

*Lest We Think the
Revolution is a Revolution*
Images of Technology and the
Nature of Change

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WHEN ENGLISH STUDIES TEACHERS GET TOGETHER TO TALK ABOUT TECHNOLOGY, we generally end up talking about change. It is common sense, after all to link computers with change when microprocessors, according to Moore's law, double in speed every eighteen months, when biomemory, superscalar architecture, and picoprocessors become feature stories for National Public Radio; and when media generations flash by in less time than it takes to uncrate a faculty workstation and get rid of the styrofoam packing.

And, at some level, English Departments have come to terms with technological change—we have adjusted diminishing supplies and equipment budgets to accommodate an ongoing program of purchases and upgrades, accepted computer studies as a new area of scholarly focus, integrated technology into various curricula, and modified many programs to include technology training and use (c.f., Selber, 1994; McDaniel, 1990; Schwartz, Selfe, Sosnoski, 1994; Wahlstrom and Selfe, 1994).

Like most Americans, however, even though educators have made these adaptations, we remain decidedly undecided about technology and change. At one level, we believe in the pairing; we believe in the computer's power, and we believe strongly in the beneficial ways that technology promises to improve our lives (Bump, 1990; Delany and Landow, 1991; Snyder, 1996). At other levels, we fear the effects of technology, and the potent changes that it introduces into familiar systems. (Apple, 1986; Kramarae, 1988; Hawisher and Selfe, 1993; Selfe and Selfe, 1994)

These contradictory impulses are the focus of this chapter, especially as they affect the work of English studies specialists and educators. In addition, these attitudes shade subtly into one another at multiple levels of a larger collective social experience, and they are worth exploring for that reason as well.

CHANGE, TECHNOLOGY, AND THE STATUS QUO: SOME BACKGROUND

Because our culture subscribes to several powerful narratives that link technological progress closely with social progress, it is easy for us—for Americans, in particular—to believe that technological change leads to productive social change.

Indeed, the narratives linking technological change to social change are part of the reason that English studies teachers—like many other educators—have come to embrace computer technology so enthusiastically over the past decade.

Quite simply put, like many Americans, we hope computers can help us make the world a better place in which to live. In the profession of English studies, for example, we hope computers can help make us, and the students with whom we work, more productive in the classroom and other instructional settings (Hafer 1996; Coogan 1995; Clark 1995; Tornow 1997; Sirc 1995) more effective as communicators (Blair 1996; Minock and Shor 1995; Sproull and Kiesler 1991), and more responsibly involved as literate citizens in world affairs (Schuler 1994; Selfe 1996; Geren 1996)

We are not alone in these stories that we tell ourselves—indeed, they are echoed for us constantly and in a variety of versions. Vice President Albert Gore (1994) has noted that the Global Information Infrastructure (GII) would increase opportunities for intercultural, communication among the peoples of the world. Howard Rheingold, in *The Virtual Community* (1993), describes how computer networks can support more citizens in their efforts to communicate with government agencies, corporations, political groups, and information resources. Nicholas Negroponte, in *Being Digital* (1995), sketches a picture of electronic landscapes that provide individuals new ways of making personal contributions to public deliberations and decision making. Dale Spender, while more careful in her perspective in *Nattering on the Nets* (1995), speculates on what it will take to establish new kinds of electronic forums that will support women and other groups now often left out of—or kept out of—public discussions in other venues.

This optimism about technology often masks in a peculiar way, however, a contrasting set of extremely potent fears. Moreover, and perhaps more importantly, an exclusive focus on the positive changes associated with technology, often serves to distract educators from recognizing how existing social forces actually work to resist change in connection with technology; how they support the status quo when technology threatens to disrupt the world in any meaningful way; how our culture, and the social formations that make up this culture, react with a special kind of conservatism to technology, even as we laud the changes it promises to bring.

This chapter will attempt to illustrate the ways in which change is modulated and complicated by forces of stasis by focusing attention on a series of images that come from commercial advertisements about technology. These

advertisements reflect a portion of our collective American cultural imagination about technology. Like most images, they tell rich and powerful stories about the social contexts in which they are produced. Like snapshots—of weddings and graduations, of Christmas and family reunions, they reveal us, as Americans, to ourselves. They are laden with cultural information, shot through with the values, ideological positions, and social understandings that comprise our shared experience. Indeed, it is because we recognize the common cultural symbols in these snapshots so clearly, because we commonly construct meaning with and through them, because they are so loaded with social significance to us, that such images are powerful communication devices.

These are also the reasons that the ads included in this chapter can reveal to us the complications of our feelings toward technology and illustrate how these feelings are played out in the shared landscapes of our lived experience.

NARRATIVE #1: THE “GLOBAL VILLAGE” AND THE “ELECTRONIC COLONY”

One of the most popular narratives Americans tell ourselves about computers is that technology will help us create a global village in which the peoples of the world are all connected—communicating with one another and cooperating for the commonweal. According to this popular social narrative, the computer network that spans the globe will serve to erase meaningless geopolitical borders, eliminate racial and ethnic differences, re-establish a historical familial relationship which binds together the peoples of the world regardless of race, ethnicity, or location. As Nicholas Negroponte (1995) re-tells the story to us, “a new generation is emerging from the digital landscape free from many of the old prejudices. . . . Digital technology can be a natural force, drawing people into greater world harmony” (230) within a landscape where “we are bound to find new hope and dignity” (231).

This story, as you can imagine, is appealing at a romantic level to many Americans. It is also, incidentally, quite terrifying. Becoming just another member of the tribe, just another citizen of the global village, suggests the possibility that Americans could be asked to relinquish their current privileged status in the world where, as Negroponte (1995, 230) also reminds us, twenty percent of the population currently consumes eighty percent of the resources. Being just one among many village members also suggests the possibility of losing the economic benefits that have accrued to us as citizens in one of the most highly technological nations of the world and the possibility of functioning within a new global context in which classism and racism are unacceptable because so many members of the connected human family are poor and of color.

In fact, we find ourselves, as a culture, ill equipped to cope with the changes that the “global village” story necessitates, unable, even, to imagine, collectively, ways of relating to the world outside our previous historical and

cultural experiences. As a result, in the advertisements included here, we revise the script of the narrative to fit within the historically determined contexts that are familiar and comfortable. In doing so, we also limit our cultural vision of the technological changes that are acceptable and possible for us as a culture.

The first series of images presented in this chapter reveals how our cultural imagination deals with the radical changes that the Global Village Narrative implies, by re-constituting technological change within the boundaries of these more historically and socially familiar contexts. In the global village narrative, for example, while we maintain the vision of linking peoples around the world, we imagine ourselves, not as simple members of this electronically constituted village, but rather as discoverers of the village, explorers of its remote corners, and even colonizers of its exotic peoples.

In the revised narrative, the global village retains its geographical reach, but it becomes a world in which different cultures, different peoples, exist to be discovered, explored, marveled at—in a sense, known and claimed by—those who can design and use technology. Inhabitants of this electronic global village, in turn, become foreigners, exotics, savages, objects to study and, sometimes, to control.

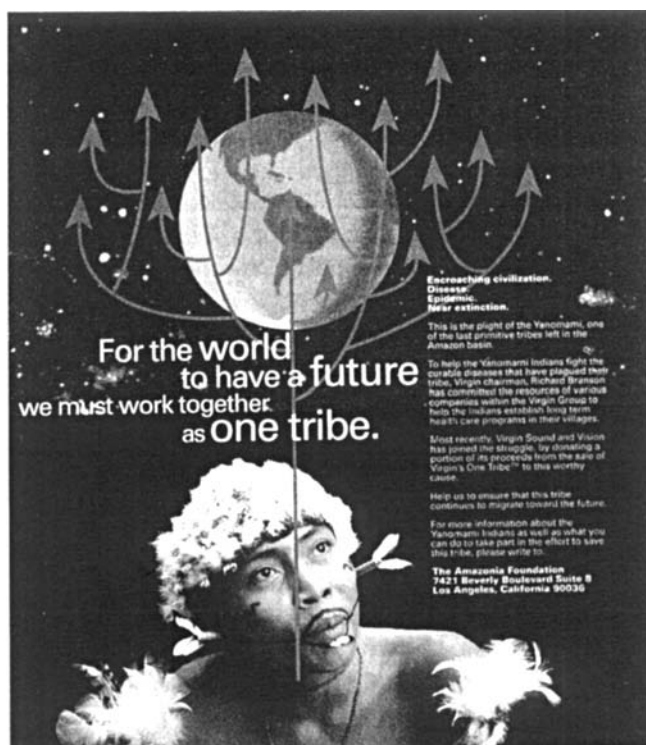
This revision is a familiar imaginative context for us—we have, after all, a history of experiencing the world as missionaries, as colonists, as tourists, as representatives of multinational companies. The revised story leaves no doubt about our own role—Americans are the smart ones who use technological expertise to connect the world's peoples, to supply them with technology and train them to use it. Nor does the revised story leave us in doubt about the roles of other peoples in the world—they are the recipients of technology and its benefits, those who use the technology that we control. This story is so familiar because it has happened before and in ways that Americans like to remember. We have a long and admirable history of exporting technological expertise to less fortunate neighbors—through the Lend-Lease, the Peace Corps, and the Space Program among other routes.

This re-telling or re-vising of the Global Village story—we can now call it the Electronic Colonial narrative—happens very naturally within the discursive venues available to our culture—on television, in our classrooms, in books, and articles, and in corporate settings—often without anyone noticing because the elements of revised Electronic Colonial narrative are so much more familiar and acceptable to us than were those of the original Global Village story.

The following pair of images reveals these themes (figures 1 and 2). Especially fascinating in terms of this revised narrative is the use in these two ads, by Virgin Sound and Records, of the “one tribe” motto.

In the first image (figure 1) we get a glimpse of both stories we have described. The text here narrates the Global Village story, “For the world to have a future, we must work together as one tribe” because “encroaching civilization,”

Figure 1



“disease,” and “epidemics” are threatening some of the world’s people with “near extinction.” Virgin, the ad tells us, has donated a portion of their profits from their CD Atlas, entitled *One World*, to assist the Yanomami tribe in the Amazon Basin as they establish health care programs in their villages.

The second, revised story—the Electronic Colonial narrative—is revealed most clearly in the visual image represented in the ad, the picture of the Yanomami man. In accordance with the themes of the revised narrative, the Yanomami is shown in ritual dress with feathers and face paint, presented as a wondering savage, vulnerable to the crueler effects of civilization, and obviously unaware, in a critical or informed sense, of the power of the technology being used to his benefit. He is connected to Americans as “a member of the tribe,” but he also remains a world away from us—the people who are creating the CD technology and donating the money to health care projects.

The second ad (figure 2), again for Virgin Sound and Records, announces two products and provides us another version of the revised Electronic Colonial story. In this story, Americans use technology to become world travelers, to learn about—and acquire knowledge of—other cultures, while

Figure 2

Welcome to the planet.

**virgin's
onetribe**

A glimpse into the future of **interactive** programming. International MTV star Pip Dann takes you on a **journey** exploring the people and cultures of our world, from the **origin** of the Maori islanders to the rituals of a Tibetan monk. Using **photography** from the world's best libraries, **BBC video** footage and **music** from Peter Gabriel's RealWorld label, One Tribe takes you farther than you can imagine—right from your own home.

**virgin's
oneworld
atlas**

A stunningly rich trek around the earth, from Alaska, Ohio to the Indian Sea and beyond. Choose a destination and embark on a picturesque, factual tour, exploring the physical planet. A unique atlas that practically dances off the screen, OneWorld presents a wealth of **maps** and **information**, all set to a culturally rich **music** track.

Both available on **CD-ROM**.

Welcome to OneTribe and OneWorld.

Welcome to the planet.

remaining comfortably situated within their own living rooms and, thus, comfortably separated from the other inhabitants of the global village.

On the left side of the page, the One Tribe CD is described, in which “MTV star Pip Dann takes you on a journey exploring the people and cultures of our world, from the origin of the Maori islanders to the rituals of a Tibetan monk.” As the ad says, “One Tribe takes you farther than you can imagine—right from your own Home.” On the right side of the page, the One World Atlas offers “A stunningly rich trek around the earth,” and a “wealth of maps and information all set to a culturally rich music track.” The non-Americans featured in this ad are identified as exotic, albeit inviting, co-habitants of the global village. At the top left, are representations of two youngsters, spliced together to present a bizarre tribal image; on the left margin scattered among postcards from exotic destinations and lists of foreign vocabulary words, two picturesque French men sport the requisite berets and a veiled Middle Eastern woman with mysterious eyes is portrayed.

To complement the textual representation of the electronic colony narrative, the picture in the bottom left of this ad reveals the source of this world gaze—a white, blond woman sits in a well appointed living room that is chock full of artifacts from around the world; several big-screen viewing areas in front of her feature images of exotic peoples and far-off locations, a large computer with a world map on the screen, and a globe complete the representation. Virgin provides an interesting case study of the Electronic Colonial narrative. As a company, it has roots in Great Britain, but, given its marketing and advertising targets, it has acquired a decidedly American flavor, thus, joining the two countries under the potency of a single colonial gesture.

And, these are the tasteful and more subtle advertisements that are associated with the Electronic Colony narrative. The other end of the spectrum is represented in the next two images (figures 3 and 4).

Figure 3, entitled “Unexpected” shows an Indian woman, bone picks through her nose, feathers attached to her ear, beads around her neck, nursing a baby on one breast and a monkey on the other. The ad, for a color scanner, begins with a large dollar sign. The person in the image, the message suggests, is another inhabitant of the global village, but one important to Americans only as the unexpected exotic, an image that we can use to sell a piece of technology.

The next ad (figure 4), for Polyglot International software, provides yet another version of the electronic colony story. In this image, a male, of undefined indigenous origins, with gold teeth, a broad smile, and a Carmen Miranda kind of bonnet made up of roses and topped by either a radio antenna or a birthday candle. The ad’s designers have superimposed a set of aviator’s goggles over the man’s eyes, and, across these goggles, are printed a series of 1s and 0s, denoting binary code.

In this ad, the text provides the background story for the image, “You need a team of software . . . experts who can help you culturally adapt every aspect of your software for global markets. What you need for what they want.” The members of the global village, the ad implies, are indeed different from Americans, and strange, but we can, given the know-how that characterizes the American free enterprise system, identify what these people are seeking in terms of desirable software and provide it to them in a language that they can understand, even with a simplistic notion of our technology products.

These four advertisements—like the travelogue images we look at in *National Geographic*, like the tourist brochures we pore over in the travel agency, like the slides we view after a friends’ trip abroad—are representations of exotic places and exotic peoples now available to Americans as new global markets, multiplied, as Fredric Jameson (1991) and Jean Baudrillard (1983) would say, to the point of dizzying accessibility and specificity. And it is the wondering native, the silly Indian, the veiled woman that is the object of our collective technological, cultural, and capitalist gaze. Americans, in these four ads, you’ll notice, go almost un-represented in terms of images. Instead,

Figure 3



THE UNEXPECTED

\$ 56,900 - A LOT LESS THAN YOU'D EXPECT TO PAY FOR A DRUM DIGISETTER. But that's the special offer price for the new Mannesmann Scangraphic ColorStar, a PostScript imprinter that uses Scangraphic's proven drum imaging system for top quality colour work. With an imaging area of 12.9 by 24 inches, and resolutions up to 325dpi, the ColorStar can produce full two-page colour with screen value up to 300dpi. And there are no hidden extras - the price includes a powerful Adobe PostScript RIP, fitted with Adobe Adobe's Neuron Technology and an Ethernet expansion for rapid data transfer. Mannesmann Scangraphic also designs (or manufactures) large format drum imagers and colour scanners with high speed networking options. Neuron can also supply and integrate Macintosh computers and Raster GIF software and hardware to create complete PostScript based pre-press systems.



The above price is based on US funds.
 For more information in a range of pre-press solutions, desktop or print room requirements, please contact:
 Paul Girdlestone, 221 Allison Road, Milton, Ontario, L9T 2V2, Phone: (905) 876-0411
 Email: gpc_3049@b.royalmail.net, Chicago, Illinois 60641, Phone: (312) 693-2900

Reader Reply 370

Figure 4

Because the World Wants Your Software



You need a team of software localization experts who can help you culturally adapt every aspect of your software for global markets.

What you need for what they want.



340 Biannan Street, Fifth Floor
 San Francisco, CA 94107
 tel: (415) 512-8800
 fax: (415) 512-8982

Americans are the canny and sophisticated minds behind the text, behind the image, behind the technology. We are the designers, the providers, the village benefactors. We are cybertourists and cybercapitalists who both understand and represent the world as a private standing reserve.

This next pair of advertisements (figures 5 and 6) from IBM entitled "Solutions for a small planet" also tells the electronic colony story, illustrating how generous Americans can be in providing other needier countries with useful technology, and providing the story a potent cumulative power. A small map portrayed in each ad helps to orient viewers to the particular area of the world that IBM and American influence have reached.

Figure 5



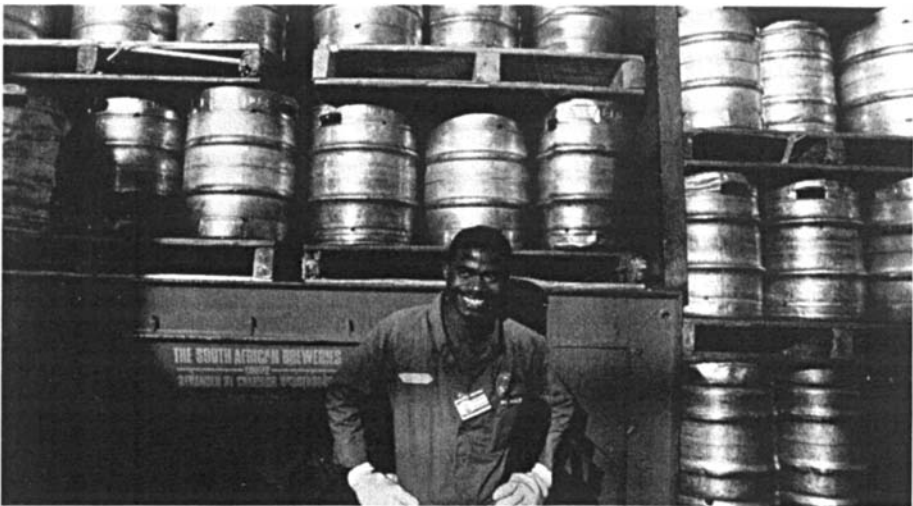
IN DRESDEN, FREEDOM RISES FROM THE RUBBLE. Germany's greatest church, the Frauentürme, was bombed flat in 1945. Where Bach and Wagner once performed, there are now only broken rock. But recently, stone-mason Franz Huber and a team of other artisans and architects began to painstakingly reconstruct the city's symbol of harmony. Over IBM reconstructed the Baroque landmark in 3-D

cyber-space, the team could begin to rebuild the ruins. Guiding them is an IBM RS6000™ running ILLIAC, a computer-aided design tool. By 2006, the church will reach to the heavens once more, thanks to 19th-century craftsmanship and a powerful 21st-century tool. What can IBM help you build? Call 1 800 IBM-3333, ext. G192, and Get on.

Solutions for a small planet™



Figure 6



A FINE UNBLINKING mid-Summer sun, the larger trucks
The South African breweries are
... train as the drink.
SMT drivers, too, rely on an OMSIS
to slake the thirst of their far-flung

customers. They use an *Outbound AI Site Invoicing System* each day to insure customer delivery so precisely that no one's ever short a drop.
OMSIS is just one of the ways IBM is helping the largest brewery

in the southern hemisphere manage its operations.
A sleek computer network links South African Breweries' outposts across the country, allowing data to flow as freely

as *Living Lager* from a freshly tapped ke.
Does your firm services help your business? Call 1 800 IBM-3333, ext. G192. Or visit us on the World Wide Web at <http://www.ibm.com>



Solutions for a small planet™

In the first ad (figure 5), for example, with the tone of an old master, IBM provides the 3-D rendering technology needed to rebuild the Frauenkirche, a church destroyed during the allied firebombing of Dresden in 1945. The ad notes that this technology, along with the experience of talented stonemasons, allows the reconstruction to proceed, linking the power of a “21st century tool” with the imagination of “18th century craftsmanship.”

In the next IBM ad, this set in South Africa, IBM helps the smiling driver of a South African Breweries truck “slake the thirst of . . . far flung customers. . . so precisely that no one’s ever short a drop.”

If the previous series reduces the world to a series of tourist destinations, this pair of ads—representative of a much more extensive series of technological “solutions for a small planet”—reduces the worlds’ problems to a set of embarrassingly quick fixes. American technology and technological know-how, these images imply, can provide reparations for the cultural damage caused by the firebombing of Dresden, recreate the painstaking artistic achievement of a destroyed eighteenth-century cathedral, and serve as a corrective for decades of apartheid. These implications, of course, are not only absurd; they are humiliatingly small-minded. Nothing can provide redress for the millions of human lives, the art, the history, the beauty lost in Dresden; nothing can totally ameliorate the pain and the lingering inequities of South African apartheid. As much as Americans might like to think it; technology is not the solution for all of the world’s problems—and, indeed, it might well be a contributing cause to many of them.

Technology, in these ads, is an American tool. And what we use this tool for reveals all too clearly our values as *homo faber*—the tool maker. In these images, I’m afraid, we see reflected not those fundamental and much needed changes we talked about pursuing earlier; not improvements in the world situation, nor the elimination of hunger or pain or suffering or war; not, in other words, an improved life for our fellow inhabitants in the global village or an improved understanding of their cultures and concerns, but, rather, the all too familiar stories of how to multiply our own markets, how to increase our own cultural profits at the expense of others, how to take more effective advantage of need and difference whenever we identify them, and how to reduce the cultures of other people to inexcusable simplifications.

NARRATIVE #2: “LAND OF EQUAL OPPORTUNITY” AND “LAND OF DIFFERENCE”

A second favorite cultural story that we tell ourselves in connection with computers and change focuses on equity, opportunity, and access—all characteristics ascribed to the electronic landscape we have constructed on the Internet and to computer use, in general.

This landscape, Americans like to believe, is open to everybody—male and female, regardless of color, class, or connection. It is, in fact, at some level, a

romantic re-creation of the American story and the American landscape themselves—a narrative of opportunity in an exciting land claimed from the wilderness, founded on the values of hard work and fair play. It is a land available to all citizens, who place a value on innovation, individualism, and competition, especially when tempered by a neighborly concern for less fortunate others that is the hallmark of our democracy. If you recognize this story, it is because it has been told so many times. It is the same story that Alexis De Toqueville (1735) told us in *Democracy in America* and one that we've been telling ourselves ever since—in *Horatio Alger* and *Huck Finn*, in *Nancy Drew* and in episodes of “Father Knows Best.”

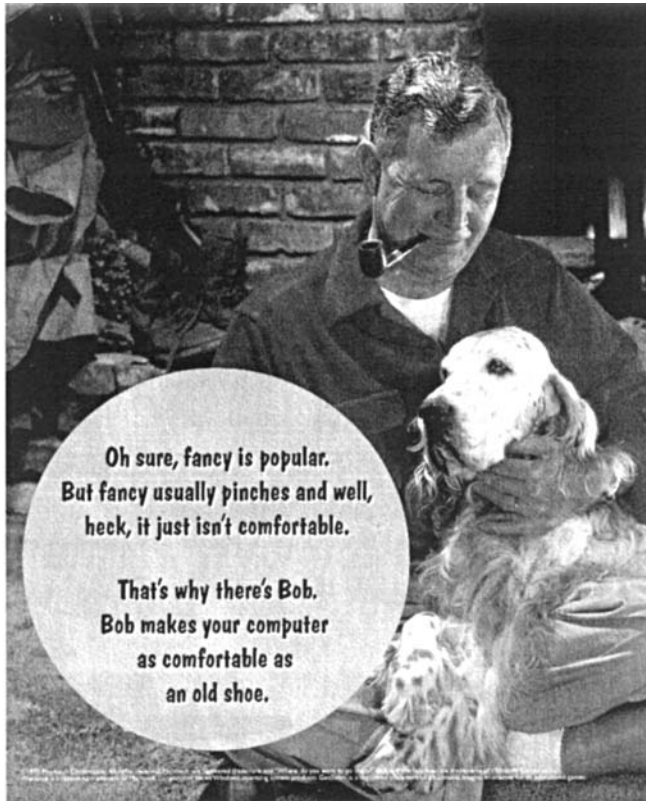
This next series of advertisements play on this narrative, emphasizing, in particular, our fascination with—and strong faith in—these traditional American values; in this case, specifically as they have the enduring power to inform and temper technological innovations. The first is an ad (figure 7) for Bob, Microsoft's friendly operating system. These images are all ripe with references to the 1950s, a time when America was entering the very beginning of an accelerated push toward technological growth and innovation. Although Sputnik, launched by the Russians on the 4th of October in 1957, weighed heavily on our collective minds, the fifties were chock full of optimism. We were still fresh from our successes in World War II, invigorated by the promise of the space program, tantalized by the bright future that the new world order seemed to hold for those who were innovative and farsighted, ready to help the world realize the promise of democracy and technology through special projects like the Peace Corp.

This cultural memory is a potent one for Americans, and these ads resonate with the values that we remember as characterizing that golden time—recalling for example, the down-home, no-nonsense comfort associated with a good dog, a good pipe, a warm fire, a comfortable pair of shoes (figure 7), and the other very American comforts accruing from a good salary and hard work in a culture where effort is rewarded with capital gain, regardless of race, color, creed, or class.

Indeed, we tell ourselves this clearly American tale—which I'll refer to as the Land of Equal Opportunity narrative—often and in many different versions. The next two images (figures 8 and 9) also play on it, for instance.

The first, for Cisco Systems, uses a picture that could have come right out of a Dick and Jane reader (figure 8). It shows another very American scene, also harkening back to the magic time of the fifties. This time, the focus is on landscape inhabited by smiling people who point to airplanes as evidence of the technological progress because these machines characterize what American know-how can accomplish in the land of equal opportunity when circumstances are right. The text notes, “With wide-eyed optimism, you thought technology was going to let you set information free. You were going to put power into the hands of the people.” The ad goes on to explain that technology uninfluenced by traditional American values can run amuck, especially in a postmodern world

Figure 7



characterized by “conflicting standards,” “rival companies,” “incompatibilities,” and inefficient work habits.

The second image (figure 9) tells a bit more of the Land of Equal Opportunity narrative. It speaks for a piece of software by CiNet called “The Ultimate Internet Tour,” showing what looks like a frame from an old home movie. From a wide angle shot of a fifties suburban tract home development, we get a magnified perspective on a typical American family—three smiling kids, two smiling, upwardly-mobile parents posing in front of a spanking new, functionally designed, split-level home, with all the optimism characteristic of the Eisenhower era. The message, which urges readers to “keep up with the Joneses, the Gates and your kids,” suggests that citizens of the twenty-first century can achieve the same kind of happy security and personal well being that was enjoyed by citizens of the fifties—by purchasing a software package rather than a new home.

Figure 8



Q With wide-eyed optimism, you thought technology was going to let you see information free. You were going to put power into the hands of the people. Then reality set in. Conflicting standards and protocols stood in the

way of the free flow of information. Rival companies were outbidding each other with promises of open computing and universal access. But now getting two different networks to talk to each other became a nearly insurmountable task.

There is a way to get your networks to interoperate as one. It's the new Cisco IOS (Internetworking Operating System). Cisco IOS™ is the unifying thread that connects one network to others, so your information can flow freely, across LAN and WAN, routers

and switches, twisted pair and optical fiber - without handoffs or delays. Cisco IOS lowers costs, provides a scalable, software-based migration path for future growth, and optimizes the performance of your WAN, today by increasing network throughput and

improving applications availability. Available on industry-leading hubs, servers, and wide-area switches, Cisco IOS is the promise of shared information, delivered. Enterprise-wide. Ready to change the world? Give us a call today at 1-800-859-3725.

We'll help turn your vision of a networked world into a reality.



REMEMBER WHEN
YOU WERE GOING TO
CHANGE THE WORLD?
LITTLE DID YOU SUSPECT
NETWORK INCOMPATIBILITIES
WOULD CLOUD YOUR
VISION.

Unfortunately, if Americans have no collective imaginary context for, or historical experience of, a real global village, nor do they have any real experience with an undifferentiated land of opportunity. Our cultural experience, indeed, tells us something very different—that America is the land of opportunity only for some people. The history of slavery in this country, the history of deaf education, women's suffrage, immigration, and labor unions remind us of this fact; as do our current experiences with poverty, the differential school graduation rate for blacks and whites and Hispanics, the fact that we have never had a woman President, and the presence of border guards and the razor-wire fences over the Rio Grande. All these things remind us that opportunity is a commodity generally limited to privileged groups within this country.

Thus, the revised story in the case of these last five ads—which we can call the Land of Difference narrative—is present not in what they show, but what they fail to show. These ads are what my grandmother would call “mighty white.” There is a remarkable absence in all the images of people of color, and poor people, and people who are out of work, and single-parent families, and gay couples, and foreigners. If citizens of all kinds are to have access to technology and the opportunities it provides, we do not see such a narrative imagined in the Land of Difference narrative; if technology is to improve the lives of all

Figure 9

How to keep up with the Joneses, the Gates and your kids.

The Internet. Now available on video.

Be the first on the block to know the Internet. Don't F.U.T.U.R.E. kind of The Internet. There's the real deal. Not an illusion. Not the future. It's real. It's the internet. Now it's back on the Internet. Meet powerful tools. Discover address and network data. You'll also want how to get on-line and spend information. Plus, CD-ROMs, video, articles and more books. All for only \$19.95. Yes, you'll find the primary Internet. But in fact, it's only available here. Get the computer network. Discover and receive a free 3 month subscription to RedDot magazine.

1 - 8 0 0 - 4 4 5 - 2 6 3 8 x 3 0 0

CNET
Directions to the future

I don't want anyone calling me a cyberspace case.
I'm calling 1-800-445-2638 x300 now.

Americans regardless of race and class and other differences, our collective ability to envision such a world is not evident in these images.

NARRATIVE #3: "THE UN-GENDERED UTOPIA" AND "THE SAME OLD GENDERED STUFF"

A third potent narrative that Americans tell ourselves about technology and change focuses on gender—specifically, this story claims that computers and that computer-supported environments will help us create a utopic world in which gender is not a predictor of success or a constraint for interaction with

the world. This narrative, the Un-gendered Utopia story, encourages educators to see and understand computers as educational allies that can support efforts to create new kinds of educational and economic opportunities for students—regardless of gender. The potency of this narrative persists despite evidence to the contrary. It is clear, for instance, that fewer girls use computers in public secondary schools than do boys, especially in the upper grades, fewer women enter the advanced fields of computer science than to males, that the computer industry continues to be a space inhabited by and controlled primarily by males. Computer games are still designed for boys; computer commercials are still aimed mainly at males; computing environments are still constructed by and for males (cf., Spender 1995; Kramarae 1988; Jessup 1991). Computers, in other words, are complexly socially determined artifacts that interact with existing social formations and tendencies—including sexism, classism, and racism—to contribute to the shaping of a gendered society.

This situation, complexly overdetermined as it is within our cultural context, is nowhere more visible than in gendered images of technology use—especially, but not limited to, commercial images. In these richly textured images, the elaborately woven fabric of social formations that supports the male focused computer industry is coded ideologically at numerous visual and discursive levels for consumers and users. This fabric is so tightly woven, that for many computer users and consumers, for many students in our schools, it represents what Pierre Bourdieu (1977) would term “doxa”—ideological systems of belief so consistent with popular beliefs, and therefore so invisibly potent, that they preclude the consideration of other positions altogether. At the same time, all such fabrics have gaps, lacunae, that provide the space for resistance; and this one is no exception. Indeed, it is exactly because this ideological system is so densely and consistently coded that these images provide such rich sites of analysis and strategic information. In Andrea Dworkin’s (1974) words, an analysis of these images can provide us the chance to unthink current discourses about technology and to transform the dialogues we hold with ourselves about gender and computers in new and productive, heterodox ways.

Like the Land of Equal Opportunity narrative, the Un-Gendered Utopia story can appeal at a romantic level to many Americans, while, at the same time, terrifying us on a practical level. Creating an electronic ungendered utopia means that we might have to learn how to understand people outside of the limited gender roles that we have constructed for them in this country, that we may have to abandon the ways in which we have traditionally differentiated between men’s work and women’s work in the market place, that we may have to provide men and women with equitable remuneration for comparable jobs, that we may have to learn to function within new global contexts that acknowledge women as Heads of State as well as heads of households.

In fact, we find ourselves, as a culture, ill equipped to cope with the changes that this Un-gendered Utopia narrative necessitates. We cannot, indeed, even

imagine, collectively, ways of relating to gender outside the context of our familiar historical and cultural set of experiences. As a result, revise the script of the narrative to fit more snugly within the historically determined contexts that are familiar and comfortable to us. In doing so, however, we also limit our cultural vision of gender within technological landscapes—constraining roles and expectations and possibilities to those we have already constructed as a culture, limiting the potential for change by subscribing to a conventional framework for our imagination.

In this revision, for example, while we maintain the vision of an electronic landscape that is open to all innovative and hardworking people, regardless of their gender, we also limit the actual participation of women and men within this landscape to the more traditionally determined gender roles we have already constructed within our culture. In the revised narrative—the Same Old Gendered Stuff narrative—the new electronic landscape retains a value on innovation, hard work, and the individual contributions of people of both genders, but only as they are practiced appropriately—within the traditionally gendered contexts we have historically and culturally ratified for women and men in our culture.

In such a landscape, women use technology within a clearly constrained set of appropriate settings: to enrich the lives of their family and to meet their responsibilities at home—as wife, as mother, as seductress, as lover; within a business setting, women use computers to support the work of their bosses—as secretaries, executive assistants, and loyal employees. There are, of course, exceptions to this story, as we shall see, but this narrative, as Anthony Giddens (1984, p. 22) would say, is “deeply sedimented” in habit, historically determined practices, in tradition, in our imaginations, and, thus, it exerts a strong influence on even these alternative stories. Men, in contrast, use computers at home to expand their personal horizons beyond current limits—for excitement, for challenge, to enhance their own private lives as explorers, pioneers, and builders. Within the business world, men use computers to support their historically constructed roles as bosses, leaders, decision makers.

This re-telling or re-vising of the Un-Gendered Utopia story happens very naturally. A good portion of our collective imagination is constructed by history and sedimented in past experience and habit. Indeed, many of the images appearing in the next series have a distinctive “retro” look that harkens back to the fifties—for many of the same reasons as those ads telling the Land of Equal Opportunity narrative discussed earlier in this chapter.

In that optimistic time, women were no longer encouraged to maintain a presence in the workplace. At the close of WWII, they were displaced from the workplace by men returning home from the European and Pacific theaters (May, 1988). Women, faced with this eventuality, became the savvy managers of the private sphere—especially when they were assisted by technological innovations. These women, were urged to serve their families frozen foods and TV dinners, and to acquaint themselves with the scientific principles of eating

so that they could be effective nutritional advisors to the family; they were expected as well to heed the advice of Dr. Spock, take advantage of the Salk vaccine for polio, and keep abreast of advances in antibiotics and modern theories of behaviorism to become effective health advisors; and they were expected to use the newly developed and improved technologies of electric vacuum cleaners, dishwashers, washing machines, televisions, cleaning products, and station wagons to be increasingly effective housekeepers.

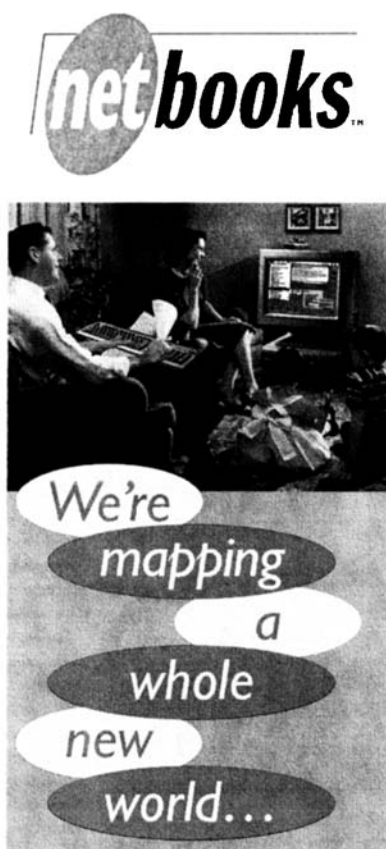
The fact that this previous era of technological optimism provides the context for Americans' collective imagination about the current cultural project of technological expansion is both interesting and important. The results are evident in numerous advertisements about computers and women that use a retro look to link women's roles in the 50s to those in the 90s—in which each gender assumes their appropriate role in connection with technology. Men use technology to accomplish things; women benefit from technology to enhance the ease of their lives or to benefit their families.

And to understand how these traditionally gendered roles of the fifties are projected directly on the technological context of the nineties, readers can focus on the living room in figure 10, where images from the television-era of the fifties are overlaid by those of the computer-era of the nineties. Despite this fact, however, despite the fact that families in the nineties must maintain a dual presence in the work force, despite the fact that the rising incidence of divorce at the end of this century makes single-parent families the norm rather than the exception, despite the fact that the optimism of the fifties and sixties as articulated by John Kennedy has given way to the paranoia of the nineties as expressed by Pat Buchanan—the images of gender, the narratives they tell in connection with technology remain relatively stable, disturbing intact except for the imposition of a computer keyboard—held and operated by the father—and a computer menu—admired and enjoyed by the woman and children.

And so the revised narrative—the Same Old Gendered Stuff narrative—remains current. Its resonance is also demonstrated in figure 11 (see page 310), an advertisement for Reveal, and in figure 12 (see page 311), where we meet a thoroughly modern woman, Celeste Craig of Pontiac Illinois. Celeste, we learn, is finally achieving her dream of “going to college by staying home.” The invention of a sophisticated distance-education computer network has allowed Celeste to undertake a course of study from her home in Pontiac Illinois while, at the same time, continuing to fulfill her role as a single mother supporting a family, parenting her children, and maintaining a household.

The gender roles of the fifties also translate into workplace roles for women in the nineties. In figure 13 (page 311), for example, Irma—like a good, upscale, personal business assistant in the nineties—speaks “fluent Internet” much like her fifties counterpart would have spoken French. In figure 14 (page 312), Fran, a fifties secretary with “just another pretty face” has been transmogrified, into a “multi-talented” nineties cyborg/robot assistant that “makes your website look good.” And finally in figure 15 (page 313), which suggests

Figure 10



only a slightly revised version of the Same Old Gendered Stuff narrative, a nineties woman-as-boss, also portrayed in sepia tones against a fifties-style restaurant banquette, remains as decidedly cool, relaxed, and elegant despite the fact that she has also required the title of “hotshot,” “collector,” “work-horse,” and “nomad.”

But the roles of parent, housewife, and secretary/boss are not the only ones open to women in the new cyberlandscape represented by the Same Old Gendered Stuff narrative. Figure 16 (page 314), for example, shows an ad for Nokia monitors, and in doing so, portrays a woman in the traditional role of “beauty.” In the advertisement, a sophisticated woman draped with jewels, decked out in a chic black dress, washed in sepia tones and softened by a grainy texture gazes into a computer monitor. Although the text accompanying this image ostensibly outlines the capabilities and design of the monitor,

Figure 11



I wanted to work here.



In the spare room.
At first my work said no way.
The equipment I'd need would be
too expensive.
So I bought it all myself
A modern, speakerphone, fax machine,
the works. Even a voicemail system
with more mailboxes than the local
Post Office.
They think I spent a small fortune.
Truth is, I got all that by plugging a
single, affordable device into my PC.
My small fortune is still
in a college fund.
What kind of people design this stuff?



Check out the new affordable Quad Office Card™ for a limited
time. It's a complete office solution. At just \$19.99,
it's the most affordable office solution. Subject to the same
restrictions as our other \$19.99 Quad Office Card.
See it all on our website at <http://www.reveal.com>

REVEAL
THE POWER OF COMPUTER UPGRADING

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For information call 1-800-775-2277

Figure 12

September 11 in Portland, Oregon:
CELESTE CRAIG began her DREAM
 of going to college by using IRMA.

IRMA is the small, powerful, easy-to-use tool that can connect you to the Internet. It's the only browser that's designed to be used on a variety of computers, including IBM, Compaq, and Sun. It's the only browser that's designed to be used on a variety of operating systems, including Windows, Macintosh, and Unix. It's the only browser that's designed to be used on a variety of networks, including LANs and WANs. It's the only browser that's designed to be used on a variety of devices, including desktop computers, laptops, and handheld devices. It's the only browser that's designed to be used on a variety of services, including the World Wide Web, FTP, and Gopher. It's the only browser that's designed to be used on a variety of languages, including English, Spanish, and French. It's the only browser that's designed to be used on a variety of countries, including the United States, Canada, and Europe. It's the only browser that's designed to be used on a variety of cultures, including American, British, and French. It's the only browser that's designed to be used on a variety of religions, including Christianity, Islam, and Buddhism. It's the only browser that's designed to be used on a variety of ethnicities, including White, Black, and Asian. It's the only browser that's designed to be used on a variety of ages, including children, adults, and seniors. It's the only browser that's designed to be used on a variety of abilities, including sighted, hearing, and disabled. It's the only browser that's designed to be used on a variety of genders, including men, women, and transgender. It's the only browser that's designed to be used on a variety of sexual orientations, including straight, gay, and lesbian. It's the only browser that's designed to be used on a variety of social classes, including rich, middle class, and poor. It's the only browser that's designed to be used on a variety of political beliefs, including liberal, conservative, and moderate. It's the only browser that's designed to be used on a variety of religious beliefs, including atheist, agnostic, and theistic. It's the only browser that's designed to be used on a variety of philosophical beliefs, including nihilist, existentialist, and humanist. It's the only browser that's designed to be used on a variety of moral beliefs, including utilitarian, deontological, and virtue ethics. It's the only browser that's designed to be used on a variety of aesthetic beliefs, including minimalist, maximalist, and eclectic. It's the only browser that's designed to be used on a variety of artistic beliefs, including traditional and avant-garde. It's the only browser that's designed to be used on a variety of scientific beliefs, including empiricist and rationalist. It's the only browser that's designed to be used on a variety of spiritual beliefs, including agnostic, deist, and theist. It's the only browser that's designed to be used on a variety of metaphysical beliefs, including materialist and idealist. It's the only browser that's designed to be used on a variety of epistemological beliefs, including empiricist and rationalist. It's the only browser that's designed to be used on a variety of ontological beliefs, including materialist and idealist. It's the only browser that's designed to be used on a variety of axiological beliefs, including utilitarian, deontological, and virtue ethics. It's the only browser that's designed to be used on a variety of political beliefs, including liberal, conservative, and moderate. It's the only browser that's designed to be used on a variety of religious beliefs, including atheist, agnostic, and theistic. It's the only browser that's designed to be used on a variety of philosophical beliefs, including nihilist, existentialist, and humanist. It's the only browser that's designed to be used on a variety of moral beliefs, including utilitarian, deontological, and virtue ethics. It's the only browser that's designed to be used on a variety of aesthetic beliefs, including minimalist, maximalist, and eclectic. It's the only browser that's designed to be used on a variety of artistic beliefs, including traditional and avant-garde. It's the only browser that's designed to be used on a variety of scientific beliefs, including empiricist and rationalist. It's the only browser that's designed to be used on a variety of spiritual beliefs, including agnostic, deist, and theist. It's the only browser that's designed to be used on a variety of metaphysical beliefs, including materialist and idealist. It's the only browser that's designed to be used on a variety of epistemological beliefs, including empiricist and rationalist. It's the only browser that's designed to be used on a variety of ontological beliefs, including materialist and idealist. It's the only browser that's designed to be used on a variety of axiological beliefs, including utilitarian, deontological, and virtue ethics.

GTE
 THE WORLD'S LARGEST TELEPHONE COMPANY

© 1995 GTE. All rights reserved. IRMA is a registered trademark of GTE. The GTE logo is a registered trademark of GTE. The World's Largest Telephone Company logo is a registered trademark of GTE.

Figure 13

Attachmate

TAKE CARE OF BUSINESS WITH IRMA® FOR INTERNET

EVERYTHING YOU NEED FOR BUSINESS PRODUCTIVITY & EFFICIENCY IS NOW YOURS. YOU GET THE LAN ACCESS TO THE INTERNET AND A FULL SET OF BUSINESS APPLICATIONS FOR EXPANDING YOUR BUSINESS. IRMA FOR INTERNET IS THE ONLY INTERNET BROWSER THAT HELPS BUSINESS OWNERS, MANAGERS, & EMPLOYEES WORK BETTER AND FASTER.

EXACTLY WHAT YOU WANT FROM ATTACHMATE, THE LEADER IN GLOBAL WIDE AREA NETWORKS, IS NOW YOURS. IRMA FOR INTERNET IS THE ONLY INTERNET BROWSER THAT HELPS BUSINESS OWNERS, MANAGERS, & EMPLOYEES WORK BETTER AND FASTER.

Irma Speaks Fluent Internet

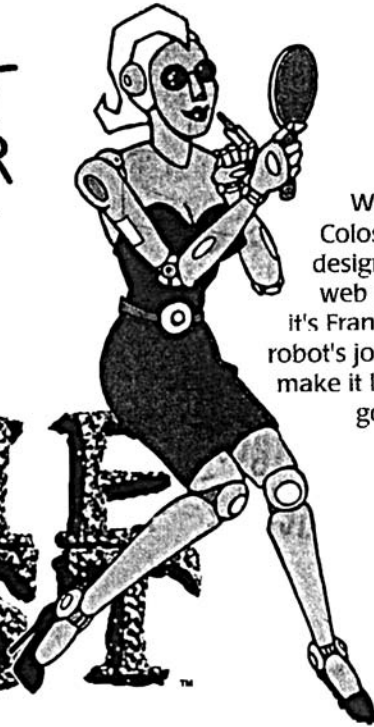
IRMA for INTERNET

SECURE WEB BROWSER • LAN AND DIALUP CONNECTIVITY • E-MAIL • NEWS READER • FTP

Figure 14

NOT JUST
ANOTHER
PRETTY
FACE

THE
LIST



When
Colossus
designs a
web site,
it's Fran the
robot's job to
make it look
good.

Figure 15

By 1999, there were 100 million more e-mail users than there were in 1998. And the LTE 5000 could help you stay connected. It's a Pentium® powered notebook featuring interchangeable devices — and the remarkable ability to make sophisticated power users in your line of work. Its unique, front-loading HotSwap™ makes it completely modular, so you can share up an e-mail meeting with a notebook committed for the agenda. Choose from a second hard drive (up to 1.5 gigabytes), a CD-ROM drive, a second battery, or a floppy drive to make the notebook that's right for the task at hand. Its expansion bay also features two additional HotSwap™ card slots great for a game glass disk. Interested? Call 1-800-242-5148 (under Payfone) or visit our Web site at www.compaq.com.

collector workhorses.com hoishot

THE COMPAQ LTE 5000. THE ULTIMATE NOTEBOOK FOR WHOEVER YOU HAPPEN TO BE.

That's the last time to you. When they add you couldn't have a CD-ROM drive and MP3C adds to a notebook, you're good enough. Yes, I can.

COMPAQ
Has It Changed Your Life Yet?

Figure 17



the language itself leaves no doubt of picture's focus or intent. As it notes, the "European passion for beauty" is quickly "winning the hearts and eyes of Americans too" by seductive means. The woman pictured in this advertisement, it should be noted, gazes longingly into a monitor, but lacks a keyboard with which she could act on the computer.

Finally, the 1990s retro series offers Americans the role of seductress—also a traditionally defined role for women, and one that has retained enormous strength even in cyberspace where change is expected to affect so many areas of our lives. Figure 17, representing a narcissistic seductress for Samsung, illustrates the potency of these traditionally constrained roles.

In these ads, we see reflected the roles that our culture can imagine women playing in relation to technology. And they are familiar roles—the seductress, the beauty, the mother—all relationships ratified by our historical experience, easily accessible to our collective imagination, and informed by traditional

Figure 18

CompuServe Consumer Products

To Get On The Internet. How Smart You Are

Announcing the CompuServe Internet Division

We're the ones that wrapped up your future in a little brown box. And we're still making it easy for both first timers and the fortunate few to enter the Internet. But we also remember the reasons why you go on the Internet in the first place. Like gaining the ability to stay tuned in to the things that are most important to you. Being part of the industry's only global online service ensures our ability to provide that. And it gives us the resources to offer more useful products and services than any other Internet company. So as you look into the future, you'll be able to count on us to be there with you. Because even as we solve problems for an entire spectrum of Internet users, we'll continue pioneering the pathways that will take you where you're looking to go, and beyond.

CompuServe
SPRY/Internet Division

social values. These roles exist, and are reproduced, within a set of over determined social formations that makes radical change hard to imagine and even harder to enact—especially when technology is involved.

The revision of the Un-Gendered Utopia narrative into the Same Old Gendered Stuff narrative deals no less traditionally with men's roles, it should be noted. In connection with workplace technologies, men are allowed essentially the same tie-and-oxford-cloth look in the nineties (figure 18) as they were in the fifties (figure 19), although slight variations of this role—the impatient-and-rebellious young entrepreneur on the go sans tie (figure 20, page 318) or the successful architect-net-cruiser (figure 21, page 319) sporting a turtle neck—are also permitted. Out of the workplace (figures 22-24, pages 319-321), men are shown to adopt the equally traditional and retrograde roles of bikers, nerds, and sex maniacs.

These ads, of course, are only one expression of our collective experience—and I would not want to claim that they tell a totalizing story. They do indicate, however, that it will be exceedingly difficult for Americans to imagine an electronic landscape in which individuals enjoy new kinds of opportunities to relate to each other and new kinds of opportunities to make positive changes in their lives. It takes energy and careful thinking to create a landscape in

Figure 19

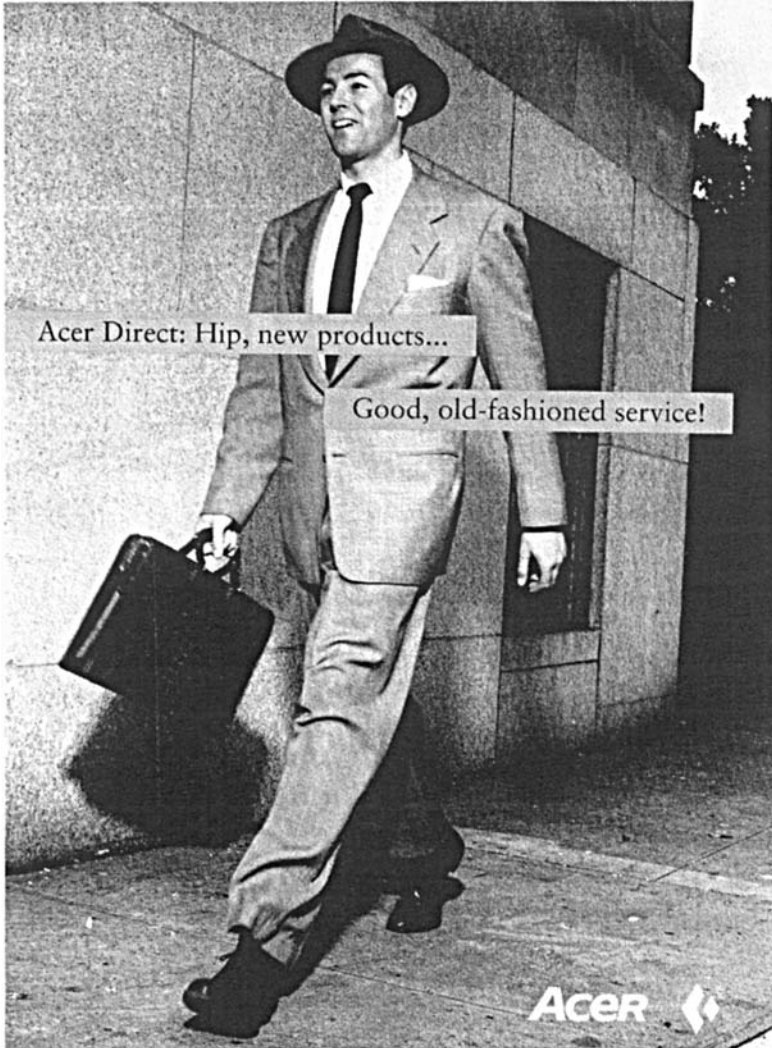
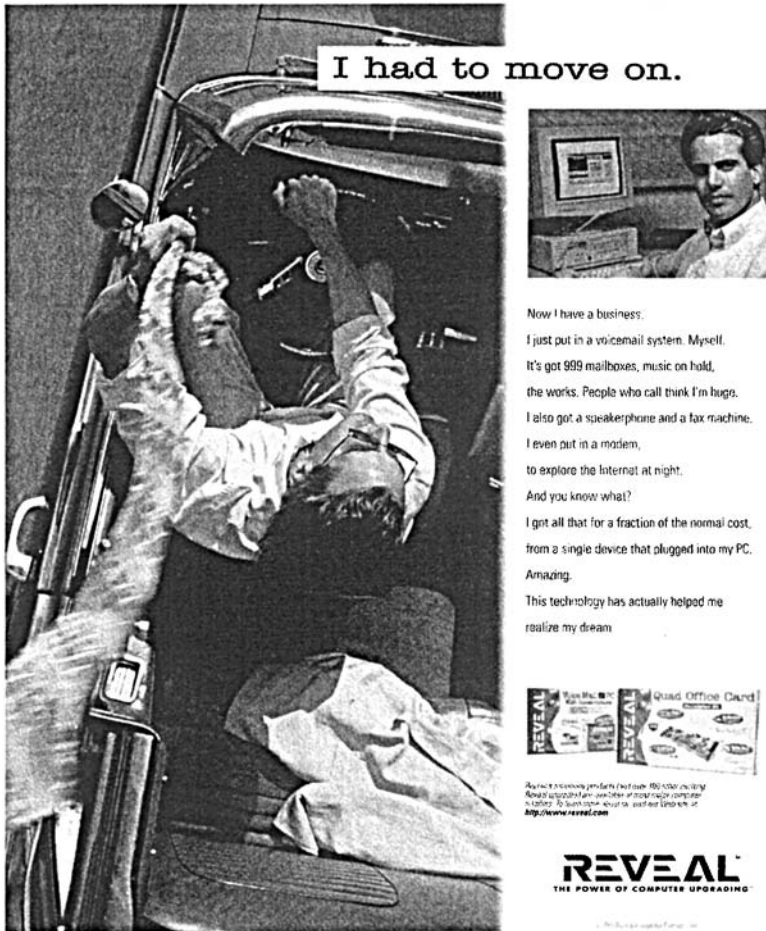


Figure 20



I had to move on.

Now I have a business.

I just put in a voicemail system. Myself.

It's got 999 mailboxes, music on hold, the works. People who call think I'm huge.

I also got a speakerphone and a fax machine.

I even put in a modem, to explore the Internet at night.

And you know what?

I got all that for a fraction of the normal cost, from a single device that plugged into my PC.

Amazing.

This technology has actually helped me realize my dream.

REVEAL Quad Office Card

Requires a working phone line. Not over 100/1000. Not 10/100. REVEAL upgrades all one-line or multi-line computer systems to business-class, unified service at <http://www.reveal.com>

REVEAL
THE POWER OF COMPUTER UPGRADING

Figure 21

I'm rebuilding City Hall using the tools in my kitchen.

Home wasn't built in a day, but my clients think a *Aspire™ To Do More™* building can be. Luckily, my new Acer® Aspire™ helps me do the impossible. If I need to be active even as a planning session, Aspire's integrated speakerphone puts me right in the boardroom. But, I can still be at my desk at home, working on a materials budget at the same time.

In fact, Aspire is loaded with features that help me get things done. Like the full color, CD-ROM multimedia presentation that won't the City I can do with my Aspire Council, and just my idea this time in the first *Do environmental studies* plane. And most important I've been, because *Negotiate the best prices* they simplified setup and preloaded all the software with professional news.

Keep it with professional news means I didn't have much more than the five *Search for interior designers* minutes it took to get Aspire up and running. And *create around the internet* But now I've got all the time in the world to build my career from the ground up.

ACER Everything You Aspire To.

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For the location of the Acer Aspire dealer nearest you, call 1-800-425-ACER. Or visit us on the World Wide Web at <http://www.acer.com>

Figure 22

T H E I N T E R N E T S 9 C R U I S E

Pop A Wheelie On The Internet.

CHARTER-NET 99

EASY RIDER

NETMANAGE

Ride The Road. Handle up and cool down the Internet. Ride Internet CharterNet straight into Hot Heaven. Well equipped to explore the road and hit all the hot spots. Hey, who says you were born to be mild?

All The Tools To Ride The Road: WebSurfer, Email, NEWSNew, File Transfer, Gopher, and more!

Book the 99 Internet Cruise! Test drive the smoothest Internet from-end around. Take the 99 Cruise and pick-up free highway fare. Call us: 1-800-658-7658. Ask for Department 88

Figure 23

**Getting
on the Internet
no longer requires
the following
hardware:**



NETSCAPE NAVIGATOR PERSONAL EDITION 1.2

You don't need to be a computer geek with Netscape Navigator™ Personal Edition, the world's most popular Internet browser. For under \$40* at your local computer store, Personal Edition lets you access the World Wide Web, E-mail, news groups, and FTP sites. Just point and click to choose from a list of leading Internet service providers and your connection is automatically set up.

Plus, it offers all the performance and advanced features that have made Netscape Navigator quite popular with the biggest brains on the Web.

When you purchase Personal Edition 1.2, you'll automatically receive over \$70 in offers from CDNow, Lombard Institutional Brokerage, SportsLine USA, and ESPNET SportsZone. And you can easily upgrade to future versions of Netscape Navigator by clicking on the new "upgrades" button.

So if you want to get on the Internet, get Netscape Navigator Personal Edition.



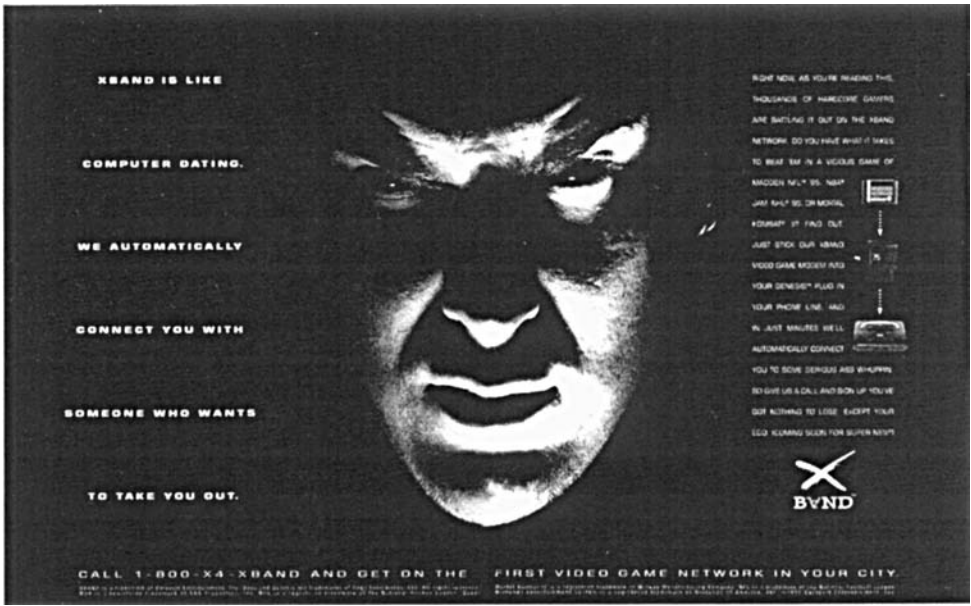
NETSCAPE

For more information, call **1-800-469-0397**.

Available for Microsoft Windows®. For info, see article on 100 Internet, Web at www.netscape.com. ©Netscape Communications Corporation 1995. All rights reserved. Netscape Navigator, Personal Edition, and the Netscape logo are trademarks of Netscape Communications Corporation. Microsoft Windows is a registered trademark of Microsoft Corporation. *MSRP. See package insert for details.

CIRCLE NUMBER 84

Figure 24



which women can participate in roles other than those of seductress, beauty, or mother; and in which men don't have to be bikers or abusers or rabid techno geeks or violent sex maniacs. It is far easier and more comfortable simply to re-construct for ourselves those traditional narratives that tell the same old gender stories over and over again, and that re-create the status quo ever more clearly in their re-telling.

CONFRONTING REVISED NARRATIVES

The images in this chapter illustrate the richly textured narrative fabrics within which computer technology and other communication technologies are situated in the American cultural scene. Our work as teachers, the curricula we fashion, the corporate and public environments our students enter as professionals, the schools that make up the educational systems—these social formations are also shaped by the same sets of culturally determined values, the same complexities, the same ambiguities, the same contexts for our imaginations.

Such a realization can serve to remind teachers that technology does not necessarily bring with it social progress, and that educators had better make

sure that students recognize and understand this fact if we want them to be able to make contributions of which they can be proud. Within the English studies programs that we design and administer, and participate in, we place everyone in jeopardy if we limit our understanding of technology and change to one dimension, if we teach students only one part of this complicated picture.

A good English studies curriculum will educate students robustly and intellectually rather than narrowly or vocationally. It will recognize the importance of educating students to be critically informed technology scholars rather than simply expert technology users. Graduates of English studies programs will face an increasingly complex set of issues in the workplace and in the public sphere, and our failure to provide the intellectual tools necessary to understand and cope with these issues at multiple levels signals our own inability to lead productively as professionals and as citizens.

Finally the images can serve to remind educators that even though productive changes are hard to make—with or without technology—our responsibility to work for change, especially as educators, remains undiminished in its urgency and importance. Like Paulo Friere, we need to be optimistic enough to believe that in teaching ourselves and others to recognize the inequities that challenge humanity in our world—the ethnocentrism, racism, classism, sexism—we have begun the difficult work of addressing these problems.

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