CultureAmerica

Karal Ann Marling
Erika Doss

SERIES EDITORS

iSpy

SURVEILLANCE AND POWER IN THE INTERACTIVE ERA

Mark Andrejevic

University Press of Kansas

Introduction

Cyberspace is not a fairy realm of magical transformations. It's a realm of transformations all right, but since humans beings aren't magical fairies you can pretty much scratch the magic and the fairy part.

—Bruce Sterling

Enter the Digital Enclosure

In the spring of 2006, search engine giant Google announced its plans to bring the holy grail of next-generation Internet access to the United States' first city of technology: the entire city of San Francisco would be equipped with free wireless Internet access. The company wasn't doing this out of the kindness of its heart or to rid itself of an embarrassingly large budget surplus; it had a business model. In return for free wireless access, Google announced its plans to use the information it gathered about users' locations within the city to bombard them with time- and location-specific ads, or what it calls "contextual advertising." As one press account put it, "users linking up with Wi-Fi transmitters placed around cities can be located to within a couple of blocks, allowing [Google] to serve tightly focused ads on its web pages from small businesses in the immediate area."[1] If, in other words, you happened to be working on your laptop in a city park during lunchtime, you might find an ad on your computer screen for a lunch discount at the sandwich shop across the street. Given the fact that Google can also keep track of the search requests entered into its search engines

and the e-mail messages sent over its popular Gmail service, it's not hard to imagine just how "contextual" the advertising it doles out might eventually become. Say you happen to be searching for information about a particular author while working in a neighborhood café. Perhaps you might find an ad for discounts on that author's work in the bookstore around the corner. Writing a friend about a trip you're planning to take to Las Vegas the following weekend? Maybe the ad will be for poker how-to manuals instead.

Google's plans for San Francisco represent the physical version of what I describe in this book as a *digital enclosure*—the creation of an interactive realm wherein every action and transaction generates information about itself.[2] Although the term implies a physical space, the same characteristics can apply to virtual spaces. The Internet, for example, provides the paradigmatic example of a virtual digital enclosure—one in which every virtual "move" has the potential to leave a digital trace or record of itself. When we surf the Internet, for example, Internet browsers can gather information about the paths we take—the sites we've visited and the clickstreams that take us from one site to the next. When we purchase items online, we leave detailed records of our transactions. Even our search requests are logged and preserved in the database memories of search engines. Google's plans for downtown San Francisco are, in other words, merely the implementation of this Internet model in physical space: an attempt to make the city "interactive" by enveloping it within the electromagnetic embrace of Wi-Fi.

I use the term *enclosure* not just to invoke the notion of a space—virtual or otherwise—that is rendered interactive, but also to highlight the *process* of enclosure, whereby places and activities become encompassed by the monitoring embrace of an interactive (virtual) space. Accompanying this movement is a not-so-subtle shift in social relations: entry into the digital enclosure carries with it, in most cases, the condition of surveillance. We can go into a bookstore and make a cash purchase without generating information about the transaction. But when we go online, we generate increasingly detailed forms of transactional information that become secondary information commodities: information that may eventually be sold to third parties or used by marketers for targeted advertising campaigns. When we turn on our wireless connection in the San Francisco of the future, we will find ourselves in a digital enclosure for which the terms of entry include submission to always-on, location-based monitoring.

The use of the term *digital enclosure* is also meant to evoke the land enclosure movement associated with the transition from feudalism to capitalism, the process whereby over time communal land was subjected to private control, allowing private landowners to set the conditions for its use. Over time, the enclosure movement leads to the formation of distinct classes: those who own the means of production and those who must sell their labor for access to these means, whether arable lands or factories. A similar division of groups can be discerned in the emerging digital enclosure between those who control privatized interactive spaces (virtual or otherwise), and those who submit to particular forms of monitoring in order to gain access to goods, services, and conveniences. If you want the benefits of mobile telephony, not only do you enter into a financial arrangement with a service provider, you also, perhaps unwittingly, surrender to the forms of surveillance associated with cell phone use. As we shall see, this means not only providing information about who you call and when, but about your movements throughout the course of the day, the types of music you like (based on the ring tones you download), and a range of practices that corresponds to the increasing functionality of mobile phones.

Enclosure might be considered a "movement" to the extent that the reach of the interactive embrace continues to expand. At present, many traditional forms of transactions can still take place offline: we don't *have* to buy our books online. But when the local bookstore closes down because it can't keep up with Amazon.com, that may change. For many services, however, we do find ourselves reliant on monitored transactions: digital video recorders, for example, come with submission to monitoring as a built-in condition of use. Cable companies may not yet be using the data they get from their set-top boxes, but they could. Internet access requires going through a service provider that can collect and store information about patterns of Internet use and online activity. Buying music online is a monitored transaction in a way that a cash purchase in a record store need not be. There is a pattern here: the use of interactive technologies—new media devices—lends itself to the generation of cybernetic information: feedback about the transactions themselves. This feedback becomes the property of private companies that can store, aggregate, sort, and, in many cases, sell the information to others in the form of a database or a cybernetic commodity.[3]

As we equip ourselves with interactive devices and become increasingly reliant on them for everything from talking to one another to listening to

music and buying plane tickets, we find ourselves caught up in privately controlled networks whose owners set the terms for entry, communication, and transaction. Using a cell phone or credit card these days is deceptively simple: communicating and purchasing are streamlined and simplified, but we have very little access to the forms of information collection and circulation that are taking place behind the scenes and screens. Companies are able to track our movements, transactions, and communications without our permission or, in many cases, knowledge. An unprecedented level of convenience is enabled by a network of complex and costly information technology whose increasing functionality is inversely proportional to the typical user's knowledge about how the system works. Those who live in a wired world know, for example, that shopping has become virtually "friction-free": they can window shop, compare prices, and order products without leaving the privacy of their homes. But they likely have only the vaguest idea about what happens to the information they provide about themselves in the process—their addresses, product preferences, credit card numbers, clothing sizes, and so on. Cell phone users know that they can remain in constant contact with friends and family, but they might be surprised to know that in some locations, for example, their cell phones are being used to track traffic patterns, or that the pings sent out by their phones, even when they're not using them, allow their paths to be traced throughout the course of the day. Interactivity is not necessarily a two-way street; more often than not, it amounts to the offer of convenience in exchange for willing or unwitting submission to increasingly detailed forms of information gathering. This book is about some of the ways in which this information is being used—or might be used in the future—and why as citizens and consumers we might want to think carefully about the relationship between the interactive revolution and the power of commercial and state institutions over our daily lives.

Interactivity

Perhaps, when the multimedia histories are assembled, the turn of the current century will be portrayed as the dawn of the iCentury—a period in which the prefix signifying the promise of the interactive revolution became ubiquitous. The hip, tricky little "i" that appears in front of an increasing variety of popular products (many manufactured by Apple) and concepts

(including, during the 2004 election campaign, iPolitics) is freighted with a timely double meaning, both solipsistic customization and the democratic promise of the ability to talk back—to "interact." And what could be friendlier and more progressive than devices that allow us to interact, not just with one another, but with marketers, celebrities, media outlets, and politicians? Isn't interactivity, like communication, an unadulterated good, something that can help eliminate misunderstandings, overcome differences, and even empower the masses? Isn't it, in fact, the antidote to the depredations of mass society, a technological enhancement of democratic participation, the ability not just to see and hear, but to be seen and heard?

To hear some of the more upbeat members of the digerati put it, the so-called interactive revolution arrived just in time to address the increasingly apparent fact that mass society wasn't turning out to be as democratic as we might have hoped. This celebration of interactivity remains both premature and largely unexamined. The term itself, although scattered enthusiastically and indiscriminately throughout popular and academic descriptions of new media (to the point that it has entered the spell-checker lexicon) is an ill-defined and slippery one that has been used to include everything from staying in constant contact with friends, family, and relatives to voting for our favorite "American Idol." The term's ubiquity is rivaled by its referential flexibility: as one group of researchers noted, "Even the 'experts' are not yet certain exactly what the concept means."[4] Or, as another researcher succinctly put it, "The academic [and, I might add, popular] usage of 'interactivity' is marginally inconsistent at best."[5]

Somewhere in the mix, the positive associations of interactivity as a form of two-way, symmetrical, and relatively transparent communication (in the sense of knowing where the information we send is going) have been assimilated to forms of interaction that amount to little more than strategies for monitoring and surveillance. But this is not a book about the so-called end of privacy, not least because the information economy is one in which personal information is being privatized on an unprecedented scale. Those who express their concern over the impending death of privacy as well as those who, like Sun Micosystems's former CEO Scott McNeally, tell us to "get over it," have the story only partly right.[6] It's true that citizens and consumers are losing control over information about themselves, that increasingly their movements and purchases, the details of their daily lives, are being recorded, gathered,

and sorted. In this respect, it's also true that the public can no longer nurture one of the characteristic expectations of mass society: that of being able to pass relatively unnoticed in a crowd, of being able, for the most part, to fly below the radar of surveillance, whether in the form of state surveillance, commercial monitoring, or even neighborhood gossip. Most crowds these days flow past scores of closed-circuit surveillance cameras as they move through the city—cameras that will likely one day soon develop the capacity to recognize individual faces and link them to personal information.

The shift away from a culture of relative anonymity is pervasive—at least wherever interactive technologies are present. Not long ago, for example, loading software on a computer was an unmonitored act—a fact with consequences for software privacy (and piracy). These days, thanks to the spread of the Internet, the programs we load on our computers check in with their parent companies to let them know that they've been legally installed. As we use our frequent shopper cards, our credit cards, and our subway fare cards, and as we surf the Internet, we generate increasingly high-resolution pieces of an emerging data portrait, one that grows more detailed and comprehensive with each new interactive application.

Privacy itself is not only far from dead, it also forms the very basis for the value of detailed information about consumers and citizens. Companies make billions of dollars by gathering detailed information about consumers and claiming it as their private property. In so doing, they prevent members of the public from accessing information that has been gathered about them by invoking their own right to privacy. A cousin of mine who works at one of the nation's largest database companies refused, on privacy grounds, to send me a copy of the information the company had about me. But when she sent a copy of the information about her—including only the public record information and not the additional proprietary information (gathered from the commercial sector and law enforcement)—it was more than 20 pages long and included not only a list of all the places she'd lived, but the names of all of her former roommates and all of the cars she'd owned. This was the lowest-resolution data image available, and yet it contained much more information than most of us would have realized is routinely gathered and stored about us.

We as individuals may feel that we increasingly have less and less freedom from scrutiny by those who would like to know the smallest details of the

rhythms of our daily lives. The flip side, however, is the return of privacy with a vengeance: we find it next to impossible to learn what is being done with all of the information about us, thanks to the shield of privacy claimed by commercial organizations and that of secrecy and national security invoked by the state. The result might be described as an asymmetrical loss of privacy: individuals are becoming increasingly transparent to both public and private monitoring agencies, even as the actions of these agencies remain stubbornly opaque in the face of technologies that make collecting, sharing, and analyzing large amounts of information easier than ever before.

Most of us have some vague understanding that marketers are gathering information about us when we use our credit or discount cards, register our preferences online, surf the Web, or use our mobile phone, but we have very little knowledge about what information is being gathered, who has access to it, and how it is being used. How many of us know, for example, that there are database companies that keep "lists of people who take Prozac for depression, believe in the Bible, gamble online, or buy sex toys," or that the "verification services" company ChoicePoint has more than 15 billion records about 220 million Americans?[7] We know in general terms that we're being monitored, but we are far from having a sense of how extensive, detailed, and sophisticated the monitoring system has become.

Increasingly, state surveillance, at least in the United States, follows the same model: as more information is gathered, less accountability is afforded to the general public. The post-9/11 Patriot Act is a telling example of this tendency. Although it has rightly received a fair amount of publicity for the forms of privacy protection that it sacrifices in the name of national security, it has received rather less publicity for what might be among its most significant provisions: the fact that it exempts monitoring activities under its aegis from the Federal Freedom of Information Act. The result is not just more intensive and extensive surveillance (which arguably has some value to national security) but decreased accountability on the part of the spy agencies—agencies that have become famous for past abuses of their surveillance power. The same logic is at work in President Bush's public insistence on his right to increase surveillance activities while at the same time bypassing the legal obligation to obtain search warrants—an obligation meant to ensure some degree of accountability. The goal is not merely increased surveillance, but increased surveillance with diminished oversight and accountability—

or, to put it another way, increasing asymmetry in the monitoring process: those who are increasingly subject to surveillance are prevented from learning about the details of the surveillance process itself. The watchmen don't want to be watched.

This asymmetry is pervasive in forms of commercial and state monitoring facilitated by new communication technologies and techniques. It is rapidly becoming a hallmark of the type of "interactivity" citizens and consumers encounter on a regular basis. Perhaps not surprisingly given their prevalence, such forms of asymmetry have made their way into the interpersonal use of "interactive" devices, which allow individuals to engage in forms of monitoring and surveillance that mimic commercial and state surveillance. Just as we are becoming increasingly accustomed to top-down forms of monitoring, so we are learning that new technologies mean friends, families, and peers have an unprecedented ability to surreptitiously monitor and record information about one another by, for example, tracking phone calls (via cell phone call histories) and computer use (by checking recently viewed searches, documents, and Web sites) or performing criminal background checks and public records searches. These broad-ranging forms of habituation to interactivity-as-monitoring reinforce one another.

All of which is not to argue that interactivity is either inherently pernicious (or, on the other hand, automatically empowering). Although this book explores various dimensions and proposed definitions of interactivity, it avoids defining interactivity in the abstract. Rather, it sets out to consider the contradictions and tensions that permeate the contemporary deployment of both the promise of interactivity (as a form of power sharing) and its practice (which often amounts to monitoring and surveillance). It takes interactivity as its guiding object of critique and analysis because of the central role played by this concept and capacity in the deployment of new information and communication technologies that have had a powerfully transformative effect on the media environment, the information economy, and, thus, on contemporary social relations.

At heart, this is a book that approaches some of the central issues surrounding the development and deployment of new media through the lens of one of their characteristic attributes. It is an attempt to debunk the false promise of the digital revolution and in so doing to rehabilitate rather than write off the democratic potential of interactive media. The standard strategy of ideology is to address a real perceived need with a false solution—often one that exacerbates the very need it promised to fulfill, thereby ensuring the unflagging demand that legitimates the ideology itself. Thus, for example, the market offers the image of control over nature as a means of selling powerful automobiles. Think of all the SUV ads that feature rugged vehicles ripping their way through tough terrain, climbing mountains, and slicing their way through snow drifts and streams. The ads cater to a desire to feel in control over nature even as they pitch a product that contributes to the threat posed by environmental degradation. The defining contradiction of every ideological strategy is that it acknowledges the reality of the need it fulfills while promising that it has already been addressed. By the same token, any attempt to debunk ideology runs the danger of dismissing the actuality of the need it addresses. As critic Fredric Jameson suggests, ideology cannot be dismissed as wholly false: it reveals its element of truth in the acknowledgment of the reality of a need or a contradiction to be addressed.[8] If we are to consider the promise of interactivity as ideological in this specific sense, we might start out by considering the need that it addresses. Or to put it somewhat differently, one approach to the notion of interactivity is to consider its implicit or explicit promise: why is it such a useful buzzword for marketing new communication technology? Rather than dismissing the marketing of interactivity as public relations froth, how might we extract the solid core of its appeal by working backward, as it were, from the proposed solution to the perceived need?

Instead of starting with a list of general answers, it is perhaps more useful to consider some specific examples chosen not so much for their sweeping social impact as for being suggestive—and typical of the promotional promise of interactivity. In the summer of the first year of the new millennium, for example, TV viewers were treated to an advertisement that featured a TV executive being tossed through the plate-glass window of his skyscraper office. The message of this tongue-in-cheek image of the impending interactive revolution was that interactive technology heralded a revolutionary shift in control over TV consumption from producers to viewers. As one account put it, glossing over the fact that the ostensible revolution had no impact on content whatsoever, "TiVo, a digital set-top unit that functions like a hyperintelligent VCR, allows viewers to create their own TV schedules."[9] By the time the advertisement aired, the rhetoric of the digital revolution had

become easily recognizable: thanks to new, interactive, media technologies, consumers, viewers, and citizens were about to become radically empowered. Such rhetoric folded the images of *political* revolution—the violent dethroning of power figures in the TiVo ad, for example—into a promotional appeal for the latest generation of high-tech *consumer* goods.

Perhaps the archetypical image of this advertising campaign was the 1984 Apple computer ad featuring the revolutionary overthrow of Orwellian authoritarianism—thanks to the emergence of personal computing, Apple style. Not only would the revolution be televised and digitized, but it could be purchased . . . and the culture critics were buying. In its celebratory article about TiVo, the *New York Times* heralded the technology as "the beginning of the end of another socialistic force in American life: the mass market."[10] Against the background of the impending interactive revolution, the article's author argued, "the entire history of commercial television suddenly appears to have been a Stalinist plot erected, as it has been, on force from above rather than choice from below."[11] At the very least, such an observation amounts to dramatic historical revisionism for a publication like the *New York Times.* Apparently, by the turn of the millennium, thanks perhaps to the fall of communism in Europe, it seemed OK to admit that the mass culture critics had been right all along: there was a disconcerting similarity between the top-down control of capitalist mass media monopolies on the one hand and top-down state-controlled media on the other.

Perhaps it shouldn't have come as a big surprise that a mainstream media heavyweight like the *New York Times* would readily embrace a promise that had, after all, become commonplace in the hype surrounding new media technologies. But it was a bit surprising to discover that, at least in this instance, the mainstream media and the hip media critics who publish the magazine *Adbusters* were on the same page. According to *Adbusters,* TiVo is a subversive technology that "struck true fear into the hearts of the transnational bosses" (including, presumably, the networks who were investing in TiVo at the time) because it "sticks it to every broadcast advertiser."[12] The result, they noted, was "something revolutionary. Something almost purely democratic. Something essentially non-commercial, driven not by price but by value. At long last, the people—could it be true?—would have control of what they wanted to hear and see."

What helps make both reactions somewhat surprising is that the business model of TiVo's founders was, as the *New York Times* article noted, not to overthrow the corporate media, but to provide it with the most detailed information possible about viewers: to become information middlemen, providing customized content to viewers and detailed information about viewing habits to consumers. Far from fomenting revolution, TiVo promised to become the twenty-first-century realization of the Orwellian telescreen that watches viewers while they watch TV. Perhaps the most graphic instance of TiVo's surveillance capabilities came shortly after the notorious "wardrobe malfunction" during the 2004 Super Bowl, when one of the half-time performers, Janet Jackson, momentarily bared her breast. According to an enthusiastic press release put out by TiVo the following day, this brief moment was the most replayed in TiVo's admittedly brief history. The "freedom" allowed by TiVo—the ability to watch shows whenever one likes—came with a dramatically heightened level of viewer monitoring: the ability not just to determine which households are watching what shows, but the minutiae of how they are watching and when, including how often they rewind, fast forward, pause, and so on. TiVo promised a quantum leap in the ability of producers to monitor viewers.

The model, up until the advent of TiVo, has been to treat audiences as homogeneous masses in which the behavior of a small sample could be reasonably assumed to reflect the viewing patterns of society as a whole (without any way of checking for certain). With the development of interactive digital recording technology—which is also being incorporated into cable TV systems, thereby threatening to eliminate TiVo's coveted monopoly of the middleman role—the model shifts from one based on generalization and probability sampling to one based on the detailed monitoring of individual viewing habits. TiVo technology brings the mass medium of television into the customized, interactive network era. Just as Web sites like Amazon.com can remember the identity of individual visitors and sort through their past actions and purchases in order to target individual consumers with customized appeals for new products and services, TiVo—and other interactive video services—allow producers to keep track of the viewing habits of individual households. When television and Internet technologies merge, the amount of information gathered about consumers will likely grow exponen-

tially, broadening from TV viewing to include, potentially, Web surfing and online shopping, digital radio listening, and downloading statistics.

The fact that digital VCR technologies allow viewers to program their viewing preferences adds a new dimension of predictability to ratings measurements: producers will know in advance the shows that specific households plan to view. Down the road, when the digital customization technology that futurists like Bill Gates have long envisioned becomes practical, advance knowledge of viewing habits will allow programmers to tailor advertisements to viewers. If, for example, a particular household has set its TiVo to record Monday Night Football every week during the football season, producers could conceivably use background information about the household to deliver customized advertising. The apparent drawback for producers is that digital VCRs make it possible for viewers to skip ads, a troublesome detail that they are addressing with product placement and the return of sponsored programming. Shows like *The Apprentice,* for example, rely heavily on sponsors who integrate their products into the content of the show. Thus, one of the likely consequences of digitization—a consequence that it both enables and necessitates (at least from the standpoint of advertisers)—is the continued blurring of the line between content and advertising.

It's worth pointing out that this process of de-differentiation goes far beyond straightforward forms of product placement, like the Reese's Pieces candy in *E.T. The Extra Terrestrial,* or the Coke logo on Simon Cowell's cup. Already the content of much television programming serves primarily as promotional material for other media commodities, either directly or in the form of packaging and promoting celebrities and hybrid entertainers like Jennifer Lopez. This convergence trend is, as media scholars and critics have pointed out, already well under way in the era of media conglomeration and cross-platform synergy. Reality shows like *Newlyweds* or *Making the Band* help promote the musical careers of their stars, while entertainment "news" shows and celebrity exposés promote the careers, movies, albums, and TV shows of featured celebrities. Watching *Entertainment Tonight* is like watching a long advertisement for movies, TV shows, and albums interspersed with shorter ads for personal care products and cars. If the advent of interactive TV heralds the end of advertising as we know it—vignettes distinct from the program content—it simultaneously anticipates the transformation of all content into advertising.

Critical theorists have for some time asserted that watching advertising might be considered a form of audience labor—value-generating work that is compensated for by access to "free" program content.[13] In other words, the informal media contract entered into by producers and viewers is that the latter agree to expose themselves to some amount of advertising in exchange for access to entertainment, news, and sports coverage. According to the unwritten rules of this contract, if no one were ever to watch any ads, presumably advertisers would take their business elsewhere, and funding for TV programming would dry up. The labor metaphor has its limits, but it is a suggestive way to approach some of the ongoing struggles that emerge around TV viewing, including attempts by viewers to shirk their viewing "responsibilities" by channel surfing or ad zapping, and counterattempts by producers to develop increasingly sophisticated techniques for monitoring viewers and thwarting their avoidance strategies—by, for example, synchronizing advertising slots and relying more heavily on ads that can't be zapped, such as product placement, sponsorship, and, more recently, advertising placed in the "crawl" space at the bottom of the screen.

TiVo, viewed from this perspective, is a technology that promises to greatly advance "workplace" monitoring, and, in combination with digital customization, to ensure that viewers work as efficiently as possible, which would mean that they are exposed only to those promotional messages that are relevant to them. Enhancing efficiency in this regard would mean cutting down on wasted advertising viewing, such as exposing retirees to acne cream ads or men to commercials for feminine hygiene products. The customization process, however, adds another, perhaps more literal, level of labor to the process. Targeted advertising relies on the collection of detailed information about consumer preferences, values, and behavior—information that, before the development of interactive technology, could be costly and time-consuming to obtain. Customization, in other words, increases the demand for demographic information to a new level: it creates new markets for the fruits of increasingly intensive and extensive forms of consumer surveillance.

To return to the example of TiVo, we can discern two different but interrelated forms of consumer labor and their relationship to one another: first, the work of watching described by media economists—the attempt to ensure that viewers are exposed to those ads that are most likely to be relevant to the needs, desires, and anxieties of individual viewers; and second, the work of

being watched—the ability of the interactive technology to gather information about individual viewing habits. This second form of "labor" generates an actual product to be bought and sold in the form of what Vincent Mosco has described as cybernetic commodities: information *about* transactions and viewing habits.[14] When I buy a book at Amazon.com, I've purchased a commodity; if Amazon.com sells information about what books I've purchased and viewed to a data-mining company, it is selling what Mosco calls a cybernetic commodity.

The burgeoning personal information industry, which includes companies like Equifax, Choicepoint, Acxiom, and Lexis/Nexis, has grown up in part around the trade in such commodities, generated by individuals as they go through the routines of their daily lives. The value of such commodities lies in their ability to rationalize the marketing process—not just to ensure that ads are sent to the "right" viewers, but to determine strategies for marketing more efficiently to particular sets of viewers by capitalizing on detailed information about their personal lives: have they recently started buying diet products and larger-size clothing? Perhaps ads that target insecurities over weight issues might be inserted in the TV shows these viewers have scheduled for downloading. And that's just a mild version of the potential for invasive and manipulative forms of advertising facilitated by the combination of detailed data gathering and personalized marketing. The example of the woman who started receiving Safeway coupons for diapers and baby food nine months after she purchased a home pregnancy test at the store is only a crude foretaste of the marketing world to come—one in which advertisers may well have ready access not just to our purchases, but our movements throughout the course of the day, our medical and relationship histories, and perhaps even the changing state of our physiological responses.[15] Entrepreneurs are already working on interactive devices that store and respond to changes in level of anxiety, pulse, and body temperature. The attempt to use everything from eye-tracking devices to EKG scanning in order to hone interactive sales strategies is already well under way. Combine the marketing mind-set with the fervid and value-free imagination of entrepreneurial technocapital, and what might seem creepy to the rest of us becomes the next killer application: Web sites that rearrange themselves in response to our viewing behavior, interactive ads fired off to our cell phones in response to changes in our pulse rates and pupil dilation triggered by an advertisement; samples for diet products sent to our homes when our pants size changes; or, perhaps somewhat more disturbingly, ads targeted to an emerging pattern of anxiety or insecurity (interactive ads for Viagra after visiting a Web site on impotency, for example). The question that we need to ask ourselves as we embark on the impending era of technologically facilitated "relationship" marketing is not what marketers want to know about us, but whether there is any information they *don't* want to know about our lives. The answer, one suspects, is a resounding "no."

The lesson of the TiVo advertisement, and the reason for dwelling on the example of digital video recording technology, is that it neatly encapsulates the marketing of surveillance as a form of revolutionary participation. What the TiVo campaign heralds is an era in which we are told that the consumer is being enthroned even as he or she is being put to work as never before. Thanks to the capability of interactive networked technology, consumers are being enlisted and equipped to assist in the process of their own manipulation. The defining irony of the interactive economy is that the labor of detailed information gathering and comprehensive monitoring is being offloaded onto consumers in the name of their own empowerment. To borrow from a formulation by critical theorist Slavoj Žižek, we are invited to actively participate in staging the scene of our own passive submission—and to view such participation as a form of power sharing.[16] As is evident from the recurring mobilization of the language of democracy, the promise of interactivity has implications that extend beyond the economic realm to that of the political—a theme that will be taken up in Chapters 6 and 7. Suffice it to note that the model of willing submission to comprehensive monitoring as a form of participation ought to be clearly recognizable to anyone who has been following the role of citizen "participation" in the Bush administration's war on terror and the Department of Homeland Security's "readiness" campaign. Willing submission to government surveillance and control is framed not just as civic duty, but as the public's participation in an interactive war.

iPromise: Interactivity's Offerings

In this book, I take as a given that there is no single correct definition of *interactivity* that can be used as a measuring stick to assess any given use of the term. Rather, through a consideration of particular applications, this book

attempts to read the promise of interactivity against itself. To avoid begging the question, then, it discerns in the use of the term by promoters of the information economy the promise of interactivity as a form of power sharing: a democratic challenge to the economic, political, cultural, and social hierarchies of mass society. Interactive artist Celia Pearce, in her handbook on interactivity, captures the celebratory, revolutionary spirit of this promise when she argues that, precisely because of emerging forms of interactivity, "The digital age introduces a new form of international socialism, a new kind of democracy that Marx never even imagined."[17] The very premise of interactivity, she claims, "is one of intellectual, creative and social empowerment. It is anti-industrial."[18]

The celebratory "post–mass society" and postindustrial tone of these claims for interactivity extends to the media technologies that enable it, including networked computing. For example, Howard Rheingold, the populizer of the idea that computer networks can help revitalize a sense of community in an increasingly dispersed and atomized society, argues, "The political significance of computer mediated communication lies in its capacity to challenge the existing political hierarchy's monopoly on powerful communications media, and perhaps thus revitalize citizen-based democracy."[19] New media guru and futurist Derrick de Kerckhove goes even further, arguing that technological developments succeed where political struggle has failed: "In a networked society, the real powershift is from the producer to the consumer, and there is a redistribution of controls and power. On the Web, Karl Marx's dream has been realized: the tools and the means of production are in the hands of the workers."[20]

Read backward, all of these promises suggest that the current state of society is not altogether democratic, but rather is characterized by the concentration of power in a group of social, political, and economic elites. Further, as in the case of the *New York Times*'s reception of TiVo described above, the implicit message is that the forms of centralized, one-way, and top-down media characteristic of industrial capitalism facilitate an undemocratic concentration of power. In what is likely to be welcome news to the monopolists, this latest critique of concentrated power proposes a technological fix. There's no need for revolution if the technology itself is revolutionary: the market will heal itself, and citizens will become empowered by embracing new media technologies. Apparently unbeknownst to themselves, the very

elites who are developing and popularizing the technology are crafting the tools of their own destruction. As Pearce puts it, "the Newt Gingriches of the world, who have inadvertently popularized the thing that will be their undoing should be very, very afraid,"[21] presumably because "no matter which way you look at it, interactivity is inherently subversive."[22] That such pronouncements reflect the euphoric techno-utopianism of the 1990s does not mean they have run their course. Indeed, the ongoing attempt to equate new media technologies with the promise of empowerment, individuation, and creative control remains alive and well even in the postbubble tech economy, as will become evident from several of the examples discussed in later sections of the book. The important ideological role that this equation plays in legitimating the ongoing rationalization of economic and political control suggests it's not going away any time soon.

Moreover, the unreflective, celebratory equation of interactivity with empowerment neatly sidesteps the more tangled and troublesome questions of revolutionary politics. An undemocratic affinity between monopoly capitalism and totalitarian culture can only be admitted—or even hinted at—once a technological fix has already been proffered. In its absence, such a critique would amount to a call for political action—a literal or metaphorical call to arms. A typically American faith in the redemptive power of technology, however, allows properly political issues to be transposed into the register of the technocracy. Media scholar James Carey describes the distinctively American faith in the ability of technological developments to properly resolve political issues as one aspect of "the rhetoric of the electrical sublime," which "massages in us all the belief that somehow advances in technology would solve the problems of the present and usher in a new century of peace, prosperity, and ecological harmony."[23] Technological politics, in this respect, functions in an era of generalized skepticism toward the political realm, as a form of *anti*-politics. We can avoid the messy work of collective deliberation and attendant struggles over power through an invocation of what Armand Mattelart called "the ideology of redemption through networks."[24]

There are two aspects of straightforward technological determinism embedded in the portrayal of interactive technology as inherently subversive and revolutionary. The first, typified by Pearce's comments, locates a political imperative in the technology itself insofar as it incorporates interactive capabilities. According to this account, interactivity is not a neutral capability that

can be enlisted either for totalitarian control or democratic empowerment; it is, rather inextricably tied to the latter. The import of such a claim is to exempt particular uses of the technology from critical scrutiny: if they are interactive, they must be empowering. The second, related, claim asserts the inevitable development and implementation of networked communication technologies. The combination of these two claims exhibits the theme of fate that runs deep in the ongoing discussion of cyberspace: the assertion that, like it or not, the digital revolution is inevitable. As Negroponte puts it, "Like a force of nature, the digital age cannot be denied or stopped."[25] The breathless certainty of such claims is underwritten by the assumption that the digital revolution is a force for good.

By contrast, the man credited with coining the term that provided the prefix for the digital revolution—cybernetics—was less sanguine about the prospects for interactive technology. Norbert Wiener, the MIT mathematician whose neologism, derived from the word for "steersman," haunts the discourse on new media in the truncated form of the familiar "cyber-" prefix, observed that the technology we now call interactive facilitates increasingly sophisticated forms of centralized control. Throughout his writing on cybernetics, Wiener emphasized the link to questions of power and control, emphasizing them in his definition of the term itself: "We have decided to call the entire field of control and communication theory, whether in the machine or the animal, by the name cybernetics."[26] Rather than trumpeting the subversive potential of cybernetic technology, Wiener, writing shortly after the end of World War II, expressed guarded pessimism toward the scientific developments he helped pioneer and theorize: "there are those who hope that the good of a better understanding of man and society which is offered by this new field of work may anticipate and outweigh the incidental contribution we are making to the concentration of power (which is always concentrated, by its very conditions of existence, in the hands of the most unscrupulous). I write in 1947, and I am compelled to say that it is a very slight hope."[27]

If, as Spiro Kiousis's overview of the academic literature on interactivity and new media suggests, "any discussion of interactivity inevitably draws from its roots in Cybernetic theory, as outlined by Wiener," the latter's work—and his reservations—might be a good place to start in contextualizing and critiquing the promise of interactivity.[28] Obviously, the notion of interactivity in a general sense long predates Wiener's theories of cybernetics. The reason his work resonates through the literature on new media is not just the popularization of "cyber-" as a prefix for all things digitally networked, but also the resonance of his study of feedback with the rise of interactive media technologies. His theories focus on technology, whether organic or inorganic (and this persistent link in his work tends to assimilate the two), that relies on detailed data collection in an ongoing process of adjustment to shifting conditions.

In short, Wiener's theories bear directly on contemporary examples of interactive technology: Web sites that alter their appearance in response to viewer behavior, interactive billboards that customize their advertising appeals, TV shows that change their outcome based on viewer voting, smart homes that change climate conditions on the basis of the comfort level of residents, electronic "newspapers" that sort content in response to reader preferences. The persistent use of the prefix "cyber-" in the popular and academic reception of new media serves as an inadvertent but telling clue regarding the element of control that characterizes the deployment of interactivity in "cyberspace"—which, taking a cue from Wiener's work, we might rethink as "directed space" or "steered space." To put it in terms that will be developed in more detail in the following chapters, we might approach cyberspace as "governed" space, building on the etymological connection highlighted by Wiener: "we wish to recognize that the first significant paper on feed-back mechanisms is an article on governors, which was published by Clerk Maxwell in 1868 and that governor is derived from a Latin corruption of *kubernetes* [the Greek word for steersman]"[29]

If the genealogy of new media interactivity can be traced back to cybernetic theories of feedback-enhanced command and control, the latter took root in military research. Specifically, the task that occupied the attention of Wiener and his colleagues during their World War II research and an example that reappears throughout his work on cybernetics is the coupling of radar and servomechanisms in the development of guided antiaircraft artillery. Far from being anti-industrial, cybernetic theory envisioned the autonomization of industrial technology. Wiener envisions the possibility of automated factories equipped with devices that combine the mechanical "muscle" of the first industrial revolution with the "brains" (and senses) of the communication-based one. In predicting the eventual development of an "assembly

line without human agents," he noted, "It has long been clear to me that the modern ultra-rapid computing machine was in principle an ideal central nervous system to an apparatus for automatic control."[30] Crucial to such control is the development of an interactive capability—the ability not just to communicate a signal or message, but to incorporate the process of an ongoing adjustment to shifting conditions of reception into the communication process.

Tellingly, Wiener highlighted the possibility that a cybernetic model might be deployed not just as a technique of mechanical control, but also as one of social control. Indeed, he considered strategies of scientific management (discussed in Chapter 3) as an early form of programming that presaged computer programming and the automated workplace. The use of cybernetic systems, he warned, might result in a society in which entrenched economic and political powers consolidated their control by modifying messages based on audience feedback. He describes a not-unfamiliar scenario, with undisguised bitterness directed toward his own contribution to military technology (in 1946, Wiener announced, "I do not expect to publish any future work of mine which may do damage in the hands of irresponsible militarists"):

> A certain precise mixture of religion, pornography, and pseudo-science will sell an illustrated newspaper. A certain blend of wheedling, bribery, and intimidation will induce a young scientist to work on guided missiles or the atomic bomb. To determine these, we have our machinery of fan-ratings, straw votes, opinion samplings and other psychological investigations with the common man as their object. . . . Luckily for us, these merchants of lies, these exploiters of gullibility have not yet arrived at such a pitch of perfection as to have things all their own way.[31]

Note the guarded pessimism of the "not yet." The flip side of the revolutionary promise of interactive media, in other words, may well be the attempt to attain this level of perfection: to craft the perfect pitch.

One objection to such a line of argument may be that cybercelebrants like Celia Pearce and Nicholas Negroponte aren't talking about the same kind of interactivity that Wiener considers in his discussion of cybernetics. What they're interested in is the forms of person-to-person communication and collaboration facilitated by interactive technologies. Celebratory accounts of interactivity tend to blur this distinction, in part because they focus on the

information gathering and sorting power of the technology itself (Nicholas Negroponte and Bill Gates love to talk about "smart" environments—that respond to the individuals moving through them), and in part because the distinction itself isn't as clear-cut as it might seem.

For the moment, most forms of interactive information gathering don't rely on autonomous machinery. As in the case of the antiaircraft gun, humans are in charge of managing the information gathering, setting the priorities, and overseeing the equipment. When we provide information about our shopping habits by, for example, letting Amazon.com know what books we're reading, this is not only a form of communication with a machine. It is also information that is used, albeit automatically, to consolidate marketing strategies devised by researchers and programmers. From Wiener's perspective, it is the use of feedback by decision makers to more effectively target advertising messages. This is precisely what the cybercelebrants call power sharing: the assertion that consumers now have the ability to talk back to producers and thus to have a say in production decisions—as if this information-gathering process allows them to take control of the production process itself. Are those who equate power sharing with a willing submission to surveillance to be numbered among the gullible, or among the accomplices of Wiener's "exploiters of gullibility"? The equation of feedback with power sharing is not a novel artifact of the new media era; it is the extension of the ideology of marketplace democracy into the digital age: the perfection of the promise of demand signaling as the essence of democracy. Later chapters will offer a critique of this equation in more detail. The following chapters offer an overview of the ways in which this equation functions in the economic, cultural, social, and political realms.

2

Three Dimensions of iCulture

And does not . . . the same hold for today's progressive computerization of our everyday lives in the course of which the subject is also more and more "mediatised," imperceptibly stripped of his power, under the false guise of its increase?

—Slavoj Žižek

iCommerce

In the summer of 2005, two of the biggest advertisers in the United States, Nike and Proctor and Gamble, unveiled interactive marketing campaigns that exemplified the equation of monitoring and empowerment. Nike's campaign was perhaps the more dramatic of the two: for the month of May, it created a twenty-three-story-high interactive billboard in New York City's Times Square. Passersby could call a toll-free number advertised on the billboard, allowing them to take control of part of the display to custom design an athletic shoe by picking the colors and watching the image on the billboard respond to their choices. When finished, they would receive a text message on their cell phone telling them where they could purchase the shoe, along with an image of their custom design, complete with their chosen lettering and a label noting that the shoe had been designed at Times Square. Passersby could watch the giant shoe change colors in real time in response to the commands of whoever had managed to phone in and take control of the billboard. This interactive campaign was part of the company's relaunch of its

NIKE iD Web site, which allows consumers to personalize their purchases from the privacy of home or office.

The marketing world greeted the Nike promotion with predictable technohype, describing the interactive billboard with headlines including, "Nike Empowers Mobile Users with Design Capabilities."[1] The NIKE iD Web site offered what, in the aftermath of TV shows like *The Apprentice* and *Rebel Billionaire*—shows that offered jobs in high-profile companies to selected audience members—might be described as the reality TV–inflected promise to enter, if only momentarily and symbolically, the hallowed halls of a corporate icon: "NIKE iD is your chance to be a NIKE designer" (note the telltale lowercase "i").[2] The site addressed consumers as apprentice producers, seizing the drawing board from those who have too long monopolized it: "You begin with a blank item—or an inspiration—and express your individuality by adding color and a personal iD."[3]

Because the Nike campaign efficiently exploited several facets of the promise of interactivity that will be taken up in later chapters, it's worth parsing the elements of the campaign in a bit more detail. First is the promise of individuation: thanks to the power of networked interactivity, mass marketing can surpass its own homogeneity. Interactivity promotes what the pundit Josh Micah Marshall has referred to, in political terms, as the "grand moral inversion." The corporate giant, an erstwhile foe of individuality, is miraculously revealed to be, on the contrary, one of its greatest facilitators, thanks to the alchemy of interactivity.[4] Drawing on the long-standing U.S. tradition of equating self-expression with freedom, the promise goes on to connect personal expression through customized commodities with shifting power relations. As the president of an interactive marketing company that worked on the NIKE iD campaign put it, "The Web gives the consumer empowerment and control. . . . Consumers own the brands, not the companies. The Internet allows the brand to adjust or adapt to fit the individual, not the other way around."[5]

In case the enthusiastically misleading rhetoric hasn't made it completely clear, the power shift is purportedly in the direction of democratization, even though any consumer who tried to use the brand for his or her own purposes would learn immediately that Nike is still very much the legal owner of the brand. Nevertheless, as one newspaper commentary put it, "Some see a political dimension to all of this, in that it points to a new market-based democratic egalitarianism."[6] Customization via interactivity

represents, on this account, evidence of "a democratic desire": "Every person wants to say this is more them, and they're not part of mass culture."[7]

A third aspect of the promise of interactivity is the invocation of nostalgia for a lost sense of community, and the forms of participation, customization, and authenticity retroactively associated with pre–mass society. As Nike chairman and CEO Phil Knight put it, "NIKEiD brings us back to our roots when we designed and sold shoes one by one out of the trunk of my Plymouth. . . . We have now come full circle."[8] Thanks to its ability to reconnect consumers and producers, interactive technology moves us forward while recapturing what was best about a lost past.

The theme that runs throughout these aspects of the promise of interactivity is that of overcoming the forms of differentiation and abstraction associated with mass society, and in particular the separation between consumption and production. Haunting the promise is a romanticized vision of pre–mass society in which consumers had greater control over their consumption, in part because of their personal connection with shopkeepers and craftspeople and in part because they made many of the goods they consumed themselves. By the same token, they presumably had a more direct connection to their own labor conducted in a tradition-governed, craft-based setting rather than in an anonymous workspace populated by human cogs. Interactivity promises to overcome both forms of alienation in a single stroke: consumers will feel more connected to the products they buy because they receive "individualized" treatment. Moreover, they recapture a lost sense of direct connection to the product world because they are invited to participate in the production process itself. As in more traditional settings, they are consumer and producer at the same time, two reunited halves of a whole that had been sundered by the advent of industrial mass society. The key to this reunion is two-way communication facilitated by interactive media. As a spokesman for the advertising company TBWA/Chiat/Day put it, "Traditional media remains a little boxed in. . . . It's still a monologue. It's one message to a mass audience."[9] By contrast, "The interactive nature of the Web . . . opens marketers to limitless opportunities for personalization and dialogue."[10]

There are, of course, limits to the dialogue, as one activist-minded customer demonstrated in a much-publicized exchange with Nike's marketing department over his attempt to order a custom shoe with the personalized tag, "sweatshop." Noting that the NIKE iD Web site equated customization

with "freedom to choose and freedom to express who you are," Jonah Peretti asked for the custom label because he wanted to, as he put it, "remember the toil and labor of the children who made my shoes."[11] Shared control over the production process, needless to say, doesn't extend to using the product as a means of protesting the working conditions of the people who *really* make the shoes. Nike turned down the request, at first contending that it contained inappropriate slang and finally conceding that even if the word *sweatshop* wasn't slang, it just wasn't something the company wanted to print on its shoes. Peretti's prank provided a nutshell critique of the limits of interactivity, albeit within the confines of what amounts to a practical joke with a point. It gave the lie to the political promise of democratization via consumption. The revelation of the limit to Nike's version of self-expression (that consumers can pick their color scheme and custom label, as long as it doesn't offend Nike's sensibilities—or, worse yet, engage in social critique) foregrounds the real role of the interactive site as a means of building brand loyalty while at the same time enticing consumers to participate in what marketers call the process of "co-creating unique value."[12] Customized shoes are not only more expensive, they also invite consumers to participate in the work of being watched. As one news account put it, "Profitable or not, the sneaker sites have one very practical application: They open up a wealth of market research possibilities. Thousands of shoppers logging their preferences on the minutiae of laces, tongues and soles amounts to a free focus group."[13]

The business literature has described the information gathered through interactive marketing as a technique for saving money "by offloading some of the duties of consumer interactions onto consumers themselves."[14] Market research "duties" once assigned to producers are being reconfigured as the responsibility of consumers. This use of interactivity as a technique for creating free focus groups is apparent across a variety of products, ranging from online shopping to reality TV. The producers of the *American Idol/Pop Star* franchise are probably kicking themselves for not having thought of it sooner. Now they can make money from the market-testing process instead of paying for it. Interactive marketing is, as one retail consultant put it, "a great way to insert the consumer into the process of product development."[15] It is truly a cybernetic process in the sense described by Wiener, one in which the manufacturing process is modified by consumer feedback. Interactive customization creates two products. In the case of Nike, it creates not just

an athletic shoe, but also detailed information about consumer preferences. To the extent that this information can be traced back to individual consumers through their cell phone numbers, their credit card numbers, or online forms, the information can be personalized and aggregated.

Proctor and Gamble's attempt to equate participation in a nationwide focus group with democratic empowerment was a bit more direct: in what some might describe as an apt parody of what politics has become, it invited the public to vote for a new flavor of Crest toothpaste. The company set up a Web site for its election, specifying that participants had to be of voting age (presumably because of a prize giveaway associated with the "election") and introducing the three "candidates": "lemon ice," "sweet berry punch," and "tropica exotica." The somewhat disturbingly named "Whitening Expressions Vote" page of the Web site featured background photographs of a celebratory crowd with their fists raised in the air, power-to-the-people style. As the press coverage of the ad campaign noted, the "democratization" of marketing is more than an attempt to market-test products and build interest and loyalty; it's also a way to cut through the clutter of traditional advertising campaigns with the promise of participation. Like the Nike campaign, the Crest election included interactive, video game–like features, inviting would-be voters to create a campaign button online and to join an e-mail list that provided updates and interactive polls. Just as video games are becoming more and more like advertisements—integrating product placement in the form of background ads, celebrity characters, and theme music—interactive advertising is becoming more like a video game. Thanks to the interactive capability of networked digital media, advertising, entertainment, and retail merge: such is the logic of commercially driven convergence.

Perhaps one of the better publicized examples of this trend is the virtual digital enclosure of Second Life, an online digital world which users navigate in the form of virtual avatars consuming virtual goods as they go. Even though the products are virtual, the money paid for them is real—reportedly upward of $200 million a year.[16] Second Life serves as a kind of prototype for a digital enclosure in which every act of consumption, creativity, and customization is redoubled in the form of data about itself. It is not just composed of information; it constantly also generates new data about the actions of the digital doubles that populate it. As Reuben Steiger, the head of a company that seeks out commercial opportunities in Second Life, put it, the virtual world can serve as a research lab where marketers can observe consumer behavior and test products in their virtual—therefore less expensive—forms. For example, denizens of Second Life can purchase a virtual Toyota Scion for real money ($1.50) and customize it: "You're interacting with the brand in a fairly intimate way, you can customize it to your hearts content, change the color, the rims, in ways that fit your fancy, that's very interesting to companies."[17] The promise of interactivity serves as an invitation to submit to the monitoring gaze of market researchers and pay for the privilege.

There's nothing particularly new about using the promise of democracy to sell—or selling the market as an economic version of "democracy" (albeit one in which the somewhat less than egalitarian principle of "one dollar, one vote" prevails). What is distinct about the marketing of interactivity is its explicit critique of the market for not being democratic enough, and its resort to customization as an alibi for increasingly comprehensive forms of consumer monitoring. The mass market relies on feedback in the form of aggregate demand, and therefore exerts control at the group level. The interactive market relies on personalized feedback and thus seeks to exert control at the individual level. The former retains the anonymity of the mass, whereas the latter seeks to eliminate anonymity.

The consequences of such a loss will be taken up in more detail in later chapters, but for the moment, suffice it to say that the comparison to pre-mass forms of personalization is deceptive. Interactivity promises not a return to the relative lack of anonymity of village life, but rather to a state of affairs in which producers have more information about consumers than ever before, and consumers have less knowledge about and control over how this information is being used. Rather than the cozy image of the town cobbler with a custom-made template for every resident's foot, imagine an electronic village in which an omniscient and invisible shop owner keeps track of every detail of villagers' lives, storing them in a database to which they have no access, and using it not just to meet their needs, but also to prey on their anxieties and insecurities and to manipulate their hopes and dreams. This data-mining technocobbler knows what they are doing, but they, in turn, have little if any knowledge of the extent of the information he is collecting, how accurate it is, and what he is doing with it. Then imagine that they are told that providing personal information for the shoemaker's proprietary database—contributing to his increasingly invasive marketing

schemes—is, paradoxically, a way of empowering themselves, and you get a more accurate picture of the grand moral inversion that characterizes the marketing of interactivity. It is a picture that is papered over by a barrage of ersatz forms of personal recognition. The hometown merchant who has a personal relationship with his or her customers is replaced by the cell phone text message that at first seems to be from a friend, but turns out to be spam, by the cheery voice of the targeted telemarketing campaign or the letter with the fake handwritten address that turns out to be yet another customized solicitation. Phony personalization abounds in the interactive era as a shoddy cover for the fundamental asymmetry of commercial surveillance.

To the extent that politics is embracing similar data-driven campaigning models, the same inversion insinuates itself into the political process, once again in the name of public empowerment—a strategy that will be taken up in more detail in Chapter 7. It's not that consumers aren't really participating. They are. But their participation is all too often limited to achieving the aims of marketers—aims not necessarily their own, despite the hype. Moreover, participation is not always the same thing as power sharing; sweatshop workers certainly participate in the production process, but that doesn't mean that the sweatshop can stand as a model for democracy.

iCulture

Mass culture, like the mass market that produces it, has long been criticized for being top down, homogeneous, and nonparticipatory. Indeed, one of the hallmarks of such culture is the way it replaces more participatory and interactive forms of popular culture: the parlor piano is displaced by the phonograph, the local band by the radio, the vaudeville troupe by the motion picture and the sketch comedy. The much-maligned result is the mass-produced cultural landscape of megabands and multiplexes, as abstracted and distant from local, participatory culture as the strip mall is from the mom-and-pop store, and as Starbucks, with its seasonal CD mixes, is from the local coffeehouse with its open-mike night. Against the background of the entertainment-industrial complex comprising the lumbering conglomerates that monopolize the mass media, the promise of interactivity is to bring active, participatory forms of cultural creativity back to the people—if they want it.

The promise of interactivity is that viewers can be cultural producers as well as consumers—that, furthermore, their participatory consumption can be creative and fulfilling. Thanks to the Internet and a host of increasingly cheap and easy-to-use do-it-yourself computer programs, access to publishing, recording, and even netcasting, is becoming increasingly widespread. If the commercial mobilization of the promise of interactivity is that consumption can be creative, its cultural corollary is that creativity is being made more accessible to a new generation of "prosumers"—or, in the parlance of media studies, "active" audiences.

The notion of the (inter-)"active" viewer, reader, and listener is central to many digital works and has been used to underwrite the claim that computer art radically "democratizes" the aesthetic experience. In his discussion of digital culture, Richard Lanham argues, for example, that the interactive character of the digital aesthetic counters the oppressive, antidemocratic nature of the artistic canon: "The traditional idea of an artistic canon brings with it, by the very 'immortality' it strives for, both a passive beholder and a passive reality waiting out there to be perceived."[18] Digital art, by contrast, promotes viewing as an active, transformative process, according to Lanham: "All of this yields a body of work active not passive, a canon not frozen in perfection, but volatile with contending human motive. Is this not the aesthetic of the personal computer?"[19]

Artists have experimented with interactivity as a form of collaboration, inviting readers to double as creators in, for example, the writing of an interactive poem, the creation of a collection of personal stories, and even the composition of a coffee table book devoted to anonymously submitted personal secrets. Margot Lovejoy's "Turns," an online work displayed at the Whitney Museum of American Art, is composed of the contributions of viewers who write essays about important moments in their lives. These essays can, in turn, be sifted through and sorted by viewers, who are invited to add to the project. An online work called "The World's First Collaborative Sentence" invited viewers to add their own thoughts, images, and links to a work that has become the world's longest run-on sentence. Within its first two years of operation, the site had logged more than 200,000 posts, in part, according to its Web page, because "it gives the world a space in which to speak its collective and its individual mind."[20]

An ongoing art Weblog called PostSecret features regularly updated images of homemade postcards devoted to previously undisclosed secrets sent in by anonymous members of the public. Contributions range from the humorous and quirky ("When I'm mad at my husband, I put boogers in his soup") to the poignant ("I call my ex at work when I know that she's not there, so I can listen to her voicemail greeting") and tragic ("I'm pretty sure that my confession to my dad that I had been abusing his prescription drugs had something to do with his suicide three days later").[21] The homemade cards are often imaginative and cleverly designed. Clearly the contributors put work into preparing them, conscious of their contribution to a collaborative and creative project. Suggestively, their willingness to contribute intimate details of their lives under the cover of anonymity evokes the information-gathering strategy of online marketers who collect detailed personal information by invoking both the promise of self-expression and the cover of anonymity: "we're gathering detailed information about you, but we won't link it to you" is the standard disclaimer (disingenuous not least because this decision could be revised later). The creator of PostSecret, Frank Warren, is the only one publicly identified with the project (he also admits to having sent in some of his own secrets), and he plans to publish a book of the secrets that have, for all practical purposes, become his property. Just to make sure, his site includes the following disclaimer: "By submitting information to PostSecret, you grant PostSecret a perpetual, royalty-free license to use, reproduce, modify, publish, distribute, and otherwise exercise all copyright and publicity rights with respect to that information at its sole discretion, including . . . incorporating it in other works in any media now known or later developed including without limitation published books." As of this writing, Warren says he has collected more than two thousand postcards and continues to receive new ones that he uses to update his Weblog at regular intervals.

The promise of participation, in short, has proven itself to be a particularly productive one—a fact that, despite some institutional inertia, has not been lost on marketers. Consider the creation of music mash-ups—homemade remixes that literalize and exploit the promise of an active audience. Thanks in large part to digitization, music fans are no longer limited to being passive audiences that merely listen to the music created by their favorite artists. Instead, they can make their own remixes—and even create original

compositions by mashing, or combining, tracks from several artists. The resulting mash-ups have been at the center of the ongoing struggle over intellectual property rights exacerbated by digital file sharing: do such works represent "fair use" sampling, do they constitute new and original works, or are they purely derivative, requiring permission from and payments to the original artists? At the center of the debate in 2005 was a work called "The Grey Album" by DJ Dangermouse, who remixed Jay-Z's black album with a collage of samples taken from the Beatles' White Album. When EMI, which owns the rights to the Beatles tracks, issued a cease-and-desist order, the reaction was an online protest called "Grey Day" during which scores of Web sites changed their background color to gray; many of them offered free downloads of the album. The result, predictably, was a barrage of cease-and-desist orders and lots of free publicity for the album. The incident helped rally support for a challenge to the existing regime of copyright protection, which critics claimed to be anachronistic in the digital era because it discouraged cultural creativity. The ability of audiences to participate in the production of the culture they consume came to be portrayed, in keeping with the marketing of interactivity, as subversive, progressive, even, as the London *Guardian* put it, part of a "media revolution."[22]

As communication scholar James Beniger notes, the word *revolution*, which is borrowed from astronomy, originally meant the restoration of a previous form of government, and it's not yet clear which type of revolution is heralded by interactive media: a subversive challenge to centralized control, or the reestablishment of the media monopoly in a more participatory guise. Consider another example from the world of mash-ups: shortly after the Grey Day protests, the automobile manufacturer Audi partnered with David Bowie to promote the Audi TT Coupe with a "make your own mash-up" contest. Members of the public were invited to download samples from Bowie's latest album along with editing software to create and submit soundtracks for use in Audi's "progressions" advertising campaign. In keeping with the "embrace the new" theme of the commercials, which included a voice-over saying, "Where would we be if we always did things the way they were done before," Audi and Bowie inverted the standard industry approach to mash-ups: if people are going to download the music and create something new anyway, why not put them to work? Thanks to digital technology, members of the public could help market Audi (and Bowie) to themselves.

Working on a soundtrack mash-up meant not only familiarizing themselves with the Audi campaign, but also spending lots of time with the tracks from Bowie's *Reality* album. It would be hard to find a better example of what the business world calls "relationship" marketing. For their efforts, participants were offered the chance of winning a car or a second prize of audio mixing software—relatively cheap wages for the soundtrack of an entire ad campaign. Just to have a chance at the prizes, participants had to hand over any and all rights to their work. As the contest literature put it in no uncertain terms, contestants had to relinquish "all present and future right, title and interest of every kind and nature whatsoever, including, without limitation, all copyrights, all music and music publishing rights, and all rights incidental, subsidiary, ancillary or allied thereto (including, without limitation, all derivative rights) in and to the Mash-Up(s) for exploitation throughout the universe, in perpetuity, by means of any and all media and devices whether now known or hereafter devised."[23]

The fact that interactivity fosters audience creativity and productivity raises the question as to who will benefit from and control the labor of an increasingly (inter-)active audience. It is by no means a given that interactivity is automatically empowering. As the Audi example suggests, it may serve rather as a means of exploiting audience labor. The fact that mass society has been so roundly and routinely critiqued for not being participatory enough has resulted in a knee-jerk valorization of participation itself. The offer of participation has become its own reward, which helps explain, at least in part, why people might be willing to pay more for customized products, why they might be willing to pay to share in some of the "duties" of production, and perhaps even why they might be willing to go on reality TV shows that chronicle the details of their daily lives in exchange for payment that often amounts to less than minimum wage.

As I was writing this chapter, a reporter called me about a story he was doing on an upcoming reality show about a local high school football team in suburban Pittsburgh. ESPN had recruited the school by offering to pay for locker room renovations, weight room equipment, and a few other amenities. In exchange, the high school planned to open its doors to the camera crews to film the lives of its students and turn them into prime-time entertainment. Viewed from one perspective, the show, *Bound for Glory—The Montour Spartans*, might have seemed like a nice way to build

community spirit (overlooking the fact that it continued the time-revered, all-American, bone-headed tradition of reducing the educational aspect of school to sideshow status for the football team). Viewed from a slightly different perspective, the decision looks disconcertingly like support for the exploitation of child labor. Apparently the students' parents and the school board were so hungry for attention and a new scoreboard that they were willing to sell ESPN access to their children for a pittance—a fraction of the cost of a prime-time TV cast. The show was not a documentary in the nonprofit, educational sense of the word; *Bound for Glory* was prime-time entertainment programming for ESPN, which means that its bottom line function was to use the images of Montour high school kids—of their triumphs and defeats, their conflicts, their personal dramas—to hawk soft drinks and cars.

It is perhaps testimony to the promise of participation—of inclusion in the formerly top-down medium of television—that our schools and parents are willing to sell their children so cheaply to the adjuncts of the advertising industry. The entire genre of reality TV might be considered a means of exploiting the promise of the interactive "revolution": that audiences can participate either directly or indirectly in shaping and creating the media they consume. In keeping with the commercial version of interactivity, much of this participation comes in the form of self-disclosure: participants' willing submission to monitoring, whether by the cameras in the *Big Brother* house or the voting hotlines and Web sites that gather information about viewer preferences.

iMonitoring

One of the more successful viral e-mail messages in recent years featured an advertisement for a product called Forget-Me-Not Panties: undergarments that allowed the wearer's location and biometric information to be monitored remotely. The ad was targeted to men with concerns about the love lives of "their" women and featured the tongue-in-cheek tagline, "Protect Her Privates." The Web site for the Forget-Me-Not Panties included testimonials from a satisfied father who bought his postpubescent daughter several pairs: "They work wonderfully . . . we can watch her around the clock, and if we see her temperature rising too high, we intervene by calling her cellphone or just picking her up wherever she is."[24] The fact that many people who

circulated the link to the Forget-Me-Not Panties site (and at least one press account) failed to realize the ad was a hoax served as testimony not so much to online gullibility as to the way in which the prank tapped into real developments in the do-it-yourself use of monitoring technology. The general trend invoked by the panties prank is that of the technologically facilitated practice of mutual monitoring: the enhanced ability of people to track, monitor, and background-check one another via the Internet, cell phones, and other networked communication technologies.

At the most trivial level, consider the changes in telephony that have become commonplace in the cell phone world. When I was growing up, the phone was an inscrutable and insistent household object: when it rang, there was an element of mystery and suspense regarding who might be on the other end—suspense that could verge on the disagreeable if you happened to be avoiding someone's call (while trying to stay in touch with everyone else). If you missed the call, you might be left wondering who had been trying to call—what opportunities, invitations, or emergencies you had missed. In the cell phone world, this layer of uncertainty is all but eliminated. It is becoming impossible to call without leaving a trace, and screening calls has become commonplace. The once-familiar movie scene of failed communication in which someone calling to express a last-minute change of heart hangs up upon hearing a voice on the other end, leaving only a message of uncertainty, has become an anachronism. Now every call, even a hang-up, leaves an identifiable trace. The missed encounter has been replaced by constant contact.

In the cell phone era, instead of bemoaning the fact that the mute receiver can't talk, we have found ways of getting it to divulge its secrets: to tell us who tried to call and when, and to call him or her back with the push of a button. If, in the old days, the police had to go to the phone company to track call records, we now carry this information in compact devices in our purses and pockets. And increasingly, we find ourselves becoming habituated not just to the fact that we trail clouds of data as we go, but also to the fact that we can trace the trails of others. As the research presented in Chapter 6 suggests, it has become increasingly commonplace for people to conduct simple online background checks about one another, whether to check up on friends, learn about a new colleague, or profile a prospective date. Privacy scholar Jeffrey Rosen recounts the story of a friend who "after being set up on a blind date, ran an Internet search and discovered that her prospective partner had been described in an article for an on-line magazine as one of the ten worst dates of all time; the article included intimate details about his sexual equipment and performance that she was unable to banish from her mind during their first—and only—date."[25]

Activities that once would have bordered on stalking have become routine—a fact with implications not just for the ways in which we represent ourselves to one another, but also for shifting expectations regarding privacy and surveillance. Consider the admittedly trivial example of a former student who joined a popular campus Web site called Facebook, which allows students to post short profiles online and to link to friends—and friends of friends. Shortly after joining, at the invitation of one of her friends, she discovered that her boyfriend, unbeknownst to her, had his own Facebook page, on which he had listed his relationship status as single—a not insignificant fact considering that the site is devoted, at least in part, to online flirtation and dating.

The fact that "Google" has become a verb as well as a proper noun suggests the extent to which we are increasingly availing ourselves of the ability to translate interactivity into peer-to-peer monitoring. Now that, as the new media truism puts it, the Internet "allows everyone to become a producer of media content," we find ourselves generating information about ourselves that is increasingly available to our friends, acquaintances, and omnivorously curious Web surfers.[26] The poet Katha Pollitt recounted in the *New Yorker* magazine how she "stalked" her former lover online, putting together the pieces of past infidelities using only the tidbits of information gleaned from Google, HotBot, and AltaVista: "There on my screen glowed the programs of academic gatherings he had attended going back for a decade: the same female names appeared over and over entwined with his in panel announcements. Why hadn't it struck me as odd that his 'best friend,' a professor of English literature, was the respondent for papers he gave at conferences on art history and philosophy? . . . I had been so out of it!"[27] Shortly after the article appeared, readers went to the Internet to determine the identity of the faithless lover. Although Pollitt hadn't identified him by name, she had left enough clues scattered throughout to allow amateur Web sleuths to figure out his identity.

Sherry Turkle has observed that the computer helps bring postmodern theory "down to earth" by highlighting the role of performance in our

everyday presentation of self.[28] Thanks to online chat rooms and role-playing games, computer users can experiment with different personas, perhaps acting out sides of their personality they aren't able to explore in day-to-day interactions with friends, family, and coworkers:

> In the daily practice of many computer users, windows [on the computer desktop] have become a powerful metaphor for thinking about the self as a multiple, distributed system. The self is no longer playing different roles in different settings at different times. . . . The life practice of windows is that of a decentered self that exists in many worlds and plays many roles at the same time. . . . When people can play at having different genders and different lives, it isn't surprising that for some this play has become as real as what we conventionally think of as their lives.[29]

The flip side of this ability to get in touch with all sides of ourselves is a savvy recognition of the staging of the self—one that might help explain the use of interactive technologies for mutual monitoring. Consider, for example, the deployment of keystroke monitoring software (developed for businesses to keep track of what employees are doing on their computers) by parents to find out what their children are doing online, or by husbands and wives to discover how their significant others are whiling away their time in chat rooms: are they engaging in innocent discussions of shared interest, flirting online—or something more?

If the computer has made it possible for us to multiply our personal connections, to participate in what Howard Rheingold helped popularize as "online community," it has also highlighted the fact that many of the people with whom we interact remain strangers in very real ways. People who meet one another on Web-based dating sites, for example, may, thanks to the cover of online anonymity, misrepresent information about themselves—whether they are married, their age, their profession. One result is that the success of such sites has been accompanied by the proliferation of online background checking services that offer independent verification of such things as marital status and criminal history. CheckMyMate.com, for example warns online daters that they "will surely come across the same assortment of mischiefs [*sic*], criminals, and sexual deviants found in the real world."[30] The remedy can be found in its databases: "CheckMyMate.com was specifically designed to protect the dating community from sexual predators and devious individuals. With just a first and a last name, CheckMyMate.com can investigate almost anyone."[31]

Sites like CheckMyMate.com have an interest in playing up the risky side of online social interaction, but, as I discuss in Chapter 6, there are plenty of free online sites that allow curious Web surfers to collect information about friends, family members, and one another. In addition to googling one another, for example, many of the students I surveyed when conducting research for Chapter 6 reported visiting the state court system's online record site to see what information they could glean about people they knew. The spirit was one more of curious exploration than focused investigation, and yet there is an undertone of suspicion: a recognition that people don't always divulge telling details about themselves—that there is always more to find, and that, thanks to the powerful information-gathering tools increasingly available at home, work, and school, we have a variety of new ways to unearth additional information about them.

There is a progression apparent here, from a celebratory sense of the potential of new media (as a means of expanding social networks and experimenting with personal identity) to a savvy wariness toward forms of deception they facilitate, and finally to a sense of personal risk, exploited by commercial monitoring sites. As one of several testimonials for a background-check Web site puts it, "Thanks Net Detective. You saved my life. If I hadn't found out about my girlfriend's credit problems, I might have made the biggest mistake of my life."[32] The mobilization of risk will be a recurring theme in the following chapters, in large part because of the deployment of new media technologies as a strategy for offloading a variety of duties—social, economic, and political—onto the populace in the postwelfare era. The deployment of the specter of risk, as I will argue in more detail in Chapter 3, can operate as a management strategy for channeling the forms of "empowerment" enabled by new technologies according to priorities set by marketers, media corporations, and, in some cases, government authorities.

Thanks in part to the technological developments associated with the information society, citizens provided with the tools for accessing information are increasingly assigned the responsibility for tasks hitherto relegated to the state. It is no accident that the ideology of the information age described by Thomas Streeter and Paulina Barsook is one of anarchic market-based

libertarianism.[33] If the technology is portrayed as empowering and democratizing (a portrayal subjected to critical scrutiny in subsequent chapters), then the need for welfare state measures that address social inequality or social welfare is largely obviated: the people have the tools they need—so much so that the outcome can be portrayed as entirely their responsibility, factually and (therefore) ethically. The government cannot assist you at this micromanagerial level, but the technology can: it can help you screen potential employees, lovers, nannies, colleagues—for a price. If the big-box wholesaler Sam's Club retails background-check software previously available only to private investigators, what excuse do members of the public have for *not* managing their own security?

Democratization of access to the means of monitoring coincides—in both the marketing industry and the prevailing political climate—with portrayals of ubiquitous and generalized risk. In a networked society, we find social and professional networks expanding even as we concede the contrived aspect of self-presentation. In other words, we're interacting with more people than even before, thanks to electronically mediated forms of communication, and we're more aware that they may not be who they say they are. Taken alongside a portrayal of the multiplying risks associated with the information society (for example, identity theft, Internet scams, sexual predators), this combination provides a potent recipe for a culture of detection and mutual monitoring. It shouldn't be particularly surprising that detection has become one of the watchwords of popular culture—not merely in the proliferating variants of shows like *CSI,* but also in the formats that offer to take us behind the scenes of the making of the video or movie, of the lifestyles of the latest pop culture heroes, or of the public image of a famous band or celebrity. The obverse of a culture of savvy debunkery—one that takes the performance of subjectivity as a given—is a culture of perpetual detection: a series of ongoing attempts to see behind the public performance, or at the very least to prove that one isn't taken in by it. We are nobody's fools, a society ostensibly immune to deceptive appearances, but captivated by the prospect of perpetually showcasing our own canny immunity from the fate of the duped.

A second monitoring trend that the Forget-Me-Not Panties hoax taps into is that of biometrics as a detection strategy: a means of isolating some empirical remainder—a trace of physical evidence that can't be staged. Early

on, reality TV shows, in an effort to provide access to a *real* reality—one not simply staged for the cameras by the aspiring actors who populated the genre—incorporated scenes of biometric monitoring: lie detectors, skin galvanometers, and heart rate monitors (used on shows like *The Chair* and *The Chamber*). Similarly, police and marketers are both exploring the uses of biometrics as technologies for targeting criminals and consumers. The day when airport screeners will be able to keep track of who is showing signs of extreme nervousness as they attempt to check in (increased heart rate, sweating, and so on) and when advertisers will keep track of viewers' physiological responses to ad campaigns are not far off. Both systems are already being tested. Moreover, the notion that we will increasingly wear our technology on our bodies—integrated into our clothes—is one that both fashion designers and computer chip developers take as a given. As our interactive gadgets move closer to our skin, they are increasingly able to gather and record biometric information passively. Devices in development include clothing that monitors the vital signs of people with health concerns and even so-called smart underwear that adjusts indoor climate settings on the basis of changes in the wearer's body temperature.

The type of location-based monitoring envisioned by the Forget-Me-Not Panties scam is already anticipated by portable GPS tracking devices in use for patients with Alzheimer's disease and by radiofrequency ID chips implanted in pets and, more recently, in Mexico's attorney general (as a kidnapping precaution). Cell phones are already equipped with GPS devices that enable users to allow selected individuals, such as parents or significant others, to track the location of their users. A service called Teen Arrive Alive uses cell phone networks to generate an archive of information about the daily movements of teenage children so their parents can not only find out where they are at any given moment (as long as they have their cell phone with them), but also where they were—and even how fast they were driving.[34] Parents can also install a device called a *carchip* in their children's cars to record the details of their driving habits. Similar devices are used by long-haul trucking companies to monitor their drivers.

The constellation of real practices and technologies invoked by the Forget-Me-Not Panties advertisements cluster around the use of interactivity for risk management via peer-to-peer surveillance. That is to say, individuals are being invited to use the interactive technology in the same way that state

and commercial entities do: as a strategy for asymmetrical, nontransparent data gathering. Consumers and citizens are invited to adopt a similar set of imperatives to those of the authorities: reducing uncertainty, increasing efficiency, and maintaining control at a distance. Thanks to the deployment of interactive monitoring devices in cell phones and cars, the power of law enforcement is extended and amplified through the actions of parents and other monitoring individuals. Whereas parents who lent or bought their children cars once had to rely on the police to enforce the laws—finding out only after the fact whether their children had been speeding or driving recklessly—interactive devices allow parents to watch more closely than the police ever could. To the extent that parents enforce adherence to the law, the technologies extend and multiply the power of policing by channeling it through the family network (a development whose political implications are explored in more detail in the following section). The flip side of interactivity as interconnectivity is that of interactivity as distributed monitoring: the democratization of the model of perpetual, perfectible surveillance embraced by government intelligence agencies and marketing services: an always-on strategy for keeping track of one another.

It is possible, of course, to argue that mutual monitoring has always been an important ingredient of community, and its online version merely confirms the notion that the Internet is rehabilitating the lost connectivity of more traditional societies. With community and connectivity come mutual monitoring. There is, however, an important difference—one highlighted by several of the examples described in this section. Whereas peer-to-peer monitoring in traditional communities is symmetrical and relatively transparent, the same cannot be said, in many cases, of networked, distributed monitoring. Background-check software, googling, and even sites like Facebook can be used without the knowledge of those about whom information is being gathered. Such monitoring can be one way and nontransparent. In the case of information about ourselves that we deliberately put online, the comparison might be made to public activities performed before a crowd: we may not know exactly who is watching, but we have no expectation of privacy.

The Internet audience isn't quite the same as a crowd. It is anonymous, but it is also largely invisible—facts that may well affect our perception of anonymity and our willingness to disclose information about ourselves that we might not be willing to divulge before a crowd. Moreover, information

that is disclosed in one context online can easily migrate into other contexts—and to different audiences, because the audience itself is not localized either spatially or temporally. Consider the example, featured in a *Boston Globe* story about Google, of a man who wrote articles for an offline journal about his experience in prison (for burglary), not realizing that when those articles went online, they would pop up when his name was googled by prospective employers, dates, and so on.[35]

In traditional communities, information gathered via peer networks has a tendency to degrade over time and relies on interaction with others for both its collection and its retrieval. Someone must be asked, which means the person gathering information must be willing to make the search itself known. Online, searching can be done relatively anonymously—or through third-party intermediaries, whose monitoring activities remain nontransparent. Google, for example, has reportedly recorded every search request ever entered into its search engine (along with the address of the computer from which the query originated), but this remains proprietary information, accessible to neither the searcher nor the target of the search. At the same time, individuals are able to create their own databases—to gather and store information about one another for personal use, as in the case of the father who can access information about his son's whereabouts thanks to a GPS device in the car, or online daters who create spreadsheets and databases to keep track of their various contacts.[36]

The world of James Bond–style surveillance gimmickry for everyday use envisioned by the creators of the Forget-Me-Not Panties hoax is not as futuristic as it might seem. Those who imagine that the public at large will balk at such intrusive technologies would do well to consider just how readily we've accustomed ourselves to forms of information gathering that would have seemed like stalking only a decade or so ago. If the invitation proffered by such technology is to avail ourselves of the monitoring capacity of new high-tech devices for do-it-yourself monitoring, it is simultaneously an invitation to lower our threshold of concern regarding commercial and state surveillance.

After all, we will no longer be merely passive objects of surveillance in the interactive era. We will also be active participants in the process—ostensibly for our own good. To what extent does importing the model of interactivity as surveillance into the realm of interpersonal interaction help domesticate and normalize the model of "interactivity" as one-way, nontransparent information

gathering—a far cry from "interactivity" as a form of democratizing empowerment?

iPolitics

Shortly after the September 11 attacks, Internet entrepreneur Jay Walker (the founder of the successful travel Web site Priceline.com) proposed an interactive system for protecting U.S. borders and other "soft targets" from attack. The system, called USHomeGuard, would enlist members of the public to monitor Web cameras equipped with heat sensors and microphones focused on vulnerable, unguarded facilities such as power plants and public reservoirs. If the cameras detected movement or a heat signature that indicated the presence of unauthorized individuals, they would trigger images to be sent by the Internet to human monitors, who could verify whether there was any cause for alarm and alert the authorities. Thanks to the networked technology, the human monitors could work inexpensively at home, creating what Walker's Web site describes as "a citizen corps" that would function as "a new kind of National Guard composed of ordinary citizens who serve their country working from home over any Internet connection."[37] USHomeGuard would serve as a kind of interactive reality show that allowed viewers to participate in the defense of the nation by creating a high-tech national neighborhood watch program.

Walker offered to sell the plan, which he reportedly spent $1 million to develop, to the government for $1. So far there has been no definitive public response, although Walker says government officials have told him they are looking into it.[38] The model is a familiar one to any Internet entrepreneur: use the interactive technology to offload labor onto the populace. In the case of USHomeGuard, Walker proposes paying spotters slightly more than minimum wage—about $10 an hour—for agreeing to monitor their computers for a fixed amount of time.[39] It's not hard to imagine supplementing paid monitors with a corps of volunteers—perhaps from among the ranks of the homebound, the retired, or even office workers with a USHomeGuard alert window on their desktop computers.

Already Web sites like Earthcam.com allow Web surfers access to Webcams around the world, documenting everything from sunsets in Mallorca to pedestrians in New York's Times Square. As in the case of the online background-

check sites described in the previous section, USHomeGuard promises to take a seemingly undirected monitoring capacity—the ability to go online and visit various Webcam sites around the nation and the world—and refocus it through the lens of risk. If surfing Webcams can serve as a kind of aimless entertainment or online tourism, the practice can also be endowed with a renewed sense of purpose by being channeled toward the goal of protecting the homeland. Uncoordinated voyeurism can be redirected and reconfigured as a patriotic contribution to nation—and as a means of assisting the police and military.

As of this writing, USHomeGuard remains on the drawing board, but the logic of offloading some of the duties of national defense onto the populace has emerged as a guiding theme of the Department of Homeland Security's readiness campaign and related statewide campaigns. The state of New Jersey's Department of Homeland Security features a series of advertisements urging vigilance and participation in law enforcement activities. Citizens are advised to keep a watchful eye out for supposedly suspicious activities, including people wearing bulky clothes in hot weather, or unattended bags ("just an unattended bag . . . or a bomb?"), and to report them via cell phone. The always-on communication culture of the information age can serve, in this respect, as an extension and amplification of homeland defense through the mechanism of peer-to-peer monitoring.

This logic was taken even further in Australia shortly after the London terrorist bombing in the summer of 2005, when a former intelligence officer advised the public to turn their cell phone cameras into security tools: "Let's look at that technology being used by the public. . . . If you can take a photograph of the person who's wearing the backpack or carrying the briefcase that's fitted the criteria, the photo could be invaluable should anything occur."[40] If everyone is a potential suspect, surveillance must become ubiquitous and comprehensive, and thus distributed. There is no way for the police to watch everyone; machines or volunteers (or both) will have to help fill in the gaps.

Even if we agree, as seems only reasonable and sane, on the need to protect the populace and the national infrastructure from ambush, we might also find some cause for concern in the attempt to turn every citizen into both spy and suspect. At issue is not just the alleged need to pit all against all in a manner that undermines a sense of the social and threatens to replace community with a variant of hypersuspicious survivalist individualism, but

also the more subtle logic of interactive participation, which invites unexamined identification with the priorities of those in power. One of the themes that I attempt to develop over the course of the next several chapters is that the promise of participation falls short of democratization in those contexts where it functions merely as a form of auxiliary guidance toward goals that are not necessarily those of audiences, consumers, and citizens. I describe this kind of interactivity as cybernetic participation, invoking the terms outlined above: citizens provide useful feedback in helping those who maintain control over the surveillance technology and the databases to pursue predetermined ends. Cybernetic participation enlists the labor of those who submit to monitored forms of interaction, but it stops short at the point of allowing shared control over shaping goals and designating desired ends.

Thus, for example, a politician who seeks support for a particular policy objective—say, for example, opposing a national health care system—can rely on public opinion polling to discover how best to market that objective: to manage the populace by means of its stated fears and concerns. Similarly, an advertiser can draw on market research to determine how best to package, promote, and sell a particular product. But the public feedback has little impact on the underlying imperative to sell as much as possible, for as large as profit as possible. These latter goals remain given and inaccessible to interactive feedback; they are the destination toward which marketers steer with assistance from public feedback. This feedback may help alter the course—but not the final destination. That the information received from the public is used to reach this destination is offered up as evidence of a harmony of interest between, for example, marketer and consumer, or politician and constituent. The fact of participation is equated with shared control over both means and ends, even though the latter were never on the table and remained inaccessible to the "participatory" decision-making process.

It is conceivable that the feedback process might induce a politician, for example, to adjust the policy objectives themselves—such is the premise, at least in part, of representative democracy. But asymmetrical monitoring allows for a managerial rather than a democratic relationship to constituents. It diminishes public accountability insofar as it allows for the fine-tuning of public relations as selective self-exposure. That is to say, to the extent that public officials and political candidates have access to more powerful and comprehensive monitoring techniques than does a public that relies for information on media conglomerates beholden to politicians (for their continued growth), information technology may well favor top-down forms of information management that more closely resemble marketing campaigns than democratic deliberation and accountability. Information technology does not benefit all equally. Those who control the means of interactivity (and the data it generates) are under no particular obligation to exercise this control democratically, and the evidence that they have no choice but to do so remains thin at best. Within the context of social, political, and economic inequality, the deployment of new technologies tends to consolidate and exacerbate asymmetry rather than redress it.

In the case of Homeland Security, the invitation to participate in defending the nation against terrorism doubles as an invitation to identify with the administration's policies and with its definition of the problem: terrorism is an inexplicable force of nature, born of irrational hatred and not amenable to shifts in foreign or domestic policy. Because there is no causal explanation for terrorism, according to this ideology, root causes cannot be addressed, and any attempt at understanding can be dismissed as appeasement. The focus thus shifts away from understanding or defining the problem to taking the formulation provided by authorities as a given—a shift that is reinforced by rituals of participatory readiness. If, as the philosopher Louis Althusser suggested, those beliefs we take to emanate from the innermost depths of our unique subjective consciousness can be understood as a function of our repeated daily rituals, participatory preparedness provides a set of practices that help embody a particular understanding of the threat of terror—an understanding that aligns itself with the terms set by the Bush administration.[41] Moreover, the portrayal of "readiness" as a form of interactive participation encourages a sense of identification with those who set the terms of interaction. Our definition of the situation must be the same as theirs since after all, we are active participants: we embarked on this collaborative process together. Interactivity, figured in these terms, invites participants to embrace the very goals that are exempted from deliberation as their own.

Positing a distinction between these goals and the possibility of different ones arrived at through a truly deliberative process—one in which participation applies to both means and ends—amounts to an attempt to secure that vexed space from which the realty of manipulation can be discerned. It entails the notion that there is a difference between a *deliberative* process

whereby goals are collectively defined and a *manipulative* process whereby one group is induced to embrace the goals of another as its own, without deliberation, compromise, or revision.

The legal scholar Cass Sunstein offers a similar distinction in his attempt to differentiate between what he describes as consumer sovereignty and political sovereignty. The former takes preferences and priorities as given, and it draws on market research to manipulate them. Political sovereignty, by contrast, doesn't take priorities as given but views the process of decision making as a deliberative one in which individuals learn about one another and also about themselves. Through the process of deliberation, their understandings of the world evolve and come to embrace a sphere of interest broader than the narrowly defined tastes and preferences associated with the atomistic individualism of consumer sovereignty.

In contrast to consumer sovereignty, political sovereignty requires deliberation over policy preferences and the ability to publicly explain and defend particular choices—to give an account for political decisions (and it relies, therefore, on a process of political accountability on the part of elected representatives). Consumer preferences are commonly understood to be questions of taste—neither amenable to, nor in need of, public justification. Such is a core component of the popular understanding of private freedom: no one can tell me what type of food I ought to like or what kind of clothes I like to wear. I don't need to justify my decisions in these spheres because, presumably, they do not have any significant impact on others: they are purely private, individual decisions. Within the political sphere, however, decisions have impact beyond the purely individual, which means that aggregating personal preferences misses the point: individual decision makers need to take into account the potential impact on others. Therefore, as Sunstein puts it, political sovereignty "does not take individual tastes as fixed or given. It prizes democratic self-government, understood as a requirement of 'government by discussion,' accompanied by reason-giving in the public domain."[42]

The distinction proposed by Sunstein is not as clear-cut as it first appears. We live in a world in which, thanks in part to the expanding role of the market in all spheres of social life, decisions that have social and political impacts extending beyond the purely personal are increasingly portrayed as private consumer decisions (the individual choice of a consumer to drive, for example, a vehicle with low gas mileage and highly polluting emissions). On closer

scrutiny, the model of consumer sovereignty falls apart. Marketers may portray themselves as slaves to consumer preferences, but when talking among themselves and their clients, they don't take these preferences as given. Consider, for example, one tagline for the BMG music corporation in an advertising trade publication: "If You Have Them by Their Ears, Their Hearts and Minds Will Follow." Marketers recognize that our ostensibly private tastes and preferences come neither from the inner recesses of a hermetically sealed consciousness nor from some uniquely determined genetic predisposition. They are largely the result of a sensibility shaped by the desires and anxieties, the fears, hopes, and dreams that derive their substance and shape from our interactions with one another—both direct and mediated.

Consumer sovereignty, in framing tastes as individual and given, partakes in a fundamental misrecognition of our relationships to one another: an inversion whereby that which is constructed through relations with others is assumed to emerge from the depths of isolated individual consciousnesses. This misrecognition is, from a commercial perspective, useful insofar as it backgrounds the role of advertising and marketing in shaping, inflecting, and channeling consumer tastes. The fiction that preferences are given underwrites the equation of feedback with participation: the promise that monitoring is a strategy not for control, but for unearthing the predetermined contours of consumer desire.

The model of consumer sovereignty is inadequate to political decision making because it backgrounds both the forces that shape individual preferences and the consequences of individual decisions made on the basis of ostensibly given sets of preferences. Where did I get the idea that driving an SUV is an expression of my independence and rugged individualism? Is this somehow a natural predisposition that reflects a core truth of my being? Did the marketers who portrayed this vehicle as a symbol of freedom and patriotism—of self-fulfillment and adventure—merely unearth a desire that was always already uniquely my own? Was it merely a convenient coincidence (for the automobile corporations) that so many people seem to share my deeply personal and individual desire at the same moment in time? By the same token, why might I believe that the impact my personal choice to purchase a highly polluting vehicle has on the environment is no one's business but my own? These are the types of questions that fall by the wayside when individual tastes are taken to be private and sacrosanct.

The wager of deliberative politics, by contrast, is that because my preferences are to a large degree shaped through my interactions with others, openly discussing their presuppositions and consequences might convince me to alter and adjust them. If the model of consumer sovereignty, understood from the perspective of marketers, is to draw on customer feedback in order to advance an imperative that remains beyond the reach of deliberation (profit maximization at the expense of all other concerns), the model of citizen sovereignty would be to make even that imperative amenable to deliberation and modification. The former remains a model of feedback-facilitated, top-down control, the latter one of power sharing. This distinction starts to suggest why the use of interactive technologies to pursue a consumer driven model of politics ends up compromising rather than advancing progress toward the democratic promise of participation.

Crucial to the consumer model of politics—voting as shopping—is the disaggregation of the public into niche audiences of individuals who can be targeted on the basis of individual preferences so as to ensure that they perceive their choices as individual ones—like choosing what to wear or eat—rather than collective ones. Relegating politics to the realm of private choice reduces both the resources and the impetus for deliberation. One commentator has suggested that a significant reason for voter alienation toward politics is that it doesn't yet live up to the model of consumer customization to which they have grown accustomed: "They have confused the norms and expectations that govern the political arena with those that govern the marketplace. Fundamentally, what they dislike about politics is that it isn't more like shopping. . . . We have become so accustomed to this sort of highly individualized service that some people, particularly the young, are tempted to wonder why their politicians can't be more like their favourite brands."[43]

The model of politics envisioned by those who would reduce it to interactive marketing is one that is becoming increasingly, disturbingly familiar: the use of voter feedback to craft the packaging of particular policies, rather than the choice of policies themselves. The failure of George W. Bush's plan to reform Social Security suggests that we have not yet reached the point at which policy makers can sell virtually any policy they like. Nevertheless, this is the direction in which cybernetics politics is pushing: increasing control over the message rather than enhanced democratic accountability. Such an outcome is not inevitable. Salvaging the democratic promise of interactivity is likely a lost cause if we continue to equate cybernetic control with power sharing. If, as democratic theorist Carole Pateman puts it, "we learn to participate by participating," the type of participation in which we engage is crucially important.[44] The danger of the emerging model of interactivity as cybernetic feedback is that it teaches a form of participation that amounts to actively staging the scene of our own submission: helping marketers—both political and commercial—increase their leverage over us. By contrast, the unrealized promise of interactivity contains a challenge to the forms of asymmetrical, top-down control that its deployment too often facilitates.

This last observation perhaps deserves a bit more explanation. When I have had the opportunity to present arguments critical of the deployment of interactivity as surveillance to academic and general audiences, I am frequently accused of being too negative. American culture is deeply imbued with the utopian optimism of the technological sublime, and we cherish fond hopes—all too frequently disappointed—that new communication technologies will resolve political conflicts, educate the masses, and deliver on the democratic promise. I have no interest in dismantling such hopes. On the contrary, my contention is that they can be realized only when we no longer depend on technology to sidestep political conflicts, when we engage in a political struggle over the deployment of the technology. The technological capacity of interactivity will not, on its own (*pace* Gilder, Pearce, and a litany of others), dismantle social, political, and economic hierarchies. It will not on its own foster a version of democracy based on collective control over the shaping of political goals. Only the deliberately political use of new media technologies can have such results—and only a political struggle for control over the means of interactivity and the databases can enable such usage.

The distance between commercial and activist forms of interactive participation was driven home to me by a relatively trivial but perhaps representative anecdote about Facebook. In fall 2006, a Facebook member who called himself Brody Ruckus issued a challenge to the online community, which was, at the time, mostly composed of college students: if 100,000 people joined an online group he had formed on his Facebook site, his girlfriend would consent to fulfilling his sexual fantasy of participating in a threesome with him and another woman. Within a week, Ruckus's group reportedly topped 100,000. The incident received a barrage of media publicity, and it was eventually revealed that the incident was a hoax designed as a promo-

tional tool for the Ruckus Network, an online music service targeting college students. Shortly after hearing about the incident, I decided to see whether Facebook could be used to attract users to a group with a noncommercial, nonerotic purpose: political protest.

The decision was shaped by the conjunction of several incidents: the publicity received by Brody Ruckus, my recent encounter with an online essay by media scholar Henry Jenkins, and proposed legislation, supported by the president, that would legalize torture, detention without trial, and the warrantless wiretapping of American citizens. Jenkins, writing about online fan sites devoted to popular TV shows, suggested that audience interaction has a tendency to morph into political activism: "the response to reality TV teaches modes of engaging critically with television that may slide into activism around the Iraq war."[45] If that's the case, why not see whether the Facebook could be used to start a group opposed to the Republican administration's attempt to dispense with the writ of habeas corpus and to legalize its policies of torture and secret detention. So I formed a Facebook group announcing a public protest against the proposed legislation, outlined the reasons for doing so, and sent invitations to six of my Facebook contacts, all of whom had dozens of their own online contacts. A week later, the same amount of time it had taken Brody Ruckus to collect 100,000 members, my own group still had six. I'm not saying it's not possible to use social networking sites for political purposes; political consultant Joe Trippi did so quite effectively, at least for a while, for the ill-fated Howard Dean campaign in 2004.[46] But the move from marketing to social activism is neither simple nor automatic. Rather, it comes about through engaged social struggle rather than sanguine reliance on the character of the technology.

I find myself writing about interactive information and communication technologies during an historical period characterized by dramatic increases in economic inequality compounded by the concentration of political power in an increasingly intrusive and secretive White House. I would feel much more comfortable about the celebratory predictions of public empowerment via new media if these predictions took place in a very different historical context—one in which the galloping concentration of economic, political, and informational capital in the hands of the few was being slowed and reversed. I don't want to dismiss the potential of new media technologies, nor do I wish to downplay some of the very real ways in which they are being enlisted

to both disclose and oppose the tendency toward the increasing concentration of power in the network society. Media theorists have made much of the use of the Internet by political groups, including the Zapatistas in Mexico and the antiglobalization movement in the United States and abroad, to challenge entrenched forms of political power.[47] Political bloggers have done a good job of circulating information overlooked by the mainstream commercial media and of holding media organizations themselves accountable for misleading and incomplete coverage.[48] Perhaps one of the reasons behind the generalized skepticism toward politics and politicians is the heightened level of scrutiny to which the political process has been subjected. Thanks to the Internet, it is easier than at any time in this nation's history for citizens to inform themselves about issues of public importance and to publish their own views and arguments. Their ability to reach a broad audience is another matter.

At the same time, much of this democratic potential remains just that—potential. The fact that citizens can inform or express themselves doesn't mean that they will, and the reasons why they don't are not reducible solely to individual preference. They have to do with the perceived impact of participation and with a shared sense of what political participation might mean. This book argues that the deployment of the promise of interactivity in commercial and political contexts underwrites participation in top-down forms of management and control rather than in democratic self-governance. Such an argument, to the extent that it depends on and elucidates concrete uses of new media technologies rather than their abstract potential, might help explain why the rise of the network society has paralleled the rise of social inequality and the concentration of economic and political power in the United States. The economist Paul Krugman has documented the end of a period of relatively increasing economic equality in the postwar era, noting the return to what he has described as a new Gilded Age: "Since the 1970's . . . income gaps have been rapidly widening . . . by most measures we are, in fact, back to the days of *The Great Gatsby*. After 30 years in which the income shares of the top 10 percent of taxpayers, the top 1 percent and so on were far below their levels in the 1920's, all are very nearly back where they were."[49] Suggestively, it was the Gilded Age that pioneered the forms of information-based management that come into their own in the network era. It is to this early history of the information revolution to which we now turn.