

CHAPTER 4

Information Wants to be Consumed

R. L. Rutsky

Information wants to be free.

Stewart Brand, *The Media Lab*

Stewart Brand's notion that "Information wants to be free" quickly became one of the most celebrated, and often cited, slogans associated with the Internet and information technologies. Like all good slogans, it was both succinct and suggestive, which allowed it – as a bit of information itself – to be taken up and used in a variety of different contexts and arguments. In fact, as this slogan was appropriated and recontextualized, its meaning was inevitably transformed, sometimes in ways that bore little relation to Brand's original intent. Thus, the slogan took on a performative function, demonstrating in its very dissemination what was asserted in it: the tendency of information to move, to spread, to escape control. Indeed, for some, the slogan seemed to anticipate and affirm the idea that information can take on a kind of life of its own, with its own desires and agency. For others, it served as a concise statement of the antipathy within information technology circles to any restrictions on the "free flow" of information. Examining the multiple senses mobilized by this slogan can, therefore, help us to understand not only what informational "freedom" might mean, but also the processes by which information is "taken up" and "taken in" – in other words, the means by which information is consumed.

One reason that "information wants to be free" struck a chord with many involved in information technologies was that it seemed to propose

an extension of the constitutional guarantees of free speech and a free press to the realm of computers and the Internet. Freedom of information, in this sense, implied the right of individuals to distribute information freely, unconstrained by governmental or other forms of censorship. In this context, it is useful to note that “freedom of information” had already been invoked in the Freedom of Information Act of 1966, and its subsequent revision in 1974, which provided mechanisms whereby secret government information could, under certain circumstances, be made public. The idea that information should be “free” or “open,” rather than constrained by censorship or secrecy, has been one of the basic tenets of cybercultural ideology, and can be readily seen in that culture’s romanticizing of the hacker, its aversion to closed source code, and its paranoia concerning governmental regulation. What is often forgotten, however, is the extent to which these ideas of informational freedom echo the ideals and the rhetoric of the free speech movement and of 1960s counterculture more generally.

The early partisans of computer and Internet culture were in fact steeped in California counterculture, often portraying themselves as revolutionaries, outlaws, and “freedom fighters” in opposition to big government and big corporations. In this regard, the famed Apple Computer “1984” commercial, casting the Apple Macintosh against the rigidity and uniformity of IBM’s “Big Brother,” was merely an exemplary instance of a prevailing attitude. Among those who have pointed to this linkage between cyberculture and counterculture is Stewart Brand himself. As Brand has noted, “The early hackers of the sixties were a subset of late beatnik/early hippie culture; they were longhairs, they were academic renegades, they spelled love l-u-v and read *The Lord of the Rings* and had a [worldview] that was absolutely the same as the Merry Pranksters’ and all the rest of us world-savers” (Dery, 1996: 27). Brand was, in fact, a member of Ken Kesey’s band of Merry Pranksters as well as the creator of that bible of counterculture, *The Whole Earth Catalog*, but he was also the author of one of the earliest articles about computer hacking, and would go on to found one of the first and most storied online communities, the WELL (Whole Earth ’Lectric Link).

John Seabrook describes the WELL in terms that make its countercultural heritage clear:

The WELL had grown out of the 1970s back-to-the-land-through-technology idealism embodied by the Whole Earth Catalog. The basic idea was that by providing citizens with the technology to do more things for themselves – to grow their own food, make their own clothes, build their own wells, design their own solar-heating systems, and, now, make their own media – you could free people from their dependency on mass consumer products and corporate marketing... The WELL was a digital version of that idea. (1998: 147–8)

It was in the context of these notions of independence from “mass consumer products and corporate marketing” on the one hand, and from governmental and legal restrictions on the other, that the idea of informational freedom arose. Yet, although counterculture has often been associated with a vaguely anti-capitalist leftism, the premises of cyberculture were less anti-capitalist than populist. Thus, informational freedom has continued to be posed in populist terms, in opposition to the power of big government and large corporations to control information, to restrict access to it. Indeed, it is hardly accidental that the increasing popularity of conspiracy theories – fueled by anxiety about large, secretive organizations – has coincided almost exactly with the rise of “information culture.” In the rhetoric of informational freedom, small is indeed beautiful, while “big” – whether it refers to IBM, Microsoft, or to the nation-state – is equated with rigidity, lack of access, and totalitarian control.

The “small is beautiful” movement, of course, focused on localism and decentralization, which were seen as inherently more open, more democratic modes of organization. This argument translated easily to modes of communication as well. Ithiel de Sola Pool, whose book *Technologies of Freedom: On Free Speech in an Electronic Age* heavily influenced Stewart Brand, summarized the value of decentralized, “free” communication: “Freedom is fostered when the means of communication are dispersed, decentralized, and easily available, as are printing presses or microcomputers. Central control is more likely when the means of communication are concentrated, monopolistic, and scarce, as are great networks.” (Brand, 1987: 219).

From this perspective, personal computers and the Internet have been seen as inherently liberating precisely because of their ability to decentralize or disperse information. No longer concentrated in large, mainframe

computers, controlled by massive, top-down organizations (whether private or governmental), information is spread across many locations, and is thus made freely available for the public to access and use. The very fact of information's dissemination is seen as inherently libratory. Once information has "gotten out" on the Internet, where anyone can freely access and copy it, it can no longer be "put back in the bottle" – contained, controlled, owned.

The metaphor of the bottle, of course, casts information in the role of a "genie" that, so long as it remains in its container, must serve its owner or master, but that when freed, can no longer be "put back," no longer owned or controlled. Here, information figuratively takes on a mind, and a life, of its own. After all, without having some form of life or agency, information could not "want" to be free. Yet, the bottle metaphor also suggests that information is inherently fluid. And indeed, informational freedom is commonly figured – as freedom often is – in terms of an unconstrained fluidity, whose destiny is to flow, to spread, to escape confinement, to go where it will. In what is itself one of the most widely disseminated essays on information in the age of the Internet, "Selling Wine Without Bottles: The Economy of Mind on the Global Net," John Perry Barlow has used precisely these figures to support his argument against legal strictures on the distribution and use of information. Equating information with ideas, Barlow attempts to distinguish the "free-flow" of ideas from the "fixing" of those ideas in physical forms, in "bottles":

the rights of invention and authorship adhered to activities in the physical world. One didn't get paid for ideas but for the ability to deliver them into reality. For all practical purposes, the value was in the conveyance and not the thought conveyed.

In other words, the bottle was protected, not the wine.

Now, as information enters Cyberspace, the native home of Mind, these bottles are vanishing. With the advent of digitization, it is now possible to replace all previous information storage forms with one meta-bottle: complex – and highly liquid – patterns of ones and zeros...

Barlow's distinction between the fluidity of information and the physical "bottles" in which it is conveyed echoes the now familiar distinction between

software and hardware. Unlike hardware, information itself has no “hard,” physical presence; it cannot be grabbed, fixed, held in the way that a machine can. Instead, information is figured as soft, fluid, “highly liquid.” It flows and spreads, passing around or through walls and borders that would contain its dissemination, its freedom. For Barlow, then, the freedom of information is based precisely on information’s supposedly innate ability to escape constraints. Attempts to control the “free” flow of information are therefore doomed to failure: “Trying to stop the spread of a really robust piece of information is about as easy as keeping killer bees South of the Border. The stuff just leaks.”

The idea that information is always subject to “leakage,” that its fluidity cannot simply be bottled and sold, might lead one to presume that Barlow is also opposed to the restriction of informational flow implicit in the notion of “intellectual property.” He does in fact argue that “along with the physical bottles in which intellectual property protection has resided, digital technology is also erasing the legal jurisdictions of the physical world, and replacing them with the unbounded and perhaps permanently lawless seas of Cyberspace.” In contrasting the “lawless” fluidity of information to legal and physical restrictions of it, Barlow portrays information within the libRARY, outsider mythology of 1960s counterculture. Free information is, in other words, cast as inherently subversive or anarchic, in much the same terms that the counterculture posed the freedom of the individual against legal and societal constraints. Like many advocates of “information culture,” then, Barlow aligns informational freedom with the individual freedom idealized by countercultural ideology. This alignment of informational and individual freedom can be readily seen in the idealization of hackers as heroic “freedom fighters,” working against authoritarian control of information and of individuals. Free, or decentralized, information is supposed, as de Sola Pool argues of communication technologies, to foster individual freedom, as opposed to a centralized control over both.

Yet, it is precisely the mythology of the outlaw hacker, of the individual who stands against a restrictive, controlling authority, that allows informational freedom to be equated with individual freedom. Thus, for example, many entrepreneurial technology companies have imagined themselves as rebels who, much as in Apple Computer’s famed 1984 commercial, “fight the

power” of industry goliaths and large governmental bureaucracies in order to set information free, to decentralize it and make it accessible to individual users. Ironically, this David-versus-Goliath rhetoric seems to persist even when these small entrepreneurs themselves grow into corporate technology giants. Thus, for example, the Microsoft Corporation continues to portray itself as if it were a small, rebel entrepreneur threatened by governmental regulations that restrict not only Microsoft’s “freedom,” but the freedom of information itself. Freedom of information comes to be seen in terms of entrepreneurial freedom, the freedom to own and ultimately profit from information. Here, the idealization of individual freedom that was endemic to countercultural liberalism has given way to a libertarian capitalism in which capitalist entrepreneurs become “freedom fighters” battling against governmental and legal strictures on information. According to this logic, the fluid, “lawless” space of information – a space that Barlow figures both in terms of “open seas” and the “wild west” – is free because it is private, because it lies beyond the bounds of governments and laws. Here, in other words, the space of information becomes synonymous with the space of the market itself. Freedom of information becomes indistinguishable from the free-flow of capital, from the so-called free market. Indeed, information is itself reconfigured in the image of capital.

The tendency to confuse the free flow of information with the flows of capital is widespread in debates over the freedom of information. And, to be sure, no one could deny that both capital and information have frequently been represented in terms of liquidity and flows, in terms of the ability to spread across boundaries, to disseminate and thus reproduce themselves. As with information, a certain dissemination and decentralization is crucial to the continued functioning of capital. Often, in fact, this decentralization has been portrayed as symptomatic of a historical shift from a modern, industrial capitalism to a postmodern, information-based capitalism. Thus, for example, Michael Hardt and Antonio Negri can argue that “the decentralization and global dispersal of productive processes and sites ... is characteristic of the postmodernization or informatization of the economy” (2000: 297).

Yet, despite the tendency to treat information as synonymous with capital, or as a postmodern version of capital, information and its dispersion differ

in significant ways from “free” capital. Allowing capital the freedom to move across borders, to spread, does not mean that capital becomes more evenly distributed, more freely accessible. One cannot download capital as one might a bit of open-source software. While a certain dissemination may be necessary to the reproduction and expansion of capital, this dissemination does not mean that capital becomes free, at least not in the sense of being freely distributed, free for all to own, to access, to consume. Capital, in this sense, *does not want to be free*.

If, indeed, capital were to become subject to an unrestricted distribution and consumption, it would lose its status, its value, as capital. No matter how broadly or “freely” it is spread, capital must, by definition, preserve its value as capital, its status as property. In this sense, capital can never be freely dispersed, spent, consumed. If it is consumed, it disappears; it becomes lost as capital. Capital always demands *a return*. The movements of capital are inevitably circular, which is why the movements of capital are generally referred to not as dissemination, but as *circulation*. “Free capital” is not, then, simply a matter of freedom from governmental or other constraints on the decentralization or spread of capital; it is more a matter of a circulation in which capital inevitably returns – and pays a return – to its owners.

Capitalists, then, have an obvious interest in seeing information as a kind of capital, on which they can earn a return. The digitization or “informatization” of ever broader areas of culture and knowledge has allowed many information companies to extract previously unrealized value from a wide range of existing materials, from art to biogenetic data, from music to economic research. Digitization has, in other words, enabled various cultural products and forms of knowledge to be more easily commodified and consumed. It has also permitted the production of entirely new information-based commodities, from computer software to digital communications technologies. This informatization was epitomized in the shift, beginning in the 1980s, in which major producers of cultural commodities began to define themselves not as providers of books or movies or music, but as purveyors of software. Software – and indeed culture itself – was thus reconceived as informational “content,” downloadable and transferable across a variety of media and technologies. The term “software” had the added advantage of emphasizing the corporately-owned, commodity status of the information

involved. This content was intended, moreover, to be a largely disposable, consumable product: software, in this sense, was viewed as the razor blade of the information age, the commodity-form of information.

As many corporations have since discovered, however, digital information is unlike razor blades and other physical commodities – and, for that matter, capital itself – in one important respect: the ease with which it can be copied and spread. Information’s reproducibility is what enables its fluidity, its tendency to proliferate, escape containment, and spread. Indeed, as Stewart Brand noted, it is precisely because of the ease with which it can be copied and distributed that information can be said to “want to be free.” Yet, when Brand coined this phrase, he was not simply referring to freedom as opposed to constraint or control; he also meant free as opposed to expensive:

Information wants to be free because it has become so cheap to distribute, copy, and recombine – too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, “intellectual property,” and the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better (1987: 202).

On the one hand, Brand observes information’s tendency to replicate and spread freely, which makes information easily available. Because of this availability, information tends to become “free” in terms of its value as a commodity: “too cheap to meter.” On the other hand, Brand suggests that information’s value is also a function of its value to consumers. At first glance, the “tension” that Brand finds between “free” and “expensive” information may seem merely an attempt to apply classical economic concepts of supply and demand to the realm of information. Yet, what is evident, if not explicit, in Brand’s argument is that information’s value is not determined, as with material goods, at the level of its production, but through the reproductive, dispersive processes by which it is consumed. While the distribution and consumption of material goods in capitalism remains largely separate from its conditions of production, the reproduction of information is integral to its dissemination and consumption. Although information spreads,

virus-like, through replication, this replication, as Walter Benjamin foresaw, involves a dispersion that allows images or data to be seen in different places, in different contexts (what Benjamin (1969) called “exhibition value”). It is, however, *only through the process of consumption* that this reproduction and dissemination of data can occur. Consumption, in short, is the means by which information, whether expensive or free, reproduces and spreads.

Information, in fact, depends upon consumption for its very existence. Without being consumed, it ceases to be information in any practical sense, becoming merely a static and inaccessible knowledge, an eternal and unreachable verity. Information is, by definition, consumable. It is less the case, then, that “information wants to be free” than that “information wants to be consumed.”

This revised slogan points to an important change that has begun to take place in our notions of consumption and information. Watching a film, listening to a song, browsing a web page, or reading an academic essay has come to be seen as just as much a matter of consumption as buying a product. As culture, art, and knowledge have increasingly come to be seen as data, they can no longer be conceived (if they ever could) as existing outside of a commercial, consumable context. In an age of information, everything is supposed to be consumable; there is nothing outside of consumption. Critiques of consumption, for example, become just as much objects of consumption as they are analyses of it.

Of course, as many theorists of digital media have observed, the consumption of information differs significantly from the consumption of material products. Unlike commodities such as food or fuel, information does not simply disappear once it is consumed. Information may be consumed many times without being used up. Indeed, consumption, in and of itself, replicates and spreads information. Consuming information inevitably involves disseminating information. We see this process of dissemination everyday on the Internet, where the consumption of, for example, MP3 and other software files takes place through a process of copying that allows information to be transferred to different locations. Here, consumption has been redefined, becoming less a matter of accumulation, as it was with material commodities, than of distribution. This can be seen not only on the Internet, but throughout popular culture, where cultural data – in the

form of images, sounds, and signs – is continually disseminated through the process of consumption.

The diffusion of information through consumption is, however, a highly ambivalent process. It often provokes, as Mark Poster has argued of the Internet, anxiety about the stability of national, ethnic, and personal identities (Poster, 2001: 101–28). Immersed in the flows of information, we often feel ourselves increasingly adrift, without the security of an essential identity that pre-exists our role as consumers. Our sense of ourselves as subjects seems to have become part of this proliferation of information, these flows of cultural consumption. In consuming, we find ourselves caught in these flows, carried along by the tides of data that increasingly surround us. For many, the encounter with this process of diffusion or dissemination proves a profoundly disorienting experience. It is, moreover, disorienting not only for consumers, but also for those who distribute information or cultural software. As the dissemination of music, of movies and television, of computer programs and video games continues to overflow their channels of distribution, they find themselves losing control over consumption. Indeed, their efforts to restrict the dissemination of the “software” that they presume to own are precisely a matter of regaining control over consumption’s fluidity. From their perspective, this dissemination must, at all costs, be channeled, made secure, and, of course, made profitable. It must, as I suggested previously, be turned into a circulation, one that both returns and pays a return.

If capitalism attempts to restrict or re-circulate the consumption of information (or the dissemination that is inherent in this consumption), this circulation inevitably revolves around a particular, if imaginary, point: a center. This center, which served as a ground for consumption even before the rise of information culture, is the notion of a free and autonomous individual subject (which is also, as I noted previously, central to the idea of informational freedom). In consumer societies, consumption comes to be seen as a means of exercising personal freedom and personal (or consumer) choice. The very act of consuming, of making choices among consumable items, is viewed as an expression of our individual identities. We come, then, to recognize and define ourselves through our consumption, whether through the clothes that we buy and wear, the cars that we drive, or the

films or websites or artworks that we choose to view. Here, the freedom of the autonomous subject has become synonymous with the freedom of the consumer. The consumer, in other words, is conceived precisely as a *consuming subject*, “free” to move and choose amongst the profusion of goods and software that seem to have been arrayed for his or her pleasure. Consumption, in other words, serves as a support for our sense of ourselves as autonomous individuals. It allows us to feel that we are choosing what and how we will consume, that we are in control of our lives.

This consuming subject can, in fact, be seen from the earliest stages of modern consumer society. Even in the nineteenth century, as Anne Friedberg has argued, consumption (of goods, signs, and cinema) constructed itself around the figure of a “mobilized, virtual gaze” (Friedberg, 1993: 29–40). Positioned to identify with this mobile gaze, the consumer-viewer emerged as a virtual subject, capable of moving, at least figuratively, through the dense profusion of goods, signs, and sights on display in the crowded arcades, department stores, and – somewhat later – the early cinema of the time. In thus positioning the consumer with (or as) a mobilized gaze, the unsettling density and dispersion of nineteenth-century urban life was translated into the personal mobility, autonomy, and freedom of a consuming subject. In an analogous way, the present-day World Wide Web gives users a similar sense of unrestricted mobility, autonomy, and vision. On the Web, the consuming subject is truly positioned as a mobilized, virtual gaze, freely navigating the “world” of information, consuming whatever strikes his or her fancy. The consuming subject’s sense of mastery, of autonomy, of freedom, is thus preserved, shielded from the disorienting effects that might otherwise be provoked by the ever-increasing proliferation and dissemination of information.

Yet, it is not only the consumer who relies upon the figure of the autonomous subject to cope with the at times chaotic fluidity that is inherent in practices of information consumption. Those who provide and market information (and other goods) to consumers also tend to imagine themselves as subjects with identities and rights that must be maintained and protected against the dissemination of information. If copyrights and patents were originally designed to protect the rights of individual authors and inventors to their intellectual property, corporations have become the main custodians

of these rights, buttressed by the legal fiction that corporations are individual subjects. Whatever value information may have to consumers, its value as a commodity – as software – depends on the ability of companies to control its dissemination, to channel its fluidity. Of course, the value of this information is determined not only by its content, but also by the relative speed with which it can be processed and distributed. Informational surplus value is not merely a function of having access to information, but of having access to it before others do. Whether this advance access is a matter of having the latest financial data before others or simply being the first on the block to have seen/heard the newest movie, music, or game, it serves to assert one's sense of distinction, taste, or style. The consumption of information, in other words, has become an increasingly important means of affirming one's unique identity, one's status as a free, autonomous subject. Indeed, information's ability to be tailored to fit one's interests has in fact led to an increasing ability to customize subjectivity, to customize ourselves. Thus, the consumption of information is less a matter of commodifying or fetishizing information than of fetishizing ourselves.

If, however, information's value is always relative to the consumer, this places even more importance on controlling its dissemination, restricting its flows to "authorized" channels. Such restrictions on the distribution of information seek not only to safeguard and maintain information's value, but to allow its consumption, like that of other commodities, to be metered and billed. Information therefore circulates within a restricted economy, in which returns accrue to those who distribute it. Distributors often imagine themselves as the subjects of this circulatory process, exerting control over it and reaping its rewards.

For both distributors and consumers, however, these efforts to define consumption as a process controlled or undertaken by autonomous subjects often seem on the verge of failure. The consumption of information is a vicious circulation. The more that distributors and consumers feel themselves overwhelmed by the proliferation and dispersion that consumption unleashes, the more desperately they try to redefine ourselves as subjects, to reassert their sense of mastery over consumption. Distributors, for example, find that their attempts to control informational flows continually go awry, overwhelmed by the vagaries of dissemination, copying, and piracy. Yet,

as they employ increasingly frantic legal and technological strategies to make their information, and its value, secure, they also increase the value of unauthorized copies, thus promoting the “unauthorized” dissemination they sought to control. In a similar way, consumers discover that the more they rely on the freedom of consumer choice to define or “express” themselves, the more their sense of identity becomes lost, dispersed. If consumption promises to fulfill our needs, to improve our productivity, to make us feel more “complete,” or “free,” or “autonomous,” it can only allow us to achieve these aims momentarily. Otherwise, there would be no need for us to continue consuming. We therefore find ourselves becoming consumption addicts, requiring ever-increasing doses of consumption – whether of goods or of information – simply to preserve our sense of being active, autonomous subjects.

While both distributors and consumers have a stake in presenting consumption as the expression of an active consumer’s choice, the processes of consumption—especially the consumption of information—are not always amenable to choice or control. Consumption is not, in other words, simply under the control of a human subject. If, traditionally, critics of consumer society have sought to reassert the authority of a subject who would be independent of the system of consumption, the rise of information culture has made it increasingly obvious that there is no position where a subject might stand outside of consumption, even in order to critique it. Criticism positions us as consumers of information just as much as any other cultural product does. The consuming subject may be an imaginary construct, but this does not mean that an authentic subject (whether depicted in capitalist or Marxist terms) exists. So long as we continue to view consumption – and the entire world of information – in terms of this notion of a free, autonomous subject, we will remain caught within the vicious cycle that necessarily depicts consumption (and culture generally) solely in terms of whether or not it remains under human control.

To say, then, that information wants to be consumed is *not* simply a matter of saying that knowledge has, in an age of information, been reduced to a consumable, commodity status (the commodification of knowledge certainly pre-exists the rise of information). It is not simply “we” who desire and who consume. We are not the subject of consumption; we are, rather,

consumption's medium, the means through which information manages to disseminate itself. Consumption is neither an action nor a course of action; it is a process in which we, sometimes without realizing it, participate. If we are to understand how consumption operates on and through us, we must attempt to rethink the concept of consumption, not in terms of subjects and objects, but as an interaction. We might, then, begin to imagine a consumption without consumers, which is not to say, without people, but without subjects as its end point. This notion of consumption would be defined not in instrumental terms, as a product of human needs and desires, but instead as an ongoing process with its own desires. Here, we might see consumption as similar to those turbulent processes in which an interaction of factors becomes too complex to be predicted or controlled. Indeed, the consumption of information has less in common with the directed, linear movements of intelligible "information" than with the fluid, chaotic dissemination of "noise." Like noise, the dissemination inherent in consumption conveys information, but that information is not necessarily conveyed to us. What we call consumption does not, therefore, exist because we choose to consume certain information, but because we cannot avoid it. If information wants to be consumed, disseminated, spread, we ourselves are inevitably part of that process.

REFERENCES

- Barlow, John Perry (no date), "The Economy of Ideas: Selling Wine Without Bottles on the Global Net," Available online at: <http://homes.eff.org/~barlow/EconomyOfIdeas.html> (accessed March 30, 2005).
- Benjamin, Walter (1969). "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn. New York: Schocken Books, pp. 217–52.
- Brand, Stewart (1987), *The Media Lab: Inventing the Future at M.I.T.* New York: Viking
- Dery, Mark (1996), *Escape Velocity*. New York: Grove Press.
- Friedberg, Anne (1993), *Window Shopping: Cinema and the Postmodern*. Berkeley: University of California Press.

Hardt, Michael and Antonio Negri (2000), *Empire*. Cambridge, MA: Harvard University Press.

Pool, Ithiel de Sola (1983), *Technologies of Freedom*. Cambridge, MA: Belknap Press.

Poster, Mark (2001), *What's the Matter with the Internet*. Minneapolis: University of Minnesota Press.

Seabrook, John (1998), *Deeper: Adventures on the Net*. New York: Touchstone.