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The Aesthetic Of Failure: Net Art Gone Wrong

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net art gone wrong

introduction

This article considers "net art" and argues that there is a developing aesthetic of failure in many online works. In general terms, this aesthetic of failure can be defined as the ways that net artists reflexively quote and misuse the programmed aspects of the computer. Jodi's *%20Wrong*, Peter Luining's *D-TOY 2.502.338*, and Michaël Samyn's *The Fire from the Sea* represent distinct aspects of this aesthetic. These works have been described as formalist. However, they offer a stance that goes beyond formalist considerations of the medium because their employment of misquotation, misdirection, and interface breakdown can offer a distance from the Internet's effects and a critical commentary on its vernacular.

Similar visuals are not a necessary part of this aesthetic. It is conveyed by the ways that net art performs and malfunctions. This aesthetic is produced by particular kinds of spectatorship and of course the corollary to this is that cultural tastes and values inform viewer reactions to this work. Aesthetics is related to the spectatorial positions that are scripted by individual works but this does not necessarily provide the spectator with the ideal or cohesive view. In many cases, the net art spectator's empowered position and ability to gaze upon the whole work are disturbed by the ways that net art cannot be interacted with or controlled. The use of the term "spectator" is intended to suggest the history of art and media spectatorship, the ways that people have been structured to look, and the particular relationship between computer viewer and interface. This term is also meant to indicate that net art highlights and enacts viewing limits. The disruption of spectatorial mastery, which produces a distinctly different user from the one promised by computer "interactivity," can encourage computer spectators to read Internet technologies differently.

The net art aesthetic also calls into question the possibility of maintaining unique "objects" and authorship online. Museums and other websites, which seek to maintain the aura of objects, struggle with the copied and quoted aspects of net art and the issues introduced in Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction."[1] Benjamin, whose work has influenced a group of contemporary theorists and many net artists, argued that the value of art objects dissipates with mechanical reproduction. Varied aspects of the computer setting contribute to this destabilization of singu-

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lar and specific works. Different computers, monitors, browsers and connection speeds produce contrary views. Such problems encourage an interrogation of traditional reading and viewing positions. They also suggest that computer-facilitated material is produced through a variety of technologies as much as an individual author generates it. However, there is the possibility that net art authorship will remain elevated and intact because of the significant ways in which spectators are scripted to fail.

All of this suggests that computer facilitation and specific net art works require a rethinking of art aesthetics and the production of setting-specific theories of spectatorship. A detailed study is necessary in order to describe the ways that spectators look as well as how artists can still be seen through such failures as misdirection, misquotation, and crashes. This can be elaborated upon by considering the relationship between aesthetics and net art, the different definitions of the term "net art" and its "history," the critical and popular uses of the conception of failure, and the ways that failure is employed in specific net art works. An aesthetic of failure can encourage a critical look at technology or become no more than a style. This article addresses ongoing theoretical and political "problems" with the position of the spectator and artist and offers a theory of net aesthetics.

aesthetics and net art

A better understanding of net art aesthetics can be reached by considering some of the critical and political questions about the cultural role of aesthetics. The *Oxford English Dictionary* defines aesthetics as "the philosophy or theory of taste, or of the perception of the beautiful in nature and art."[2] Aesthetics has been understood as a "coherent system of criteria, which can be purely visual, moral or social, or any combination of these, used for evaluating works of art."[3] However, some more recent arguments insist that the "social," in the form of cultural values and beliefs, always informs aesthetics.

Feminist aesthetics has encouraged spectators to acknowledge the cultural aspects of aesthetics. This political project has clearly influenced some contemporary art practices, including net art. "The emergence of feminist aesthetics in the 1980s" has "resulted in a broader and deeper understanding of the many social and cultural variables that contribute to prevailing notions of taste, aesthetic value and artistic genius."[4] Feminist aesthetics "is not a way of evaluating art or our experience of it, but rather examines and questions aesthetic theory."[5] Hal Foster's "anti-aesthetic" establishes a similar practice. His anti-aesthetic is not meant to suggest a "negation of art or of representation as such."[6] Instead, he is resisting ongoing beliefs, which are often associated with Immanuel Kant, that aesthetic judgment, or deliberations about what is beautiful and pleasurable, are universal.[7]

This article is politically aligned with feminist aesthetics and a version of Foster's anti-aesthetics. It considers the cultural aspects of aesthetics as well as such "taste"-oriented issues as color and composition. Aesthetic engagement is related to spectatorship because objects are understood through particular embodied positions, cultural values, beliefs, and points of view. All of these aspects of aesthetics are an important part of contemporary criticism. People and other components of the environment are understood through aesthetic criteria. For instance, power is delivered to certain individuals through seemingly universal codes of beauty, such as body shape and skin color.

Contemporary artists may seem to have resisted aesthetics by downplaying bodily representations as well as beautifully and skillfully produced works in favor of a more theoretical project, or an anti-aesthetic. However, these artists still employ a set of aesthetic conventions, including the copied (Sarah Charlesworth, Sherrie Levine, and Richard Prince), and low (Mike Kelly, Karen Kilimnik, and Paul McCarthy). The net artists discussed here also employ an anti-aesthetic because they critique art aesthetics and produce sites that are intertwined with varied forms of web culture. However, such potentially critical strategies as copying aspects of the web and quoting popular culture can become solely an aesthetic style when they are consistently repeated without political intent.

net art

Net art is sometimes described as "net.art" or even "art on the net." It usually includes e-mail projects, text-based performances, and other Internet-based forms. Website projects are probably the most common type of net art.[8] It has been widely discussed on listservs and other e-mail-based communication forums, including 7–11, Rhizome, The Thing, Museum-L, nettime, and the World Wide Web Artist's Consortium.[9] The term "net art" suggests that there is a consistent set of aesthetic guidelines for producing and evaluating these cultural works. The varied producers and critics that engage with net art have also tried to establish a vocabulary and set of expectations for this form through discussions and production practices. Some of the reoccurring attributes of net art, which have been mentioned in these discussions, are collaboration, interactivity, formalism, and reflexivity.

The works of Jodi, Luining, Samyn, and many other net artists share a loose set of visually and politically aesthetic properties. However, there are also online and net art practices with different aesthetic criteria. Describing a completely unified net aesthetic is stymied because many of the artists resist fully delineated categories and stable terms. In fact, this "slipperyness," in which artistic identity is challenged, the relationship between a title and the content of a work shifts, and display strategies are used to make "new" works, may be an aspect of this aesthetic.

Net art has been associated with a number of essential aspects of the web. According to Brett Stalbaum, net art's formalism "involves the exploration of the HTTP protocol, HTML, and browser specific features as a unique medium in a Greenbergian sense."[10] Stalbaum and other critics of net art have been referencing more traditional understandings of formalism:

> Formalism usually refers to an over-emphasis in ethics or aesthetics on form over content. … Formalism has been used to describe a twentieth-century view in aesthetics, art history, and literary criticism that values artistic form over artistic content and that is therefore opposed both to representationalism and realism in the arts.[11]

However, net art can do more than employ the structural elements of the medium. Many net art works visualize the web's language, a code that often remains hidden, and re-represent the elements of the web in countless reflexive configurations. These net artists pastiche and critique their medium in ways that are significantly different from formalist art.

Net art is often described as an alternative to traditional art concepts and the limiting aesthetics of the gallery system. To some extent, it must move the viewer away from the confines of the physical gallery and the object-oriented focus of traditional art forms because of its means of delivery. Steve Dietz may argue that "rather than trying to assimilate net art into our existing understanding of art history" it could "problematize many of the very assumptions we take to be normal, if not natural."[12] However, there are a variety of artistic movements that have significantly challenged art conventions and then been incorporated into the canon.

It is quite ironic that art remains a part of the discourse and is embedded in the movement's name, because many net producers and critics have been ambivalent about calling these works "art." This is a familiar strategy. Jay David Bolter and Richard Grusin argue that "popular culture often wants to deny traditional high art a claim to superior status, but still to appropriate its cachet and vocabulary, as it does, for example, with the terms *digital art* or *computer art*."[13] Through their strategy of quotation and denial, net artists manage to elide their relationship to such high art "problems" as class privilege, hierarchical evaluation, claims of mastery, and the exclusion of other voices while still marking the importance and cultural worth of their work. However, the occasional resistance to the art label produces new versions of incomprehensibility, because these works are difficult to understand and culturally locate, as well as high-art exclusivity, because net art sites like hell.com were once only available by invitation. Spectators who are familiar with contemporary art and its debates have an advantage in engaging with these net-based works.

It is certainly the case, particularly with new kinds of works and aesthetic strategies, that art is

more easily recognized when such contextual devices as museums and gallery-like structures demarcate it. In 1996, Alexei Shulgin and the Moscow WWWArt Centre commented on the different ways that art and aesthetics could function online and founded an award for Internet web pages that provided an "art feeling" rather than having intentionally been produced as works of art.[14] Their accompanying manifesto states that the "internet is an open space where the difference between 'art' and 'not art' has become blurred as never before in XX century. That's why there are so few 'artists' in this space."[15] They suggest that an artist's identity is reliant on institutional affiliations. "There is possibility of misinterpretation and loss of 'artistic' identity here. This might be welcome. There are no familiar art institutions and infrastructures." However, familiar institutions and infrastructures have been appearing on the web in escalating numbers.

Net artists have had the opportunity to present their works in different ways online and to have seemingly different relationships to art structures. Early online organizations like äda'web, which released its first project in 1995, offered the spectator access to works by Heath Bunting, Jodi, Jenny Holzer, Michaël Samyn, Julia Scher, Alexei Shulgin, and Lawrence Weiner but the term "art" was never mentioned.[16] Of course, for some spectators, a number of these names would have immediately marked this as an art site. In any case, the Walker Art Center incorporated these net works into its virtual museum presence after äda'web lost its funding. Jodi also appears on the Rhizome site where the term "art" has been frequently employed. Rhizome is a nonprofit organization that "presents new media art to the public, fosters communication and critical dialogue about new media art," and offers a web-based "artbase." This artbase provides access to a featured number of "art objects" and an alphabetically organized database of documented works.[17] Organizations like Rhizome may actually counteract the indeterminacy of online identification by calling these varied representations "art objects" and by providing spectators with label-like details.

These works may be called "art" but there are still problems in conceptualizing net art's relationship to traditional forms because of the unfamiliar aspects of the medium and the ways that space and display, two key ways that viewers understand their encounter with art, have been skewed online. The structure of the web and the difficulty in determining the borders or limits of a website make it difficult to identify individual net art works or to describe where these works end. The "edge" between works of art and the surroundings are almost impossible to conceptualize online because there is little physicality. We could include the browser frame, e-mail interface, or other supporting structures as well as surrounding sites, computer screen, and the computer "box" itself as part of net art.

There has been a continuing drive to collect and show net art within the museum structure even though its attributes make it difficult to physically display and some net art relies on its position "outside" the art market for its impact. The possibility that net art will present new formal and political aesthetic strategies has become increasingly unlikely with the growing influences of such traditional structures as the gallery and museum. The larger functions of net art and its shifting identity and address are curtailed by its containment within more familiar art structures. Luther Blissett maintains that net art is "Everyone with his own site, everyone with his own domain, everyone with his own gallery, they are throwing themselves into the trammels of traditional art."[18] However, even the traditional museum and other structures for displaying and selling art face new challenges online because they cannot fully transform digital reproductions into original and aura-imbued works of art.

The museum and other websites, which seek to maintain the aura of objects, still struggle with the issues introduced in such articles as Benjamin's "The Work of Art in the Age of Mechanical Reproduction." Benjamin suggests that the authority of the object dissipates when it can be mechanically reproduced:

> One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a

> plurality of copies for a unique existence. And in permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object reproduced. These two processes lead to a tremendous shattering of tradition.[19]

The shattering of tradition that Benjamin describes is only intensified in the online environment where the material basis of the museum and its possession of objects are continually challenged.

Directors and curators of a number of leading museums, including David Ross who is the director of the San Francisco Museum of Modern Art, believe that museums should play a significant part in the development of net art. Ross is interested in linking net art to more canonical forms of art production, in order "to develop standards and a critical evaluation framework for looking at net art based on our idea of what art should act like or do."[20] Yet his goals appear to be different from some net artists who want to challenge the art system through their online production practices. SFMOMA has certainly played a part in authorizing this form by establishing a Webby prize for "Excellence in Online Art."[21] Their Webby symposium panel on "The Artwork in the Age of Online Communication" acknowledges "The Work of Art in the Age of Mechanical Reproduction" and the problematic of copying online. It also appears to replace these challenges to the traditional system and materiality with a visceral presence or a new aura in the form of human interaction.[22] Of course, online communication is often delivered textually. It is copied when portions of e-mails are reposted and individual users save their chat session logs.

There have been a variety of constituencies interested in publicizing and commodifying net art. Art.Teleportacia, which describes itself as "The First Real Net.Art Gallery," has worked to define the worth and originality of this form. Art.Teleportacia's insistent use of the terms "first" and "real" and Artcart's claim to be "the first net.art_shop" indicate that there are problems with maintaining aura online.[23] Douglas Crimp could have been thinking about these online institutions when he suggested that "if the withering away of the aura is an inevitable fact of our time, then equally inevitable are all those projects to recuperate it, to pretend that the original and the unique are still possible and desirable."[24] Art.Teleportacia may be concerned with establishing ways that individuals and institutions can own some kind of original net art and Artcart may offer the "original print" along with screen-based works but they also confront a dilemma because there is reason to believe that the "one thing mechanical reproduction cannot, by definition, reproduce is authenticity."[25]

Attempts to authenticate and market net art have instead highlighted such "problems" as the lack of clearly official agencies online, the easy downloading and transferring of simple html-oriented web-based projects to other sites, and the inability to fully archive works outside the Internet. Online works can be transferred to more stable and clearly defined formats like CD-ROMs but this transfer irrevocably alters the work and web-based links are usually lost.[26] This destroys the webbed quality of these works and their relationship to the larger structures that many of these works are commenting on and quoting. To some extent, net art is viable only within the particular "environment" in which it has been situated. In other words, net art requires some supporting online structure to facilitate its full functioning. The multiple and reproducible aspects of net art, which can be understood as its distinct lack of uniqueness and originality, have also been part of its character. In this sense, the concept of uniqueness hasn't fully dissipated.

However, reproducibility is still a problem for the various constituencies that want to make net art into a commodity. Art.Teleportacia argues that original net art works can be identified by the "location bar" or url address.[27] "One can copy HTML code and images of simple net project, but URL can't be doubled."[28] Of course, there are certain instances where the url can be faked. Art.Teleportacia's argument suggests that the originality of net art is based on the uniqueness of its supporting address, which would presumably allow for the authentication of net art within virtual galleries or other institutional structures, rather than any unique attributes of the work.

Location-based originality and the existence of authorizing urls would allow online galleries a heightened control over net art works. Not surprisingly, a variety of artists have argued that this connection between net art and the address, which performs as a kind of physical location, is ill conceived. Michaël Samyn does not "think location is of much importance. The network has become a place on its own"[29] It might be more accurate to say that the network has insistently remained a non-space where exact and fixed locations are inconceivable. The identity of specific supporting servers has been supplanted by other internal net relationships that are established through hypertextual links, search engine listings, listserv conversations, and user browsing.

Art.Teleportacia proposed that unique addresses substantiated original works of net art after their *Miniatures of the Heroic Period* web "show," which included a number of for sale web pieces, was manipulated and reposted to another site by 0100101110101101.org.[30] This collaborative has resisted the continued institutionalization and commercialization of net art. Their comments evoke the political aspects of Benjamin's work on mechanical reproduction and underscore why an aesthetic, which stresses the problems with original works of art, might be employed online:

> Theoretically every work of art can be reproduced, but with Net art the reproduction is absolutely identical to the original one. It follows that it becomes a "non-sense" to perpetrate such concepts that seemingly functioned in the real world. The notion of author in general, [and] therefore concepts like authenticity and plus-value, are strictly connected to the economic, institutional, and juridical aspects of traditional art. … Net art requests new production, preservation, and fruition criteria that often conflict with the old rules of the art system, like the necessity of critics and museums.[31]

Net artists like 0100101110101101.org sabotage other sites or make them "fail" in order to encourage a more critical look at what technology delivers.[32] They are invested in reproducibility because making an exact copy of something on the web negates the originality of net art works. However, the claims for the critical work that these copies can perform, as well as the celebration of other reproduction media, can also ironically establish a kind of unique status for them. It is possible that reproductions can hold their own kind of aura for academics, artists, intellectuals, and Marxists through such devices. For instance, the dismissal of authenticity, rejection of traditional forms of aura-imbued art, and acknowledgment of indistinguishable copies may increase net art's worth in art markets where postmodern appropriation has been institutionalized. It is certainly ironic that value and a different kind of aura are produced through critical strategies that are seemingly designed to resist such effects.

These tactics have promoted the copy, which according to Benjamin could politically reconfigure art and culture by allowing the masses access into a system of exchange and power that had previously excluded them. However, these strategies have not necessarily made net art comprehensible to all viewers. For instance, in hypertext and web-based works, users are often unsure what will occur when they "follow" particular links or paths. This may suggest that previous conceptions of user navigation are inadequate. Surfing has provided one understanding of the Internet. It has been "used by analogy to describe the ease with which an expert user can use the waves of information flowing around the Internet to get where he wants."[33] However, hypertextual documents may also produce unintended connections and mistaken paths. A more appropriate term for encountering material online might be "blundering." Such a term suggests the difficulty in recognizing net art and other online materials and the ways that these sites are open to various interpretations. In some cases, this may be the intention of the artists and programmers.

an aesthetic of failure

The hypertext critic and enthusiast George P. Landow has favored the productive aspects of linked computer documents. However, he has also suggested that computer breakdowns, coding errors, and the disorientation of viewers are

important, and sometimes positive, aspects of the medium.[34] He traces this interest in disorientation to modernist and postmodernist tendencies in the arts and literature. "Joyce's *Ulysses*, T.S. Eliot's *Waste Land*, and William Faulkner's *The Sound and the Fury* – to cite three classics of literary modernism – all make disorientation a central aesthetic experience."[35] Such aesthetics can be designed in order to encourage the viewer to perceive differently.

Feminist aesthetics and anti-aesthetics have invited such alternative perceptions by attending to the social structures through which we see objects. In a similar way, the intermingled formal and political aesthetic of net art encourages the spectator to address the ways that technology is understood. Jonathan Crary suggests that the acknowledgment of failure and the disjunction between streamlined technology and rot is one way to induce an awareness of aesthetics and the underlying presumptions that accompany technology. He argues that society will increasingly engage with such conflicting terrains as Paul Virilio's high-technology world of "absolute speed" and "the decaying, digressive, terrain of the automobile-based city."[36] For him, "any sense of breakdown, of faulty circuits, of systemic malfunction" can begin to disrupt the production of a "fully delusional world." Crary's call to highlight and even produce failure, which he identifies with such writers as Philip Dick and David Cronenberg, is also achieved by the actions of some net artists.[37]

The incompatible contemporary settings that Crary highlights also appear in many literary and critical writings about technology. William Gibson, Bruce Sterling, Neal Stephenson and other cyberpunk authors depict male characters who must correlate the almost omnipotent power that they can gain by "jacking in" to the machine with the limits of their physical environments and corporeal bodies.[38] The artist Lee Bul also tries to understand the "contradiction between the growing faith in the creed of new technology and the chastening reality of things constantly breaking down."[39] According to Bul, Korea is a "place of casual catastrophes: bridges and department stores collapse, subterranean gas mains explode, and the jumbo jets of Korean Air, the national carrier, routinely go down." Of course, an examination of international events indicates that the reliance on certain kinds of technologies and the failures of both human and machine readings are "global" issues. Bul's list of breakdowns has no national borders.[40]

Popular entertainment has also provided a fascinated and terrified audience with innumerable representations of technological failures. These include airplane disaster films like *Alive* (Frank Marshall 1993), *Airport* (George Seaton 1970), *Airport 1975* (Jack Smight 1975), *Airport '77* (Jerry Jameson 1977), and *The Concorde: Airport '79* (David Lowell Rich 1979); other transportation failures such as *The Poseidon Adventure* (Ronald Neame 1972) and *Runaway Train* (Andrei Konchalovsky 1985); architectural horrors such as the *Towering Inferno* (Irwin Allen and John Guillermin 1974); and computer-oriented failures such as *2001: A Space Odyssey* (Stanley Kubrick 1968), *The Net* (Irwin Winkler 1995), and *War Games* (John Badham 1983). In many of these films, instances of sabotage or other improper human interventions reveal poor construction practices and other technological insufficiencies. These films may confirm the spectator's concerns about technology or encourage the viewer to see the technological infrastructure in new and uneasy ways.

The familiarity, if not outright fascination, that contemporary culture has with such narratives of technological failings suggests why "recent media art is preoccupied" with "fallibility, limits," and rupture.[41] The net artists who are engaged with failure use a series of strategies that are similar to those employed in disaster films. Sometimes they shock the viewer with breakdowns, technological confusion, and illegibility in order to warn the viewer against believing that technology is highly functional. Terry Winograd and Fernando Flores argue that breakdowns "serve an extremely important cognitive function, revealing to us the nature of our practices and equipment, making them 'present-to-hand' to us, perhaps for the first time. In this sense they function in a positive rather than a negative way."[42] Winograd and Flores's argument underscores the important work that net artists can perform by rendering "accidents."

These highlighted and simulated failures encourage the viewer to more carefully attend to the functional and aesthetic properties of the Internet. However, another group of spectators can never engage with this political aesthetic because its codes remain incomprehensible or invisible.

jodi

The artists Joan Heemskerk and Dirk Paesmans, who collaborate on Jodi, produce an aesthetic of failure by intentionally misusing the properties of html. They quote such common website blunders as improperly written html, broken forms, and malfunctioning java. When it first appeared on the web, this work produced a number of productive conversations on listservs about the parameters of net art. The work was particularly challenging because spectators had to visually confront a version of web programming:

> We use certain elements, like a virus, whether a virus is present, or whether things go wrong with somebody's "cache", somebody's personal computer. A lot of these elements are collages of things that are found on the net. The natural environment of us, of Jodi, is the net and you can find a certain condensed form of the net in Jodi.[43]

Heemskerk and Paesmans disassociate Jodi from an art context by describing the Internet as its "environment."

Jodi has disrupted the familiar aspects of web pages by literally overwriting them with all sorts of incomprehensible material. Part of this material is the support code for all web pages that has now been revealed to the spectator. On the web, this code is masked and yet also available through the use of the browser's "Page Source" menu option, which allows the spectator to see the html for any given page, or through error messages and other malfunctions, which make the programming of any individual site visible. Jodi's work suggests that the usual structure of the web has somehow been turned around. This can produce a kind of panic or trauma in the spectator who mistranslates these texts and believes that the computer has crashed. When following links from the Jodi site, the spectator is likely to misidentify coding errors and other glitches as part of Jodi's project. Through this process, the spectator is encouraged to read all web material in a different way after engaging with the Jodi site.

Jodi's work rejects a literal reading of html and print media in favor of a more visual presentation of text. Blocks and shaped units of words as well as other aspects of the web are offered up for the spectator's aesthetic contemplation. The revealed snippets of html on various Jodi sites suggest that the documents are transparent. However, spectators who are not familiar with html or who cannot imagine why a web page would intentionally be written "wrong" will fail in their contemplation because the underlying content layers are not accessible to all viewers:

> *Jodi.org*'s pulsing green and black blankness is not so blank as it seems, that is; one just needs to know where to look. In the browser's tool bar menu, there is a command to view "Document Source." The source code comes up as a text document, and what is revealed is that there is a whole layer of pictorial, ASCII text art "below" the surface of *jodi.org*.[44]

Jodi's work is as much about blindness as it is about visibility. It operates by shifting the spectator between confusion and comprehension:

> We get a lot of email. In the first couple of weeks after we put up the site we got a lot of complaints. People were seriously thinking that we made mistakes. So they wanted to teach us. They sent us emails saying: You have to put this tag in front of this code. Or: I am sorry to tell you that you forgot this or that command on your page.[45]

Jodi suggests that some spectators are unwilling to give up certain forms of programming logic and control. Ironically, it is Jodi's work that encourages these spectators to perform such "spectatorial limitations." These spectators may be alienated or they may eventually be inculcated into the codes of net art and read web materials differently. In either case, satisfaction in navigating Jodi's site is unfortunately based on the knowledge that such spectators fail to comprehend. Jodi and some other net art works, perhaps unintentionally, operate by creating an "inside"

and "outside" online in the same way as such categories as "newbie" and "guest" consolidate power in virtual communities by labeling users who are not a part of the system.

Readings of Jodi's site as confusing or error-riddled code are certainly suggested by the front page of *%20Wrong*, which greets the viewer with a 404 message. It evokes the common web error message "404 Error – File Not Found" that occurs when a user tries to access a file that is not available. The 404 message usually marks the end of a "path" or the termination of the user's progression through a series of pages and links. However, in Jodi's work the 404 message is on the first page of their *%20Wrong* site and thus marks the beginning. The spectator who detects the link can access the site despite the error message but has been warned that proper files, clearly marked links, and exact meaning are not available "within."

There are a number of sites that explore the history, aesthetic, and collect unusual versions of 404 messages.[46] The codes of the web have become so established that most of these sites refer to certain 404 messages as "classic." This suggests that 404s are an integral part of the web. Stuart Moulthrop argues that 404 error messages "may be the most profound thing one can say about the World Wide Web – the best representative for all its shifting multiplicity."[47] These 404 messages act as a stand-in for the larger structure of the web where addresses and styles are temporary. Sarah Papesh's 404 message advises, "Oops! You didn't find the file you were looking for, but LOOK, here's all of those socks you lost in the clothes dryer!"[48] She implies that 404s provide a substitute for the expected material at the same time that they remind us about what has been lost.

Jodi's, Papesh's, and other designers' error messages evoke loss or a missing gap in the web. They highlight the ways that the system functions and malfunctions. Speaking about hypertext, Terry Harpold argues that the navigation of links and paths "presumes displacement, separation and loss, departures and farewells."[49] The missing gaps that Jodi foregrounds and the potentially melancholic sense of absence that they evoke are a crucial part of the Internet. Absence, according to Derrida and other writers, is also an aspect of writing.[50] There is the "absence of the sender, the addressor from the marks that he abandons, which are cut off from him and continue to produce effects beyond his presence and beyond the actuality of his meaning, that is, beyond his life."[51] Online texts contain and intensify these absences by making it more difficult to locate authorship or even articulate the physical location of the text.[52]

The sense that something is missing does not necessarily have to produce a completely negative experience. The 404 error messages and other kinds of disappearances that happen online may offer an erotic of the medium. Roland Barthes suggests that the "intermittence of skin flashing between two articles of clothing (trousers and sweater) between two edges (the open-necked shirt, the glove, and the sleeve); it is this flash itself which seduces, or rather: the staging of an appearance-as-disappearance."[53] Versions of this online erotic flickering, such as the downloading of web pages, the delivery of sequential webcam images, the flashing of banners, the occasional staccato of Flash images, and the qualities of the screen, are a significant part of online spectatorship and may keep users engaged because they are always waiting for more.

There are also other kinds of intermittence online. N. Katherine Hayles argues that information technologies create "*flickering signifiers*, characterized by their tendency toward unexpected metamorphoses, attenuations, and dispersions. … When a text presents itself as a constantly refreshed image rather than a durable inscription, transformations can occur that would be unthinkable if matter or energy, rather than information patterns formed the primary basis for the systemic exchanges."[54] However, there are also ways that these absent and shifting elements stabilize and even become a form of online materiality. The highlighted error messages by Jodi and 404 fan sites change disappearances into appearances. They reconfigure the non-site of incorrectly typed addresses and missing material into desired destinations.[55] With this restructuring of the 404, spectators see something that is meant to inform them that there is nothing there. This produces a significant rift

between the intended conventions of the web and the ways that this material is read by some spectators.

There are alternative renditions of many Jodi projects. A version of the web-based *%20Wrong* piece on the Rhizome site presents a completely different opening page.[56] In this piece, the processes of failure and breakdown are evoked by the flickering background that abruptly shifts from black to gray, the "Transfer interrupted!" message, the visibility rather than functionality of certain sections of html code, the "accessDeniedPage" warning, the malfunctioning forms, and the "%Diconnecting%Host%20wrong.htm" notice at the bottom of the page. Failure, or the spectator's inability to identify Jodi's work, also occurs because its position as art was repressed. As Heemskerk and Paesmans argue, there is "no 'art'-label on it." However, Jodi's work also does not follow the conventions of web design, which "is not about art, it's about making money. To make money, you don't want to design a site that might confuse someone."[57]

The work of net artists like Jodi is linked to recent feminist theory through its tactics of disorientation, ideological failure, and a rupturing of the "law." Judith Butler argues that repetition and a failure to master certain identity categories may offer the "other" a unique form of agency:

> My recommendation is not to solve this crisis of identity politics, but to proliferate and intensify this crisis. This failure to master the foundational identity categories of feminism or gay politics is a political necessity, a failure to be safeguarded for political reasons. The task is not to resolve or restrain the tension, the crisis, the phantasmatic excess induced by the term, but to affirm identity categories as a site of inevitable rifting, in which the phantasmatic fails to preempt the linguistic prerogative of the real.[58]

Butler calls for the rifting of categories as a way of reconceptualizing identity politics.[59] She continually repeats or rehearses aspects of certain arguments until they fail. Net artists also use exacting repetition of technologies, sites, and styles and the failure to master craft as a way of reworking traditional ideas about artistic identity.

Butler's proposal and the work of net artists like Jodi suggest a postmodern celebration of fragmented identities. Butler wants to "resist both the claim that feminism is being 'ruined' by its fragmentations … and the claim that fragmentation ought to be overcome through the postulation of a phantasmatically unified ideal."[60] These practices are antithetical to "existential literature and psychoanalytic theorizing" that presumes that the divided self is "in need of unification and reintegration."[61] Jodi employs failure for its political and disrupting effects rather than as a way of achieving a more readable and coherent work. There is rarely a move to achieve a reintegration of sites or identities.

However, Jodi and other net artists have disrupted their own politics by constantly employing and repeating ruptures, breakdowns, and confusion so that they are instituted as a more formal aesthetic. So many net artists now work in this way that it has become a conventional web strategy:

> Immitators of the Jodi style abound. From Hotwired's recent RGB feature (www.hotwired.com/rgb/opp/++++++++++++++++/) to the design group e13 (www.e13.com), from San Francisco's superbad.com to Brooklyn's experimental performance space Fakeshop (www.fakeshop.com), net art these days is taking a giant step away from print-oriented graphic design and toward an aesthetic of the machine, of code, of the crash.[62]

In discussions about net art, on lists like Rhizome and nettime, Jodi is often used to contextualize other net art works. There has also been a tendency to collapse Jodi's name with other rupture-oriented net art. Eryk Salvaggio's *Absolut Net.Art* project, which included a Jodi simulation, has often been mistaken for Jodi's work. His "favorite comment in response to the work was: 'I don't care who made it, its still JODI.'"[63] Salvaggio's work and such comments underscore the problems with establishing authorship and specific categories online but they also suggest that artistic originality has been transmuted into a style rather than overturned.

Jodi's processes of confusion, which resist such things as legibility, linear reading, conventional culture, "high" art, and authorial mastery, are related to avant-garde art practices like Dada and Surrealism. However, like these other practices, Jodi's constant association with net art has institutionalized and legitimized the work.[64] The Rhizome site describes *%20Wrong* as "A nice tidbit from the kids who invented net.art."[65] By being anointed as "inventors," Jodi is incorporated back into a series of art discourses, net art is provided with a lineage, and its worth is validated. Jodi's work becomes "a literal origin, a beginning from ground zero, a birth" and originality and aura are recreated online even though the Internet setting is still conceived of by some as a site in which mechanical and digital reproduction have destabilized the very possibility of originality.[66] Spectators have become familiar with and accepted the "rightness" of an aesthetic that was once wrong and relied on the strange. The aesthetic of failure has faltered because critical distance can no longer be maintained with the incorporation of this material into the art canon.

peter luining

Peter Luining produces an equally troubled aesthetic of failure by juxtaposing and misquoting computer games and post-painterly abstraction in *D-TOY 2.502.338*.[67] This work presents the spectator with a series of colored squares that move inside a larger square grid. The movement of the square units is accompanied by a pulsating noise that seems to be produced by their progression. The color, composition, and the accompanying sound change when the computer spectator "catches" and "clicks" on the moving elements.

Luining establishes and denies the work's formalism. For instance, the grid-like arrangement and hard-edged quality of the colored units evoke post-painterly abstraction, but this formalist aspect is disturbed because the underlying "material" is code rather than paint. A white background emphasizes the flatness of the image. Yet this rendering of flatness and computer immateriality is contradicted by the sound effects that accompany the shape's progression through the composition. In one part of the sequence, each shift of the units within the maze-like structure produces a reverberating sound as if the moving square is hitting against hollow walls. In another sequence, a static-like sound suggests that the moving square "object" is scraping along an uneven channel that remains invisible to the eye.

It may be difficult for the spectator to establish a relationship to these works or to read them "properly" because of these conflicting messages. In many of his works, Luining contradicts the viewer's visual and auditory perceptions. Interestingly, Luining dismantles the spectator's ability to determine things by actually allowing a high level of engagement or "interactivity." This contradicts various theories, from Barthes's work on the writerly text to Landow's arguments for hypertext, which imagine that reader agency occurs with the ability to control the materials. Instead, the work renders a bodily disorientation in which signals can no longer be taken as reliable.

Despite this problem, the work continues to provide the spectator with varied effects. Its frenetic sound and speed seem to duplicate the intense fascination and immersion of computer games. Luining underscores this connection by calling many of his pieces "toys." Their design, which lets spectators manipulate simple abstract representations as if they were objects, may seem to suggest games like Pong. However, in Pong the user identifies the white "blips" as paddles and ball, and Luining's work does not make any such stable references.

The limited instructions provided on the *D-TOY 2.502.338* site may be called a "manual," which suggests that this is a game with rules and parameters, but there is no detailed explanation of the game play:

> manual: click on the moving blocks
> for maximum effect: put monitor brightness 50% & contrast 50%
> soundvolume 20%

The aesthetic of Luining's instructions, with its focus on terse commands and numerical adjustments, removes his works from the realm of art. Yet, his "toys" fail to deliver a clear set of rules or a standard form of game play. There is no apparent success achieved through interaction,

clear directions about the ways to navigate, or obvious ending. Instead, each of these quotations acts as a false clue or misdirection. The shifting functions of the work, in which it can be read alternately as a form of art or computer game, suggest the computer technique of morphing, or the "transformation of one image into another by computer."[68] The spectator's decision to engage with one of the conflicting elements effects the reading of the work.

The work's function is purposefully kept in an unfixed state by the hosting site. Both Luining's *D-TOY 2.502.338* and Samyn's *The Fire from the Sea* are part of the Lifesaver project that is sponsored by the Dutch television station VPRO:

> Lifesavers are small interactive programs exclusively made for the Internet, and aim to occupy the user for approximately five minutes. They are situated somewhere between popular and avant-garde culture, and are created by young producers who operate in the hazy area between media, art, and subcultures.[69]

These pieces, like Jodi's works, are not fully identified. However, they do have some physical existence because they are represented by a "half-page graphic design in the VPRO television guide" that is designed by the producer and appears when the Lifesaver is released.

Luining's design is worth noting for the way that it depicts the spectator.[70] In the ad, an abstracted female figure contemplates a large straight-edged abstract work so that only her back is revealed. This depiction of aesthetic consideration and transcendent contemplation, with the spectator waiting for her revelation in front of the work of art, is troubled in a number of ways. The originality of Luining's image and the possibility of online authenticity are disturbed because the image seems to reference a female figure from Oskar Schlemmer's *Bauhaus Stairway*, *c.*1932. In Schlemmer's work, the female figure shifts her body in space as she navigates new architectural and educational environments. However, Luining's figure is pushed to the periphery of the composition rather than centered in front of the work. She appears to be embedded in an abstract "art work" that is like Luining's compositions. This suggests that immobility is an aspect of Internet spectatorship and engagement with Luining's toys.

Luining's depicted spectator is intimately close to the contemplated object. The computer user is also bound to the computer screen rather than repeating the ideal spectatorial and critical distance of traditional Hollywood film. Mary Ann Doane has suggested that women film spectators are often arranged in intimate connection with their own images on the screen.[71] If nearness to the screen is a feminine position then computer users are feminized. "Problems" with the gender position of computer users are also underscored by the portrayal of male nerds, geeks, and other obsessive computer users as abnormal and not "appropriately" masculine.[72]

It seems unlikely that this was Luining's intent but it may be possible to reprieve the negative effect of women's closeness to their bodies and representations based on the ways that this image and new technologies function.[73] Unfortunately, it seems likely that computer spectatorship will become a more stable experience as Internet and computer technologies become an ever more central aspect of culture. Before a newly solidified form of empowered male spectatorship is facilitated through closeness, there are some unique opportunities to intervene in the ways that certain versions of gender, race, class, and sexual difference are produced through spectatorship. Luining's work might contribute to this by showing the spectator how interactivity does not necessarily lead to an empowered position.

More traditional ideas about art, like that of the individual and unique work, are also disturbed by the ways that *D-TOY 2.502.338* can be manipulated. The "final" work is presented as a discrete abstract composition that is framed against a white ground, but the work's edge or limits become increasingly hard to delineate as the spectator interacts. The work can be changed into a series of similar pieces through the "zoom in," "zoom out," "play," and other Flash Player menu options. The zoom in option produces a series of micro works, since it is clear that this is an enlargement of a section, which are the same size as the first view. These are both details and completely different works in which each view

becomes an abstract composition reminiscent of Kenneth Noland's or Ellsworth Kelly's paintings. Yet these views have no autonomy outside the spectator's manipulation.

The possibility of identifying an original or unified structure is destabilized by the ways that each of these parts becomes a whole that is centered within the browser window. The browser-based setting is like André Malraux's "Museum without Walls," which is produced through photographic books and "has created what might be called 'fictitious' arts, by systematically falsifying the scale of objects; by presenting oriental seals the same size as the decorative reliefs on pillars, and amulets like statues."[74] In the Internet setting, there is no constancy to a work's height or depth. The dimensions of the screen and other settings, rather than the more typically stable aspects of the work, determine the ways that viewers see things online.

Online art is largely reliant on such display techniques as the framing operations of browser windows and already established museum vernaculars for its context. Of course, these aspects may also cause a work's coherency to fail. Luining tries to displace the stability of his site and the parameters of his art by changing the display technique instead of the work:

> I don't think it is exciting always to present my work in the same way. By often presenting the work anew, by adding variety, one gets a different experience. When you visit my site in two weeks, you see the work presented completely differently, so to speak. I think it is important to not always present work in the same way, even if the work is the same.[75]

If net art is often difficult to detach from its supporting display structure, in the same way that site-specific installations are sometimes difficult to distinguish from their surroundings, then presenting the work differently allows Luining to destabilize its constancy. He cites but does not deliver the expected conventions for art and computer games. The ability to read these works as original and authentic is disturbed by the quotation of disparate styles. Luining puts pressure on a variety of irreconcilable aesthetic styles or "movements" so that their codes fail. His aesthetic may avoid the canonization and institutionalization of other online works if the display mechanism through which spectators encounter these works continues to evolve. However, the spectator's ability to engage with these works through other sources suggests that this aesthetic of disorientation, misquotation, and spectatorial limitations is also being incorporated into a net art canon.

michaël samyn

Michaël Samyn's *The Fire from the Sea* is more visually complex and painterly than Jodi's or Luining's work.[76] Its depiction of running children, walls of fire, and fluttering butterflies appears to be aligned with a romantic vision and a traditional kind of art production. However, Samyn's work also acknowledges its means of delivery and critiques the properties of the computer. *The Fire from the Sea*, like Jodi's work, begins with a warning. "This piece is not user friendly and deliberately counter-intuitive: roll over to load, click to unload. It can even bring a fast computer to its knees. That is exactly the point."[77]

Such warnings suggest the ways that the spectator's physical body is impeded throughout *The Fire from the Sea*. Moulthrop indicates that spectatorial disturbances are a common occurrence in hypertexts:

> "Profound shock" could describe the conditions from which these texts emerge as well as the effect they address, and perhaps aim to reproduce. Hypertext may be a technology of trauma, reflexively figuring its own assault on the textual corpus in terms of insults to the physical body.[78]

A kind of spectatorial trauma is produced in Samyn's work since he does not let the spectator master the interface. His instructions are unreliable because the spectator must "click" rather than "roll over" the word "Enjoy" in order to engage the piece and its promised programming. Yet some spectators insist on believing that his instructions provide the correct way to access the work.[79] This can lead to a frustrated reloading of the opening screen, which is particularly painful when using a slow computer and connection.

Samyn and his partner Auriea Harvey emphasize the unpleasant or even traumatic encounter of the spectator with interfaces in their *Sixteenpages* search engine.[80] In this net art work, the user must manipulate an avatar through a maze and "work" in order to gather information. When this representation of a fleshy body is improperly steered into a "wall" it makes strange sounds of pain or despair. This may provide a gripping reinterpretation of the user's interaction with interfaces.

Samyn's work does critique and even occasionally sabotages the expectations of spectators with expensive technologies and high-bandwidth access but his work can be frustratingly inaccessible to spectators with outdated technologies and more limited Internet access. For instance, *The Fire from the Sea* has a tendency to stall slow computers and dial-up connections even though it can also slow computers with faster processors and connections. Thus, his critique and resistance to a certain Internet and technology economy is most readily available to those who are a part of that system.

The Fire from the Sea, unlike Jodi's and Luining's work, employs a fairly traditional form of overlapping translucent layers and a dark ground as a way of rendering depth. The browser window acts as a frame through which the spectator gains access to this spatial world. Points of light seem to render a night sky that is seen through the browser/window. However, the spectator is forced to contend with the means of delivery as well as the content. The spectator must engage with the work's illusionistic window onto another world, which is a familiar painting convention and "reads on the picture plane in correspondence with the erect human posture," and the computer's mouse navigation and menu-based controls, which suggest different bodily orientations.[81] A version of Leo Steinberg's "flatbed" subject position is produced by these different elements. This flatbed position, which disorders the traditional vertical relationship between viewer and art object, offers new spectatorial positions such as floating over flat icons and topographical maps. However, the difficulties of the interface and the slow processing speed mean that the flatbed position can also generate fractured, disabled, or even illegible views.

The spectator cannot access the coherent narrative that Samyn's animation might imply or even manipulate the elements according to a familiar set of computer codes. Of course this displacement has already been foregrounded by his warning at the beginning of the piece. Rolling over what seems to be a translucent torso at the beginning of the work allows the spectator to manipulate a series of visual and sound elements, which includes a tangle of octopus legs. However, this "bodily" control quickly changes into a representation of a throbbing organ-like mass of flesh that is covered in blood red spots. This is one of the many failures and "insults" to the corporeal body that this work evokes. The pulsing image suggests the catastrophic toll of AIDS more than it does computer viruses or codes. It is only by "touching" each mark, engaging on some metaphorical level with the viral body, and changing its sores from dark burgundy to bright red that the spectator gains some level of control over the piece.

The bottom register of marks, which function as "buttons," provide a fairly clear set of effects that include (from left to right) clouds, a pair of woman's lips, butterflies, and a wall of flames. A layered soundtrack, which includes ocean noises and a woman's slow melodic singing, accompanies these images. The date stamp on some of the images, which evokes the low-tech of camera snapshots, contradicts the complex visual and aural effects. Playing children, fluttering butterflies, and other captured instamatic moments may seem to provide the spectator with a nostalgic past, but navigating the buttons means that an animated wall of flame or scorching sun often burns out these possibilities. The nuanced qualities and the non-narrative composition encourage navigation without providing the spectator with a final destination.

Through such effects, Samyn renders both aesthetically attractive compositions and some kind of critique of the medium. He works to keep himself between fixed and expected positions by describing himself as a "bad designer and an ex-artist."[82] Samyn and Harvey have often resisted their individual authorial role by identifying their combined projects as entropy8zuper.org.

Samyn's work borrows from the computer vernacular but it is critically and aesthetically positioned in a slightly different way than the work of many other net artists. He uses these differences to distinguish his work and to establish a different position for his production. In an interview with Alex Galloway of Rhizome, Samyn notes that it is strange to "be appreciated by someone @rhizome. We always have the feeling that Rhizome is interested in a totally different kind of Art, you know the kind of art that *looks* conceptual and only uses code as an aesthetic element and is never about anything but itself."[83]

Samyn's critique of net art suggests that politics is always linked to an aesthetic. He states that during the online reaction to the Communication Decency Act "when every website made its homepage black as a protest against censorship, I made the homepage of FFF black too with the text 'This page is black as a result of aesthetic considerations.'"[84] What Samyn's critique does not address is that aesthetic strategies can also enable political projects. Samyn and "the typical 'blinking pixel' net artists abuse this technology" and embrace failure.[85] His critical project may be to use these technologies "to make something poetic and beautiful that is about human things rather than machines."[86] However, his opening warning in *The Fire from the Sea* suggests that he is also engaged with the aesthetic of code. Samyn's aesthetic of failure, including his misuse of computer conventions, clearly engages with and resists the aspects of other net art.

conclusion

In the work of Jodi, Luining, Samyn, and a variety of other net artists, clear navigational markers and links are suspended in favor of moving the spectator towards a cacophony that, at least for some spectators, is never fully realized. Turning the ruptures in this work into more elaborate site-wide, browser, or system failures is a problem because at least some spectators must be engaged for net art to maintain an audience. Net art works quote and perform failures while also keeping a precarious relationship with functionality. The net art works discussed here contain a version of Roland Barthes's punctum. These works contain "that accident which pricks me (but also bruises me, is poignant to me)."[87] However, the poignancy and pain of interacting with individual works eventually dissipate as the spectator grows acclimated to the site and discovers the highly constructed aspects of the failures. This may even be a necessary aspect for net art to function.

However, Barthes has suggested that no punctum can be intentionally produced, persist over time, or be shared by viewers. In the photographs that he discusses in *Camera Lucida*, the shocks from individual aspects of the photos eventually disappear. Some other point of interest may replace these but there is no way to recapture the flashes of blindness and confusion. Changing sites and aspects of the work can keep the spectator in a more prolonged period of blundering. However, as the spectator becomes more familiar with the work, clear and less critically oriented navigation probably replaces an attention and consideration of particular interface tools and representations. It is ironic that net art most clearly engages with "accomplished" Internet users and those who are familiar with art conventions. These spectators can find an entrance point and understand the quotations of the sites, and yet it is just these spectators who will probably quickly decode all of the failures that these works perform. It seems likely that the spectators who engage are most safe from the destabilizing effects of these works.

All of this suggests a problem with the kinds of failures that occur in this work and the forms of repetition through which they are achieved. Judith Butler indicates that repetition can be used to unravel dominant cultural beliefs. However, the forms of repetition that occur in these net art works and the ways that they have become institutionalized suggest that repetition may also reinstall traditional categories and forms of power. This problem with the politics of repetition is certainly indicated by the ways that Jodi's repetitions have become a stylistic convention rather than encouraging further interrogations of programming and technology.

Repetition of particular phrases and ideas (which may admittedly be different from Butler's

repetition of the law) also negates the political messages in other net art works. For instance, Jennifer Ley's *Catch the Land Mine!* quotes a click and catch form of online ad campaign to call attention to the catastrophic loss of life and body parts that occurs because of the proliferation of land mines.[88] However, the initially disturbing effect of being blown up after trying to "catch" a mine is not intensified with repetition. The reoccurrence of the same page and ironic texts about our poor sense of body image seem to cause apathy rather than concern after any lengthy engagement.[89]

There are certainly situations in which repetition can be a critical strategy; however, the ongoing viability of such instances remains unclear. According to Rose, the trends in recent media art, such as a focus on "insufficiency" and "fallible corporeality," is "an acknowledgment of the limits of performativity."[90] Rose suggests that Butler's performative repetition is not a successful strategy for producing politically productive works. The relationship between disruptive reiteration and reinscription needs to be more carefully articulated. In the meantime, the problem of ongoing repetition should warn political groups and theoreticians against solely organizing their work around such effects.

Despite the critical writings about the political effects of failure, this strategy also presents some problems. The ongoing recognition of net art online and the interest of many traditional art institutions in this form indicate that the aesthetic of failure will become increasingly more stylistic. The institutionalization of the aesthetic of failure as a common kind of online style threatens to compromise its "wrongness" and provide instructions for spectators who previously engaged with the strange and unfamiliar properties of these works. The challenge for net artists, software producers, technology critics, and spectators may be to find new critical strategies rather than relying on repetition to highlight the ways that technologies have been constructed. Perhaps with such effects and aesthetics we can continue to read carefully as well as differently.

notes

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1 Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction" in *Illuminations*, ed. Hannah Arendt (New York: Schocken, 1983).

2 James A.H. Murray, Henry Bradley, W.A. Craigie and C.T. Onions (eds.), *Oxford English Dictionary*, vol. I (Oxford: Clarendon, 1961) 148.

3 "Xrefer-Aesthetic," *The Thames and Hudson Dictionary of Art Terms* (London: Thames, 1984), available <http://www.xrefer.com/entry.jsp?xrefid=647986&secid=.->, 24 May 2001.

4 Mary Devereaux, "The Philosophical Status of Aesthetics," available <http://www.aesthetics-online.org/ideas/devereaux.html>, 24 May 2001.

5 Sarah Worth, "Feminist Aesthetics" in *The Routledge Companion to Aesthetics*, eds. Berys Gaut and Dominic McIver Lopes (London and New York: Routledge, 2001) 437.

6 Hal Foster, "Postmodernism: A Preface" in *The Anti-Aesthetic: Essays on Postmodern Culture*, ed. Hal Foster (Port Townsend, WA: Bay, 1983) xv.

7 Immanuel Kant, *Critique of Judgment*, trans. J.H. Bernard (New York: Haffner, 1951).

8 Some critics have suggested that there are political implications to the terms that are used to describe online art works. Josephine Bosma argues that "replacing the term 'net art' by 'web art' causes a negligence of art history within a

political and economic environment. The radical implications of net art are replaced by the much less threatening aspects of web art." Josephine Bosma, "Text for Moscow: Between Moderation and Extremes. The Tensions Between Net Art Theory and Popular Art Discourse," *Switch* 6.1, available <http://switch.sjsu.edu/web/v6n1/article_b.htm>, 19 July 2000.

9 Not all of these lists approach the issue of net art in the same way. Josephine Bosma has argued that nettime has largely evacuated net artists from its forum and disrupted critical exchanges. "Now that nettime has chosen to mostly close the door to art, the development of net art has lost a central point for critical cross disciplinary thought from a multicultural perspective." Josephine Bosma, "Text for Moscow: Between Moderation and Extremes. The Tensions Between Net Art Theory and Popular Art Discourse," *Switch* 6.1, available: <http://switch.sjsu.edu/web/v6n1/article_b.htm>, 19 July 2000.

10 Brett Stalbaum also argues that it "is both productive and ironic that these sites turn to a specific historical manifestation of modernism as an escape avenue." Brett Stalbaum, "Conjuring Post-Worthlessness [excerpt]," online posting, 20 Aug. 1999, Rhizome, available <http://rhizome.org/object.rhiz?1543&q>, 31 July 2000.

11 Peter Saint-André, "The Ism Book: 'F,' The Ism Book: A Field Guide to the Nomenclature of Philosophy," available <http://www.monadnock.net/ismbook/F.html#Formalism>, 31 July 2000.

12 Steve Dietz, "Why Have There Been No Great Net Artists?," *Webwalker* 28, 23 Apr. 2000, available <http://www.walkerart.org/gallery9/webwalker/index.html>, 23 July 2000.

13 Jay David Bolter and Richard Grusin, "Digital Art" in *Remediation: Understanding New Media* (Cambridge: MIT P, 1999) 142.

14 Moscow WWWArt Centre, "WWWArt Award," available <http://www.easylife.org/award/>, 23 July 2000.

15 Vuk Cosik and Alexei Shulgin, "Who Drew the Line?," *Net Criticism, ZKP2 Proceedings*, June 1996, available <http://www.nettime.org/desk-mirror/zkp2/theline.html>, 23 July 2000.

16 Benjamin Weil, "Untitled (äda'web)," *Walker Art Center: Gallery 9*, available <http://www.walkerart.org/gallery9/dasc/adaweb/weil.html>, 2 Aug. 2000.

17 Rhizome, "Rhizome.org Info," available <http://rhizome.org/info/>, 22 July 2000. Through Rhizome's search function the user can also gain access to its artbase:

> The Rhizome ArtBase is an online archive of Internet art projects. The goal of the Rhizome is to preserve Internet art projects for the future, and to provide a comprehensive resource for those who are interested in experiencing and learning more about Internet art.

Rhizome, "Rhizome ArtBase: The Net Art Resource," available <http://rhizome.org/artbase/>, 22 July 2000.

18 Luther Blissett, "01001011101101101.ORG--art.hacktivism," online posting, 26 June 1999, Rhizome, available <http://rhizome.org/cgi/query.cgi?a=query&q=jodi&f=&start=10&target=12>, 17 July 2000.

19 Benjamin, "The Work of Art" 221.

20 David Ross, as quoted in Reena Jana, "David Ross: Director, San Francisco Museum of Modern Art," *Flash Art International* Jan./Feb. 1999: 34.

21 For a press release from the first SFMOMA prize in May 2000 see SFMOMA, "SFMOMA Press Release," available <http://www.sfmoma.org/info/press/press_webby.html>, 5 Aug. 2000.

22 SFMOMA, "SFMOMA Press Release," available <http://www.sfmoma.org/info/press/press_webby.html>, 14 June 2001.

23 Art.Teleportacia, "FAQ," available <http://art.teleportacia.org/art-ie4.html>, 17 July 2000. Artcart offers works by Peter Luining and a number of other net artists. Artcart, "Artcart – Be Avantgarde – Buy Net.art," available <http://artcart.de/>, 3 Aug. 2000.

24 Douglas Crimp, *On the Museum's Ruins* (Cambridge and London: MIT P, 1993) 112.

25 Bill Nichols, "The Work of Culture in the Age of Cybernetic Systems," *Screen* 29.1 (1988): 23.

26 Discussions about this issue have occurred at a SFMOMA panel on net art as well as in other forums:

> One of the most forward-thinking SFMOMA curators, Betsky came under fire for his

"butterfly-pinning" method of archiving websites, in which he burns them onto a CD and renders links dead. While Betsky said that the work maintains its beauty without active links, artists and new media enthusiasts in the audience expressed their discontent with giving privilege to form over function.

Marisa S. Olson, "Weighing In on Net Art's Worth," *Wired News* 15 May 2000, available <http://www.wired.com/news/culture/0,1284,36320,00.html>, 4 Aug. 2000.

27 Art.Teleportacia, "FAQ," available <http://art.teleportacia.org/art-mac.html>, 9 Sept. 2000.

28 Art.Teleportacia, "FAQ," available <http://art.teleportacia.org/art-ie4.html>, 17 July 2000.

29 Michaël Samyn, as quoted in Art.Teleportacia, "Under Construction," available http://art.teleportacia.org/art-ie4.html>, 17 July 2000.

30 For a discussion of this issue see Luther Blissett, "0100101110101101.org--art.hacktivism, " online posting, 26 June 1999, Rhizome, available <http://rhizome.org/cgi/query.cgi?a=query&q=jodi&f=&start=10&target=12>, 17 July 2000.

31 This site is a parody of Britannica.com. 0100101110101 101.org, "Britannica.com," available <http://www.britannica.com/bcom/original/article/0,5744,8800+2,00.html>, 2 Aug. 2000.

32 "Xrefer-machine aesthetic" in *Bloomsbury Guide to Art* (London: Bloomsbury, 1996), <http://www.xrefer.com/entry.jsp?xrefid=439085&secid=.->, 24 May 2001.

33 Free On-Line Dictionary of Computing (FOLDOC), "Surfing from FOLDOC," available <http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?surfing>, 14 June 2001.

34 George P. Landow, *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology* (Baltimore: Johns Hopkins UP, 1997).

35 Landow, *Hypertext 2.0* 118. Of course these linkages are also an attempt to relate computer-based works to more canonical forms of production.

36 Jonathan Crary, "Eclipse of the Spectacle" in *Art After Modernism: Rethinking Representation*, ed. Brian Wallis (New York: New Museum of Contemporary Art, 1984) 290.

37 Crary, "Eclipse" 291.

38 See, for instance, William Gibson, *Neuromancer* (New York: Ace, 1984); Neal Stephenson, *Snow Crash* (New York: Bantam, 1992); and Bruce Sterling, *Holy Fire: A Novel* (New York: Bantam, 1996).

39 Lee Bul, "Beauty and Trauma," *Art Journal* 59.3 (2000): 106.

40 For instance, the work of James Der Derian highlights such "accidents" as "A U.S. EP-3E Aries II aircraft on a routine reconnaissance flight is in a mid-air collision with a Chinese fighter plane" and a "CIA-contracted surveillance plane [that] detects a suspicious plane flying over the Amazon and alerts the Peruvian Air Force, which shoots down a Cessna carrying not drugs but U.S. Baptist missionaries and their two children." James Der Derrian, "Global Events, National Security, and Virtual Theory" in *Information, Technology, and Society: Proceedings,* Institute for Advanced Study, 8–10 June 2001, 2.

41 Christine Rose, "The Insufficiency of the Performative: Video Art at the Turn of the Millennium," *Art Journal* 60.1 (2001): 29.

42 Terry Winograd and Fernando Flores, *Understanding Computers and Cognition: A New Foundation for Design* (Reading: Addison Wesley, 1985) 77–78.

43 Dirk Paesmans, as quoted in Josephine Bosma, "Interview with Jodi," online posting, 16 Mar. 1997, nettime, *The Beauty and the East, ZKP4 Proceedings*, May 1997, available <http://www.ljudmila.org/nettime/zkp4/38.htm>, 23 July 2000.

44 Peter Lunenfeld, "The World Wide Web: In Search of the Telephone Opera" in *Snap to Grid: A User's Guide to Digital Arts, Media, and Cultures* (Cambridge: MIT P, 2000) 84.

45 Jodi, as quoted in Tilman Baumgärtel, "Interview with Jodi," *Telepolis* 10 June 1997, available <http://www.heise.de/tp/english/html/result.xhtml?url=/tp/english/special/ku/6187/1.html&words=Baumgaertel>, 19 July 2000.

46 See, for instance, "404 Error," available <http://www.sendcoffee.com/minorsage/404error.htm>, 31 July 2000; Jenni Ripley, "404 Research Lab," Plinko.Net, available <http://www.plinko.net/404/>, 31 July 2000; and "404 Not Found Homepage," available <http://www.mindspring.com/~isixtyfive/404page/404.html>, 31 July 2000.

47 Stuart Moulthrop, "Error 404: Doubting the Web" in *The World Wide Web and Contemporary Cultural Theory*, eds. Andrew Herman and Thomas Swiss (New York: Routledge, 2000) 261.

48 Sarah Papesh, "sarahpapesh.com:: online portfolio:: 404," available <http://sarahpapesh.com/404.html>, 31 July 2000.

49 Terry Harpold, "The Contingencies of the Hypertext Link," available <http://www.lcc.gatech.edu/~harpold/papers/contingencies/index.html>, 5 July 2001.

50 For a discussion of this see Terry Harpold, "The Contingencies of the Hypertext Link," available <http://www.lcc.gatech.edu/~harpold/papers/contingencies/index.html>, 5 July 2001.

51 Jacques Derrida, "Signature Event Context" in *Margins of Philosophy*, trans. Alan Bass (Chicago: U of Chicago P, 1982) 313.

52 What we read isn't on the screen, under the glass, or distinctly located on the hard drive.

53 Roland Barthes, *The Pleasure of the Text*, trans. Richard Miller (New York: Hill and Wang, 1995) 10. Of course, these glimpses of flesh or webcam images can also repulse the spectator.

54 N. Katherine Hayles, "Virtual Bodies and Flickering Signifiers" in *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: U of Chicago P, 1999) 30.

55 Usually all mistyped addresses on a specific site will produce the same effect.

56 Jodi, "%20Wrong," online archive, 1 Jan. 1996, Rhizome, available <http://rhizome.org/artbase/1678/wrong.html>, 1 Aug. 2000. Other sites with versions of this work include "%20Wrong," available <http://www.502.org/404.html>, 2 Aug. 2000.

57 Vincent Flanders, "Web Pages that Suck – Bad Navigation," available <http://webpagesthatsuck.com/badnavigation.html>, 4 June 2001.

58 Judith Butler, "The Force of Fantasy: Feminism, Mapplethorpe, and Discursive Excess," *Differences: A Journal of Feminist Cultural Studies* 2.2 (1990): 121.

59 Strangely, Butler's call to performativity always seems best resolved by her own critical practice and repetition of texts.

60 Butler, "The Force of Fantasy," *Differences* 2.2: 124, n. 7.

61 David Payne, "Failure and Personal Identity" in *Coping with Failure: The Therapeutic Uses of Rhetoric* (Columbia: U of South Carolina P, 1989) 34.

62 Alex Galloway, "browser.art," online posting, 30 Jan. 1998, Rhizome, available <http://rhizome.org/cgi/query.cgi?a=query&q=jodi&f=&start=30&target=12>, 19 July 2000.

63 Eryk Salvaggio, "*Absolut Net.Art*: Project Description," online archive, 5 Nov. 1998, Rhizome, available <http://rhizome.org/object.rhiz?1690&q>, 30 July 2000.

64 Jodi, as quoted in Tilman Baumgärtel, "Interview with Jodi," *Telepolis* 10 June 1997, available <http://www.heise.de/tp/english/html/result.xhtml?url=/tp/english/special/ku/6187/1.html&words=Baumgaertel>, 19 July 2000.

65 Jodi, "%20Wrong," online archive, 1 January 1996, Rhizome, available <http://rhizome.org/artbase/1678/wrong.html>, 1 Aug. 2000.

66 Rosalind Krauss, "The Originality of the Avant-Garde" in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge: MIT P, 1994) 157.

67 Peter Luining, *D-TOY 2.502.338*, online archive, 9 Mar. 1999, Lifesavers, available <http://www.vpro.nl/data/lifesavers/10/index.shtml>, 4 Sept. 2000.

68 AllWords.com, "AllWords.com-Dictionary, Guide, Community and More," available <http://www.allwords.com/query.php?SearchType=3&goquery=Find+it%21&Language=ENG&Keyword=morphing>, 14 July 2001.

69 VPRO, "VPRO Aflevering," available <http://www.vpro.nl/lifesaversmanualuk>, 15 Sept. 2000.

70 VPRO, "VPRO Aflevering," available <http://www.vpro.nl/lifesaversmanualuk>, 20 Sept. 2000.

71 According to psychoanalytic and apparatus theory, male cinema viewers achieve an ideal spectatorial position because of their physical distance and intellectual detachment from the screen. However, female spectators are conceived as being inextricably bound to their bodily processes and tied to a version of their image within the screen. Women's nearness to the cinema image is less than ideal. According to Noël Burch, such an intimacy prevents the spectator from a comprehensive understanding:

> If he is too close, so close that his field of vision does not include the whole screen, his

> eyes must change focus as the centers of visual interest shift, and he will never be able to grasp the total visual effect created by the framed image.

Noël Burch, "Editing as a Plastic Art" in *Theory of Film Practice*, trans. Helen R. Lane (New York: Praeger, 1973) 35. Mary Ann Doane argues that it is the "opposition between proximity and distance, control of the image and its loss, which locates the possibilities of spectatorship within the problematic of sexual difference." Mary Ann Doane, "Film and Masquerade: Theorizing the Female Spectator" in *Femmes Fatales: Feminism, Film Theory, Psychoanalysis* (New York: Routledge, 1991) 22.

72 The difference between these identity positions is usually explained as "geeks must be born, nerds are made." Internet and Unix Dictionary, available <http://www.msg.net/kadow/answers/n.html#nerd>, 12 Apr. 2001. Geek is defined as "One who eats (computer) bugs for a living. One who fulfills all the dreariest negative stereotypes about hackers: an asocial, malodorous, pasty-faced monomaniac with all the personality of a cheese grater." "The Jargon Lexicon (4.2.3)," available <http://tuxedo.org/jargon/html/entry/nerd.html>, 12 Apr. 2001. Of course, these positions may now be viewed as desirable with the economic and social rise of the programmer. Films such as Hackers (Iain Softley 1995), with its portrayal of hip teenage computer users, have also changed the way that computer users are conceived.

73 I presented a longer discussion of this concept in Michele White, "Too Close to See: Men, Women, and Webcams" in *Information, Technology, and Society: Proceedings*, Institute for Advanced Study, 8–10 June 2001.

74 André Malraux, "Museum Without Walls" in *The Voices of Silence: Man and His Art*, trans. Stuart Gilbert (Garden City: Doubleday, 1953) 24.

75 Peter Luining, as quoted in Josephine Bosma, "Interview with Peter Luining." Online posting, 3 May 2000, Rhizome, available <http://rhizome.org/cgi/query.cgi?a=query&q=jo&target=12&search=+search+>, 17 July 2000.

76 Michaël Samyn often works with Auriea Harvey on their collaborative website. They won the first SFMOMA Webby Prize for Excellence in Online Art in May 2000. Michaël Samyn and Auriea Harvey, "if (1+1==1) {e87=true;};" Available <http://www.entropy8zuper.org/>, 24 Sept. 2000.

77 Michaël Samyn, *The Fire from the Sea*, available <http://www.vpro.nl/data/lifesavers/16/index.shtml>, 21 Apr. 2000.

78 Stuart Moulthrop, "Traveling in the Breakdown Lane: A Principle of Resistance for Hypertext," available <http://www.ubalt.edu/ygcla/sam/essays/breakdown.html>, 7 July 2001.

79 I have encountered this insistence more than once while presenting *The Fire from the Sea* to students at the University of California Santa Cruz. This "problem" with the instructions has also produced interesting conversations.

80 Michaël Samyn and Auriea Harvey, "sixteenpages.net," *Sixteenpages*, available <http://sixteenpages.net/>, 20 July 2001.

81 Leo Steinberg, "Other Criteria" in *Other Criteria: Confrontations with Twentieth-Century Art* (New York: Oxford UP, 1972) 82.

82 Michaël Samyn and Auriea Harvey, "*g*e*n*e*s*i*s*," available <javascript:parent.genesisF.go('biographies.html');>, 4 Aug. 2000.

83 Michaël Samyn, as quoted in Alex Galloway. Online posting, 18 Apr. 2000, Rhizome, available <http://www.rhizome.org/fresh/>, 24 Sept. 2000.

84 Michaël Samyn, as quoted in fokky, "Art and Design – An Interview with Michael Samyn," online posting, 3 Oct. 1997, Rhizome, available <http://www.rhizome.org/cgi/to.cgi?q=871>, 24 Sept. 2000.

85 Michaël Samyn, as quoted in fokky, "Art and Design – An Interview with Michael Samyn," online posting, 3 Oct. 1997, Rhizome, available <http://www.rhizome.org/cgi/to.cgi?q=871>, 24 Sept. 2000.

86 Michaël Samyn, as quoted in Alex Galloway, online posting, 18 Apr. 2000, Rhizome, available <http://www.rhizome.org/fresh/>, 24 Sept. 2000.

87 Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill and Wang, 1981) 27.

88 Jennifer Ley, "Catch the Land Mine!! – Win a Free Prosthetic …" *Catch the Land Mine!*, available <http://www.heelstone.com/banner/>, 17 July 2001.

89 Jennifer Ley, "Catch the Land Mine!! – Win a Free Prosthetic …" *Catch the Land Mine!*, available <http://www.heelstone.com/banner/pic3.html>,

17 July 2001. My observation of people using this net art work in lab situations suggests that movement through the piece is escalated in attempts to "win" the game. The meaning of the texts seems to give way through such engagements.

90 Rose, "The Insufficiency" 33.

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Because I am alone. It is my dialogue, my society, my companion, my confidant. It is also my consolation, my memory, my scapegoat, my echo, the reservoir of my intimate experiences, my psychological itinerary, my protection against the mildew of thought, my excuse for living, almost the only useful thing I can leave behind.

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