It is some time in the future. Technology has greatly increased people’s ability to “filter” what they want to read, see, and hear. General interest newspapers and magazines are largely a thing of the past. The same is true of broadcasters. The idea of choosing “channel 4” or instead “channel 7” seems positively quaint. With the aid of a television or computer screen, and the Internet, you are able to design your own newspapers and magazines. Having dispensed with broadcasters, you can choose your own video programming, with movies, game shows, sports, shopping, and news of your choice. You mix and match.

You need not come across topics and views that you have not sought out. Without any difficulty, you are able to see exactly what you want to see, no more and no less.

Maybe you want to focus on sports all the time, and to avoid anything dealing with business or government. It is easy for you to do exactly that. Perhaps you choose replays of famous football games in the early evening, live baseball from New York at night, and college basketball on the weekends. If you hate sports, and want to learn about the Middle East in the evening and watch old situation comedies late at night, that is easy too. If you care only
about the United States, and want to avoid international issues entirely, you can restrict yourself to material involving the United States. So too if you care only about New York, or Chicago, or California, or Long Island.

Perhaps you have no interest at all in “news.” Maybe you find “news” impossibly boring. If so, you need not see it at all. Maybe you select programs and stories involving only music and weather. Or perhaps you are more specialized still, emphasizing opera, or Beethoven, or the Rolling Stones, or modern dance, or some subset of one or more of the above.

If you are interested in politics, you may want to restrict yourself to certain points of view, by hearing only from people you like. In designing your preferred newspaper, you choose among conservatives, moderates, liberals, vegetarians, the religious right, and socialists. You have your favorite columnists; perhaps you want to hear from them, and from no one else. If so, that is entirely feasible with a simple “point and click.” Or perhaps you are interested in only a few topics. If you believe that the most serious problem is gun control, or global warming, or lung cancer, you might spend most of your time reading about that problem, if you wish from the point of view that you like best.

Of course everyone else has the same freedom that you do. Many people choose to avoid news altogether. Many people restrict themselves to their own preferred points of view—liberals watching and reading mostly or only liberals; moderates, moderates; conservatives, conservatives; neo-Nazis, neo-Nazis. People in different states, and in different countries, make predictably different choices.

The resulting divisions run along many lines—of race, religion, ethnicity, nationality, wealth, age, political conviction, and more. Most whites avoid news and entertainment options designed for African-Americans. Many African-Americans focus largely on options specifically designed for them. So too with Hispanics. With the reduced importance of the general interest
magazine and newspaper, and the flowering of individual programming design, different groups make fundamentally different choices.

The market for news, entertainment, and information has finally been perfected. Consumers are able to see exactly what they want. When the power to filter is unlimited, people can decide, in advance and with perfect accuracy, what they will and will not encounter. They can design something very much like a communications universe of their own choosing.

PERSONALIZATION AND DEMOCRACY

Our communications market is rapidly moving in the direction of this apparently utopian picture. As of this writing, many newspapers, including the Wall Street Journal, allow readers to create “personalized” electronic editions, containing exactly what they want, and excluding what they do not want. If you are interested in getting help with the design of an entirely personalized paper, you can consult an ever-growing number of Websites, including individual.com (helpfully named!) and crayon.com (a less helpful name, but evocative in its own way).

In reality, we are not so very far from complete personalization of the system of communications. Consider just a few examples.

- Broadcast.com has “compiled hundreds of thousands of programs so you can find the one that suits your fancy. . . . For example, if you want to see all the latest fashions from France twenty-four hours of the day you can get them. If you’re from Baltimore living in Dallas
and you want to listen to WBAL, your hometown station, you can hear it.”

- Sonicnet.com allows you to create your own musical universe, consisting of what it calls “Me Music.” Me Music is a “place where you can listen to the music you love on the radio station YOU create . . . A place where you can watch videos of your favorite artists and new artists.”

- Zatso.com allows users to produce “a personal newscast.” Its intention is to create a place “where you decide what’s news.” Your task is to tell “what TV news stories you’re interested in,” and Zatso.com turns that information into a specifically designed newscast. From the main “This is the News I Want” menu, you can choose stories with particular words and phrases, or you can select topics, such as sports, weather, crime, health, government/politics, and much more.

- Info Xtra offers “news and entertainment that’s important to you,” and it allows you to find this “without hunting through newspapers, radio and websites.” Personalized news, local weather, and “even your daily horoscope or winning lottery number” will be delivered to you once you specify what you want and when you want it.

- TiVo, a television recording system, is designed, in the words of its Website, to give “you the ultimate control over your TV viewing.” It does this by putting “you at the center of your own TV network, so you’ll always have access to whatever you want, whenever you want.” TiVo “will automatically find and digitally
record your favorite programs every time they air” and will help you create “your personal TV line-up.” It will also learn your tastes, so that it can “suggest other shows that you may want to record and watch based on your preferences.”

- Intertainer, Inc. provides “home entertainment services on demand,” not limited to television but also including music, movies, and shopping. Intertainer is intended for people who want “total control” and “personalized experiences.” It is “a new way to get whatever movies, music, and television you want anytime you want on your PC or TV.”

- George Bell, the chief executive officer of the search engine Excite, exclaims, “We are looking for ways to be able to lift chunks of content off other areas of our service and paste them onto your personal page so you can constantly refresh and update that ‘newspaper of me.’ About 43 percent of our entire user data base has personalized their experience on Excite.”

If you put the words “personalized news” in any search engine, you will find vivid evidence of what is happening. And that is only the tip of the iceberg. Thus MIT technology specialist Nicholas Negroponte prophecies the emergence of “the Daily Me” — a communications package that is personally designed, with each component fully chosen in advance.

Many of us are applauding these developments, which obviously increase individual convenience and entertainment. But in the midst of the applause, we should insist on asking some questions. How will the increasing power of private
control affect democracy? How will the Internet, the new forms of television, and the explosion of communications options alter the capacity of citizens to govern themselves? What are the social preconditions for a well-functioning system of democratic deliberation, or for individual freedom itself?

My purpose in this book is to cast some light on these questions. I do so by emphasizing the most striking power provided by emerging technologies: the growing power of consumers to filter what they see. In the process of discussing this power, I will attempt to provide a better understanding of the meaning of freedom of speech in a democratic society. I will also outline possible policy reforms, designed to ensure that new communications technologies serve democracy, rather than the other way around.

A large part of my aim is to explore what makes for a well-functioning system of free expression. Above all, I urge that in a diverse society, such a system requires far more than restraints on government censorship and respect for individual choices. For the last decades, this has been the preoccupation of American law and politics, and indeed the law and politics of many other nations as well, including, for example, Germany, France, England, and Israel. Censorship is indeed a threat to democracy and freedom. But an exclusive focus on government censorship produces serious blind spots. In particular, a well-functioning system of free expression must meet two distinctive requirements.

First, people should be exposed to materials that they would not have chosen in advance. Unplanned, unanticipated encounters are central to democracy itself. Such encounters often involve topics and points of view that people have not
sought out and perhaps find quite irritating. They are important partly to ensure against fragmentation and extremism, which are predictable outcomes of any situation in which like-minded people speak only with themselves. I do not suggest that government should force people to see things that they wish to avoid. But I do contend that in a democracy deserving the name, people often come across views and topics that they have not specifically selected.

Second, many or most citizens should have a range of common experiences. Without shared experiences, a heterogeneous society will have a much more difficult time in addressing social problems. People may even find it hard to understand one another. Common experiences, emphatically including the common experiences made possible by the media, provide a form of social glue. A system of communications that radically diminishes the number of such experiences will create a number of problems, not least because of the increase in social fragmentation.

As preconditions for a well-functioning democracy, these requirements hold in any large nation. They are especially important in a heterogeneous nation, one that faces an occasional risk of fragmentation. They have all the more importance as each nation becomes increasingly global and each citizen becomes, to a greater or lesser degree, a “citizen of the world.”

An insistence on these two requirements should not be rooted in nostalgia for some supposedly idyllic past. With respect to communications, the past was hardly idyllic. Compared to any other period in human history, we are in the midst of many extraordinary gains, not least from the
standpoint of democracy itself. For us, nostalgia is not only unproductive but also senseless. Nor should anything here be taken as a reason for “optimism” or “pessimism,” two great obstacles to clear thinking about new technological developments. If we must choose between them, by all means let us choose optimism. But in view of the many potential gains and losses inevitably associated with massive technological change, any attitude of “optimism” or “pessimism” is far too general to make sense. What I mean to provide is not a basis for pessimism, but a lens through which we might understand, a bit better than before, what makes a system of freedom of expression successful in the first place. That improved understanding will equip us to appreciate a free nation’s own aspirations and thus help in evaluating continuing changes in the system of communications. It will also point the way toward a clearer understanding of the nature of citizenship and toward social reforms if emerging developments disserve our aspirations, as they threaten to do.

As we shall see, it is much too simple to say that any system of communications is desirable if and because it allows individuals to see and hear what they choose. Unanticipated, unchosen exposures, and shared experiences, are important too.

PRECURSORS AND INTERMEDIARIES

Unlimited filtering may seem quite strange, perhaps even the stuff of science fiction. But it is not entirely different from what has come before. Filtering is inevitable, a fact of life. It is as old as humanity itself. No one can see, hear, or read
everything. In the course of any hour, let alone any day, every one of us engages in massive filtering, simply to make life manageable and coherent.

With respect to the world of communications, moreover, a free society gives people a great deal of power to filter out unwanted materials. Only tyrannies force people to read or to watch. In free nations, those who read newspapers do not read the same newspaper; some people do not read any newspaper at all. Every day, people make choices among magazines based on their tastes and their point of view. Sports enthusiasts choose sports magazines, and in many nations they can choose a magazine focused on the sport of their choice, Basketball Weekly, say, or the Practical Horseman; conservatives can read National Review or the Weekly Standard; countless magazines are available for those who like cars; Dog Fancy is a popular item for canine enthusiasts; people who are somewhat left of center might like the American Prospect; there is even a magazine called Cigar Aficionado.

These are simply contemporary illustrations of a long-standing fact of life in democratic countries: a diversity of communications options and a range of possible choices. But the emerging situation does contain large differences, stemming above all from a dramatic increase in available options, a simultaneous increase in individual control over content, and a corresponding decrease in the power of general interest intermediaries. These include newspapers, magazines, and broadcasters. An appreciation of the social functions of general interest intermediaries will play a large role in this book.

People who rely on such intermediaries have a range of chance encounters, involving shared experiences with diverse
others, and also exposure to materials and topics that they did not seek out in advance. You might, for example, read the city newspaper and in the process find a range of stories that you would not have selected if you had the power to do so. Your eyes might come across a story about ethnic tensions in Germany, or crime in Los Angeles, or innovative business practices in Tokyo, and you might read those stories although you would hardly have placed them in your “Daily Me.” You might watch a particular television channel—perhaps you prefer channel 4—and when your favorite program ends, you might see the beginning of another show, perhaps a drama that you would not have chosen in advance but that somehow catches your eye. Reading *Time* or *Newsweek*, you might come across a discussion of endangered species in Madagascar, and this discussion might interest you, even affect your behavior, maybe even change your life, although you would not have sought it out in the first instance. A system in which individuals lack control over the particular content that they see has a great deal in common with a public street, where you might encounter not only friends, but also a heterogeneous array of people engaged in a wide array of activities (including perhaps bank presidents and political protesters and panhandlers).

Some people believe that the mass media are dying—that the whole idea of general interest intermediaries, providing both shared experiences for millions and exposure to diverse topics and ideas, was a short episode in the history of human communications. As a prediction, this view is probably over-stated. But certainly the significance of the mass media has been decreasing over time. We should not forget that from the
standpoint of human history, even in industrialized societies, general interest intermediaries are relatively new, and far from inevitable. Newspapers, radio stations, and television broadcasters have particular histories with distinctive beginnings and possibly distinctive endings. In fact the twentieth century should be seen as the great era for the general interest intermediary, providing similar information and entertainment to millions of people.

The twenty-first century may well be altogether different on this score. Consider one small fact: In 1948, daily newspaper circulation was 1.3 per household, a rate that had fallen by 57 percent by 1998—even though the number of years of education, typically correlated with newspaper readership, rose sharply in that period. At the very least, the sheer volume of options, and the power to customize, are sharply diminishing the social role of the general interest intermediary.

POLITICS, FREEDOM, AND FILTERING

In the course of the discussion, we will encounter many issues. Each will be treated in some detail, but for the sake of convenience, here is a quick catalogue:

- the large difference between pure populism, or direct democracy, and a democratic system that attempts to ensure deliberation and reflection as well as accountability;
- the intimate relationship between free speech rights and social well-being, which such rights often serve;
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- the pervasive risk that discussion among like-minded people will breed excessive confidence, extremism, contempt for others, and sometimes even violence;
- the potentially dangerous role of social cascades, including “cybercascades,” in which information, whether true or false, spreads like wildfire;
- the enormous potential of the Internet and other communications technologies in promoting freedom, in both poor and rich countries;
- the utterly implausible nature of the view that free speech is an “absolute”;
- the ways in which information provided to any one of us is likely to benefit many of us;
- the critical difference between our role as citizens and our role as consumers;
- the inevitability of regulation of speech, indeed the inevitability of speech regulation benefiting those who most claim to be opposed to “regulation”; and
- the extent to which the extraordinary consumption opportunities created by the Internet do not really improve people’s lives, because for many goods, they merely accelerate the “consumption treadmill”; and
- the potentially destructive effects of intense market pressures on both culture and government.

But the unifying issue throughout will be the various problems, for a democratic society, that might be created by the power of complete filtering. One question, which I answer in the affirmative, is whether individual choices, innocuous
and perfectly reasonable in themselves, might produce a large set of social difficulties. Another question, which I also answer in the affirmative, is whether it is important to maintain the equivalent of “street corners,” or “commons,” where people are exposed to things quite involuntarily. More particularly, I seek to defend a particular conception of democracy—a deliberative conception—and to evaluate, in its terms, the outcome of a system with the power of perfect filtering. I also mean to defend a conception of freedom, associated with the deliberative conception of democracy, and to oppose it to a conception that sees consumption choices by individuals as the very embodiment of freedom.

My claim is emphatically not that street corners and general interest intermediaries will or would disappear in a world of perfect filtering. To what extent the market will produce them, or their equivalents, is an empirical issue. Many people like surprises. Some people have a strong taste for street corners and for their equivalent on the television and on the Internet. Indeed, new technological options hold out a great deal of promise for exposure to materials that used to be too hard to find, including new topics and new points of view. If you would like to find out about different forms of cancer, and different views about possible treatments, you can do so in less than a minute. If you are interested in learning about the risks associated with different automobiles, a quick search will tell you a great deal. If you would like to know about a particular foreign country, from its customs to its politics to its weather, you can do better with the Internet than you could have done with the best of encyclopedias.
Most parents of school-age children are stunned to see how easy all this is. From the standpoint of those concerned with ensuring access to more opinions and more topics, the new communications technologies can be a terrific boon. But it remains true that many apparent street corners, on the Internet in particular, are highly specialized. Consider Townhall.com, a street corner–type site, as befits its name, through which you can have access to dozens of sites. But unlike at most real townhalls, only conservative views can be found at Townhall.com. Each site is a conservative political organization of one sort or another, including, among many others, the American Conservative Union, the Oliver North Radio Show, Protect Americans Now, Conservative Political Action Conference, Citizens Against Government Waste, and the *National Review*—each with a site of its own, most with many links to like-minded sites, and few with links to opposing views.

What I will argue is not that people lack curiosity or that street corners will disappear but instead that there is an insistent need for them, and that a system of freedom of expression should be viewed partly in light of that need. What I will also suggest is that there are serious dangers in a system in which individuals bypass general interest intermediaries and restrict themselves to opinions and topics of their own choosing. In particular, I will emphasize the risks posed by any situation in which thousands or perhaps millions or even tens of millions of people are mainly listening to louder echoes of their own voices. A situation of this kind is likely to produce far worse than mere fragmentation.
WHAT IS AND WHAT ISN'T THE ISSUE

Some clarifications, designed to narrow the issue, are now in order. I will be stressing problems on the “demand” side on the speech market. These are problems that stem not from the actions of producers—Microsoft, Netscape, and the like—but instead from the choices and preferences of consumers. I am aware that on the standard view, the most important emerging problems come from large corporations, and not from the many millions, indeed billions, of individuals who make communications choices. In the long run, however, I believe that the more serious risks, and certainly the most neglected ones, are consumer driven. This is not because consumers are usually confused or irrational or malevolent. It is because choices that seem perfectly reasonable in isolation may, when taken together, badly disserve democratic goals.

Because of my focus on the consumers of information, I will not be discussing a wide range of issues that have engaged attention in the last decade. Many of these issues involve the allegedly excessive power of large corporations or conglomerates.

- I will not deal with the feared disappearance of coverage of issues of interest to small or disadvantaged groups. That is not likely to be a problem. On the contrary, there has been a tremendous growth in “niche markets,” serving groups both large and small. With a decrease in scarcity, this trend will inevitably continue. Technological development is a great ally of small groups
and minorities, however defined. People with unusual or specialized tastes are not likely to be frozen out of the emerging communications universe. The opposite is much more likely to be true; they will have easy access to their preferred fare, far easier than ever before. Hence that will be my focus here.

- I will provide little discussion of monopolistic behavior by suppliers or manipulative practices by them. That question has received considerable attention, above all in connection with the 1999–2000 antitrust litigation involving Microsoft. Undoubtedly some suppliers do try to monopolize, and some do try to manipulate; consider, for example, the fact that Netscape provides some automatic bookmarks, designed to allow users to link with certain sites but not others. (My own automatic bookmarks, for example, include ABC News and CBS Sportsline—not NBC or CBS news, and nothing from ABC or NBC sports.) All sensible producers of communications know that a degree of filtering is a fact of life. They also know something equally important but less obvious: Consumers’ attention is the crucial (and scarce) commodity in the emerging market. Companies stand to gain a great deal if they can shift attention in one direction rather than another.

This is why many Internet sites provide information and entertainment to consumers for free. Consumers are actually a commodity, often “sold” to advertisers in return for money; it is therefore advertisers and not consumers who pay. This is pervasively true of radio and television. To a large degree, it is true of websites.

For general queries, contact webmaster@press.princeton.edu
too. Consider, for example, the hilarious case of Netzero.com, which provides free Internet access. Netzero.com describes itself—indeed this is its motto—as “Defender of the Free World.” In an extensive advertising campaign, Netzero.com portrays its founders as besieged witnesses before a legislative committee, defending basic liberty by protecting everyone’s “right” to have access to the Internet. But is Netzero.com really attempting to protect rights, or is it basically interested in earning profits? The truth is that Netzero.com is one of a number of for-profit companies, giving free Internet access to consumers (a social benefit to be sure), but making money by promising advertisers that the consumers it serves will see their commercials. There is nothing wrong with making money, but Netzero.com should hardly be seen as some dissident organization of altruistic patriots.

Especially in light of the overriding importance of attention, some private companies will attempt to manipulate consumers, and occasionally they will engage in monopolistic practices. Is this a problem? No unqualified answer would make sense. An important question is whether market forces will reduce the adverse effects of efforts at manipulation or monopoly. I believe that to a large extent, they will; but that is not my concern here. For a democracy, many of the most serious issues raised by the new technologies do not involve manipulation or monopolistic behavior by large companies.

I will be discussing private power over “code,” the structure and design of programs. In an illuminating and important book, Lawrence Lessig has expressed...
concern that private code-makers will control possibilities on the Internet, in a way that compromises privacy, the free circulation of ideas, and other important social values. As Lessig persuasively demonstrates, this is indeed a possible problem. But the problem should not be overstated, particularly in view of the continuing effects of extraordinary competitive forces. The movement for “open code” (above all Linux), allowing people to design code as they wish, is flourishing, and in any case competitive pressures impose real limits on the extent to which code-makers may move in directions that consumers reject. Privacy guarantees, for example, are an emerging force on the Internet. Undoubtedly there is room, in some contexts, for a governmental role in ensuring against the abusive exercise of the private power over code. But that is not my concern in this book.

- I will not be discussing the “digital divide,” at least not as this term is ordinarily understood. People concerned about this problem emphasize the existing inequality in access to new communications technologies, an inequality that divides, for example, those with and those without access to the Internet. That is indeed an important issue, not least domestically. According to recent estimates, income is the most significant source of the domestic divide; fewer than half of households with average incomes under $15,000 (19 percent of the total American population) will have entered the Internet population by as late as 2005. A large gap can also be found among ethnic groups, with African-American and Hispanic-American segments at 30 percent and 33 percent, respec-
tively, in 1995, and whites well above 50 percent. But this gap is closing quickly, and it is anticipated that much of it will disappear by 2005.

The digital divide is far more serious internationally, because it threatens to aggravate existing social inequalities, many of them unjust, at the same time that it deprives many millions (in fact, billions) of people of information and opportunities. In 1998, for example, industrial countries, accounting for less than 15 percent of all people, had 88 percent of Internet users—with North America, home to less than 5 percent of the world’s people, having more than half of its Internet users. In several African countries, the cost of a monthly Internet connection is as much as $100, ten times that in the United States. A computer would cost the average American about a month’s wage, whereas it would cost a citizen of Bangladesh over eight years’ income. In 2000, an astonishingly low 0.11 percent of the total Arab population had Internet access, at the same time when well over 50 percent of Americans, or 130 million people, had such access, with eighty million turning out to be active Internet users. But as in the domestic context, that problem seems likely to diminish over time. Of course we should do whatever we can to accelerate the process, which will provide benefits, not least for both freedom and health, for millions and even billions. But what I will describe will operate even if everyone is on the right side of that divide, that is, even if everyone has access to all media.

My focus, then, will be on several sorts of “digital divides” that are likely to emerge in the presence of
universal access—on how reasonable choices by individual consumers might produce both individual and social harm. This point is emphatically connected with inequalities, but not in access to technologies; it does not depend in any way on inequalities there.

The digital divides that I will emphasize may or may not be a nightmare. But if I am right, there is all the reason in the world to reject the view that free markets, as embodied in the notion of “consumer sovereignty,” are the appropriate foundation for communications policy. The imagined world of innumerable, diverse editions of the “Daily Me” is the furthest thing from a utopian dream, and it would create serious problems from the democratic point of view.