibility, hallucination, Parmigianino, Raphael, Salvador Dali, Pierre Bonnard, Humberto Maturana, Gordon Pask, Giorgio Vasari, Jackson Pollock.

Introduction

First, painting is a metaphor for individual consciousness. It is both a metaphor for conscious and, at the same time, and inex- tricably connected to that, it is an example or sample of consciousness. It reveals what is unique about the person who made it, something unique which is mysterious, but is understandable as it has form; and this combination of the mystery and the form constitutes style in the fullest extent of the word. It also has the capacity to reveal, to the observer, what is unique about the observer, and there is a parallel to the union of form and mystery that can take place in the observer. As a metaphor for consciousness, the painting is a metaphor for everyone’s consciousness. In this way every painting is the same painting while every painting is different. Second, it follows that the painting asserts the individuality of every observer, and in this way every painting has an ethics that conforms to Humberto Maturana’s “biology of love.” As a metaphor for consciousness in union with its status as an example of consciousness, the painting acknowledges the legitimacy of every viewer as a legitimate viewer in relation to itself. And though they are most frequently unavailable to one another in another form, this relation through the painting links the painter and the viewer to the painter in a relationship that is unique. But Peter Schjeldahl says there are conditions that can make this relationship more available, or more intimate, and these conditions require a respectful culture, and “reward” such a culture and thrive.

** Painting, symbol as well as unbeat- able medium of individual consciousness, thrives when people are interested in, and revere, the reality of their own and other people’s minds and hearts. Painting can’t make anyone interested and reverent. It can only reward interest and reverence that are brought to it, in a social milieu of respect- ful persons.** (Schjeldahl 1990: 97)

**This is a well-know concept, I first heard it formulated by Maturana at an conference of the American Society for Cybernetics (ASC) on Ecological Understanding in Sundvollen, Norway, circa 1990. It has appeared extensively ever since, summarized as “the regard of the other as a legitimate other in relation with one’s self.” Of the painters illustrated in this text, Antonio Lopez Garcia seems to embody this ethic with accessibility and clarity in his work. See the illustration of La Cena which appears at the conclusion of this paper.

http://www.univie.ac.at/constructivism/journal/5/1/001.galuszka
Painting and the painter

Inspiration

In discussing artworks as “aesthetically potent environments” Gordon Pask lists four attributes of such environments:

“(a) It must offer sufficient variety to provide the potentially controllable novelty required by a man (however it must not swamp him with variety – if it did, the environment would merely be unintelligible). (b) It must contain forms that a man can interpret or learn to interpret at various levels of abstraction. (c) It must provide cues or tacitly stated instructions to guide the learning and abstractive process. (d) It may, in addition, respond to a man, engage him in conversation, and adapt its characteristics to the prevailing mode of discourse.”

(Pask 1971: 76)

Some paintings have greater decision-density than others, and a more engaging decision-architecture than others. A painting with a good deal of incident (a photorealist painting or an abstraction made up of many skeins, drips and marks) may result from many decisions or may not. There are trivial and nontrivial decisions, trivial decisions being predictable and somewhat mechanical, decided beforehand in greater part by planning; and nontrivial decisions being inventions forged by analysis and unconscious intuition working together, in some cases rising to the level of “inspiration” – unexpected, original, and suddenly elegant (Galuszka 1988).

Salvador Dali describes his inspiration for the painting that became known as the Persistence of Memory (Figure 2):

“... I lit the light in order to cast a final glance, as is my habit, at the picture I was in the midst of painting. ... I knew that the atmosphere which I had succeeded in creating with this landscape was to serve as a setting for some idea, for some surprising image, but I did not in the least know what it was going to be. I was about to turn out the light, when instantaneously I 'saw' the solution. I saw two soft watches, one of them hanging lamentably on the branch of the olive tree.”

(Dali 1942: 317)

There was, to Dali, an undeniable fit of the hallucinated solution. Its surreal elegance was beyond all understanding, and remains provocative, even today. After painting the images he had just “seen,” Dali showed the painting to his wife Gala, who had just returned from the movies.

“I looked intently at Gala’s face, and I saw upon it the unmistakable contraction of wonder and astonishment. This convinced me of the effectiveness of my new image, for Gala never errs in judging the authenticity of an enigma.”

(Dali 1942: 317)

This is a kind of communication of coherence rather than a communication of data. In 1935, Dali laid out his agenda in The Conquest of the Irrational. He included the following assertion:

“The fact that I myself, at the moment of painting, do not understand my own pictures, does not mean that these pictures have no meaning; on the contrary, their meaning is so profound, complex, coherent and involuntary that it escapes the most simple analysis of logical intuition.”

(Dali 2004: 559)

This story is impressive not only for the illumination of Dali’s process of expectancy, but for the vividness of the visual impression of the inspiration. He says it was “seen.”

This kind of “seeing” is commonplace in an artist creating a painting. In imagining the consequences of a subtraction, an addition, or a change in a painting, the painter learns to “see” the change and to calculate its impact. I think this commonplace use of phantom images is a practical function of constructivism in painting. Not only is our experience of reality a passive consequence of constructivist operations, but this same construction can be used actively as an instrument.

By this I mean that our own construction of the reality we experience remains invisible to us as involving our own doing. The reality we have actively constructed and which we actively sustain, appears to be experienced passively as something out there reported to us by our senses. Our own construction of what we experience generally goes unnoticed. The artist who sees inspirations is also reminded that the operations that produce these hallucinations are not very different from the operations that produce the appearance of the world.
When this same construction is used actively as an instrument, not only does it play a part in inspirations but in the everyday act of drawing an observed object. In the act of effectively drawing or painting from life, a process of observation, memorization, translation into action, projection ("seeing") to anticipate effect, rehearsal, retesting, confirmation, execution, analysis, and revision takes place, over and over again, at high speed. The painting results from an interdependence of decisions, usually a very large number of decisions, linked together in alternate simultaneous configurations, in a partly visible-partly invisible architecture that satisfies Pask's posited attributes: ideally, it should never run out of novelty. All novelty should be integrated and thus relevant to the coherent identity of the whole (the authenticity of the enigma). It should be encoded in such a way that it can be adequately decoded by varying individuals, and can teach its own decoding. Thus the decoding can be idiosyncratic without losing authenticity, and thus it is vital and changing. The viewer can shift in relation to the painting from attraction, to interrogation, to conversation. Relationships with paintings rich in visible and invisible substance can last lifetimes. The viewer asks of the painting, the painting asks of the viewer – conversation.

**Coupling**

The painter is aware that the painting is a result of internal operations of the painter, or has the impression that the painting creates itself, using the painter as a medium. The painter is in communication with physical and intellectual factors, the paint itself (see Elkins 1999), himself/herself, an imagined other or others, the times, the history of the painting itself, its visual pathways and its evidence of accumulated decisions, the subject of the painting, the planning of it, and so on.

These factors, even down to the original subject itself, the pretext for the painting's existence, may be subject to change as the painting develops. It is not unusual for the artist to feel the original pretext disappear in the course of the work, and often as the last major decision that allows the work to "find itself," to resolve into the emergent structure of its own integrity. This integrity often appears concurrently with a breakdown of the artist's control over the artwork, and it severesthe artist's identification with the artwork, giving the impression that the painting has become, through this seemingly necessary sacrificial act, independent of its creator. This arrival at independence has not usually been a conscious purpose or destination from the point of view of the painter, and it is with mixed feelings that the painting concludes, and is "finished."

Some artists seek to cling to certain things, the audience, the subject, the plan, etc. while others tolerate or entertain universal and mutual flexibility. These highly flexible artists are the most interesting to me, as their process most vividly resembles an expanded version of Maturana's diagram of structural coupling and drift.

In Figure 3, the painter simultaneously exists as an observer of two worlds, the world of the world, and the world of the painting, for the painting is not only created from without, it is eventually inhabited, and is created (so it appears and is experienced) from within. This simultaneous existence, and the inhabitation of the painting as a replete world, confuses the observers (these are represented by eyes in profile in the diagrams), who are both united and disunited in the process, as each domain (each "reality") requires a denial of the other. These domains are linked through the materiality of paint itself, and it is frequently an effort to reconcile the two domains by reconciling illusion with materiality, as discussed earlier in some paintings by Camille Corot, Paul Cézanne (Figure 4) or by Giorgio Morandi (Figure 5).

These painters produce objects that confess, without equivocation, their paradoxical existences, as if making a deal with the world in exchange for being allowed to remain in it. Both Corot and Morandi suggest, in their work, painterly wisdom, an acceptance of the paradox. Their strength is that they conform to the human condition, but it is also their weakness that they surrender, or gloss over, the psychological tearing involved, acting politely as gentlemen. Among those who do not reconcile these factors, are Cézanne and Edvard Munch, whose work always feels alive, unclosed, like an open wound. Munch and Cézanne resist resolution, suggest that the work is unfinished, and thus their paintings remain poignantly alive.

**Artists know the feeling that others can only weakly imagine, of being so close to their work that they cannot distinguish themselves from it. As students, artists routinely suffer from criticism when they do not have a clear awareness of the distance between themselves and what they have made. In that state of mind, there is no distinction between theory and practice, observer and observed, substance and allegory, observation and empathy.**

**Elkins 1999: 165–166**

**Solitude**

The mysterious closed system of the artwork is a solitary experience, both in its creation and in its understanding.

**"Solitude I name this closed system where all things are alive."**

**Valery 1969: 233**

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Figure 3: (a) Maturana’s diagram of structural coupling of two living systems in a medium and including the observer (b) An expansion showing the painting-in-process as a living system including structurally coupled living systems within it and including a second (simultaneous) observer, as well as the first.
Creative consciousness extends into the whole of the seen world, changing it into something in which that creativity feels, with emotional recognition, nested. Valery may be writing of the poetic imagination, though in its impression of vastness to the creator, in its endless opening out, it suggests an inexhaustible fecundity that poetry shares with painting. The feeling of limitlessness is suggested by prodigious spontaneous talents such as Picasso’s or Milarepa’s, and by a desire to inhabit that fecundity forever. On the day before his death, not knowing that his end was near, the Pre-Raphaelite painter Edward Burne-Jones said, “I should like to paint and paint for seventeen thousand years…. Why seventeen? Why not seventy thousand years?” (Wood 1998: 141)

Françoise Gilot describes Picasso’s impression of his own disappearance into the world of the painting and reports his explanation:

“...He stood before the canvas for three or four hours at a stretch. He made almost no superfluous gestures. I asked him if it didn’t tire him to work for hours at a stretch. He made almost no superfluous gestures. ‘That’s why painters live so long. While I work I leave my body outside the door, the way Moslems take off their shoes before entering the mosque.’” (Gilot & Lake 1964: 116)

Coming out of this trance, or trance-like state, there is sometimes a noticeable adjustment of the world inside the painting to the world outside it, as the painter seems to transit from one observer to the other and a startling shock of chaotic raw appearance intervenes.

**Finishing**

The painter Balthus who, during his life often worked and reworked paintings for many years said of his process:

“...My paintings are composed and organized by this indecisive and nocturnal approach. I give no tyrannical orders, but let the painting make itself. The hand receives indications and serves as a humble and faithful tool for beauty to realize itself.” (Balthus & Vircondelet 2002: 55–56)

This statement suggests the artist as a sort of dowser, and that the hand holding the brush as a sort of divining rod, an intermediary between the artist and the painting, transmitting in both directions. Elkins says

“...The artist… may not be sure of any categories – there is no clear difference between the artist and the half-formed work. Neither is in control, neither clearly “makes” the other.” (Elkins 1999: 166)

What is the “half-formed” work? It is neither object nor being. It is something the artist is only now learning about himself. It is alive during this learning, and is a part of the artist’s livingness because of its uncertainty. A fragile embryo, it may die on exposure to criticism or even praise. And when the painting and the painter part, it is sometimes uncertain whether the painting is “finished.”

Balthus resisted parting with his creations:

“...Balthus is painting slowly these days, so the appearance of The Cat with Mirror III, the first work to come out of his studio in five years, is an event.” (Perl 2000: 58)

As the unfinished painting feels alive to the painter, the finished painting may feel dead. In completion, its future closes, and in its separation is the greatest disappointment of all, the realization that the painting has become, or may have become, an object, as now in the world it is vulnerable and undefended, and its identity is subject to being determined by others.

On the other hand, the unfinished painting is still alive with possibilities, and when the unfinished painting leaves the studio and goes into the world it feels to the artist as if, by mischief, the painting has simply run away from home.

Bonnard had difficulty with closure, and even corrected his own paintings repetitiously, at least once engaging fellow-painter Edouard Vuillard as a lookout, after his paintings had been sold and were hanging in collections. The painter and sculptor Alberto Giacometti had similar difficulties, and continued working on some figurative sculptures, whittling them until they became so small they nearly disappeared.
Art movements

In painting there have been broad styles that can be collected into art movements. Each of these movements emphasizes ways in which painting and constructivism relate.

Different art movements approach knowing, acting, and communicating differently, or with different emphasis. Encodings are different, as are processes of creation. Surrealism and abstract expressionism programatically seek after confrontations with an unknown, and, in many cases, intend to stimulate discomfort in both creator and viewer, and limit invitations to the work. Impressionism sought to reduce the dominance of accumulated subjects or depicted objects as aggregated in paintings in favor of an overall suggestion of a place with emphasized general properties of light and space. While initially inviting few observers, consequent popularity, due to a variety of cultural developments, now invites many. The appeal or lack of appeal that an artwork suggests has to do with the formation of invited or denied participants into strong or weak communities, and the value of understandings of the work in serving further to understand the developing cultural medium, with consequences to adequacy of action for viewers. In a general way, each style invites us, as potential viewers, to be changed in some way. In a general way, we change our way of regarding reality with each style, and some are “easier” than others. With deepening involvement, we may move from changing the way we regard reality to changing the way we experience reality as described in Kathleen Forsythe’s 1986 essay, Cathedrals in the Mind. Further, the metaphoric relation of image to experience may vary structurally from one style to another, as for instance, symbolization is fundamentally different from impressionism to cubism, or from realism to abstract expressionism, and even the location of style in relation to the observed world may undergo a change, as in postmodernism.

Postmodernism

Postmodernism in art is the prevailing contemporary style. It could be argued that postmodernism, being a multi-faceted cultural condition is not a style but a collection of styles, both individual and fused, a condition or circumstance. Because it is contemporary it is, like the water-environment of the fish, invisible to us because of its ubiquity. Our efforts to detect it produce much critical material, and may exaggerate certain trends, like the reconfiguring of authorship so as to minimize individual originality (much like Hermann Hesse’s introduction to the cultural background of Joseph Knecht in the Glass Bead Game) to an apocalyptic degree. Since it focuses on matters of semiotics-choices in depiction – rather than on the struggles to create against obdurate material (Elkins 1999: 147–149) – it focuses on things media have in common in a cultural environment dominated by photography, which is over-applied to painting, a practice that has an altogether different decision-structure from photography. Postmodernism, too, emphasizes new forms – including digital media, intermedia, and performance – and painting can look archaic and out-of-step in its environment, yet painters who examine style as an issue, such as Gerhard Richter and Lucio Pozzi, are clearly postmodern, as are painters who see the field of the painting as a domain for the performance of the painting (Anselm Kieler, Lucian Freud), and those whose work consists of intentional and ambitious revival of past forms and values via constructed artistic persona (Martha Erlebacher, Julie Heffernan, Julian Schnabel). The inclusiveness of divergent and individual styles (somewhat like configurations of cultural incidents or units – again resembling the Glass Bead Game) in postmodernism stands in contrast to the destiny-oriented way train of modernism, and thus may simulate multiversa in which differing individual constructions manifest in styles are assembled. Postmodernism can be seen as an expansion of modernism into its margins, with a subsequent weakening, and finally eradication of its center. Rather than a movement, postmodernism resembles a field or a condition. The expelled hegemony of modernism may occur at the periphery of this field, and the creativity of artists includes the invention of new ways of being marginalized. Hence the frontiers are continuously expanded. Postmodernism may not be visible as a style until it metamorphizes into something distinct from it, but at present, it has the appearance of a metastyle, or second-order style. A particular project that may occur to artists that understand constructivism is that, given the historical convention of identifying individual personality with individual style that has characterized comprehension, connoisseurship and career-building (commercial and academic) in art, style itself may be ripe for revolution, and with it, the understandings of possibilities for expanding individual personality beyond current conceptions of identity, including self-identity and identifiability.

The style of any individual artist has come to be associated with the individual personality of the artist, thus, Picasso’s style not only describes Picasso’s paintings, it is attributed to, and describes, his personality. This style is also identified with a way of seeing the world that allows some things and does not allow other things, and these same allowables and disallowables are mapped, in some way, onto the artist as well as onto the artworks. The acceptance of style as an expression of the individual (so-called “signature style”) suggests the embrace of an objective reality in that it suggests that the artist creates in relation to a stable reality that is “out there” and unchanging. From the point of view of the artist, the apprehension of “multiversa” (Maturana 1990: 57) is an understanding that compels the artist to act, and act differently in relation to his or her own individuality than has been acted upon such individuality before. If the “world” is known to be many, then the artist can no longer act as if it is one. This compels a change in the artist, away from unifying style and toward a metastyle of some kind, one that adequately reflects the apprehension of coherence among multiple constructions of reality. A de-pathologizing of psychopathology is a step that painting (and other art forms) has taken to express the shifting conditions of reality as artists experience it, and that artists wish to reflect and organize into art. As surrealism, for instance, investigated and even luxuriated in an imitation of paranoia, and abstract expressionism in pre-mediated mania (DeKooning) or depression (Rothko), and as postmodernism appears schizophrenic in its prodigious and vertiginous proliferation of forms, so the artist in the age of multiversa may experiment with
regarding the individual personality as obsolete, and explore this in the relatively safe environment of art. Note Gary Boyd's (1993: 120) observation that “in many cases several cultures must share the same human bodies.” Already there are multistylists among painters and other artists practicing today, and this suggests that multiple personality disorder may become a template for a new domain of invention in art, one that more adequately addresses reality as it is coming to be constructed in contemporary culture.

Abstraction

While abstract painting may consciously derive from external imagery (e.g., Kandinsky) or unconsciously (Pollock), or minimally (Mondrian), the resulting painting, early in its process, departs from its ignition and carries on toward conclusion, not in the triangular relationship of artist-model-painting but in an artist-painting dialog. In this dialog, the painting's history (its sequence of states prior to the present moment, in the course of its creation), and its imagined future (what new state will it attain if a particular new mark, change or intervention is made?) converge in a sequence of rows, a sequence of present states. It may appear that with the exclusion of a referent, abstract painting is a more constructivist act than representational painting. I am inclined to think not, although abstract painting may more nakedly reveal itself as constructed, and may appear more synonymous with the internal construction of the artist. As to the viewer, the invitation to construct out of the raw material of the painting is palpable and evident, and the viewer is readily aware of an invitation, if not a demand, that he or she create meaning from a provocative object, and is conscious, often uncomfortably so, that this meaning can have no external standard of objective validation.

The abstract expressionist ethic seeks to create for the artist an environment of uncertainty in which no next action logically or necessarily follows, but is decidable without recourse to past decisions or to the trajectory of events. Before the painting becomes predictable, it is hastily concluded or abandoned. Painters Hans Hofmann, Willem deKooning and Jackson Pollock epitomized this ideal. “At the time of making a picture, I want not to know what I’m doing,” said Hofmann (1950).

DeKooning has said, “The attitude that nature is chaotic and that the artist puts order into it is a very absurd point of view; I think. All that we can hope for is to put some order into ourselves.” (Stevens & Swan 2004: 326) DeKooning’s method involves continuous revising, as a consequence of recursion applied to the existing painting, each revision having the potential to raise the recursion to a new level. The recursion involves visually re-entering a painting-in-process with a fresh vision after an interval of time away from it, and critically experiencing the visual pathways, collisions and knots in it, with an effort to generate more elegant solutions that do not reduce vitality, continuity, and impact, but sustain or advance these qualities.

Pollock who famously declared, “I am nature,” creates “action paintings” that are enactments rather than depictions of nature. In his “drip” paintings, drips, loops and liquid lines of paint accumulate to collect into skeins that move outward from a central area in the painting and are inclined to be turned inward as they approach the framing edge. It is as if these gestures are herded in by the edge, which exerts an invisible force on them. Each painting’s resulting dynamic network resembles, more than anything, a “pattern which connects” (Bateson 1979).

“My paintings do not have a center,” Pollock says, “But depend upon the same amount of interest throughout” (Goodnough 1951). Pollock’s drip paintings come about as a consequence of a system, in which he includes his physical actions (these include his whole body, his reach and his balance), moment-to-moment judgment (that tracks the action and is quick enough to exceed deliberation and thus becomes unreflective, that is, spontaneously intuitive), gravity, the viscosity of the paint, the stick or other painting instrument in his hand, and the framing edge of the piece of canvas that lies, unstretched, on the floor. In these so-called “all-over paintings” Pollock works over the entire field, again and again, re-entering pathways, strengthening rhythms and making connections, with (optimally) an unflagging awareness of the whole painting as an evolving rhythmic entity (Figure 6).

Pollock has referred to the early phase of his paintings as a “getting acquainted” period, as if he is modeling the painting as an “other,” and modeling his interaction with it as a conversation.

Realism and realisms

Just as there is a specific art movement called “constructivism” that has nothing to do with constructivism as it is discussed in this journal, there is an art movement called realism, which is very specific and

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2] Pollock’s resemble the extensive interconnecting brambles in the general area of his Long Island studio. It is unlikely that these brambles contributed to a conscious project on his part, though it is also likely that they influenced or allowed, at an unconscious level, his creative vision, in my opinion.

4] Realism is the “fidelity to natural appearances without slavish attention to minute details. As a movement, it goes back to Courbet and Manet in the 1830s and culminates in impressionism.” (Ehremann 1979)
which is not connected to philosophical definitions of realism, but to "the real" as it is commonly understood, as a sphere of visual plausibilities that excludes, for instance, angels and ghosts and includes what one might encounter in daily life.

When Leonardo describes, at length, how to paint a battle scene (Da Vinci 1970), he lists all the things we might encounter in a battle if we were there, including those, like the dust in the air, that might be missed in the consideration of less attentive painters. Leonardo's description is a recipe for constructing a plausible battle scene, not for copying one from observation. Even as a duplication of nature, there is an absence of realism in painting. Leonardo's drawing of a plant, such as his famous chalk drawing of a star of Bethlehem (Figure 7), exaggerates growth trends into insistent curves, and eliminates deviations due to accident or individual circumstances of growth. Surface detail is either simplified or eliminated.

The most persuasively representational paintings convince us by rhetoric or through empathy. Nothing is ever being represented. Some nonverbal something is advanced by way of visual synecdoche. There is no delivery of information. There are coordinations of coordinations of actions only.

Photorealism

Photorealism is a form of contemporary realism. Originating in the 1960s and early 1970s, it is particularly confusing as it, more than other forms of painting, suggests the accurate transfer of the external world into (onto) the painting.

In photorealism painting, the painter's relationship is with a photograph as an object rather than with the mechanically referenced objects or scenes in the photograph. It is not a coordination with the world but with a mechanical document of the world. There is a relation, and often a confusion, especially among viewers, of the cultural, as well as the mechanical and creative, positions of painting and photography in relation to one another. The conformity of the painting to the dispassionate "reality" of the mechanical representation suggests exaggerated achievement to unsophisticated viewers who mistake mimicry for mastery and conformity for understanding. The photorealist painting nevertheless reflects considerable specialized expertise. It projects a miraculous appearance, an occult glamour, and conforms to the current cultural inclination to accept the photographic image (uncritically) as accurate and true. It suggests a knowledge (and understanding) of reality that the artist does not have, especially as the photographic "source" is almost never exhibited concurrently with the photorealist painting. Photorealist careers are associated with choice of subject matter, the arranged still lives of Audrey Flack, Bay Area suburban scenes of Robert Bechtle, cars and trucks of Salt and Goings, ships of Morley, city scenes of Estes, lingerie of John Kacere. Nevertheless some photorealist paintings have strong abstract (formalist) or material properties themselves, distinguishing the work of Estes, Bechtle, and Richter especially. There is also a history of the disguised or hidden use of the photograph as a source or visual reference in modern art, and a use of photography or similar image by way of the camera obscura and the camera lucida used in centuries before photography. There are fascinating distinctions among these painters. These painters include such important figures as Eakins, Canaletto and Vermeer. David Hockney (2001) has speculated about an extensive use of lenses in painting in the history of art.

The conformity of the photographic image with the "real world" is a convention of our times. Realist paintings seem to confess that reality is not being duplicated in the painting, but that it is presenting an analog to observed reality. Photorealist paintings suggest that the world is being accurately represented. This is due to a slight of hand, by which it is the normative photographic image that is believed in by the viewer, and is taken to be a true document. Responsibility for this documentary verisimilitude is transferred to the painter, who, it is assumed, has created a likewise "truthful" image. According to the popular understanding as to the purpose objective of representational, or realist art, it is conformity with the photographic that is a test of mastery and "talent," which is a highly regarded and mysterious component in artistic production. Thus, the photorealistic painting is presumed to be a creation of high quality, one that shows a high level of skill, a mysterious and almost magical quality due to talent, and which conforms, without difficulty, to the way the viewer "sees" the world anyway. Thus, as the viewer is both impressed and flattered, value accrues to the photorealist painting. Photorealist paintings (with notable exceptions including Chambers, Bechtle and Estes) fall in the category of entertainment rather than art as it is defined and discussed by Gregory Bateson, emphasizing spectatorship rather than creative engagement.

Photorealism is presented here in contrast to other sorts of painting, both representational and non-representational, which are all, by comparison, far more decision-dense and information-rich due to having been constructed by multi-level active choices throughout. Photorealism gives

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5 Visual synecdoche is a visual equivalent of the literary device or figure of speech, synecdoche, by which, (among other strategies, and as an example) a part of something is used to refer to a whole thing.

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Figure 7: Leonardo da Vinci “Star of Bethlehem” (The Royal Collection, UK). The object in the natural world as a text from which representation may be extracted: Leonardo’s famous chalk drawing of a star of Bethlehem exaggerates growth trends into insistent curves, and eliminates deviations due to accident or to the individual circumstances of growth.
an impression of such density and richness because of the appearance of mastery and because of the large quantity of incident. But the decisions are likely to be trivial routine tasks of submitting a technique to fidelity to a photograph. While there is potential for interbraiding photo realist technique with other decisions to create information-rich paintings, in general these paintings are simpler than they appear.

Impressionism and plein air painting

The dynamic relation between observation and imagination in a practice of painting operates in adversity; there is material resistance and time restraints. Plein air painting, working from nature outdoors, can bring wind and cold as well as rapid changes in light and atmosphere. Along with mastery, urgency and adversity are common constraints. It is out of engagement with these liabilities that much art that could never be created otherwise is born. The fecundity of urgency and adversity is generative of unforeseeable imaginative negotiations that take the form of spontaneous visual synecdoche. Vincent Van Gogh confessed the frustration of the plein air painter.

“...I neglect everything for the external beauty of things which I cannot reproduce because I render it so ugly and coarse in my pictures, albeit nature seems so perfect to me.” (Van Gogh 1997: 414)

There is no duplication of nature in such painting, but a failure to do so that can be both humiliating and exhilarating at once. In this failure there is available a richness of expression and meaning.

Such stresses as Van Gogh or Monet experienced, compress the decision-making process to a point that cannot be paced by conscious action. In these contexts, the painter fuses conscious intention with unconscious decisions. In the case of plein air painting, the constraints are various. Some can be foreseen; others cannot be planned for. Some affect the consistency of the motif: light moving, fog lifting, wind blowing. Rapidly changing light conditions, in particular, create a context of temporal urgency requiring swift retrievals of metaphorical parts to suggest the whole. Other factors affect the physical features of the enterprise: the easel may fail in the wind and tip over, or the canvas may shake in the wind under the brush (Van Gogh 1997 reports this maddening experience in his letters), the paint may dry too quickly or too slowly, the surface of the canvas may be afflicted with blown dust or with rain or insects. Further there are physical and psychological discomforts: the general physical awkwardness of the enterprise, the cold and damp, fatigue, and frustration; and further, there are changes in perception and consciousness. In the field, adversities of different orders arise not one at a time, but in combination.

Both foreseen plans and unforeseen revisions are cast in economies of synecdoche, and whether rehearsed or spontaneously invented, the artist’s choices are responsible to a sensibility that, having been created over time, may be illuminated, expanded, challenged and even betrayed but not ignored or forsaken. The sensibility is the system of allowables and disallowables created by the artist, consciously and unconsciously, over time (Galuszka & Dykstra-Erikson 1997). Sensibility forms a catalog of possibilities (Galuszka 1988); in the situation of plein air painting, sensibility meets both motif and constraints to decide, via the technique of synecdoche, how and what of the observed will be registered on canvas, and how subsequent adjustments and revisions are decided.

Hence, without forethought, spontaneous visual synecdoche determines that a curve of paint summarizes the swelling of a cloud, a scattering of tangled brushstrokes suggests a margin of weeds, some scumbling conspires into a patch of earth, and brush size indicates a limit as to the scale of what will and what won’t be represented.

As plein air painting submits the memory and style of the painter to any new and challenging sensorium, recursions arise involving the painter, the painting, the “view” or “scene,” memory, style and accident, which are all worked together toward concluding an adequate unity that has coordinated these elements, having built a partly conscious but mostly unconscious pattern among them, and resulting in a painting that, in some way, can be considered a representation of what was seen or experienced.

Raphael, mannerism and … madness

Mannerism can mean a way of doing something, and pejoratively, it has come to mean a way of repeating a stylistic quirk or entity as a way of prolonging achievement in cheap success. Here I wish to discuss the art historical movement called Mannerism, which flourished in Italy, particularly in Florence, as the High Renaissance passed. Its invention addresses the depersonalization and repersonalization of style in a way that is relevant to constructivism.

Florentine painters in the first half of the sixteenth century began creating a self-conscious and eccentric style in the turbulent wake of Renaissance achievements. Their “mannerism” continues some of the trends in Renaissance Art and repudiates others, and likewise it subsequently influences and is repudiated by the Baroque. Its rise and the conditions surrounding it are described in detail by Giorgio Vasari, architect, biographer, art historian and, himself a Mannerist painter personally acquainted with all the major proponents of the movement, and by Benvenuto Cellini, a Mannerist sculptor and notable autobiographer.

It is a period in which style (and stylization) is self-conscious and is advanced by artists.

Pivotal figures in the High Renaissance are Raphael and Michelangelo, who also evolved into a major figure in Mannerism. While wholly a Renaissance painter, Raphael’s inclination was away from nature. Though he was a brilliantly observant portraitist, his focusing project was abstract and classical. His style progresses toward harmony and grace, and even towards a blandly normalized sweetness, and his is a conscious step away from observable nature. According to Vasari, the inclination towards grace is an effort towards refinement, and an effort to map onto visual art the refined conventions of courtly behavior. This inclination maps an intuitive set of protocols, privileges, concessions and restraints onto the form and content of visual art, including its removal from spontaneous passions and quotidian detail. Thus this art is not only apart but elevated, not by accident or by way of the vanishing of detail and ornament, but due to simplicity and the removal of detail, as the forms of the world are coaxed toward imagined Platonic
pure forms. Energy becomes sublimated. All individualities are eschewed: individual details of observed reality (with the exception of portraiture), individual moments of lived time, individual expression of the artist. Art becomes depersonalized in a hegemony of leveling style.

Sir Joshua Reynolds, who summarized three hundred years of academic development in painting, said that Raphael, "...by an individual and imperfect marking, left room for every imagination, with equal probability to find a passion of his own." (Reynolds 1966: 72)

Miller Crouch, a contemporary artist, commented about Raphael:

"The geometrical forms Raphael depended on to achieve clear approximations of transient muscle display and lend immutability to his figures and his genius for rhythmic repetition and spacing, concentration and lapse, give everything in his pictures an ordered life outside time, ruled by formal necessities, undisturbed by disquieting sensations. "Vitality is pleasantly absent in this pattern of balanced proportions within juxtaposed bodies and the spaces in between them. Likenesses to persons living or dead and other incidentals are introduced to add ambiguity to what are essentially mathematically determined images. Raphael's mature conceptions are, like higher mathematics, patterns of sustained elegance that arrange complex iconographic and visual data into satisfying arrangements of apparent simplicity." (Crouch 1995, personal communication).

Kenneth Clark comments about Raphael:

"Some of the greatest masterpieces leave us with nothing to say. Raphael's Sistine Madonna is undoubtedly one of the most beautiful pictures in the world....but the few banal thoughts it has aroused in my mind would not fill a postcard." (Clark 1960: 17)

And Dali, with deadpan humor (as well as with serious advice), praises Raphael's distraction:

"It was in order to put painters to sleep while keeping them awake that at the height of the Renaissance it was usual to surround them with diversions and to play Aeolian music, so that during their long and patient hours of manual labor they might keep their minds elsewhere as much as possible. For it is well-known and recognized that the painter who reflects is always a bad painter, and I dare say also that the same is true for the philosopher who reflects too much – of whom the prototype is that lamentable “Thinker” by Rodin. For inside the head of such beings one may be almost certain beforehand that absolutely nothing happens. 'When you paint, always be thinking of something else,' said Raphael. This truth is like a temple." (Dali 1948: 45)

It could be argued that Raphael, who is so empty, is the most influential painter in the history of western art. His style and attitude have inspired revivals over hundreds of years. Though vacuum-like itself, Raphael's style did not exist in a historical vacuum, nor was it immune to recursions that paradoxically adjusted to destabilize it in order to keep it alive.

Mannerism reacts against the evacuation of energy in Raphael's high style, and Raphael himself seems to have been abandoning it at his untimely death. He left unfinished a large vertical Transfiguration (Figure 8) with figure groups segregated into two groups, one above and another below. The figures above represent participants in a miraculous event as well as initiates who are "insiders" as to the understanding of the event. These are represented in the harmonious style that is most associated with Raphael. Figures below represent a collection of common people observing the miraculous with various reactions, and a more agitated composition of abrupt tearing rhythms and stark chiaroscuro. While the disturbing contrast between the two realities above and below may be due to the painting having been finished by Raphael's assistant Giulio Romano, it is likely that it was finished according to Raphael's composition plan, which would have included this contrast. The stability of Raphael's high style is perturbed in any case, by forces within its recursive development such as a simple ambition to include greater diversity in the style, or by events influencing it from the cultural-historical medium in which it is created.

The troubled feeling of the lower part of the Transfiguration is similar to the troubled feeling developing in the brooding work of Michelangelo, and in the works of Andrea del Sarto and of the painters in del Sarto's studio.

Michelangelo outlived Raphael at both ends, having been born earlier, and dying later than Raphael. Michelangelo's style evolves considerably and is powered by an animating individuality in spite of its (perhaps half-hearted) efforts to transcend that individuality.

In the shadow of both artists, the thoughtful, masterful, ambitious, yet conservative Andrea del Sarto (Vasari's teacher) arises in Florence while Michelangelo and Raphael spend their greater energies in the pre-sack boomtown of Rome. Digesting the styles of Raphael and Michelangelo, Andrea proceeds to analyze them, and it is in del Sarto's studio (as well as in the nearby cloister of S. Annunziata) that a discourse founded on this analysis comes into being. Participants in this discourse include Pontormo and Rossio Fiorentino, as well as Vasari.

The evidence of an on-going conversation is in the paintings. Style becomes a thing in itself, is separated from the spontaneity of response to observation, and considerable room is made for ideas, formal, philosophi-
individual and otherwise abstract, and for speculation, principally about style itself and the unknown limits of beauty and meaning. It is at this time that the artist withdraws from social norms, and it is the Mannerist painter who comes to typify the artist as someone obsessive and apart from society.

Individuality and conversation become concentrated. Conversation includes the non-verbal conversation of competition. These conversations-by-way-of-competition are observable in Rome and Florence. In Rome there is an epicenter in the Vatican complex of the Stanze, Loggia and the Sistine and Paoline Chapels, and in Florence the simplicity of a single space, S. Annunziata where the dialog among frescoes continues today.

Given the operation of sensibility, it is in locations such as these that allowables and disallowables are tested against one another, to see which has more integrity, which achieves more beauty and meaning, and which simply accounts for more. Further, sensitivity to novelty inclines competing artists to invent further, within constraints of grace and effective communication. While the paintings in the Stanze and the Sistine Chapel are representational, in a sense they are only nominally so. The contest is not that of Zeuxis and Parrhasius, one of mastery, deception, and illusion; but a contest of conformity to an invisible zeitgeist, a bringing to light of the emergent spirit of the times. Certainly in Rome the stakes seemed higher. The audience was demanding, sophisticated and powerful. Raphael’s success may be due to his accuracy in epitomizing the spiritual and temporal nexus of the papal court, while Michelangelo clings more to his own inner depths and, it can be proposed, resonates more with key attuned individuals rather than with the court in general. Raphael lightens and Michelangelo makes grave. Seen in the vicinity of one another, their great works travel through the viewer with subtle motion, like a pendulum. The conversation in Andrea del Sarto’s studio can be imagined as more cooperative and less competitive (Briganti 1961: 19). Among these artists, conventions are identified, both to be broken and to be advanced. Interest expands beyond the local in time and space. While greater sophistication is the shared goal, and the pre-eminence of Italian art is believed in, these artists look to the past, especially to carved Gothic sculpture, and to exotic accomplishments abroad, especially to Dürer, made available through the distribution of his prints in Italy. These influences were sought, not in that they were superior to the Florentine art of the time, but in that they were exotic, that they could stimulate the new and the strange. These influences can be seen as growth-producing perturbations in the recursion of style.

James Elkins writes about the craziness of painting in What Painting Is, and about the nature of its quest involving an effort to make something out of resistant material. Painting has something in common with alchemy (making something noble out of something gross – this gross matter being both the material substance of paint, and the moral or intellectual condition of the artist himself) and it is not inconsistent with this parallel of underlying process that Mannerist painter, Parmigianino, eventually pursued alchemy ( Vasari 1987: 195–197), that Cellini indulged in necromancy (Cellini 1927), and that Rossio Fiorentino concerned himself with the reasoning capacity of a Barbary ape (Vasari 1987: 173–174). In mannerism, the inherent strangeness of painting became apprehended by painters, its branching patterns of choices became revealed, its strange outcomes became entertained.

The difference between the world outside the painting from the world inside the painting, became cause, not for bridging the gap by way of art, but for fascination. These artists chose to widen this gap rather than close it, to find out how far painting could go on its tether from reality, not toward it. In their choice to alienate art from reality, they also seem to have chosen to alienate themselves from consensus reality. Pontormo, Parmigianino and Michelangelo became increasingly eccentric. Vasari describes Pontormo as being solitary “beyond belief”, of Michangelo giving up changing his clothes to the extent that his buskins grew together with the skin of his lower legs, and of Parmigianino descending from a handsome and elegant young man into a man “almost savage” and in a “sorry state of melancholy and oddness” (Vasari 1987: 196). Rosso digs up rotting corpses by night and dies by suicide, Nicodemo Ferrucci commonly wore a doublet made from the flayed skin of a hanged man. Bartolomeo Torri lived among his anatomical studies so much so that he would, “...poison the air of the house by filling his rooms with human limbs and fragments of bodies which he even kept under the bed.” (Briganti 1961: 12) Rustici lived with a raven, a porcupine, an eagle and a collection of snakes (Briganti 1961: 12).

Since those times there are abundant stories of eccentric artists. The eccentricities of artists have become the stuff of fables, and part of the explanation of creativity, its origins and its consequences.

Like modern artists, the Mannerists sought after a realm that was remote, not near, to the world of their day-to-day lives. Dali famously proclaimed that the difference between himself and a madman was that he was not mad, but Dali did, nevertheless, become mad in the end (discussed in Gibson 1997: 656–660).

The regular inhabitation of unformed imaginary realms seems as if it should be regarded as risky. With the rise of importance of the imaginary world in the artist’s life, its influence on ordinary life, and on participation in sensuous reality becomes compromised, societal constraints on behavior weaken accordingly and, eventually, the artist can no longer “pass.” The tension between the world inside the painting and the world outside the painting creates too much stress. When the world outside the painting prevails, the artist may retract creatively. When the world inside the painting prevails, the constraints of the world give way.

As an approach to painting, Mannerism feeds on itself as correspondence with observations outside the system (the system of the style, and particularly as enacted in the creations of the paintings as systems) diminishes or ceases and the artist remains more and more in the escalating recursiveness of greater and greater distortion and exaggeration of proportion, expression, rhythmic vibrations, and color effects. (This kind of recursiveness, more or less confined to the system of the painting-in-process, later characterizes abstract art). Without external resistance entering the system, the new style becomes a new reality for these artists, not a reality that exists as inferior to the observable natural world, or one that is in harmony with it, but one that surpasses it, in a “discovery” of things beyond the reach.
of ordinary experience. With the distinction between invention and discovery unknown, and with the distinction between the scientific and theological dogmas unclear, and with no knowledge of (the invention of) psychology, the “ worlds” they encountered in these paintings were unknown realities, wild or sublime, which corresponded to some unseen but felt reality outside of ordinary experience. The new reality for these artists becomes a primary narrative, and influences life outside of the confines of the system of the painting-in-progress. Both the paintings and the lives of these artists become obsessive.

** When I was manic, I projected metaphors that talked to me. And I talked back to them. ** (Sloan 1995)

Steven Sloan describes a similar, if not identical, condition in The Current Self-Description of Manic-Depression in a System. The unacknowledged co-ontogenetic drift of art and life may be interbraided or its interbraiding may fray. If art is deeply experienced to the point that it becomes a primary narrative, and if this narrative diminishes its links to observables outside the system, a crisis may be in the making. Steven Sloan’s confessional self-cybernetics points to the process of breakdown among these artists.

The surging rhythms of Parmigianino’s Madonna with the Long Neck (Figure 9) analogize the surging addictive power of mania, as do many of his other works and many of the works of Parmigianino’s teacher, Correggio.6 While surging rhythms later become standard in the Baroque and especially characteristic ly urgent in the Rococo style, these are later more inclined to be engineered performances of skill, more manipulative of viewers, again (as with photorealism) occasions for spectatorship and entertainment, usually less filled with the vitality and power that is apprehended in paintings in which something unfamiliar is being encountered and is under vigorous and questioning development, and about which there is a good deal of uncertainty about meaning, potential for communication, future potential, and the like. The building of novelty upon novelty at a rapid pace can incline dissatisfaction and disconnection from an outer environment less reflective of change. The organizationally closed painting contains the process of its production, and the viewing of a painting can be understood as eliciting process from the product. A painting, as an object, is open to change while in process, but eventually becomes closed to revision as an object, while remaining open to interpretation. While in the broadest sense, paintings are open to participation in larger systems of communication that include them, the painting, also a system of relationships (for example, a system of formal relationships of rhythm, color, and line) is materially closed.

It can be considered that even a finished painting is not “finished” at all, but has been brought to a state in which it is sufficiently equipped to enter into conversation with viewers.

When it is remembered that the painter is also a viewer, and that the painting may be subject to changes of all sorts during the course of its creation, due to feedback from the painting-in-process tracked and considered by the painter, the living qualities of the process can be appreciated. The choices encountered by the artist may be many (indeed, every mark, as well as every mark decided against, is a decision), with each leading to a somewhat different created world, not only in part, but as a whole. This movement through choices, carried out in a realm apart from consensual reality, resembles a dream.

** I began entering into a waking dream, a hallucination with a coherent narrative: …an incident took place wherein I let the conversation with my people begin to break down by choosing to keep the self-centered narrative of the waking dream going. ** (Sloan 1997)

Sloan’s description of the onset of recurring psychosis also serves to describe the condition of these artists, as the recursive involvement with producing visual narratives disconnected from the larger environment of the observable world increased specialized choices within the systems of the paintings, while decreasing choices, including imagined choices in the more inclusive domain of the worlds in which they lived.

** While I remained in the narrative, myself observing myself as the observer, I could leave it. ** (Sloan 1997)

Sloan’s capacity to distance himself from the enthralling domain derives from the cybernetic perspective (and action) he has on his crisis, which is not generally available to those that similarly suffer, including these mannerist painters. When Parmigianino forsakes painting for alchemy he is colonizing his greater world with the madness that overspilled from his painting, seeking to discover something comparable in reality to what may have seemed promised in painting.

** …the bubble of human cognition changes in the continuous happening of the human recursive involvement in coontogenic and cophilogenic drifts with the domains of existence that he or she
Monet entered the room in which his beloved wife Camille had just died and became fascinated with the colors that were changing as her face began to register her loss of life. 

The student of art is usually someone who has become good at something, say, drawing a likeness or harmonizing colors. The best students have a strong capacity to suspend disbelief, and to tolerate ambiguity, but this quality usually goes unnoticed by the student, as the student sees art foremost as a matter of achievement based on skill and mastery. This student is often surprised to realize that an art education can include strategies that challenge pre-existing competencies. In my experience, all effective teaching strategies in art that go beyond advancing trivial preconceptions and prejudices that can interfere with the attachments students have to their competencies. On foundational levels, this has to do with interfering with habits of posture, patience, and expectation, as well as habits of seeing, drawing and composing. Teaching interventions spark new approaches through counterintuitive exercises such as drawing from upside down images or drawing with eyes closed, or with a non-dominant hand, or with a clumsy or unfamiliar drawing instrument. Also, they involve disciplines for undercutting persistent habits such as seeing in terms of things with outlines. Twentieth century American painter and art teacher Charles Hawthorne would say to his students: **Let the eye go from one spot to another without the aid of outlines. Jump from the center of one spot of color to the center of the next. Keep your eye away from the edge a little bit more – don't insist that the eye shall stop at the edges.** (Hawthorne 1960: 43)

Such interferences and perturbations reveal habits of seeing, as well as presenting openings to new ways of seeing. Teachers routinely persist with admonitions that drawing is a sort of forgetting, a forgetting of the names of things seen, in an effort to reorient vision from the "known" to the unknown, from things to unclassified phenomena. This can be insisted upon without ever being fully successful. The forgetting is often momentary, but in that moment of forgetting, persuasive results are so often encountered that students rarely deny the validity of this advice, while nevertheless resisting it. At the core of the teaching of drawing is the disconnecting of visual imagery from language. While, as in descriptive writing, visual art is dependent on a kind of synecdoche to evoke and communicate "reality," it does so by way of indicators and grammar alien to the realm of words.

The teaching of visual language then, is an invitation to internal examination of preconceptions and prejudices that can have wide-ranging results, beyond the visual, into the philosophical and political.

The teaching of an alternative approach to the obvious or direct is a longstanding tradition. Early Renaissance painter Cennini (1933: 57) describes how to paint mountains:

**If you want to acquire a good style for mountains, and to have them look natural, get some large stones, rugged, and not cleaned up; and copy them from nature, applying the lights and the dark as your system requires.**

With rocks standing in for and inspiring mountains, we have resistance, and a suspension of disbelief, as one thing is to be done in terms of another. This kind of work, which requires decisions by the dozen, eventually engages the artist to the point that belief in normative reality is also suspended, as one realm of phenomena is translated into another. The artist looks at the stones and sees mountains. This translation of whole to whole, requiring that one thing be experienced in terms of another, is
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a poetic experience described by Kathleen Forsythe (1986) as an isophor in her paper *Cathedrals in the Mind*.

The experience of an artist in following Cennini's directions for painting mountains resembles provocations of the imagination from random and unlikely patterns. Vasari writes about Piero di Cosimo (1462–1521):

"He would sometimes stop to contemplate a wall at which sick people had for ages been aiming their spittle, and there he described battles between horsemen, and the most fantastic cities, and the most extensive landscapes ever seen; and he experienced the same with clouds in the sky." (Vasari 1987: 107)

This cross-category thinking, and metaphoric envisioning was also practiced by Leonardo, who was his contemporary and who was acquainted with Piero (Vasari 1987: 107), and this approach inspired surrealists, culminating in paintings and drawings initiated through suggestions of natural processes like *frottage* and *fumage*, and by Max Ernst's process of *decalcomania*, and Dalí's "Paranoiac Critical Method," and leads to a material-as-metaphor trigger for creative communication that is common to much contemporary art. These changes of perception are projections of the constructed onto compliant configurations of incident. Unlike some other viewers, who might see remarkable visions on a stained wall, in a piece of toast, or in a cloud, and believe this vision to be evidence of supernatural communication, the artist performs this action so regularly that it causes no mystification at all. In fact, as Dali mentioned in his communication, the artist performs this action regularly, and which is practiced regularly, and which is practiced against resistant materials. From art education based on challenges from counterintuitive resistance, as well as other challenges, the artist develops a tolerance for unpredicted outcomes, for accidents, and for paradox. Painting requires many decisions, often many decisions per minute. Some of these are conducted consciously, others unconsciously, intuitively. These decisions are of many orders. They are in many categories, which often converge on a single mark that must be made to satisfy them all. Also there are undecidable situations, which, in being decided, open new pathways.

Maturana often addresses the distinction between perception and illusion, and that in the experience of observing there is no distinction between perception and illusion and that "...errors are changes of domain of reality in the operational of an observer that he or she notices only a posteriori." (Maturana 1990: 115)

What might be regarded as an error of perception, an illusion, by another observer, is of no concern to Piero as for him, the stain on the wall has become a special and familiar place where ordinarily contradictory realities coexist. In one domain of reality there is a unique place that generates battle scenes and the like, in another domain there is a stain on the wall. With familiarity, these domains unify into a unique locale of reliable ambiguity.

Vasari reminds us that Piero is looking at only a wall when he sees these things. While "...one is forced to claim a privileged access to an objective reality to resolve it and to deal with errors as if they were mistaking of what is." (Maturana 1990: 115) Piero travels from one domain to another, as he does when he is painting, where disagreements are not mistakes but relationships.

Drawing is fundamental to art instruction. In learning to draw, it is not very helpful if a piece of paper is regarded only as a piece of paper, but it is very helpful if a piece of paper is also regarded as a space in which three-dimensional forms may arise. If the piece of paper is regarded as a piece of paper only, perspective can be learned, but only as a formula to be applied. Curiously, and I cannot explain this, students who suspend disbelief effectively create more convincing spaces than students who apply the laws of perspective, however accurately, if they cannot suspend disbelief. But effective drawing requires more than the mere suspension of disbelief (into a kind of backgrounding of skepticism, and passive spectatorship, to return to that distinction), it requires a belief that has the capacity for creative engagement. Belief becomes crucial. Belief in what is known not to be true is crucial. And through exercise it becomes familiar, and through familiarity the mutual denial of "domains of reality" breaks down into a mutual acceptance.

One learns to draw what one sees, yet one also sees what one draws. Seeing leads drawing but drawing also leads seeing, and it is not infrequent that whole objects and features, as well as relationships among forms, seem to pop up out of nowhere in the experience of drawing, in which a line takes us from one thing to another. This experience is a reminder of blindness to the unexpected, and, as an exercise, drawing "from life" reduces that blindness. Drawing teaches seeing.

In his *Tractatus Paradoxico-Philosophicus*, Ricardo Uribe (1991) distinguishes between trivialized observers and detritialized observers, and discusses the distinction between instruction and education in determining a likely outcome of trivialization or non-trivialization among learners.

"**Instruction**: Attempt to make observers follow the logic of a group in order to make them predictable (trivialized) members of that group."

Part of art education, usually at the beginning, distinguishes fundamental issues and addresses these issues through instruction that, when enacted, produces reliable results, and can be used to gauge mastery of a skill, such as creating credible spatial illusions through adequate perspective, or creating a credible figure of a human being by applying proportion and anatomy.

Uribe (1991) describes education as follows:

"**Education**: Attempt to develop thinking and conversation (recursion, paradoxes) within and among observers in order to detritivalize them, i.e., to make them unpredictable."
The aim of both instruction and education in art education is to ultimately expose decidable questions, those “already decided by the choice of the framework in which they are asked, and by the choice of the rules used to connect what we label ‘the question’ with what we take for an ‘answer’” (Foerster 1990: 10), to stimulate an increase in the number of choices of each student, and to prepare students to engage effectively and to learn, and subsequently an individual protocol for setting and solving problems.

What is commonly sought after is “individual style,” a personally-determined approach in form and subject, which is explored in a sequence or series of artworks that can be discussed while in progress and also later examined in conversation (critique) to interrogate process, test adequacy of communication, uncover hidden motivations or assumptions as well as emergent qualities, and open up further development and learning. This approach to learning is rich in implicit, as well as explicit, means. While responsible to content, and mindful of this responsibility, it emphasizes exploration and responsiveness. It facilitates the building of creative communities by fostering multi-level conversations that include but exceed the apparent boundaries of the subject of art, and encourage recursions through which other-than-art subjects are returned to consideration in relation to art, and art is considered in relation to other subjects. It addresses different systems in the student (and teacher) and among students and teachers. Gary Boyd (1993) describes something similar:

“...If we are composed of a heterarchy of autopoeitic actors (p-individuals) – so that sub-individual, individual, and collective processes are mutually interlocking autopoeitic systems, then, only by multilevel conversational educational intervention can appreciable culturally and ecologically symbiotic human learning be brought about.”

Without being designed as such, the teaching of art, which, historically, has been developed outside of the academy in an environment emphasizing praxis, commonly intuits ways of initiating students through a deep and complex process that is commensurate with Boyd’s recommendation.

Boyd’s view is compatible with Reynolds’ (Reynolds 1966: 21–22) considerations in the fostering of the British Academy as an educational institution for artists. “Every seminary of learning may be said to be surrounded with an atmosphere of floating knowledge, where every mind may imbibe somewhat congenial to its own original conceptions. Knowledge, thus obtained, has always something more popular and useful that that which is forced upon the mind by private precepts, or solitary meditation.”

The art student usually originates as a child teaching himself or herself how to create an adequate something. A good deal of self-teaching, and learning to learn, usually precedes formal education in this field. Art education is a structure that surrounds the learner who already knows something valuable. At the same time, because of the unique value of what has been self-learned, art education stands apart from each learner. Painting is mostly self-taught from a deuto-learningset in motion in childhood and advanced in the course of art education, a form of education that is intentionally shrouded in enough mystery so that it is always a little unclear. This gap or lapse in clarity creates a space that invites being filled by the unique learner, and suggests a dimension of creative freedom. In the learning of even simple principles, there is space for difference as to practice, and it is through this difference as to practice that every painter re-invents painting. The self-learning that takes place after its initiation both deepens and further individualizes the art that follows.

## Painting and the viewer

Since paintings do not have temporal beginnings and ends, and are apparent all at once, visitors to a museum are tempted to glance at them and move on. At a glance, a good deal may be evident, but no relationship has taken hold between the painting and the viewer. Paintings invite time. This problem was adroitly addressed by Kenneth Clark (1960) in his introduction to a popular “art appreciation” book, *Looking at Pictures*.

Metaphysical painter Giorgio de Chirico muses:

“...I have wondered why... in a room, facing a public armed with binoculars and opera glasses, pictures (naturally not modern ones) are not shown, and why the public is not forced to look at each picture for a time corresponding to the duration of a long symphony; that is, about sixty
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Conclusion

A painting is an object in which an internally constructed reality is translated, with difficulty caused by such things as the resistance of materials, limitations of talent or mastery, the way things look different than they are imagined, as they are translated from an imaginary domain to a physical domain. The physical object is consciously and unconsciously coded through intentional and unintentional style. It is decoded by the viewer according to a means of decoding suggested by the painting but determined by the viewer. What the viewer “sees” in the painting is unique to the viewer, and may also become, to the same viewer, unique from time to time, as the information formed changes with the viewer, even as the painting remains physically stable. Since the painting is only that which is seen by a viewer, the painting appears to have changed in some way from viewer to viewer and from viewing to viewing by the same viewer. This history of change becomes enfolded into a relationship between each viewer and the artwork (Figure 12).

Painting is created, and how to paint is taught in such a way as to further a developing identity as its meaning and even its appearance is co-created with each viewer. While there may be planning involved and subject matter intended, as well as emotional impact intended, the mutability of the painting is of paramount value in presenting it as an inviting object that is at the same time, paradoxically, a vision. This vision may be abstract or representational, and may derive from any style or sensibility. Different styles incline toward the co-creation of distinct imaginative realms, but do not specify the feeling, the poetic tenor, or deep meaning or any absolute interpretation. Sometimes painters make efforts to specify these things through rhetoric, but the painting that results is nevertheless constructed by the viewer as something other than what was intended. Some paintings are more complex than others, the more complex paintings being structures resulting from more decisions and more organizational levels or orders of decisions. Some paintings are more trivial than others and some are nontrivial. Trivial paintings seek to control interpretation and the experiences of the viewer in relation to the painting. Painters, through these paintings, seek to dominate viewers, creating conformity to their views. Because of the freedom from spoken or written rhetoric (unless this is provided in support of the painting), and because “visual literacy” is not standardized, co-creation is unique to each viewer, and requires attending spoken, written, or otherwise enacted rhetoric, for the visual experience of an artwork to be brought into some kind of social conformity.

Nontrivial paintings provide a configuration of formal and symbolic elements of complexity and resonance. Internal resonances incline the viewer toward creating links, but the sequence of the links is not determined, and the links may strengthen, weaken, dissolve or reconfigure as the paint-

Figure 12: Antonio Lopez Garcia “La Cena [The Dinner]” (Reproduced from the Museum of Fine Arts, Boston). Worked over a long period of time, and with exceptional mastery pressed to the point of breaking down into small failures, Antonio Lopez Garcia’s tenacious paintings are poignant and moving. La Cena, in an apparent effort to conform as much as possible to a depiction of consensual reality is both heroic and so obviously flawed that it might even be embarrassing were it not for the deep honesty that nakedly prevails in the painting. Lopez Garcia’s work epitomizes Schjeldahl’s description of painting as well as Maturana’s specifications for a “biology of love.” In looking at La Cena, it can be felt that a certain dignity pervades throughout the work in which the subjects of the painting, the artist, and the viewer feel held in the same unqualified respect.

In writing about a Pierre Bonnard retrospective (Figure 11), Michael Kimmelman (2006) titles his review: Keep Looking Till You Get It: Bonnard and the Art of Seeing. He writes about the persistence of imagery in paintings, noting a comparison between Matisse and Bonnard. Matisse’s paintings seem to be memorizable in a way that Bonnard’s are not. Kimmelman quotes Museum of Modern Art curator John Elderfield as saying, “For Bonnard the image is more important as a present experience than it is for Matisse, which is why his paintings are more difficult to remember.” To this, Kimmelman adds:

“Bonnard’s art, steeped in memory, registers in the here and now, at the instant it is seen, thwarting encapsulation, demanding repeated viewings that then disclose fresh discoveries.”

Every painting comes into being only in the mind of whoever is looking at it. Every painting is an act of creativity by every viewer. The painting has no other existence. A persistence of looking teaches seeing. While the persistence of expecting the known produces reassurance or disappointment, the persistence of expecting the unknown in the wordless environment incline the viewer toward creating something other than what was intended. Some paintings are more complex than others, the more complex paintings being structures resulting from more decisions and more organizational levels or orders of decisions. Some paintings are more trivial than others and some are nontrivial. Trivial paintings seek to control interpretation and the experiences of the viewer in relation to
ing is looked at. Meaning is produced in an ongoing way in relationship with the painting, as the painting, suggestive of a comparable consciousness (its creator), enters into structural coupling with the viewer. In this coupling, both the viewer and the painting ask questions of one another, from the experience of the viewer, and each, in answering, continues the process. Synecdoche is one of the means of questioning and answering between painting and viewer (“Is this collection of marks a dog or a plant?”) as they relate via a shared language coding and decoding, as the painting presents a something that meets the viewer’s projection, and, through circularity, constitutes an adequate “reading.” Relationships with paintings can be unpredictable and revelatory while feeling comfortable and cozy, in acknowledgement of the fit established between painting and viewer. Relationships with paintings are sustained and advanced through recursion. These recursions take place over a short (in one viewing) and a long (many viewings) time. The painting has no content until it is personal to the viewer.

The painter is both a creator and a viewer (Figure 1: This illustration is introductory to the whole paper as it presents the act of painting, and it is also where the paper concludes). It is in the space between being a viewer and a creator that the painter acts. It is in the space between being a creator and a viewer that the painter makes judgments. In order to act, the paradox of the painting as material/immaterial must be accepted by the painter as both defensible and generative. This paradox must also be accepted by the viewer. Sometimes the viewer is aided in this acceptance by physical (framing, placement) or conceptual (interpretive, evaluative) means. Such aids urge the painting towards trivialization.

Paintings have qualities in common with other forms of visual art, with other art forms, and with other things. The importance of recursion is common to all of them, as is the capacity for trivial and nontrivial qualities, and for decision density. Visual art forms are commonly not time-based, and offer no sequence of unfoldment. They have no “end” that can be anticipated from a “beginning.” They are manifest, all at once, and paintings are, most frequently, small enough to be comprehensively viewed. Further, the limits of a painting are manifest at the beginning, as is all of its presumable content that is, it seems, simultaneously available.

My approach to understanding painting as a process entails looking at it through the circularities involved in its creation and its understanding. As objects of study, paintings, and their relations to creators and viewers, can have value to observers who wish to examine a product of construction that is manifest, unmoving, silent, and available for simultaneous viewing and discussion. The paintings or drawings referred to in Wölfflin’s account constitute material evidence of comparable constructions producing comparable results, as in creating visual results, comparable constructions of a common subject can be easily observed and discussed. This situation is not unique to the story that Wölfflin recounts, it is repeated with regularity whenever students or professionals draw from a common subject, whether it is a subject as complex and provocative as a human model, or as ostensibly simple and invariable as a plaster cube. There is distinction, and a means of detecting its origins, in every case. My approach to understanding painting as a process of communication entails looking at a sequence of conceptualizations that, in spite of one participant appearing to be inanimate, resembles conversation. The seeing and understanding of a painting through conversation with it, in which the imagined other may become progressively more complex, tells me about the construction of the other through conversation and refers me to the work of Gordon Pask. The safety of acting in the closed system of painting, makes for an environment in which undecidables readily arise, as in a moment of development in which the next act is unknown, and not determined by any need, any external responsibility, or any judgment of “better” and “worse” for the painting.

I believe that the understanding of painting, and of other art forms, can be furthered by looking at it in this way: in terms of creation and viewing, as recursive, co-created, and particularly as a manifestation of constructivist activity that would otherwise remain hidden. While I do not wish to see painting reduced to a specimen of some kind, I do want to emphasize its unique availability for study, and the richness of observable human action in concentrated form that it presents. The trend of contemporary art theory is, to my mind, trivializing, while...
claiming to be the opposite. It insufficiently searches out and questions its own foundations. As art becomes subsidiary to political agendas, it becomes suffocated, no matter how well-intentioned these agendas might be. And art regresses into triviality when it works to support or illuminate theory, and when it works to provide form, even indirectly, to a political agenda. It rapidly descends into propaganda. Much contemporary art looks to me as if it must choose between commodification or propaganda (or cunningly synthesize the two).

What Klaus Krippendorff says about society in his paper *A Second-Order Cybernetics of Otherness*, applies to the contemporary critical establishment as an expression of a political environment, including the academic political environment, in which painting, as well as other art forms, find themselves today:

“... in this political form of society, the assumption that communication (by its received definition) must converge toward mutual understanding or conserve its medium provides a hidden lever for the (often institutionalized) I that asserts such common grounds and thus remains in charge of the political realities that can grow on it. This foundationalism, mostly unnoticed and unquestioned, provides the hidden support for political institutions to develop and thrive.

“Political institutions become oppressive when they act to preserve the unquestionableness of their foundations. A society in which people can contest its foundations, question its authorizations and reflect on whatever creates barriers to open conversation can be called emancipatory.”

(Krippendorff: 326)

The agenda of cybernetics is, as Krippendorff has said, “wholly emancipatory.” The same is true of art, including painting. When it is free, it is freeing. With the inclusion of cybernetic and constructivist approaches to understanding visual art, including painting, that demonstrates the complexity of actions that produce a work of art, for artists as well as for individual viewers, I seek an emancipation of creative freedom from a constraining hegemony of contemporary criticism and from its underlying attachment to power. I want to see art as connecting individual observers rather than in service as a cultural emblem, or as a commodity connecting interest groups and markets. There are signs of writing about art that is insightful, such as James Elkins’s *What Painting Is* that seeks to present painting from the inside, and from a point of view that is true to art by being analogous to art – not analytical and distant, but poetically near its subject, in fact near enough to give the impression, in some passages of arcane alchemical drama, that Elkins is speaking from within the paradoxical adventure of painting itself. Maturana describes cybernetics as both an art and a science, and I look forward to seeing the art and science of cybernetics engaging robustly and mindfully in the arts.

While I neither wish nor expect the overturning of markets and theories, and certainly do not look forward to any new hegemony, I do wish for an effective challenger to be put in play in order to open art to understandings commensurate with Schjeldahl’s description of painting as an “unattainable medium of individual consciousness” that “thrives when people are interested in, and revere, the reality of their own and other people’s minds and hearts” (Schjeldahl 1990: 97) and with Maturana’s “biology of love.” I believe that what Schjeldahl sees and what Maturana sees are at the heart of painting. The “respectful observer” who sees the other as a legitimate other – both completely distinct, and comparably wholly real – is the opposite of a world in which other people are regarded as objects. The painting, which only from a trivial point of view is only an object itself, is evidence that the other person who created it is not an object, and that the relationships with it, or within it (the history of relationships that produced it) are not objects either. Each painting offers an opening to the legitimate otherness of a person, most often a stranger, with whom there is no link, other than through this paradoxical work of art.

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