Jon Ippolito, "Ten Myths of Internet Art" (2002).

Leonardo (Cambridge, MA) 35.5 (October 2002), pp. 485-498. Archived online at muse.jhu.edu/journals/len/toc/len35.5.html, mirrored at www.nydigitalsalon.org/salon_10/essay.php?essay=6. Interactive version online at www.guggenheim.org/internetart. (All accessed 1/25/2002). Reprinted in English and Spanish in José Luis Brea, ed., *The Conquest of Ubiquity* (Murcia: Centro Párraga, 2004.

Written to accompany the first Internet art commissions by the Guggenheim museum, this essay tries to counter ten assumptions about online creativity prevalent among many artists, galleries, and museums at the cusp of the millennium, with the goal of encouraging more exploration of and support for this new arena for artistic expression.

2,500 words.

Jon Ippolito, "Ten Myths of Internet Art"

By the time the mainstream art world awakened to the telecommunications revolution of the 1990s, a new landscape of exploration and experimentation had already dawned outside its window. Art on this electronic frontier--known variously as Internet art, online art, or net art- matured at the same breakneck pace with which digital technology itself has expanded. Less than a decade after the introduction of the first image-capable browser for the World Wide Web, online art has become a major movement with a global audience. It took twenty years after the introduction of television for video artists such as Nam June Paik to access the technology required to produce art for broadcast television. Online artists, by comparison, were already exchanging text-based projects and criticism before the Internet became a visual medium with the introduction of the Mosaic browser in 1993. By 1995, eight percent of all Web sites were produced by artists, giving them an unprecedented opportunity to shape a new medium at its very inception. Since that time, art on the Internet has spawned countless critical discussions on e-mail-based communities such as the Thing, Nettime, 7-11, and Rhizome.org. Encouraged by a growing excitement over the Internet as a social and economic phenomenon, proliferating news articles and museum exhibitions have brought online art to the forefront of the discussion of art's future in the twenty-first century.

One of the reasons for the difficulty of adapting a museum to networked culture is that numerous misconceptions persist about that culture--even those who are savvy about art or the Internet do not often understand what it means to make art for the Internet. Here are ten myths about Internet art worth dispelling.

Myth Number 1: The Internet is a medium for delivering miniature forms of other art mediums.

Though you might never know it from browsing many of the forty million Web sites listed in an online search for the word "art," the Internet is more than a

Results of a Yahoo search for "visual art," 25 Jan 2015.

newfangled outlet for selling paintings. Granted, searching Yahoo for "Visual Art" is just as likely to turn up alt.airbrush.art as äda'web, but that's because Internet art tends to make its cultural waves outside of art-world enclaves, surfacing on media venues like CNN and the *Wall Street Journal* as well as on museum Web sites. More importantly, this art exploits the inherent capabilities of the Internet, making both more participatory, connective, or dynamic. Online renditions of paintings or films are limited not just by the fact that most people cannot afford the bandwidth required to view these works at their original resolution, but also by the fact that painting or cinema do not benefit from the Internet's inherent strengths: you would expect more of art made for television than a still image, so when surfing the Web why settle for a scanned-in Picasso or 150 by 200 pixel *Gone with the Wind*? Successful online works can offer diverse

paths to navigate, recombine images from different servers on the same Web page, or create

unique forms of community consisting of people scattered across the globe.

Myth Number 2: Internet art is appreciated only by an arcane subculture.

Museum curators are sometimes surprised to discover that more people surf prominent Internet

art sites than attend their own brick-and-mortar museums. To be sure, the online art community

has developed almost entirely outside the purview of galleries, auction houses, and printed art

magazines. Ironically, however, online art's disconnect from the mainstream art world has

actually contributed to its broad appeal and international following. The absence of a gallery

shingle, a museum lintel, or even a "dot-art" domain suffix to flag art Web sites means that many

people who would never set foot in a gallery stumble across works of Internet art by following a

fortuitous link. Without a Duchampian frame to fall back on, most online artworks look outside

of inbred references to art history or institutions for their meaning. For these reasons, the

Guggenheim's acquisition of online works into its collection is less a radical experiment in

evaluating a new medium than a recognition of the importance this decade-old movement has

gathered independently of the art world's traditional validation mechanisms.

Myth Number 3: To make Internet art requires expensive equipment and special training.

One of the reasons network culture spreads so quickly is that advances don't come exclusively

from Big Science or Big Industry. Individual artists and programmers can make a difference just

by finding the right cultural need and fulfilling it through the philosophy of "DIY": Do It

Yourself. In the right hands, homespun HTML can be just as powerful as elaborate VRML environments. And thanks to View Source--the browser feature that allows surfers to see how a Web page is built and reappropriate the code for their own ends--online artists do not need residencies in research universities or high-tech firms to acquire the necessary skills. The requirement that online artworks squeeze through the 14.4 kbs modems of dairy farmers and den mothers forces online artists to forego the sensory immersion of IMAX or the processing power of Silicon Graphics. However, constraints on bandwidth and processor speed can actually work to the advantage of Internet artists, encouraging them to strive for distributed content rather than linear narrative and to seek conceptual elegance rather than theatrical overkill. Making successful art for the Internet is not just a matter of learning the right tools, but also of learning the right attitude.

Myth Number 4: Internet art contributes to the Digital Divide.

The widening gap between digital haves and have-nots is a serious concern in many public spheres, from education to employment. But this bias is reversed for art. While it is true that artists in Ljubliana or Seoul have to invest in a computer and Internet access, finding tubes of cadmium red or a bronze foundry in those locales is even more challenging and much more expensive. Even in Manhattan, an artist can buy an iMac for less than the oils and large stretcher bars needed to make a single, "New York-sized" painting. And when it comes to distributing finished works, there is no comparison between the democratizing contact made possible by the Internet and the geographic exclusivity of the analog art world. Only an extreme combination of luck and persistence will grant an artist entrance to gallery openings and cocktail parties that can

make or break careers in the New York art world. But artists in Slovenia and Korea--outside what are considered the mainstream geographic channels of the art world--have had notable success in making art for the Internet, where anyone who signs up for free e-mail account can debate Internet aesthetics with curators on Nettime or take advantage of free Web hosting can post art for all to see.

Myth Number 5: Internet art = Web art.

The World Wide Web is only one of the mediums that make up the Internet. Internet artists have exploited plenty of other online protocols, including e-mail, peer-to-peer instant messengering, videoconference software, MP3 audio files, and text-only environments like MUDs and MOOs. It's tempting to segregate these practices according to traditional categories, such as calling e-mail art and other ephemeral formats "performance art." Yet the interchangeability of these formats defies categorization, as when, for example, the transcript of improvisitory theater conducted via a chat interface ends up on someone's Web page as a static text file. Internet mediums tend to be technologically promiscuous: video can be streamed from within a Web page, Web pages can be sent via e-mail, and it's possible to rearrange and re-present images and text from several different sites on a new Web page. These artist-made mutations are not just stunts performed by mischievous hackers; they serve as vivid reminders that Internet has evolved far beyond the print metaphors of its youth.

Myth Number 6: Internet art is a form of Web design.

It may be fashionable to view artists as "experience designers," but there is more to art than design. The distinction between the two does not lie in differences in subject matter or context as much as in the fact that design serves recognized objectives, while art creates its objectives in the act of accomplishing them. The online portfolios of Web design firms may contain dazzling graphics, splashy Flash movies, and other attractions, but to qualify as art, such projects must go beyond just visual appeal. Design creates a matrix of expectations into which the artist throws monkey wrenches. Just as a painter plays off pictorial design, a net artist may play off software design. Design is a necessary--but not sufficient--condition for art.

Myth Number 7: Internet art is a form of technological innovation.

Internet artists spend much of their time innovating: custom-writing Java applets, or experimenting with new plug-ins. But innovation in and of itself is not art. Plenty of nonartists discover unique or novel ways to use technology. What sets art apart from other technological endeavors is not the innovative use of technology, but a creative misuse of it, for to use a tool as it was intended, whether a screwdriver or spreadsheet, is simply to fulfill its potential. By misusing that tool--that is, by peeling off its ideological wrapper and applying it to a purpose or effect that was not its maker's intention--artists can exploit a technology's hidden potential in an intelligent and revelatory way. And so when Nam June Paik lugs a magnet onto a TV, he violates not only the printed instructions that came with the set, but also the assumption that networks control the broadcast signal. Today's technological innovation may be tomorrow's cliché, but the creative misuse of technology still feels fresh even if the medium might be stale. The combined megaHerz deployed by George Lucas in his digitally composited Star Wars sequels only makes

more impressive--and equally surprising--the effects Charlie Chaplin achieved simply by cranking film backwards through his camera. In a similar vein, the online artists jodi.org exploited a bug in Netscape 1.1 that allows an "improper" form of animation that predated Flash technology by half a decade.

Myth Number 8. Internet art is impossible to collect.

Although the "outside the mainstream" stance taken by many online artists contributes to this impression, the most daunting obstacle to collecting Internet art is the ferocious pace of Internet evolution. Online art is far more vulnerable to technological obsolescence than precedents such as film or video; in one example, works created for Netscape 1.1 became unreadable when Netscape 2 was released in the mid-1990s. Yet the Guggenheim is bringing a particularly long-term vision to collecting online art, acquiring commissions directly into its permanent collection alongside painting and sculpture rather than into ancillary special Internet art collections as other museums have done. The logic behind the Guggenheim's approach, known as the Variable Media Initiative, is to prepare for the obsolescence of ephemeral technology by encouraging artists to envision the possible acceptable forms their work might take in the future. It may seem risky to commit to preserving art based on such evanescent technologies, but the Guggenheim has faced similar issues with other contemporary acquisitions, such as Meg Webster's spirals made of leafy branches, Dan Flavin's installations of fluorescent light fixtures, and Robert Morris' temporary plywood structures that are built from blueprints. Preserving those works requires more than simply storing them in crates, so too immortalizing online art demands more than archiving Web files on a server or CD-ROM. Along with the digital files corresponding to

each piece, the Guggenheim compiles data for an each artist how the artwork is to be translated into new mediums once its original hardware and software are obsolete. To prepare for such future re-creations, the Guggenheim has created a variable media

Mark Napier, *net.flag* **(2001)**

endowment, the interest of which is earmarked for future costs of data migration, emulation, and reprogramming.

Myth Number 9. Internet art will never be important because you can't sell a Web site.

It is true that the same market that so insouciantly banged gavels for artworks comprised of pickled sharks and other unexpected materials has yet to figure out how to squeeze out more than the cost of dinner for two from the sale of an artist's Web site. The reason artist's Web sites have not made it to the auction block is not their substance or lack thereof (since equally immaterial forms of art have been sold via certificates of authenticity since the 1970s), but their very origin. The Internet of the early 1990s, and the art made for it, was nourished not by venture capital or gallery advances but by the free circulation of ideas. Exploiting network protocols subsidized by the U.S. government, academics e-mailed research and programmers ftp'd code into the communal ether, expecting no immediate reward but taking advantage nevertheless of the wealth
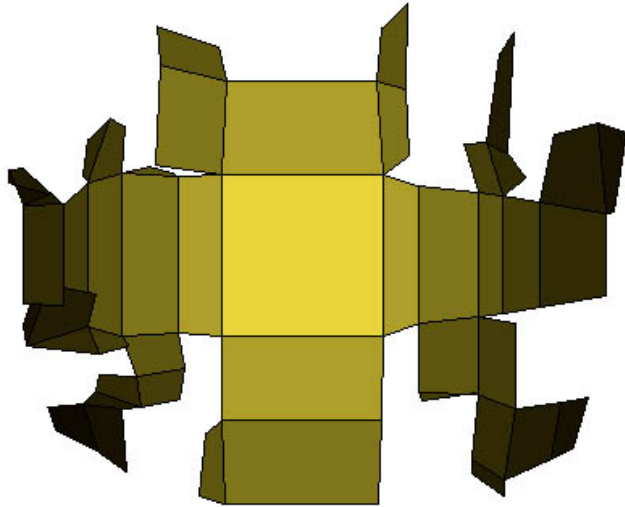
John F. Simon, Jr., *Unfolding Object* **(2001)**

of information this shared ethic placed at their fingertips. Online artists followed suit, posting art and criticism with no promise of reward besides the opportunity to contribute to an exciting new paradigm for artmaking. Indeed, many artists who made the leap to cyberspace claimed to do so as a reaction against the exclusivity and greed of the art market. It's not clear whether online art can retain its youthful allegiance to this gift economy and still enter the profit-driven world. It is possible, however, to hypothesize a Web site's putative value independent of its price tag in an exchange economy. That value would be the sum total of money a museum would be willing to spend over time reprogramming the site to ward off obsolescence (see Myth Number 8).

Myth Number 10. Looking at Internet art is a solitary experience.

Most people surf the Internet alone, in their home or office, but this doesn't mean that others aren't virtually present. The Internet may be a valuable tool for individual use, but it is far more important as a social mechanism. Beyond the numerous online communities and listserves dedicated to discussing and debating art, many of the best Internet artists reckon success not by the number of technical innovations, but by the number of people plugged in and turned on. The hacktivist clearinghouse ®™ ark, for example, connects sponsors interested in donating money or resources for anticorporate protest with activists who can effectively promote those agendas. Not

all online communities need be political. Artworks as visually dissimilar as Mark Napier's net.flag and John F. Simon, Jr.'s Unfolding Object capture the traces of many viewers' interactions and integrate them into their respective interfaces. In some cases, viewers can see the effects of other participants immediately, as they are reflected in the artwork in real time. In most online art, however, as in most online communication, viewers' interactions with each other are asynchronous--as though an empty gallery could somehow preserve the footprints of previous visitors, their words still ringing in the air.