

## **Abstraction, Automation and Subjectivity In Interactive Artwork: An Annotated Bibliography**

Pall Thayer

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Blocker, H. Gene.(1977). Pictures and Photographs. *The Journal of Aesthetics and Art Criticism*, 36(2), 155-162. Retrieved December 8, 2006, from JSTOR database.

One thing to keep in mind when looking at dated references such as this one and Cavell's "The World Viewed" (see below) is the fact that their idea of filmic reality is vastly outdated. With the digital imaging tools that are now available to the public, we cannot necessarily accept photographic images as displaying reality in the same sense. In their day, it was generally accepted that almost anything caught on film had to have happened as it is portrayed. Never the less, this essay points out methods of subjective intervention, by operators of image capturing devices, which Cavell fails to regard and that have a significant impact on his argument. The primary points that Blocker attacks are; that the photographer has no control over what happens on the other side of the camera, that a painting cannot extend beyond its frame and that a photograph has not only a causal relation to its subject matter, but is also a "picture of" the subject matter. The first point has to do with the subjectivity of the photographer despite the automatism of the machine, the second point deals with the subjective response of the viewer of a painting (and therefore a painter's escape from subjectivity) and the third point has to do with the nature of the medium. He uses these arguments to point out that there is not enough "aesthetic distance" between the photographer and the camera to allow for the degree of lack of subjectivity suggested by Cavell and that painting is in fact capable of producing at least some distance between the painter and the painting. He also makes a fine point that the act of trying to avoid subjectivity is in itself subjective. Try as we might, we can never completely avoid subjectivity in any creative act.

Brucker-Cohen, J.(2003) *Desktop Subversibles*. Retrieved December 9, 2006, from <http://www.coin-operated.com/ds>

Jonah Brucker-Cohen's Desktop Subversibles are a good example of works that use data generated through the use of interfaces created for a specific purpose and present that data in another context, i.e. as artwork. Although people are likely to focus their interaction with the computer mouse to what "Mouse Traces" does with it, it can also be left running in the background while the person works and interacts with their computer in a normal, day to day manner. The "Mouse Traces" program will automatically keep transmitting their interactions over the network. If used in this way, the degree of subjectivity is

minimal as the data being used is not being generated as a specific reaction to the artwork.

Cavell, S. (1979). *The World Viewed: reflections on the ontology of film*. Cambridge, MA: Harvard University Press

As a personal, yet philosophical approach towards an aesthetic analysis of film, this book (originally published in 1971) is an important one within film studies but elements of it can easily be extended to any media dealing with moving or progressive images. The most significant chapter, for my purposes, is the second chapter, "Sights and Sounds." Here, Cavell argues that due to the photographic camera's mechanically automated nature, it has allowed us to "overcome subjectivity in a way undreamed of by painting, a way that could not satisfy painting, one which does not so much defeat the act of painting as escape it altogether: by *automatism*, by removing the human agent from the task of reproduction". Today, we can immediately spot problems in this argument. In the context of the ubiquity of higher modern technology, it would be quite a stretch for us to attempt to claim that photography "remove[s] the human agent from the task of reproduction." In this day and age where, theoretically, I could remotely control my coffee maker through my cell-phone from anywhere in the world, without even having to invest in outrageously expensive equipment, our ideas concerning the relationship between man and machine naturally change. However, Cavell's claims suggest a correlation between the automated machine and human objectivity which adds validity to the idea in general but is likely a qualitative assessment that shifts over time, as we become aware of new technology. As H. Gene Blocker points out (see above) it is not a question of whether or not an automated machine can help us escape subjectivity but rather a question of the degree of separation between human and machine in triggering the automated action.

Cook, L.(1995-2006). Lawrence Weiner. *DIA Art Foundation*. Retrieved November 26, 2006, from [http://www.diacenter.org/exhibs\\_b/weiner/essay.html](http://www.diacenter.org/exhibs_b/weiner/essay.html)

In this essay, Lynne Cook gives an excellent account of the methods and concerns of the conceptual artist, Lawrence Weiner who, by employing language, attempts to escape subjectivity in an effort to create abstract works of art. He does so by making the audience responsible for their own experience. Weiner is well-known for his statement, "The work need not be built" meaning that the work is essentially immaterial. The only thing that matters is the concept. If the audience requires a visual image, they will need to construct one themselves. On the other hand, if we look at images of Weiner's work<sup>1</sup>, we notice right away that there is a carefully thought out, controlled visual element which suggests that no matter how hard we try, we cannot avoid subjectivity entirely, only dilute it by appealing to the

subjectivity of others.

LeWitt, S.(1967). Paragraphs on Conceptual Art. *Artforum*, 5(10), 79-83. Retrieved November 26, 2006, from [http://www.ddooss.org/articulos/idiomas/Sol\\_Lewitt.htm](http://www.ddooss.org/articulos/idiomas/Sol_Lewitt.htm)

Although playfully written, this essay by Sol LeWitt is, by many, considered a seminal text that provided the first published definition of conceptual art. Like Lawrence Weiner (see above), he maintains that the concept is the most important element in this type of art as opposed to the elements of perceptual art which is “Art that is meant for the sensation of the eye primarily”. This is an interesting distinction between terms whose function, he claims, are contradictory as one comes before the work's completion and the other after. By releasing control of his work before it reaches the perceptual state, he avoids personal subjectivity and shifts the onus of subjective interpretation to the viewer. Since the artist cannot know what the work, in its perceptual state, will look like, he is in no better a position to interpret that outcome than the viewer. However, we could apply Blocker's statement that the act of avoiding subjectivity is itself subjective.

Pold, S.(2005). Interface Realisms: The Interface as Aesthetic Form. *Postmodern Culture*, 15(2). Retrieved November 26, 2006, from Project MUSE database.

Soren Pold analyses the impact of the graphical user interface (GUI) and its role as a modern cultural artifact. Pold's analysis is made at a time when the GUI (as introduced with the Macintosh computer in the mid-1980's) has matured quite a bit and is beginning to adhere to stricter standards developed through several years of human-computer interaction research. What interests me most in this essay is his discussion of the artwork, “Auto-Illustrator” and how “software as an apparently functional tool also serves as a representational structure that influences culture, aesthetics and art.” In other words, the way in which a GUI is designed, i.e. what features are available, which of them are displayed prominently in the GUI and their functionality will, to a certain extent, effect what is created with the software. Take for example the drop-shadow effect frequently used in graphic design. At some point, through a creative combination of existing methods and effects, a handful of people began using this effect in compelling ways. But since this functionality was incorporated into the GUI, so that the effect could be applied by merely clicking a button, it is as if the drop-shadow has become a required element within all graphic design. The design of graphical user interfaces has a much greater impact on the way in which we use and interact with computers and software than many people realize. The idea of the interface is not to provide flexibility but to narrow our choices down to those which the software developers believe we

require the most. This, as is suggested in the essay, also brings into question elements of subjectivity: “Auto-Illustrator questions the implied perceptions in ordinary software of the user as the active artist/author and of the software itself as a passive tool.” In other words, which is the work of art? Is it the photograph that has been manipulated in Photoshop or is Photoshop itself an interactive work of art?<sup>2</sup> These questions sound absurd yet we cannot fully deny that anyone who creates an interface, injects elements of their own subjectivity into the work created through interaction with that interface. Thus, if an artist is attempting to avoid personal subjectivity in an interactive work of art, then one step could be to eliminate the interface. How then, does the work become interactive? By employing someone else's interface (see Brucker-Cohen above).

Reas, C.(2004) *{Software} Structure*. Retrieved December 9, 2006, from <http://artport.whitney.org/commissions/softwarestructures/>

In this work, commissioned by the Whitney Museum, Casey Reas attempts to model the ideas of Sol LeWitt in software. Visual works are first created as natural-language instructions which are then interpreted in computer code to create a program that visualizes the instructions. It is an interesting approach but I can't help feeling that it cheats to a certain extent. Reas and the other participants, provide the computer code behind each of the software implementations. These code files show that ambiguity within the instructions, is more often than not, handled by applying random functions. However, what makes Sol Lewitt's wall drawings interesting are the varying interpretations of the ambiguous parts of his instructions. Computer-based randomization will give you a variety of results, but it is not an interpretation of the instructions. In fact, by applying these random functions, I would say that Reas and his collaborators ignore entirely the most complex yet potentially compelling part of their exercise.

Withington, F.(1987). The Mature Intelligent Computer. *MIS Quarterly*, 11(1), 1-3. Retrieved December 2, 2006, from JSTOR database.

We would like to think that machines are smart. At times, they behave as though they are. However, the problem with machines is that they are entirely logical while human intelligence sometimes has a way of defying logic (see Wittgenstein below). In this essay, published twenty years ago, Frederic Withington discusses the possibility of machine intelligence in the near future. He points out a number of possible scenarios where computers may display some sort of intelligence but at the same time he points out the current limits as far as what computers can and cannot do. In the twenty years since this article was written, the basic technology behind computers has not changed. They have gotten faster and storage

space has increased but the way in which computers handle information has not changed at all. It's interesting to compare his predictions with what has happened in the last twenty years. Our computers do display a sense of intelligence but in so doing, they also provide constant reminders that what they are displaying is closer to parroting than actual intelligence. For instance, a recent Reuters article spoke of "tens of thousands of worker bees commanded by Queen Elizabeth"<sup>3</sup> in an article about honey bees. Obviously a "find/replace" operation was used to automatically change "the queen" into "Queen Elizabeth", which would be more appropriate when referring to her, but the computer failed to realize that in this case, "the queen" was more appropriate. Anyone who uses word-processing programs will be familiar with the conflicts that arise when the computer wants to apply a certain type of formatting while the user wants something else (for instance, when a word-processing program tries to capitalize a letter after an abbreviation). The problem is, as stated by Withington, "Since machines have no consciousness, volition or purpose, they cannot generate a purpose that corresponds to that of the user." Intelligent computers are incapable of parsing ambiguous data. Their displays of intelligence only occur when things happen in a way that the computer has been told that they should happen. Any deviation from the norm will throw the computer off. The computer is entirely incapable of any conscious understanding of any information it receives or has. Due to this lack of understanding, the computer's information reaches a degree of abstraction that goes far beyond anything that would be possible for humans. Because of its lack of "consciousness, volition or purpose" the computer will be more than happy to handle information in any way we tell it to. For instance, the computer will not complain if told to interpret its memory files as a video, as was done for "Data Diaries" (2002)<sup>4</sup> by Cory Arcangel. So if we tell the computer, "Get images." Without providing any information about what types of images to get, what do we end up with? And if we combine that with the level of automation that a computer is capable of (compared to the automation discussed by Cavell and Blocker above), then what do we get?

Wittgenstein, L.(2001) *Philosophical Investigations*. Oxford: Blackwell.

In this seminal philosophical text, Wittgenstein constructs a number of what he calls "language games" in an attempt to analyze the way in which we learn and understand language. Rather than examining directly how we learn to use language, each game is constructed in a way that they reveal logical flaws. In fact, his whole point is to show that the way we use and understand language defies logic. We are able to use language effectively, even though we cannot always explain why or how we are using it. For instance, could you provide a spontaneous definition of a word like "to"? If so, which of it's several possible meanings would you apply to it (i.e. "I have **to** go **to** work everyday from nine **to** five.")? The interesting thing about these reflections is that, when programming a computer, we use language.

However, a computer is a strictly logical machine. There is no room for ambiguity. A computer is willing to understand anything we can explain to it in logical terms, but it will never have the type of flexible understanding of these things that we humans have. I could teach a computer to draw a circle by providing it with a mathematical formula, but that wouldn't mean that the computer would then recognize a circular shape within an image. If I taught a child to draw a circle, she could most likely apply that understanding to other scenarios and recognize circles when she sees them. The computer's lack of conscious understanding and its inability to apply one definition to something related but slightly different makes for a machine that is incapable of subjectivity. If I teach a person to recognize the color red by pointing to something red, that person will recognize a slight range of colors as being red. The degree of deviation from the original will likely vary between individuals, so that what is recognized as red becomes a matter of personal subjectivity. A computer will however, not show any subjectivity by not deviating from the original color at all.

- 1 See *Bits & Pieces Put Together to Present a Semblance of a Whole* (1991) Walker Art Center, Minneapolis, MN  
[http://collections.walkerart.org/item/enlarge\\_fs.html?type=object&id=1015&image\\_num=1](http://collections.walkerart.org/item/enlarge_fs.html?type=object&id=1015&image_num=1)
- 2 This issue was heavily debated within online digital art forums around the time that “Auto-Illustrator” emerged and was fueled by the fact that the creator of the Linux operating system received a Golden Nica award at the 1999 Ars Electronica festival. It's a bit like awarding the Turner Prize to the inventor of Liquitex. Personally, I feel that all artistic media come with certain restraints and constrictions and that working within those confines fosters creativity. If we were to seriously pursue this debate, it would quickly lead in absurd directions. For instance, if I am an oil painter, are my paintings the product of my creativity or are they simply dictated by the colors that the paint manufacturer makes available to me, by the availability of brushes, canvas, etc.?
- 3 [http://ordinary.blogs.com/.shared/image.html?/photos/uncategorized/queenbee\\_1.jpg](http://ordinary.blogs.com/.shared/image.html?/photos/uncategorized/queenbee_1.jpg)
- 4 <http://turbulence.org/Works/arcangel/>