In the mid-1990s, Internet art was just emerging on the fringes of contemporary art practice, and it was still rare to encounter it in the museum or gallery. One was quite likely, however, to encounter it when online. In 1995, net art constituted a significant portion of the World Wide Web (WWW). It occupied 8 percent of the web, and artists were actively using other online channels, such as e-mail, instant messaging, video conferencing, MP3s, and software to make and circulate art. The World Wide Web had come into existence just a few years earlier in 1991, when Tim Berners-Lee used his newly developed application protocol, Hypertext Transfer Protocol (HTTP), and computer language, Hypertext Markup Language (HTML), to carve out a publically accessible section of the rapidly expanding "network of networks," the Internet. When he developed the web, he envisioned it as a means of delivering information, "such as reports, notes, data-bases, computer documentation and on-line systems help," to Internet users through a series of linked documents that would be easy to navigate, eliminating "waste of time, frustration, and obsolete answers in simple data lookup." It would "provide a common (simple) protocol" for requesting "human readable information stored at a remote system, using networks" so that a user could "follow links pointing from one piece of information to another one." But net art websites did not merely present art or information about art via the Internet: they used the new medium to create works of art that critiqued and complicated the user's relationship to the technology and the easy flow of information. Online artists exploited the public's lack of experience with the web to make intentionally confusing sites that were not readily distinguished from typical, informational web pages, and that played upon general fears about false identities, the circulation of ill-founded information, and AIDS era concerns about illness and viral contamination. Net artists short-circuited Berners-Lee's system by purposefully introducing frustration, disinformation, unreadability, and anxiety into the web.

By the mid-1990s, the web was rapidly becoming the primary way that individuals connected with institutions, corporations, and one another. These connections, however, were marked by ambiguity and risk. The distance and disembodiment of online interaction meant that users weren't always certain who the others out there actually were or what the consequences of their online actions would be. Sites were potentially dangerous, putting the user's machine in contact with malicious software and viruses. A user's "friends" may have borne little resemblance to who they were "IRL" (in Real Life). As media theorist Wendy Chun describes it, the Internet was a "virtual commonplace" where "users'
actions separated from their bodies, and in which local standards became impossible to determine. It thus freed users from their bodies and locations.5

Net art emerged in the midst of these anxious new encounters with digital technologies and mediated others. Online artists created sites aimed at disorienting and destabilizing the viewer by the adoption and détournement of familiar web genres and forms, appropriating corporate websites for the circulation of their work, or by reworking computer code. Like their counterparts in mainstream artistic practice, net artists took up the key themes of the 1990s evidenced elsewhere in *Come as You Are*: the fluidity of racial and sexual identity, the politics and erotics of globalized exchange, and the vulnerability of the individual to lurking threats of contamination and disease. Net artists, however, explored the specific ways in which networked telecommunications and digital technologies enabled and exacerbated these conditions.

**Figure 1**

**JODI**

*Location 1995–98*

[www.jodi.org](http://www.jodi.org)

Website, display, and dimensions variable

**Terminal Conditions**

First-generation net artists, such as JODI and Mark Napier, used the web to undermine the expectations of communication and functionality that Berners-Lee and others saw as its primary reason for being. In doing so, they not only exposed the essential, formal modernist conditions of the web as an artistic medium, but also highlighted the new users’ fears of contagion, malfunction, and surveillance. JODI, a web collective composed of Joan Heemskerk and Dirk Paesmans, first appeared online in 1993. Their original site, later archived at [www.jodi.org](http://www.jodi.org) in 1995, presents the user with a confounding vision [figure 1]. Neither image nor text, the homepage is filled with a jumbled sequence of punctuation and numerals that comprise a single neon green hyperlink on a black screen. The site seems to be in a state of disrepair, the

5. Chun, 38.
effect cryptic and sinister, calling up associations with the Internet’s early identity as a military tool. If the user clicks on the link, she comes to a series of ominous images—a roughly drawn aerial map of New York and New England marked with text links such as “target=,” “SURGERY,” and “BETA LAB.” The links lead the user on a frustrating dérive through looped video-game screens, inscrutable diagrams, glitchy and discombobulated interfaces, and colorful frozen static. Each click of the mouse instills in the user the worry that the website is not broken, but rather that the machine may have been corrupted by contact with the suspicious site. Or, worse, she imagines that she may be unintentionally war gaming with her random clicking, having real effects somewhere far away. Rather than being in control of the online experience, JODI reveals the user as a novice consumer, unaware of the workings of the web and lost in the system that she believes she is “navigating.”

The unsettling effects of www.jodi.org are intentional. Anyone who knows how code generates web pages can peek at the source files for the confusing site and see what is actually happening. JODI purposefully misused HTML scripts to generate the inscrutable website. Rather than writing actionable lines of code, they arranged ASCII characters into a diagram of a nuclear bomb. Just as the user cannot read the abstract glyph on the home page, the computer cannot read the image hiding in the code. The artists transpose the human-readable and machine-readable domains, and the informational structure of Berners-Lee’s web is hijacked for abstraction.

Garbage In, Garbage Out

Wwwwwwwww.jodi.org works on the basic computer science principle of “garbage in, garbage out.” That is, computers will execute all instructions given to them, regardless of whether the code is full of errors, or in JODI’s case, illogical. For Untitled-Game (A-X, Q-L, Arena, Ctrl-Space) (1998–2002), JODI reworked the code of the popular online game Quake [plate 56]. The artwork is available as a series of downloadable game “mods,” software packages that modify the structure of the original game. JODI exploited glitches in the code of the hyperrealistic “first-person shooter” to transform it into an abstract, and often psychedelic, but still “playable” game. Quake’s medieval mazes and lush landscapes become stark, modernist environments, disorienting psychedelic spaces, or impassive, flashing Technicolour screens. The user’s commands—shooting, navigating, and so on—still work, but now produce different effects. She might find herself trapped in a rapidly swirling universe of vector-graphic checkerboards, or spraying pixels rather than
artillery across the screen. In Untitled-Game, JODI “breaks” Quake’s code, but they do not produce “garbage.” By manipulating the algorithms that generate the game, they unveil the abstract, Op-Art underpinnings of the hyperreal virtual world: the naturalism and “human readable” information of the virtual world is a fiction; all that exists are flashing bits of information and light.

Mark Napier, too, began using the web to make abstract, software-based net art in the mid-1990s. Rather than authoring specific net-art websites or modifying the code of online games as JODI did, Napier created a series of browsers that altered the appearance of the sites the user would normally visit, including Shredder (1998) and Riot (2000) [figure 2 and plate 64]. A web surfer can use these browsers just as she would any other: type in a URL or select a bookmark, and the browser will take her to the desired page. What she encounters there, however, is quite different. Shredder uses a Perl script to separate the constitutive elements of the web page into graphic, vertical strips. Like the analog office tool used to ensure informational obfuscation, Napier’s virtual version shreds coherent messages into jumbled ribbons of data. Riot also disrupts the easy transmission of information over the web. Rather than muddling the content of a single page, Riot combines the graphic and textual elements of the sites that different users are simultaneously surfing into a single window. One user’s pornography may be interlaced with another’s news or e-mail; not-for-profit .orgs are muddied by the corporate concerns of .coms. The riot of information across the screen destabilizes not only the user’s assumption that browsers should transparently display the informational content of the sites they access but also assumptions about property and privacy. Riot causes the discrete, individually held “domains” of the web to infiltrate one another and makes the private searches of individual users visible to the anonymous community of surfers. In doing so, Napier illustrates an untapped site of power and individual agency. His browsers allow him to wield artistic control over the entire web. Any website, no matter how carefully designed, falls into the service of Napier’s modernist aesthetic of intersecting planes and collaged sources.

Ethereal Identities

Like JODI and Napier, Prema Murthy and Mendi + Keith Obadike experiment with the malleable nature of codes, exploiting the inherent gaps between input and output, identity and appearance. But rather than playing with the algorithmic underpinnings of computational systems, they deal with how the slippery signifiers of racial, ethnic, and sexual identity are mobilized in the immaterial,
online space of the Internet by appropriating common web forms, such as online pornography in Murthy’s *Bindi Girl* (1999) [plate 57], or using corporate websites as the hosts for a parasitic project, as the Obadikes do with their eBay.com work, *Blackness for Sale* (2001) [plate 66]. Cultural theorists of the 1990s imagined cyberspace as an arena of interaction in which users could free themselves from the specificity of their physical bodies and create new online identities, generating a post-racial, post-gendered environment. Disembodiment did not, however, produce an egalitarian system where race and gender no longer mattered. Rather, it pointed to how identity is performed online and off through the circulation of signs of race, ethnicity, gender, and class.

Murthy’s multimedia online porn parody, *Bindi Girl*, uses the traditional Hindu bindi as a sign of desire and otherness that points to how race and ethnicity become commercial products in online pornography. *Bindi Girl* appeared on Thing.net early in June 1999. By clicking on a red bindi floating in the center of the home page’s warning about explicit content, the user launches a multi-window site. One window presents a rapidly flashing series of appropriated pornographic photographs of South Asian women interspersed with broken lines of text from the *Kama Sutra*. In each image a bindi dot, or series of dots, obscures the nudity of the model. The viewer is left with only brief impressions of explicit imagery and spiritual texts, but her eyes are dazzled by the dots. The bindi comes to stand in for the Asian body, despite its total graphic abstraction and Murthy’s careful use of it to frustrate erotic consummation. Bindi dots form the buttons on a remote that navigate the user to other areas of the site, including a “harem” of similarly bindi-obsured photographs, a comical online chat of failed “cybersex,” a souvenir shop that peddles used socks and panties, and videos of live web performances Murthy put on during the original one-month run of the site, which are now available on a pay-per-view basis.

At each moment, Murthy presents her avatar, Bindi, and the other South Asian models on her website as simultaneously available and unattainable, real and virtual, idealized and tragically average. “Avatar,” Murthy points out, has a specific meaning in Hindi: “[the] incarnation of a Hindu deity, [the] embodiment of an archetype.” Murthy uses both Bindi and the bindi dot as avatars for the “goddess/whore archetype that has historically been used to simplify the identity of women and their roles of power in society.” Murthy’s parodic pornography treats the bindi as a free-floating sign available for feminist reappropriation. The flashing bindi dots hover as afterimages in the user’s vision, disrupting and censoring

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everything else the user looks at. The dots colonize the screen, exerting their independent agency across the web.

When individuals construct new online identities for themselves, they do so by performing signs of race, sex, gender, and class in their online interactions and self-presentations. The fact that their traits online may not be the same as the ones they assume in their physical lives does not make these codes any less powerful. If a web user can choose an online identity that is different than her embodied one, it stands to reason that she may no longer need the traits she uses in her off-line life. In 2001, Mendi + Keith Obadike offered up a piece of Keith’s embodied existence for sale, as if it could circulate freely as a detached sign. His “blackness” went up for auction on eBay.com on August 8 and reached a price of $152.50 before the site halted the bidding. The artists briefly hijacked eBay as the host of their artwork, but the auction site quickly took the listing down after just four days for being “inappropriate.”

Although the corporation did not give reasons for its action, perhaps it considered the auction “inappropriate” because the Obadikes were selling something immaterial, which couldn’t be exchanged in a monetary transaction. Or it could have been because it referenced the American slave trade and contextualized the other items for sale on eBay that might turn up in a similar search for “heirloom” objects of “Black Americana,” such as “ceramic coons and mammies, African exotica,” and other racist items for which there is a collectors’ market. The Obadikes’ product description lists benefits and warnings about his blackness. The benefits include gaining access to “high risk neighborhoods” and affirmative action, easing the awkwardness of interracial dating, and “instilling fear.” The seller warned the bidder that use of this blackness was not recommended during legal proceedings, while seeking employment, or while voting, among other circumstances. The Obadikes’ auction acted as a critique of the naively utopian post-racial fantasy of the Internet, and analyzed how “blackness” circulates as a sign in the physical and virtual worlds. The web may have been expanding daily life into a virtual plane, and identity on the Internet may be fluid and immaterial, but this did not mean that the signs used to create these new identities slipped into the ether and ceased to carry real social, political, and historical significance.

404 Not Found / 410 Gone

The weight of embodied life is present as well in Mark Tribe’s early net artwork Traces of a Constructed City (1996/2004), which analogizes specific sites in the physical world with the rapid growth


9. Ibid.
of the web [plate 47]. Tribe documented Berlin in the immediate
years after the collapse of the Berlin Wall and the end of the East
German socialist state. Wielding an early digital camera, Tribe
photographed the city in the process of transformation. The wall
that separated east from west turned to rubble, landmarks of the
fascist and socialist eras came down, and new buildings went up
throughout the reunified city. Navigating through Berlin became
increasingly difficult for the artist: construction signs and barri-
ers blocked his regular pathways. Tribe saw a connection between
the expanding physical structure of Berlin and the new territory
of the web. The Internet, too, was in a process of rapid expansion,
having become publicly accessible via the web around the same
time as the Berlin Wall fell. Just as in the German city, a user wan-
dering around the web would find herself continually blocked by
construction signs that mimicked those of the physical world—
inaccessible areas of new development and interest. Tribe brought
the two kinds of "sites" together in his first web project, a clickable
aerial map of the city. He divided Berlin into a grid of one hundred
squares, and linked photographs of construction sites to corre-
sponding portions of the map. By mousing over the doubly virtual
space of the web-based map of the city, the user could encounter
the same blockades as Tribe. The buildings placed on the map's
mesh of interconnected streets mirrored the rapidly multiplying
links and nodes of the sprawling web.

In the 1990s and early 2000s, the web was under constant
construction and expansion. But this did not mean that areas—
websites—would not fall into dereliction. Like physical sites, web-
sites require maintenance. As Tribe pointed out, a web surfer was
likely to see a construction sign on the web in the 1990s, but today,
twenty-odd years later, the animated gifs Tribe describes are passé,
or at least retro. Instead, the user sees other kinds of blockades
while searching out early net art: HTTP status codes indicating
that the desired site is no longer available. The server may no lon-
ger be able to find the URL (404-Not Found) or the site may have
been deleted with no known forwarding address (410-Gone), or the
site may, simply, no longer work.

Sadly, this is the case for many works of early net art. Links are
broken; software falls out of date; hosting and registration bills go
unpaid. JODI's Untitled-Game is incompatible with today's operat-
ing systems, which cannot open or understand the files. Napier's
Riot now has a steady screen and entering a new address does
nothing to change it. Murthy's Bindi Girl looks the same as it did in
1999, but it no longer has the live video chats that made the site so
provocative and compelling. The Obadikes' eBay auction was only
"live" for four days; since then, it has existed as an archived screen capture on the Obadikes' personal website. Finally, Tribe's *Traces of a Constructed City* has become as un navigable as the city it documented. A description of the project resides on Tribe's web page and the photos are archived in a Flickr slideshow, but the original site and experience is lost.

These works may no longer exist in their original forms, and contemporary viewers may not be able to access or experience them in exactly the same way, but the critiques they offered of networked life are more pressing and prescient than ever. The fears and anxieties that the net artists explored have been actualized and have become commonplace: governments surreptitiously install software on the devices of unsuspecting users to monitor their information and connections; corporations track web searches and "crawl" e-mail to glean data about the user's identity so that it can target advertisements to each individual's specific identity-demographic; and users willingly make their private lives completely public, freely uploading intimate details about their lives to corporate websites, that then, in turn, sell that information to interested parties. The automated violation of users' privacy, clandestine operations of malicious software, and the unthinking construction of online avatars and identities that transform the facts of embodied existence into market research are accepted facts of contemporary life. The anxiety and disorientation the early net artworks created—and can still create—remind the user that while she may now be comfortable and confident navigating in cyberspace, the web is still full of traps; the net is still a snare.