

## A User's Guide to the Electronic Cliché

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Come on down! Embark on a search for new esthetic possibilities at the frontier of the digital revolution. Journey to the "Edge," the place where art, science, entertainment and industry meet. See the Zone ruled by net cowboys, outlaws, digital revolutionaries and data surfers. The new breed of cyber-artist is exploring how mere images can be transformed into art—unique art. All with the aid of radically new tools! Stake your claim in cyberspace and help capture the imagination of the Entire Planet!

*Net Surf!* Skateboard to Cyberspace!

"Where Electronics and Art Converge. Entertainment enters a new dimension. And companies don't want to miss out." [1]

If only myth and reality coincided. You may recognize this breathless hype as the cheerleader surrogate of the datasphere. It surrounds our interactions with electronic art, science and the computer industry. These verbal formulas have visual equivalents as well. It's now almost a cliché to state that electronic art is clichéd. Everyone agrees. What does this mean?

Digital art has a "perception problem." It promises much more than it delivers. Witness the science-fiction extrapolation about its boundless potential for "changing the way we think." Ads create false claims about new aesthetics which spring into existence in barely a nanosecond. Electronic tools, with their highly specific "effects," spawn their own sets of clichés. Not yet able to grasp a vision of the electronic datasphere, artists unknowingly map new images into old formats and old images into new formats. This peculiar combination of cutting-edge technology and familiar images leads to cliché. The close connections between art and industry complicate this mix. Installations inadvertently function as marketing demos of new techniques; scientific illustration passes for both art and science. Image is mistaken for art.

What are some clichés in the context of electronic art? Why is this such an hospitable breeding ground for cliché? Oddly, cliché is a term that has its origins in technology. Cliché and stereotype are words related to the creation of casts or blocks for the printing process. They later came to mean copies from an original matrix; cliché also became a description of the snapshot. By the mid-1800's cliché and stereotype had become synonymous with the formulaic, with uncritical judgment, or an oversimplified opinion or commonly agreed-upon response. With origins in mechanical reproduction, cliché is likely related to the speed of technological innovation, overexposure and obsolescence. Nowhere is that speed of change more apparent than in electronic art. Artists working in this area struggle to merge content, tools and formats as the ground beneath them shifts continually. When these components are mismatched, the results are problematic.

Here are some of our favorite formulaic representations, uncritical judgments, and over-simplified opinions in 2D art, animation, interactive art, virtual reality, and scientific imagery. The subject is vast. Instead of cataloging every offense, we've looked at some of the broad patterns, and defined the underlying issues.

### CLICHÉS IN 2D ART

"Gogh Crazy!"

Create "Dazzling Artistic Effects" and "Feel a Creative Explosion!"

"...takes a scanned bitmapped image and turns it into Art"

Promising infinite malleability at the touch of a mouse, paint and image processing programs offer the seductive promise of speedy, efficient, clean creativity, with a nod toward the scientific and up-to-date. Artists are seduced by their toolsets, which promise total fluidity and control. With so many effects, what else could possibly be needed?

**“Chalk and Charcoal, Chrome, Craqueline, Dark Strokes, Dry Brush, Emboss, Film Grain, Fresco, Graphic Pen, Mosaic, Poster Edges, Ripple, Smudge Stick, Spatter, and Watercolor”  
“The possibilities are infinite!”**

One type of 2D cliché involves conventional figurative imagery used without any awareness of contemporary modes of representation. This figuration is barely evolved beyond the parrots and tropical sunsets genre of hotel art. You get the Jeff Koons look without the irony. It swings between the polar opposites of blissful ignorance of contemporary figuration to slavish replication of various old masters modes. In this hierarchy Impressionism ranks high on the list of favorite styles. This genre wears the latest fashions in toolsets, but its iconographic development stopped before modernism.

**“...Refines the Art of Design” ...instant Rembrandt  
“Impressionism. It’s Fast, Fun and Easy!”**

It’s now possible to replicate most traditional painting and photographic effects with a variety of simulated paper or canvas textures. Instead of emerging as a byproduct of the process of making the work, or of its concept, visual effects can be applied globally to give the work a particular appearance. One can even purchase libraries of surface appearances called “looks.” Take a photo, apply the impasto filter and some chiaroscuro, and voilà! For an instant Old Master, take an original photograph by Joel Meyerowitz and do a Rembrandt makeover. (Why did Meyerowitz permit this use of his work?) While presented as almost-advertising art with a fine arts pedigree, this image is a demonstration piece of the 2D cliché. A familiar style is recycled as new, and is distinguished by its connection to technology and to two famous artists.

Why this tremendous emphasis on tools and effects? Richard Wright has observed that “The future of art is required to settle into the form of an unbroken stream of new expressive tools...Thus the aesthetics of tomorrow are constantly pre-empted by the latest technological commodities and brought forward into today.” [1] The perpetual discussions among some electronic artists of what tools they use carry the assumption that the tools *do* determine the art. The possibilities for making art increase with every improvement to the tool set. Or do they? It’s even become common to list hardware and software on exhibition labels, in the assumption that this information elucidates the work. Wrong. It might tell you how to copy the look of a particular image, but it reveals nothing about content, process, or the artist’s intent. When you know how it’s done, what’s left?

Art is usually the outcome of a specific material process which results in a tangible object. Or, in the case of printed art, it is seen through the filter of mechanical reproduction. In contrast, electronic art can be liberated from this status as object and from materials themselves.[2] This liberation could lead to an expansion of the domain of art, or perversely, to its diminution. The traditional art world sees the computer as an enabler of imagistic promiscuity and mindless creation. The processing speed that is so essential to graphic designers working against deadline is perceived in a fine art context as leading to the facile and slick.

**“Creating art with a computer can be like squeezing blood from a rock”  
“Turn any picture into a brilliant painting—automatically”**

Advertising hype suggests that the art-making process has been so simplified (or at least should be) that anyone can do it with the latest software plug-in. Armed with your scanner and filters, the world becomes your database, and you can appropriate ten times faster than any conventional artist! The ease-of-creation myth of electronic montage is already a well worn cliché. This claim is cynically reinforced in advertising as a way to sell software. In fine art, this myth feeds into other

prejudices against collage. While it may be technically easy to assemble images using these tools, making a meaningful image is as difficult to achieve in this mode as it is in others.

Critics of electronic montage recapitulate past complaints against photography. Digital work is criticized for being technological and therefore not “artistic.” It’s too fast; too easy; too mechanical. You can even solarize, posterize, collage, composite, dissolve, fade and create vignettes without being trapped in the darkroom for hours. (Ironically, manipulation of photographs is as old as photography itself). And while 2D electronic art has been poorly received by critics, nothing comes in for more abuse than electronic collage. In a review of the *Montage 93* exhibitions, Viki Goldberg writes that, “In Rochester, collage is mercifully treated with restraint...most computer collagists have apparently come to the keyboard innocent of art history—they repeat every maneuver ever performed with that tool of a primitive technology, the scissors. With delirious ease, they patch in bits of digitized art on a computer...” [3] Obviously, compositing in the darkroom is preferable to using scissors, and electronic “scissors” are the worst of all.

Electronic or not, montage has always carried the burden of being “trick” photography. [4] Tricks are shortcuts; they provoke accusations of facility and have an aura of dishonesty. The forms of collage and montage have always been popular and pervasive, appearing as advertising art, “high art,” crafts and folk art. Objections to collage, and electronic montage, hinge on its democratic nature (anyone can do it), and its (deceptive) ease and speed of creation. This new seamless and fluid form of collage raises interesting questions about the veracity of photographs and is responsible for a change in our essential relationship to the photograph as a record of reality. Photographs suffer other indignities as well. Ubiquitous in mass media they are now just so much raw material for montage. They are devoured and mutated by the omnivorous scanner, which speeds their devaluation as distinct images. So easily reprocessed, they are recycled to myriad uses with various levels of success.

Photography once borrowed the look of painting. Later film borrowed the techniques of photographic montage. Now computer image processing appropriates the vocabularies of both. Still based on photography’s idioms, electronic montage still has some way to go to develop its own vernacular.

## ANIMATION

Welcome to “worlds never before seen”

Advances in hardware and software have unleashed a progressive sophistication in effects, simulation, visualization and other forms of experimental computer animation. Early vector drawings progressed to checkerboards, transparent spheres gave way to even more complex shapes in increasingly accurate simulations of material and atmospheric conditions. Infinite zooms, particle animations, artificial evolution, human motion simulation, morphing and dizzying magic carpet rides through inner and outer space are a few techniques in the animation repertory. These amazing effects wash over the viewer with more visual pandemonium than an Andrew Lloyd Webber production. The emphasis is on constant motion and transformation, on visual and aural overload. Ironically, the more clever the effect, the shorter its lifespan. It’s applied indiscriminately, and is then forever associated with its most clichéd uses. The effect is forgotten in favor of the latest new buzz. Do you remember morphing? Cars changed to sleek tigers, women to men, men into shaving-cream-covered cubes, frogs became princes.

See horny toads morph into rock stars...

Even the most marvelous special effect can be dulled by persistent overexposure. Wide-eyed awe turns into a fixed glassy stare as the point is hammered home. The vertiginous synthetic kinesis induced by computer-generated camera motion is truly amazing, but how many tunnels do we have to fly through to appreciate it? How many heads can be exploded into clouds of particles?

### **Experience tunnel vision**

**It was fun the first time in “Particle Dreams” but ... “Lawnmower Man?”**

In early computer animation festivals, the cheers that greeted effects, demos, experiments, and flying logos gave way to yawns. Audiences and animators wanted more meaning and story. But again, there is a mismatch of innovative technology with overly familiar or predictable content that falls into the “old wine in new bottles” category of cliché in narrative animation. Anthropomorphism in the Disneyesque manner has now been nearly perfected, eliminating disturbing signs of “otherness” or unfamiliarity. Timeless, saccharine love stories are now enacted between adorable blobby entities. Boy gets girl. Boy doesn’t get girl. Who really cares? To keep the audience awake, another more daring twist on this timeless theme combined with new effects has brought us the inevitable: the bouncing breast animation! While the breast motion is a truly strange mixture of realism and algorithmic regularity, the face has all the liveliness of a blowup sextoy.

### **Barbarella returns to SIGGRAPH ’93 in “Sister of Pain”**

The breast is not the only body part pressed into action. There’s an amazing new category of phallic cartoon character. This little guy has learned to dance and stand up tall. Why is the breast simulation realistic, while a naturalistic, animated penis attached to its owner is not to be seen?

**“Joram” a suggestively human-like character  
“Mindblender” exploits another timeless theme**

A stereotyped view of sexual politics is not limited to the casting of characters, but emerges in the narratives as well. In Peter Gabriel’s “Mindblender,” we have the fractured fairy tale of the ugly frog pursuing the beautiful girl in a chase scene with overtones of harassment if not rape. To complaints voiced after its showing at SIGGRAPH, the animator (a woman) replied irritably, “that it was not about rape, but about a blow job.” What a defense of content!

### **“Lawnmower man” —the future of sex?**

Far from liberating us from sex and gender roles, these images reinforce them. What then may we expect from teledildonics? Sex is still an attention getter. But substantive commentary on the consequences of the simulation of the body, and on sexuality and gender is slow in coming.

**“Enertopia, “Starquest Adventure,” and “Luxor Dream Sequence”—three from SIGGRAPH ’93. Man’s energy consciousness meets the Universal Life Force**

Once the mysteries of sex have been cut down to size, the nature of life comes in for review. On a grander scale, appropriate to a tool with such infinite possibilities, are animations about the mysteries of the universe, replete with planets, starfields, new age music, and emerging life forms. The awakening cosmic consciousness is just background. The yearning for substance is laudable, but the symbols of mystery don’t automatically supply meaning. Assembled as pastiche, they are just so much visual elevator music.

Critics of cinema are fond of disparaging special effects as an “unfortunate sideshow.” [5] But most would agree that effects’ sophistication far outranks the quality or innovation of the old-fashioned narratives with which they are paired. So what do we do? Tone down the effects and update the stories? Or demand vision and innovation from the more experimental forms of animation which explore the unfamiliar rather than visualizes the already-seen? Artificial life and evolution algorithms and visualization animations when explored without recourse to sentimental anthropomorphism may provide a glimpse into the future. New narratives may then emerge.

## **EMERGENT INTERACTIVE VIRTUAL TELEPRESENCE**

**“Is passive experience with outdated art forms no longer relevant to your work?”  
WARNING: participation may not guarantee satisfaction!**

If quiet contemplation doesn't work for you, then try participation and interaction to pep up tired art forms. Delle Maxwell worked on such a project at the Sky Art festival in the early 80s at MIT. "I was working with a group receiving slow-scan images of artists using with inflatables, kites, and other skyborne objects. Our instructions were to 'do something' with the images and send them back to other nodes. The idea of collaboration was exciting, the reality was something less than hoped. It was very hard to do 'anything' except play with the images given the short amount of time allowed. The result was mostly pictures that had words added, were altered with digital paint programs, or had the images processed in one way or another, but without much rhyme or reason. We heard later that some of the other artists were mad about their images being trivialized. Viewers at the event found it tedious too." Unless an interaction is structured as performance, spontaneous real-time exchanges are not by nature exciting to watch, and don't engage the viewer. Many network exchanges have all the drama of waiting for grass to grow!

Participatory work at its worst just puts the viewers through an assembly line. Each one is patiently waiting to have their short interactive experience, and maybe to get a snapshot or souvenir of the visit to take home. The Disney experience is cloaked in high technology for the upscale audience. This art typically congratulates itself for being more democratic. It includes everyone, and promotes involvement rather than passive "looking" or "simple" appreciation. But is it really democratic? Or is this involvement highly pre-programmed, structured and routinized with very limited autonomy for the participant? Who says smiling and waving is real participation?

With so much happening in cyberspace, some conclude that static images no longer have a role in contemporary art. Interactivity and participation is becoming an end in itself, a requirement for anyone claiming cutting edge status. Artists who buy into this belief system travel along an inevitable path from 2D to 3D to moving images to stereo images to virtual space, following the flavor of the month. But when lacking any other motive than avoidance of the passivity of static images, participatory and interactive pieces reveal a very narrow set of concerns.

**"Wave to the camera," Hi, Mom!**

Playing to the baser desires of the audience is a cliché of participatory art. But it works. In the quest to capture audience, nothing sells better than the self. Interactive projects often incorporate some aspect of tele-narcissism as an "attraction loop" or hook, to get them over to your hardware. See yourself on TV; Hi Mom! Is there much difference between this naked appeal to egocentricism and seeing yourself on a video camera outside the discount electronics store? Narcissism sells almost as well as sex. Some artists say, "The viewer is required to complete the work." This is a useful stance, for you can demand creativity on the part of the viewer of a work, rather than on the part of the artist. Viewers want to be in the work so artists turn the camera around on the them. It's the electronic art version of a talk show.

Installation design for interactive art is critical in getting and holding audience. Although a very new form, conventions have already developed their own predictable mystique and rules for display. Shoehorned into trade shows, or difficult spaces, designers have adopted interesting presentation strategies. Favored are Dark Rooms. They enhance the sense of mystery, and keep people from knowing How It Was Done for a little while longer. Satellites in an inky universe, the individual exhibits beckon us with their CRT's. The mysterious darkness isolates the exhibits, and emphasizes the weightlessness and spacelessness so appropriate to Cyberspace. Like a Las Vegas casino, there are no cues to the outside world, no sense of time passing. The darkness puts a spin on a cliché of mainstream contemporary art, the minimalist white room.

No talk on clichés is complete without mention of cyberspace and virtual reality. From military simulators to children's toys to imaginary venues for stereotyped sex, virtual reality and cyberspace have captured the imagination of the hysters and the hyped. Verbal clichés of the "emergent interactive virtual telepresence" are regularly disseminated in *Mondo 2000*, with no

affirmation too bold and no assertion too extravagant for publication. Coiner of cyber-neologisms par excellence, *Mondo* extends the anarchistic, anti-authoritarian, paranoid rants of cyberkitsch to discourse on a wide range of topics. Over-heated prose is pumped out to an audience of believers eager to surf the edges. In this future-crazed environment of bionic body parts, smart drugs, cyborgs, and cybersex, serious issues are sometimes lost in the trappings of techno-fashion.

Surfing the Edge requires a fine sense of timing. Only recently, Billy Idol adopted cyberpunk to update his image. Too late, he missed the wave! Cyberpunk has already been declared dead by a number of Authorities. Even *The New York Times* noted that “cyberpunk has some critical and political content, and a viewpoint about social and technological change, but is being reduced to the borg look—a fashion statement.” After cyberpunk, cybersex, cyborgasm, cyberculture, and cyber-kitsch comes cyber-burnout. Death by ubiquity, almost as bad as fractals. A cyber-joke.

“VR makes you appreciate the real world even more?” [2]

“Computer realities gives you greater appreciation for the real things you walk around in.” [3]

“...It’s a way to help us see what’s around us all the time, again, anew.” [4]

Can the reality of virtual reality survive the hype? Instead of selling it as escapism (the common cliché about VR) one strategy is to promote it as helping you to appreciate the real world more. Think of it! Now we have a basis of comparison for reality!

“Experiential Advertising is one of the most innovative applications for virtual reality technology on the market today. For the first time consumers will be able to enter—and more importantly, interact—with a corporate marketing message. The possibilities are endless!” [5]

When science invents new worlds, commerce is not far behind. And art can be used to bridge the gap. Besides creating a demand for the VR experience itself, simulation art can stimulate desires for the real things you can buy once you leave cyberspace.

## SCIENCE AND ART

Do you believe that Chaos theory combined with the power of digital computers can explain everything from the movement of sub-atomic particles to the organization of human consciousness with pretty pictures as proof?

“Can the flap of a butterfly’s wing stir up a tornado in Texas?” [6]

“...a butterfly stirring the air today in Peking can transform storm systems next month in New York.” [7]

“A roulette ball in Las Vegas wouldn’t spin exactly the way twice because another leaf falling in Yellowstone Park had disturbed the air differently than the one before.” [8]

“Just as a butterfly, lazily flapping its gossamer wings in faraway Japan, can inaugurate a tiny zephyr that will one day become a mighty typhoon, so every credit card holder in these United states, by splurging that bit extra at the store, can strike the keynote of a vast, soon-to-be, consumer-led recovery...” [9]

Fractals and chaos images are cited as well-known examples of the merging of the visual, mathematical, and the computational. They have been promoted as mathematical and aesthetic objects and as art for our time. Although these objects may resemble works of art, as aesthetic objects containing a wealth of meaning, they remain art primarily for a scientific subculture. These images are seen by some scientists as an “inner connection, a bridge, ...between rational scientific insight and emotional aesthetic appeal.” [6] They fit the classical canons of beauty. “Our feeling for beauty is inspired by the harmonious arrangement of order and disorder as it occurs in natural objects—in clouds trees, mountain ranges or snow crystals.” [7] The relation of disorder to order in natural phenomena is complemented by the relation of Chaos Theory to Fractal Geometry. The authors of “Chaos and Fractals, New Frontiers of Science” explain: “When we examine the development of a process over a period of time, we speak in terms used in chaos theory. When we are more interested in the structural forms which a chaotic process leaves in its wake, then we use the

terminology of fractal geometry, which is really the geometry whose structures are what give order to chaos.” [8] The icon of chaos and fractals is the Mandelbrot set, which “...can be interpreted as an illustrated encyclopedia of an infinite number of algorithms. It is a fantastically efficiently organized storehouse of images, and as such it the example par excellence of order in chaos.”[9]

The ability to model natural forms such as coastlines or snowflakes with mathematical models seems a “union of opposites.” The balance between order and chaos, process and structure, image and algorithm, the endlessly recursive micro and macro reversal of scale, and the combination of the bounded with the infinite, contribute to this nearly-perfect multilevel symmetry. Fractals even have their sonic counterpart in music—the images can be “played.” The time-and-spacelessness suggested by their existence within the computer, suggests a transcendental, out-of-body quality which also contributes to their mystique.

This notion of beauty and symmetries, intertwined with science and nature, is a reassuring and old fashioned ideal of Art. Why are these qualities out of sync with mainstream art? Contemporary art as well, tries to reveal the world as it really is, and is not always concerned with beauty. Nor is it very reassuring. In addition, the symmetry that is so satisfying to a scientist or mathematician does not always translate well into art. George Bernard Shaw was reputed to have said, “...symmetry is the enemy of art...” This same symmetry can also be read as a maddening sameness—infinity as tedium—and as a desire to impose too much order and conceptual closure.

The idealization of Beauty and Nature also led to the progressive transformation and romanticization of the fractal images themselves. At first, some of the abstract images were given sentimental titles, evocative of landscape—“Islands” or “Dark Canyon.” The next logical step was to merge scientific realism with visual realism. The abstract model of nature was forced to assume the appearance of nature, of clouds, trees, and mountain ranges, adding another level of recursiveness and symmetry. This new landscape takes the form of 19th century romanticism.

#### **Caspar David Friedrich visits a Fractal Landscape**

We see a Caspar David Friedrich, but without the lone figure enveloped in the mist, gazing towards the horizon. Does the lone figure gazing upon Beauty now reside on the outside of the computer screen? In such romantic and sentimental imagery, there is a pairing of today’s mathematics with yesterday’s art history. Ironically, these images lose the original purity achieved by the elegant integration of algorithm and visual result.

**“Put Some Chaos in Your Life!”  
“Fractals Everywhere”**

The same surfeit of meaning and connectivity that inspired these romantic visual experiments no doubt contributed to the popular appropriation of chaos as an explanation of natural and social phenomena. [10]. Some insist on a resemblance between fractal patterns and those induced by hallucinogens. [11] This, along with the mandala-like centered images and mystical associations evoke the 1960’s. The presence of Timothy Leary as celebrity spokesmodel and the re-emergence of Peter Max in digital art would seem to complete the revival.

With such universal appeal, it’s not surprising that fractals appeared everywhere—on mouse pads, T-shirts, videotapes, and computer screens. It is hard to find anyone who hasn’t seen them. It is even harder to find someone who admits to still being crazy about them—it’s almost like saying that one still likes Pachelbel’s Canon. Again the ubiquity of the idea and image serves to deaden its impact. It becomes just another pattern-generating formula. The strange hybrids produced by misunderstandings between art and science and mathematics show that cliché can be produced with the most modern means and ideas.

**“Cellmates or Soulmates?”**

Science and art share other peculiar territories as well. In visualizing synthetic organisms, scientists have, perhaps not inadvertently, appropriated the visual languages of science fiction and Surrealism. If chaos and fractals open our eyes to a dry airless world, then artificial evolution plunges us into a realm of wet and wild biomorphic fantasies. Where fractals and chaos strive towards a type of pure beauty, science fiction hallucinations of biological surrealism depict the grotesque.

Unbounded by mathematical theory, this experimental discipline combines biological ideas with a kind of “automatic programming” with the computer as “medium.” These images share some of the characteristics of fractals and chaos such as symmetry, and a mandala-like centering on the screen. But add the third dimension. With multiple light sources, busy surface patterning, and a penchant for disembodied eyeballs and muscular tentacles, the viewer is thrust into the realm of out-of-control metastatic organic blobs.

### **Surrealism revisited: The Eyes Have It**

Continuous metamorphosis through millions of iterations might produce some interesting forms. Artificial evolution may yet have an impact on art when it finds its own language, and doesn't rely on the anthropomorphic. But so far, The Creators seem to have an inordinate fondness for eyeballs and other artifacts of the Jungian unconscious. Yet unlike some of the subtle, evocative and dreamlike images of surrealism, these forms fail to make the leap from organic raw material to fully assimilated images. As undigested images, they wed the biological to the abstract in a literal patch. They succeed in the paradox of making the unseen and phantasmagoric seem extravagant and predictable at once. Eyeball to eyeball with another bowling ball-shaped scungilli, the iteration-weary artlover has to say, “If you've seen one...you've seen them all...”

## **IF CLICHÉ IS THE DISEASE, IS CONTENT THE CURE?**

### **Table of “Content”**

Some say the missing link is content. “Content” has been recognized by an art community which has only recently shaken off the constraints of formalism. Replacing formalism, minimalism and the other isms of the 60's, 70's and 80's, content is the holy grail of the 90's. Media critics have proclaimed its absence in electronic art. They say we've got it backwards: amazing new techniques arrive, then works are created to employ them. The means are matched to the meaning as afterthought. It's the content conundrum.

Some art is driven by the technology coming out of the marketplace rather than by aesthetics, personal vision, or meaning. The hard-sell glitz of the demo is absorbed into the work, and art becomes an extension of the marketing campaign. Is technological innovation the content? It can be, but it can just as easily be the handwaving that conceals the absence of content. Artists are squeezed from both sides. What the mainstream art world sees as a superficial novelty, the computer community dismisses as passé. The effects of the moment widely recirculate—this year's pet rock. When it's noticed that there is something lacking, discussions about content begin. Can't the content just be poured in, since the technological form has already been built?

**“It's the content, stupid. It's not the dazzling technique.” [10]**

**But beware “The False God of Content” [11]**

While everyone laments the dearth of content, in some venues, too much content is a bad thing. Chris Crawford [12], a well known designer of interactive games spells out the dangers of content overload. “The worship of content can lead to shovelware—hastily created titles with only a thin veneer of interactivity.” An obsession with content can lead to “highly polished productions that are impoverished due to a lack of interactivity.” From that perspective, interactivity is demoted to the role of “an electronic page flipper.” Crawford call this the expository delusion: the designers don't permit the user to engage in dialogue with the multimedia installation. The user experiences a lecture, not a conversation.



**And watch out: “Information is the ammunition. Your mind is the target.”**

The wrong amount of content can create other problems as well; one difficulty is information overload, or as Richard Saul Wurman calls it, “information anxiety.” [13] Design (and art) are supposed to help us filter information so that information has context, and meaning can be integrated and assimilated. That filtering process is the true domain of the artist, who gives shape to information, idea and emotion. When that integrative role is sidestepped, the coherence of intent, meaning, context and means is broken. Cliché is a byproduct of that rupture.

The relationship of content to image serves this integrative function. It is the bridge that connects us with the broader realm of art history, aesthetics and ideas; the motivation to develop a body of work which expresses a strong personal vision; and the substance that engages in critical dialogue with other works of art. When art reflects intent, the tools are given purpose and meaning.

### **CAN CRITICISM POINT THE WAY?**

The mechanism for responding to art doesn't change just because the tools do. It's up to the viewer to look and compare. Listen to your visceral response. Make an emotional connection. Think. Even a wildly negative response is telling you something. Comparisons can be instructive. Let's look at some examples of success and failure.

“Another Day in Paradise” was an installation by Victoria Vesna seen in the *Machine Culture* show at SIGGRAPH '93. In this piece three large preserved palm trees provided a natural focus of attraction. For viewers who took a closer look, the attraction stopped there. One monitor played a continuous video loop showing the story of a Vietnamese PhD. student at UC Irvine. A second palm held a video monitor which reflected the viewer's image, captured by a surveillance camera. The third monitor (also embedded in a tree) was interactive and played a videotape with footage of daily life in Vietnam. With the impact of a point-of-purchase display in a mall, the palms dwarfed the monitors. Reduced to afterthought, the monitors offered passive viewing, and the chance to “see yourself on TV,” with little affect. We later found there were a number of themes scattered through the artist's catalogue summary, but they were invisible in the work. This “idea salad” tossed together disconnected thought fragments that didn't add up: real estate, ecology, shopping malls and the 20-year anniversary of the Vietnam War. This piece demonstrates the dangers of elevated presentation values serving up a pastiche of “current concerns.”

An intimate video installation, that makes its points with subtlety, is “Family Portrait,” by Luc Courchesne (also seen at SIGGRAPH). An extended meditation on the subject of portrait character, and human interaction, it enables the viewer to “converse” with a group of virtual friends. Not just a bunch of talking heads on TV, the virtual beings are disembodied projections, which magically float in front of us. The forced proximity of the installation, with the portraits positioned facing each other on the four sides of a square, created a room-like environment which further enhanced familiarity. Courchesne has advanced an old and traditional form by extending the possible interactions a viewer can have with a portrait. One of the most surprising things about this installation is the power of the emotional connection with images. Drawn into conversation, one wants to spend time. Why do these virtual beings seem so real? A conversation can halt abruptly, and you wonder what it was you said. This installation, simple in its presentation, initiates an authentic interaction.

#### **Man in Polyester Suit meets Man in his Birthday Suit.**

What makes a work powerful? An extreme contrast of opposites is evident when one looks at Robert Mapplethorpe's photograph, *Man in Polyester Suit*, 1980 next to (Art) group's “homage” titled *Mapplethorpe/The Nineties* exhibited at SIGGRAPH '90. The Mapplethorpe photographs are fully resonant with tension. As Germano Celant has said, “There is always a

dialectic in these images between provocation and aesthetic harmony. Consciously and unconsciously, Mapplethorpe tries to bridge the gap between opposites—order and disorder, dissent and assent, anarchy and the ideal.”[14] (Art)’s barrier-strip autostereograms, while purporting to engage the same content, are lifeless. Hardly sensual, in this image the technology is distancing. The supposedly daring content might easily be exchanged for any other: a bowl of fruit or a late-model automobile. While the Mapplethorpe image engaged the subject of race as well as sex, the blue color of the stereo image avoids such charged meanings. Its icy surface has the warmth of a medical model or cadaver. Inadvertently, this work speaks of a new weightlessness and disconnectedness from the body without impact or resonance. It wouldn’t warrant a visit from the NEA.

If electronic art is to find its place in the mainstream, then this divergence in art and what’s admired and accepted by electronic artists must be addressed. Criticism can assist. It’s been said that we don’t yet have the vocabulary to evaluate electronic art. But considering the amount of newly-minted electronic jargon, adding to the grammar of electronic art may not be the answer. Any evaluation of electronic art needs to recognize the pervasiveness of technology without assuming that it is intrinsically wonderful or suspect. It should not be a shopping list of VRAM, bits, 16.7 million colors or powerful hardware. Critics can raise the level of discourse by going beyond discussions of whether the evidence of pixels in an image is appropriate or whether virtual reality should be immersive or not. Reviews which catalogue tools or provide only technical or methodological description contribute to the propagation of the digital cliché. After all, the work should stand when the technical description is stripped away.

## CONCLUSION

### “But is it Art? Is it Good Art?”

No one likes the perception that cliché and formula have become the signature of electronic art. This already well-established perception has stigmatized an entire field; the same few genres of clichéd imagery are pointed out repeatedly, and much electronic art that does work is ignored. Because some computer clichés are so visible, it becomes easy to dismiss most electronic art without examination. This blanket indictment of technological art leaves the thoughtful electronic artist in an ambivalent and defensive position. The problems are obvious, but the solutions are slow to emerge.

It is clear that some electronic art is marked by cliché. This generally occurs when artists use the new tools to reprise familiar forms. Or when a small set of visual effects is indiscriminately applied without consideration of content or process. Or because advertising hype makes impossible claims and overemphasizes special effects. Or when the art/science union is forced to create mystical meaning. Each category of electronic art has unfortunately developed its own set of formulas, as artists try desperately to keep pace with technology. Should this invalidate these emerging forms?

It does help to look at these clichés and not dismiss them without examination. This review of clichés is not meant to merely enumerate them, nor to focus on failure. Clichés are inadvertently revealing. As a subtext, they signal the difficulties artists have in merging form and content with the new tools. When faced with rapidly evolving modes, it’s all too easy to fall back on familiar formulations. Faced with too many choices and too much change, it’s tempting to take the unbearable “infinite possibilities” and cut them down to size. But rather than limiting our vision, we need to expand it.

Arthur Danto, in his December, 1992 Artforum review of “The Hydrogen Jukebox: Selected Writings of Peter Schjeldahl,” insists on the highest expectation for works of art. He says, “It is my sense that those who have not had the meanings of their lives put into question by works of art have not participated in the critical transaction that alone justifies the existence and experience of art. Nothing else—not pleasure, information, political truth, quality, or visual excitement—is a

substitute if the whole point and meaning of works of art is that they should move the souls of those who are present to them.”

Clichés may reveal inadvertent truth, but they are by definition limiting. If electronic art is to develop its own forms we need to recognize them and move on. If we have high expectations for electronic art, then movement beyond the conventional and routine is essential. Ironically, the reliance on formula, technical determinism, or the acceptance of aesthetic novelty actually allows us to avoid our own cry to “change the way we think.” Computer clichés are the refuge of the reactionary to the dizzying speed of change. Take comfort in them at your own risk.

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- [3] Goldberg, Vicki, “A Brave New World of Electronic Art and Images,” *Photography View, The New York Times*, Sunday August 25, 1993.
- [4] Sharf, Aaron, *Art and Photography*, (New York: Penguin Books), 1974, p. 109.
- [5] Bukatman himself is not one of those critics. He believes that special effects hold an important place in the development of the language of cinema, and is merely making about about current critical thought. Bukatman, Scott, *Terminal Identity*, (Durham: Duke University Press), 1993, p. 13.
- [6] Eilenberger, Gert, “Freedom, Science, and Aesthetics,” *Frontiers of Chaos*, ed. Peitgen, H-O., Richter, P., (Germany: Forschungsgruppe Komplexe Dynamik, Universitat Bremen, 1985), p. 36.
- [7] Eilenberger, Gert, “Freedom, Science, and Aesthetics,” *Frontiers of Chaos*, ed. Peitgen, H-O., Richter, P., (Germany: Forschungsgruppe Komplexe Dynamik, Universitat Bremen, 1985), p. 35.
- [8] Peitgen, H-O., Jurgens, H., Saupe, D., *Chaos and Fractals New Frontiers of Science* (New York: Springer-Verlag, 1992), p. viii.
- [9] Peitgen, H-O., Jurgens, H., Saupe, D., *Chaos and Fractals New Frontiers of Science* (New York: Springer-Verlag, 1992), p. viii.
- [10] When questioned by the interviewers about the relations of chaotic attractors to catastrophic change [in terms of cultural transformations] Ralph Abraham, a mathematician and chaos expert cautioned that that was “a commonly expressed idea that might turn out to be unfounded.” McClen, R., Brown, D.J., “Chaos & Catastrophe, An Interview with Ralph Abraham,” *Mondo 2000*, No 3 (1991), pp. 153-154.
- [11] Again Abraham cautions against equating one visual experience with the other. “...the mathematicians of fractal geometry have made movies and-to me-they don't *move* right. So I think the resemblance between fractals and psychedelic visuals is very superficial.” McClen, R., Brown, D.J., “Chaos & Catastrophe,” An Interview with Ralph Abraham, *Mondo 2000*, No 3 (1991), p.153.
- [12] Crawford, Chris, “The False God of Content,” *New Media* (April 1993), p. 18.
- [13] Wurman, Richard Saul, “Information Anxiety,” Doubleday, 1989.
- [14] Celant, Germano, “Robert Mapplethorpe, Man in Polyester Suit,” *Artforum* (September 1993), p. 155.

#### Slide References

- [1] *The New York Times* Business Section, September 15, 1991.
- [2] Attributed to Jaron Lanier.
- [3] Rucker, Rudy, “Use Your Illusion,” in *Wired* (September-October 1993), p. 89.
- [4] John Tierney in his *New York Times* article “Jung in Motion, Virtually,” interviews Brenda Laurel about *Virtual Reality*. September 16, 1993.
- [5] “VR: A New Marketing Tool,” *Virtual Reality Systems Magazine*, Vol 1, No 1 (1993), p. 67.
- [6] Title of original chaos paper by Edward N. Lorenz.
- [7] Attributed to James Gleick's book *Chaos The Making of a New Science*. From McClen, R., Brown, D.J., “Chaos & Catastrophe,” An Interview with Ralph Abraham, *Mondo 2000*, No 3 (1991), p. 150.
- [8] Horvath, Adam Z., *Newsday*, May 29, 1990.
- [9] Hitchens, Christopher, “Martha, Inc.,” *Vanity Fair* (October 1993), p. 80.
- [10] A quote from Todd Rundgren, in an article by Fred Davis entitled “I want my desktop MTV!” in *Wired* (July/August 1993), p. 91.
- [11] Crawford, Chris, “The False God of Content,” *New Media* (April 1993), p. 18.
- [12] From a Billy Idol ad in *Mondo 2000*, No 10, (1993), inside back cover.