From the Rhizome Archives: Code As Creative Writing--An Interview with John F. Simon, Jr. by Jon Ippolito

BY RHIZOME

In this series of posts, we will be reblogging content from Rhizome's Archives, available here. This interview with John F. Simon, Jr., conducted by Jon Ippolito, comes from Rhizome's former publication, the *Rhizome Digest*. It was published on March 23, 2002. You can peruse old editions of the*Rhizome Digest* here.

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This interview took place in January 2002, on the occasion of the

Guggenheim's acquisition of John Simon's *Unfolding Object*. More info at http://www.guggenheim.org/internetart.

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Jon Ippolito: You've been working on or near the cutting edge of digital art since the mid-1980s, when you were programming image-processing routines for CCD [charge-coupled device] photography. Yet you often cite sources of inspiration from the world of pen and brush rather than the world of pixel and browser, and I see some of these influences of Modernism-for example, the influence of Paul Klee in your plotter drawings [1994-95] and Sol LeWitt in *Combinations* [1995]. What is it about those artists that speaks to you?

John F. Simon, Jr.: I am interested in analytical approaches to creativity. A new technology doesn't erase a life's work of thoughtful, creative production. The ideas are bigger than the medium. There are many examples in art history where artistic practice could be described as algorithmic-an approach to experimentation by rule making, including LeWitt and Conceptual artists in the 1970s also Paul Klee in the 1920's along with many other Bauhaus professors.

An even older example would be Dominican priest-scholar Sebastien Truchet's 1722 work on the use of combinations in tile design. His study uses square tiles of two colors that are divided diagonally. He assigned a letter to each of the four possible orientations of this kind of tile. He then made lists of letters describing the sequence and orientation for laying out the tiles. The lists functioned like instructions or programs for constructing the design. Craftsmen would pick a pattern out of his book and use the lists of letters as assembly instructions. Another even older example would be the analytical techniques used in the design of the Alhambra and in much Islamic art.

JI: Is there a single artist or movement you can point to as an influence on *Unfolding Object*? Where did the idea for this project come from?

JS: The idea for *Unfolding Object* comes from many sources. Physicist David Bohm theorizes about a level of information below the quantum level where all matter is interconnected. In his terminology, the object unfolds information about itself. The outward expression of an object is the unfolding of this potential.

I detected a similarity between Bohm's description of nature and software objects. The potential for the *Unfolding Object* is contained in the source code, which is not displayed on the screen but functions on a different level. The expression of the code, its unfolding, is decided by the interaction of the code with the person unfolding it.

Another source was Klee, who wrote about how a drawing is defined by its "cosmogenic moment," when the symmetry of the blank page is broken by the first mark-the first decision of the creator. Gilles Deleuze also considers *The Fold* [1993] and its relationship to the process of formation.

From my own thoughts about drawings as diagrammatic records of decisions, I wanted to create a software object that would reveal its history. I am also fascinated by the implicit potential that a software object has in its programming.

JI: Virtual reality guru Jaron Lanier has described virtual reality as an experiment in alternative physics. You've created an object that appears to inhabit normal euclidean space yet has a mathematical extensibility beyond anything in our physical environment. When you envisioned this work, did you ever see yourself as bending the laws of nature in the service of art?

JS: Which laws of nature? Newton's? I think that nowadays artistic conceptions of reality can hardly keep up with the non-local, non-euclidean, non-linear scientific theories of the natural world.

My interest is in relativist mathematics that have no concept of infinity. I want *Unfolding Object* to exist in a relativist space where it defines, as much as possible, the shape of its space. I want to avoid the Cartesian picture plane, with a horizon and vanishing point. I don't want to conceptualize the whole space from the beginning-I want the object to create the space as it unfolds. Of course, this idea is limited when you have to use a computer screen and perspective projection to visualize the thing.

JI: Are you inspired by particular gizmos that help you avoid these kinds of limitations? I'm thinking of the drawings executed with a pressure-sensitive stylus and ink plotter, or your wall-mounted sculptures made from exposed Powerbook innards, or your recent acrylic panels cut with an industrial laser.

JS: I think it's the gizmos that create the limitations. All the works you mention are concerned with algorithmic possibilities. There are many technologies that can be used to explore possibilities especially if you can program them. I switch to a new technology when I feel like it can shed some light or offer a different perspective on a bigger idea.

JI: Yet working online requires you to settle for the most abundant technology, like Netscape or Explorer, rather than the most specialized.

JS: Actually, I think browsers are highly specialized and limited while Powerbooks seem abundant with a much less restricted development environment.

JI: I guess I'm wondering whether you find it more challenging to make an alluring work for the Internet, given that its display hardware is mundane rather than precious.

JS: Who can say what the next display hardware will be? Maybe someone will design a precious screen to view my online work. An undefined context is by far the biggest obstacle for designing and experiencing online art. Many qualities that define other artwork cannot be considered with online work. This can be liberating but also detract from the overall impression. There is no control of display with online work. The best that can be done is hope that whoever views it will focus only on the window in which your piece is displayed and not have too many other distractions on the desktop-or surrounding the computer. Making my LCD [liquid crystal display] panels was a reaction to this situation, an attempt to have more control of the display environment.

What I try to do online is design an artwork that relies on a strong concept, whose qualities as an artwork don't depend on any specific colors or display speed or viewing environment. This takes away a lot of decisions but puts more emphasis on understanding the limits and refining the concept.

JI: Your work has not obeyed a strict progression, from, say, pen-and-ink to animated paintings to Internet-based projects. Do you ever feel like you are jumping forwards and backwards, creating art to fill in gaps in art history?

JS: I don't think the concept of progress applies to art the way it does to technology, so the idea of a "strict progression" may also be poorly applied or assume too much about how or why art is made. If you look at my art over a longer term, say the last fifteen years, I think what you

see is a continued push to visualize and activate complex ideas. I choose whatever materials I think are appropriate to lock down an idea or get to what I want to see.

JI: You were one of the first artists I know to have figured out new economic models for selling digital artworks. I'm thinking particularly of the low-cost multiples available at your "souvenir shop" , which offers art in everyone's price range, or the edition of *Unfolding Object* you've contemplated for collectors' desktops. Last year you even published a brochure about your art that emulated the look and function of a corporation's annual report. This approach seems at odds with the attitude of many online artists of your generation, for whom the Internet offered a space outside of the profit-driven art market. Do you think every artist should have a business plan?

JS: I think every artist should have a plan for paying their expenses so they can devote their full energies to their art.

JI: You've adapted your work *Every Icon* [1996] for the Web, for a Powerbook screen, and for a Palm Pilot. The way you've re-created the same work in different platforms has encouraged me to think that translations from one medium to another may be the best preservation strategy for digital art [as outlined in the Variable Media Initiative]. Does the fact that you've already sold these different formats as different artworks make it easier or harder to imagine preserving them via a protocol like variable media?

JS: Easier, because what was sold in each case was a software license. Every Icon is the simplest example because it is primarily carried by the concept. There are no issues of processor speed/timing, color, display size. It works most everywhere so many of the translation issues are

already solved by example. Of all my pieces, it is easiest to imagine this piece being preserved by porting the code to whatever is the "system du jour." It is also, by far, the simplest piece of code.

JI: Many of your works are, in fact, primarily programming code. How do you think this work relates to the "artist software" genre, works like the Web Stalker, FloodNet, or Auto-Illustrator ?

JS: I think what I am programming is quite different but I like those projects and think they are important. For me, what's important is that a piece of software can be considered an artwork, and that writing software is as creative as it is technical, and the choices made for language, data structure, methods, etc., are significant creative choices.

JI: In most online artworks, the code can be separated from the visual result. I am thinking of the difference between the Web page Netscape or Explorer shows you and the HTML or scripting that View Source shows you. This separation doesn't normally exist with other artworks-LeWitt being the obvious exception. An elegant page written with a simple JavaScript "for" loop and document.write could generate the same visual result as a messy HTML document with loose tags that's ten times as long.

Do you see any aesthetic difference between a work elegantly coded by a programming perfectionist versus a kludge that happens to generate the same experience for the viewer?

JS: How important do you consider craftsmanship in fine art? There is no right or wrong way to code. What you write and the way you write it reveal yourself.

Whatever you see on screen and in View Source reflects the resources and choices of the person who put the page together. Some people care more about how the HTML and JavaScript source looks than others. I know some people embed messages as comments in their Web pages that are not visible in the browser. Some painters finish the sides of their canvases and others choose to leave them raw. There is a difference in the way each one looks. I usually only ask: is the choice appropriate to the work?

Personally, I don't pay much attention to the way my HTML looks. Unless it is part of the project, I make the HTML as plain as possible or accept whatever the default is from an editing program. I usually only care about how the pages function in the browser.

JI: Must an artist be a programmer to make truly original online art?

JS: Truly original? You Modernist!

Whether you make art or not, understanding programming is an amazing understanding.

JI: You have said:

"Once you write a piece of software and run it on the computer, then it is a very fluid language. Every variable that you choose in the software becomes subject to expansion, and you can make lookup tables to vary parameters or you can have functions that are varied by random numbers...Sometimes you get things that look the way you expected them to look, and sometimes they are completely different." [Interview by Tilman Baumgaertel on Nettime]

I think you put your finger here on a common misunderstanding of both computer-based art and the analog "Conceptual art" that you point to as

an influence on your work. Does it bother you that some people misread algorithmic art as simply the demonstration of some mathematical tautology, and hence a purely cerebral exercise? What, if anything, should artists do to counteract such a misreading?

JS: I practice what I call a "creative writing" style, as opposed to a "problem solving" style, of writing software. I can say that I have only really been able to practice this style for a few years. I believe I am just finding out what it means to code with this awareness so I can't say how it should be read. There are a lot of misperceptions about code because it varies as much as the number of people writing it. The only way artists can improve people's understanding of software is to keep creating and understanding it ourselves.