

OH! SAY CAN YOU SEE...

"We should all be concerned about the future because we will have to spend the rest of our lives there."

—Charles Franklin Kettering

Listen to the speeches of any politician out there and you're almost assured of hearing at least one reference to the future. After all, we don't seem to want to elect politicians unless they offer a hopeful vision of what lies ahead. But when the future finally comes around to the present, it usually resembles nothing of what we were promised, so we blame the folks in office for fooling us.

But we are all at least as responsible as the politicians, because we as voters set up the rules of the game that scorches us. If you play three-card monte against someone promising big wins and you lose your shirt, whom do you blame? The fellow who scammed you? Or do you blame yourself for being silly enough to believe you'd win?

In this issue we've tried to provide a rough picture of what you can anticipate in the years to come—in everything from sex to war, the environment to education—so you don't have to rely solely on the words of those who trade you a pair of rose-colored glasses for your vote. After all, it's the New Year, the inauguration is just over, and it's time for the stocktaking State of the Union message. If you're like us, you're probably tempted to look beyond the prosaic present and a frigid February and wonder for a moment, What's next?

There's something gooey about much of what you read about the future, because it's usually all speculation unsupported by hard facts. So in this month's survival guide, we tell you how eight critical political issues will evolve and which people will effect all those changes come the year

I'm just a Bill (ionaire): Gates at Microsoft.

2020. There's no magic in our choice of year other than if you're approximately my age, that would be about the time when your Social Security checks will, if we keep on our current course, bounce. But we have some solutions for that unpleasant possibility, too. Two of the biggest names in the investment industry, Peter Lynch and Peter G. Peterson, explain why the Social Security trust fund will go bust, and they offer some practical solutions that could keep it an entitlement for generations to come. Given that a bipartisan blue-ribbon panel has been unable to agree on any of a number of proposed solutions for keeping the fund solvent, the Peter principles are especially topical.

As a general rule, beware of those who predict the future, except, of course, those who study it or own it. In this issue, Edward Tenner, author of a recent book about the revenge effects of technology, talks with Wendell Bell, a futurist professor at Yale University. Carl Sagan looks into the cosmos to imagine a world in which he is president. And Bill Gates answers the looming question "If all politics is local, what happens when we're all connected in the global village?"

Finally, no explanation of the future would be complete without a recitation of the past. We are particularly proud to have in this issue a piece by historian Douglas Brinkley on the final days of the Carter presidency. As Bill Clinton begins his second term, it's worth reflecting on how similarly situated both men were coming into the White House and why their fortunes parted. Each was a popular governor of a southern state who trumpeted his separateness from the Washington political establishment. And though Clinton hints occasionally of a chilly relationship with the Washington elite, stemming from his meteoric rise from humble southern roots, he has forced their acceptance of him by circumstance if

not choice. Carter, we learn, was done in by the very qualities that got him elected in the first place: his unwillingness to play politics the Washington way, his aloofness, and his rigid sense of morality. But today it's Carter's particular character that has earned him respect as a statesman, which he never enjoyed while president.

So we hope you enjoy *George's* take on the future. Why not put it in a safe place somewhere and take it out in 20 years? To paraphrase a great Englishman, it may not get you what you want, but you just might find, it will get you what you need.

STEVEN SEBRING

John Kennedy

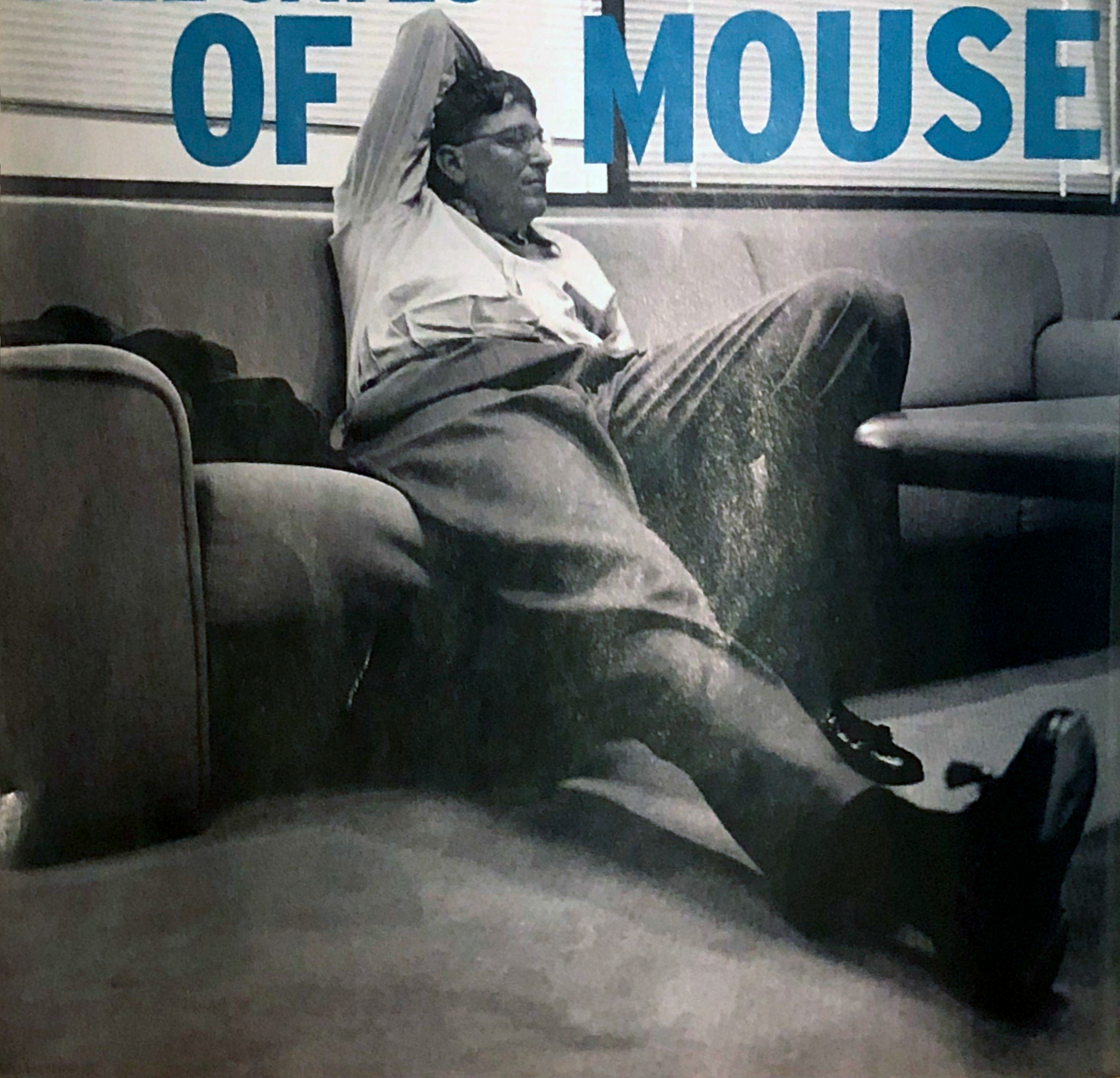


John Kennedy talks to the head of
Microsoft about money, Murdoch, and why he's
a politician's favorite photo-op

BILL GATES

OF

MOUSE



& MAN

In the United States, great wealth is often acquired with great speed, but no one has ever amassed so much so quickly as has Bill Gates, the 41-year-old co-founder, chairman, and chief executive officer of the Microsoft Corporation. With a personal fortune in excess of \$20 billion, Gates presides over a company whose net worth (in excess of \$100 billion) is more than ten times the gross domestic product of Zaire. Not only that, his name has become synonymous with the information revolution. His achievement is all the more astonishing when you consider that the young Gates was sure enough about his vocation in 1975 to drop out of Harvard University in his sophomore year and team up with his high school friend Paul Allen to lay the foundations of the Microsoft Corporation.

It's hard to believe that the calm, modest, boyish-looking Gates—the opposite of the stereotypical swashbuckling entrepreneur of old—has transformed not only the computer industry but also how millions now work and communicate with each other. In the business community, however, there are those who say that Microsoft, the epitome of the modern company, has adopted the predatory business practices of old-fashioned industrial behemoths such as General Motors or IBM, that Microsoft's share of the software market is approaching a dangerous monopoly. In 1995, Microsoft had to drop its plans to take over software producer Intuit amid accusations that the acquisition would represent a breach of antitrust legislation. Indeed, during the course of my interview the only occasion that disturbed the placid exterior of Microsoft's chairman was when I brought up this issue.

With his software programs a ubiquitous feature of offices and homes in the Western world, Gates is now hoping to alter the practice and the perception of government. In Gates's view, so long as government is prepared to embrace the information revolution, then we can all expect government to become smaller, more accessible, and infinitely more accountable.

Yet there are some who believe that Gates's vision of the future—a computer-driven democracy in which the individual, liberated by technology, will be self-sufficient—might easily lead to the scenarios predicted by Aldous Huxley in *Brave New World* or George Orwell in *1984*. Far from connecting people to each other, Gates's critics allege, the computer age will herald an era of social alienation, a world where everything can be acquired or communicated via one's workstation and where there will be little need to participate in what we understand to be civic life. Worse still, it might allow government to pry more effectively into our lives.

As I walked through the Microsoft campus in Redmond, Washington, just outside Seattle—the only city people move to so they can be closer to nature, as a writer once joked—I couldn't help noticing a utilitarian quality about the place. Here, Gates is known by all simply as “Bill,” and there's a collegiate feel to the buildings. As for the people who work for Bill Gates, they walk around looking relaxed and just fine (some earnest Microsoft employees insist on wearing shorts year-round, regardless of the temperature outside), but there's also an air of overwhelming purposefulness. You are less likely to find a tie or suit hanging on the back of a door than a sleeping bag—for catnaps during those long northwestern nights, programming the next generation of Microsoft software. Just how far the appearance of the place matched the temperament of its maker I would only learn after I had entered Building 8 and climbed to Floor 2, where the chairman of Microsoft has his surprisingly modest office.

John Kennedy: There's a lot of speculation these days about how the Internet will change our lives. I'm particularly interested in how you think it will change politics and people's interaction with government.

Bill Gates: There's an opportunity to improve politics and democracy whenever you have an advance in communications technology. The Internet is a tool that lets you find information in a much better way than anything else. Historically, most tools of communication were either broadcast—which meant your material had to appeal to millions and millions of people—or personal and able to address only a very small audience. But the Internet provides a single individual with access to virtually unlimited information on any given topic.

How can that improve the political process?

Well, let's say they're cutting \$5 billion from some program in the budget. Most people don't have enough background to know whether this is a wise move or not. They don't know the key political issues, what the trade-offs are, or how this particular budget item has been spent historically. With the Internet, not only can you take that news item and have it linked to background information, but you can also reach out and

Left: Behind closed blinds with Bill Gates. Below: On-screen during the launch of MSNBC, Microsoft's joint venture with NBC, in 1996.





find other people who are interested in that issue. The Internet is scalable in the sense that if something really catches your eye, you can become as educated and involved on the subject as you want to be.

So one of the things that the Internet has changed is the dynamic between elected officials and their constituents. Suddenly, the folks in Washington aren't the only ones with access to all the relevant information on a given issue.

Clearly, elected officials are more accountable now. For example, if there is a big vote in Congress, I can quickly find out exactly how my congressperson voted and even what he or she had to say. You cannot get that level of detailed information in a national news article. About 40 percent of U.S. homes have personal computers now, and that's rising. So the implications of this kind of accountability are significant.

Constituents also can now swamp their representatives with data as opposed to the other way around.

Well, it must be pretty hard with the paper mail nowadays, because people try to bombard a congressperson's office with various opinions. Electronically, it's a lot easier. Congresspeople can use e-mail as a sort of poll to see how many people were for something and how many were against it, though I feel sorry for the person who reads the president's e-mail, because I'm often copied on the same junk e-mail. [Laughs]

That sounds like Ross Perot's notion of a direct democracy. Is that where we're headed?

In the future, direct democracy will be feasible. An extreme example would be to say, on a weekly basis, we'll take an issue and have every-

body vote on it. But personally I think representative democracy is better. Elected representatives can be a lot more thoughtful; they have the time to listen to both sides of an issue and often come up with the nonobvious solution. In the future, we'll have to choose representative democracy not because it's the only system available but because we believe that it's the best approach available.

In your book *The Road Ahead*, you describe people becoming more self-sufficient through technology. You say it will allow people to eliminate many of the tedious routines of everyday life. What are the implications for our government? How will the burgeoning electronic community change our national community? Is government being rendered obsolete?

I don't think there's much that government does that you can eliminate altogether. Certainly technology will make the government a lot more efficient. In the future, instead of filling out paper forms or standing in line and talking to somebody in a governmental department, people will simply go online. So the government can be smaller than it is right now. But it's not dramatic. I mean it's not like you say, Oh, this is the world of the Internet; let's get rid of the VA hospitals.

How do you respond to the argument that the cost of this technological self-sufficiency is the loss of our traditional sense of community? If you can get everything you need through your phone or TV, you lose those kinds of human exchanges that keep us connected as citizens.

It cuts both ways. Say that I'm from Israel and I want to listen to a radio broadcast from my homeland. Today you go on the Internet and, boom, you are there. No matter where you are located, you can maintain contact with any cultural group you belong to. On the other hand, physical communities were really primary when we were all just farming together and there were no telephones and no books. As you make the world a smaller place, ties to people in your proximity are paradoxically reduced. But those physical communities impose cultural standards in a stronger way than when you are free of those constraints and don't have that kind of attachment.

Will online communities ever replace physical communities altogether?

It's nonsense to say that people are just going to sit at home and use their computers. But people shouldn't underestimate how much we are going to improve the nature of that computer experience; there will be talking 3-D images of yourself that will enable you to sit and converse with people, play games with people, and a lot of neat things. We will never replace the idea of "Let's go on a picnic together" or "Let's climb a mountain together." In fact, as technology increases our efficiency, we will have extra time to engage in leisure activities with one another. Let's take shopping as an example. Sometimes shopping is purely utilitarian. I need to get soap, so I get on the Internet, type in *soap*, and the soap gets delivered. But sometimes shopping is an experience with a bunch of people, when you want to window-shop and all that. In no way does the computer mean you are not going to make that choice.

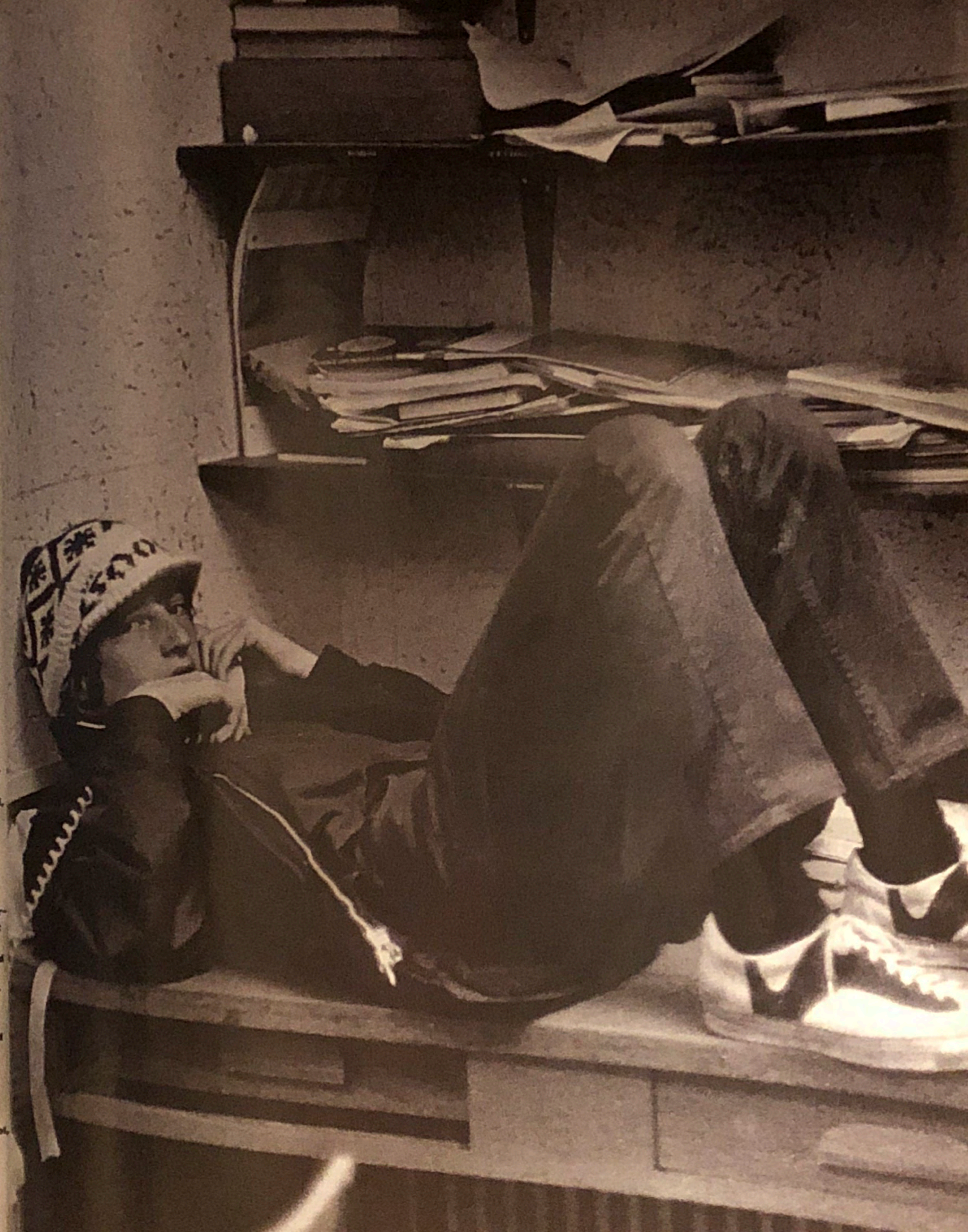
Do you think that people who are disposed to experiment with technology have a kind of distinct political orientation or identity?

Well, there are a lot of people involved with technology who are very optimistic about what technology will provide. They tend to think there's got to be a way of structuring incentives so as to greatly reduce government involvement. So you will probably find a lot more libertarians in the technology sector than anywhere else.

What about people on the Internet?

The Internet has grown enough now that you find people of all political stripes out there. I think the Internet represents the future. That's why you had Bob Dole giving out his Web site (continued on page 101)

Top left: Bill Clinton on the presidential campaign trail, listening to Gates spell out his vision for the next century. Bottom left: Gates with former Microsoft VP Patty Stonesifer and the DreamWorks team—David Geffen, Steven Spielberg, and Jeffrey Katzenberg. Right: Gates working the telephone at his high school, back in 1973.



Bill Gates

(continued from page 80) address in a presidential debate. Every politician wants to be associated with the future. There's no country where I've gone where there hasn't been interest among the top political leaders in sitting down and talking with me. Part of it is the legitimate issue of talking about how their country can exploit technological advances, and part of it is just trying to associate themselves with technology and the bright future that comes with that.

What do you see as government's role in developing the Internet? Bill Clinton has drawn analogies between the information superhighway and Dwight D. Eisenhower's highway building program in the '50s.

The highway analogy would suggest that the government should be deeply involved. The government built the highways. But in the case of the Internet, no one is suggesting that the government needs to do anything of the kind. Whenever you have something new like this, it's best for the government to sort of sit back and see how it develops. And where there are problems, fine, the government can step in. For example, some people said, Let's have the government come in and set standards on the Internet, so all these systems that are formatted differently will work together. Thank goodness the government didn't choose to do that, because the de facto standards that have evolved are working super, super well. So, to date, the government's role in setting standards has been quite modest.

But aren't some new laws necessary to deal with this new world?

It's always surprising how well old concepts carry over into the new medium. It's overly idealistic to act like, Oh, the Internet is the one place where people should be able to do whatever they wish: present child pornography, do scams, libel people, steal copyrighted material. Society's values have not changed fundamentally just because it's an Internet page. Take copyright. Sure, there should be some clarifications about copyright, but the old principles work surprisingly well in the new medium. Anybody who says you have to start over—I don't agree with that.

Will it be possible to maintain our privacy in a digital world?

Privacy is a very interesting issue. I think people are a little naive about how much data exist about them electronically today. Some countries are already issuing these "smart cards" with all your vital information on them; you use them to claim medical benefits, to vote, to identify yourself to the bank, and so on.

Sounds Orwellian.

You know, the degree of privacy afforded each individual will always be a political decision. It's a decision for each society. The U.S. is the ultimate we-believe-in-privacy country, so the government will probably never issue smart cards.

At the same time, attitudes can change. If, for example, the U.S. went through a terrible period of terrorism, people might decide to draw the line about privacy a little differently.

Speaking of the government, do you think that the antitrust investigations brought against Microsoft are fair?

Well, the industry we are in is very important. We've been immensely successful, so at some point it was going to be worthwhile for the government to look at our industry. We don't have any issue with the way the laws are written or even with the idea that very successful companies like ours are going to be looked into. What's interesting is that in terms of power in the marketplace, none of us in the world of high technology have the kind of power that, say, Coke has in the soft drink market. In our business, not even the most successful companies, like IBM or Microsoft, can stand still. If we stand still, we are going to get replaced pretty quickly. Our business is less forgiving than any other that I can think of. We reached a consent decree with the Justice Department freely and fairly, and we are perfectly satisfied with what came out of that. But as long as we are successful, competitors will try to exploit the situation and try to hobble us as a competitor.

[After protracted negotiations, Microsoft signed a consent decree with the Department of Justice in July 1994 to settle charges of antitrust violations. The company agreed to monitor itself—primarily to consider whether new acquisitions would lead Microsoft to further dominate the software market, and to cease the acquisition if it would.]

What about the criticism that Microsoft's dominant position in the industry is anti-competitive, that the industry should be reconfigured so that a thousand flowers can bloom instead of one big tree that dwarfs everything else?

Anybody who would say that doesn't understand our business. There are more new companies created in our industry than in all the other industries put together.

Wouldn't the competition and variety be even greater in the PC industry without a dominant player like Microsoft?

No. Someone had to come in and play the role that we play: that is, create the standards and really evangelize the platform. Why are there a hundred times more software companies today than before? It's because they are writing software for a standard environment that Microsoft created. Why are there so many hardware companies offering all these choices? Because there is a standard hardware environment that we created.

How do you respond to the criticism that, basically, Microsoft behaves toward new entries into the field the way IBM behaved when Microsoft was just getting started? Your early success was predicated on maintaining an

open software environment, promoting the compatibility of your products with other products. But now that you are a market leader, some are saying you advocate a closed software architecture.

The word *open* is just an abused word. It started out as a slogan for workstation vendors. What counts are innovative software products that work well with what people have. We and other companies created the current computer industry regime: You can buy one brand of PC on Monday, another on Tuesday, and your software still works and you get a choice. This has made computing very successful, and we're the key element there. So the openness that counts is the basis on which we and everybody else compete, and because of our products, we're doing very well in that regime.

Ralph Waldo Emerson said that "an institution is the lengthened shadow of one man." In what sense is Microsoft a reflection of you?

In the sense that we love great software. We're very optimistic about what software can do. We're very product oriented, very much looking for the new things we can do. It's a bit of an engineering culture here, fairly fast moving. A lot of companies waste a lot of time congratulating themselves about what's going well. When I sit down and talk about a product I just focus on the opportunities to make it better. You can save a lot of time that way.

Microsoft just entered into a partnership with NBC for a news channel/Web site called MSNBC. You've also recently launched Slate, an online magazine. As you get deeper into the information business, will your own views color the content of the news you provide the way Rupert Murdoch has set the Fox News Channel up as an antidote to the perceived liberal bias of the establishment press?

I'm not interested in doing that. I'm surprised Rupert is able to retain quality people with that approach. I mean, that's very dangerous and perhaps inappropriate.... He claims he's just reacting, that the rest of the press has a liberal bias. I personally don't see that. The people you hire to be editors and writers, they have their own opinions. That is their job. My job is to run a great, great software company. I'm very careful to keep my political views separate.

Why do you keep them separate?

Because the alternative is inappropriate. I have my personal views. Then there's Microsoft, a company that gets involved in very few political things. My own views are those you'd expect from somebody who feels like he's been very, very lucky and that the resources under his command are really society's resources. And I have to be clever about how I'm going to funnel those back in. I fund education projects, I fund population control, I'm very big on the United Way.

Bill Gates

Do you mind whether I ask you if you're a Democrat, a Republican, or an Independent?

Well, it's a tricky issue because, as I said, I try to keep my political views separate from the company's. I went to an event where I said I was a Democrat, and that was covered publicly. When it comes to issues of how business is treated and managed, I wouldn't subscribe to a lot of Democratic views. When it comes to social issues, you'd find me very much on the Democratic side.

What did you think of Ted Turner's notion that extremely wealthy people like you and [billionaire investor] Warren Buffett would donate more of your money if someone published a list of biggest donors similar to Forbes magazine's list of wealthiest individuals?

Ted said some things that just weren't true. He said that Warren and I didn't give money away, because we want to be high on the list of the wealthiest—that is just a total fabrication. Warren and I have both said that we don't believe in passing huge amounts of wealth on to our heirs and so, one way or another, my wealth will go to various causes. I think the fascination with wealth is always going to be there. It's unfortunate in that it creates a simplistic view of who I am and what I care about. It's sort of an invasion of privacy. I wish the list wasn't there. But, hey, what's free about the press if you can't make a list like that, you know?

So you're planning to give most of your money away when you die?

I'm giving away \$30 to \$40 million a year now, and [since 1992, I have donated \$200 million] to my foundation. So I'm already doing some things. But as a percentage of my wealth, I'll do most of it when I can put a full-time effort into that. That's the only caveat. My work now is focused on trying to keep Microsoft successful.

How does the immensity of your wealth affect your life?

It's a very strange thing. I think it's unusual that someone can have so much money.

It strikes you as strange?

Oh, very. Are you kidding? Somebody who has this much money has a command on society's resources. In my view, it all comes down to how you use it.

What do you see on the "road ahead" for the Microsoft Corporation?

We're based on a vision of computers becoming an incredible tool for everybody. It's a vision that's very far from being realized. Computers can't listen to what you're saying. They can't speak to you. They can't see. They don't learn. I mean, computers are still pretty limited today. My entire life has been devoted to the future, and exciting new things are on the way. There is something called Moore's Law, which says that basically every two years computers get twice as good. That's a sure thing. ☐

Power Surge

(continued from page 93) political cover for other Democrats to oppose 211.

The funding was easy. The "old economy" of companies that service Silicon Valley—banks, accounting firms, and insurance companies—gave as much as \$1 million apiece to Taxpayers Against Frivolous Lawsuits (TAFSL), the campaign's umbrella organization (which was formed with help from the California Chamber of Commerce). In addition, Valley companies wrote exceedingly large checks: Cisco gave \$610,000; Intel and Sun Microsystems \$500,000 each. "It's chump change," says Cypress CEO T.J. Rodgers. "I gave \$100,000. My company will spend \$100,000 during this telephone call."

Some of the money went to the California Technology Alliance, which was busy meeting candidates and writing checks. Though Tom Proulx says it supported aspirants from both major parties, the CTA was especially generous to Democrats who had opposed their party organization on 211. At one meeting, Larry Stone says, he pestered a high-tech executive on behalf of a candidate who hadn't received a promised donation. "So this guy pulled out his checkbook and wrote a check for \$10,000. Just to get me out of his hair."

Working with a political consultant named Wade Randlett, the NO campaign pursued a strategy that would have done more-seasoned politicians proud. While Randlett and Celia Fischer, co-director of the state's Democratic coordinated campaign, laid the groundwork, feeding the White House background on 211, local politicians such as Stone and San Jose mayor Susan Hammer reinforced how important the issue was to the Valley. Brook Byers was delegated to land the president. At a July 23 fundraiser at fashion designer Susie Tompkins's San Francisco penthouse, Byers approached Clinton, who told him he was against the initiative. Two weeks later, after a number of high-level phone calls between Washington and the West Coast, Clinton met with several Valley executives in the cafeteria of San Jose's John Muir Middle School and agreed to go on the record opposing 211. The Valley had got what it needed from Clinton.

In the weeks following the Muir school meeting, Doerr and a handful of executives worked the phones, putting together a Valley endorsement of the president. They ended up with 75, and on August 20 held a news conference in San Jose, with Clinton and Vice President Al Gore patched in from Washington. "This administration really gets it," Doerr happily told reporters. David Brady, a professor of business and political science at Stanford, is a bit more sanguine about the endorsement. "They liked it because the president came out and kissed their fanny," he says.

On September 11, Clinton came back to California for an intimate dinner with a core of the

new power brokers. That night, the and Leon Panetta, his then chief of with eight Valley executives and heirloom tomato salad and aged beef with chanterelle mushrooms. As Peet's coffee, they talked about government, encryption, and export \$50,000 a head.

All of which—the fanny-kisser—set off rampant speculation about the Valley's new power. Mulvaney describes their political variation of the statement "I'm fiscally conservative and socially liberal." By which generally means he'd like the capital to be lower (making him not quite a Democrat) or gay marriage (making him not quite a Republican). In the past, most Valleyites would be left alone to go to work in their Tech one midlevel executive put it, "As long as [Reserve chairman] Alan Greenspan is in the country, we assume everything's

On the far side of this spectrum is T.J. Rodgers, whose mantra is "Free minds." Rodgers says he's so opposed to the idea of the CTA that he refused to support it during the 211 battle. Rodgers says he gave \$200,000 to the campaign and had another \$100,000. "Tom Proulx called me up and wanted me to give the second \$100,000 to the political action committee. And he said how it was going to 'start the political revolution' working all of the legislature, all of the courts to get things for Silicon Valley. We're not having these surprises. We've gotta be proactive to get what we want." Rodgers says he'll give his cash. "This concept—you've gotta be proactive or get screwed—I don't buy it," he says.

To Doerr, that's the old Valley talk. "I don't think there's any turning back from this kind of activism," he says. "The days of executive power in garages are over. The Valley now has important economic interests that need to be protected and involve the public."

No one, says Doerr, expects a return to involvement in politics to stay at the level of the 211 campaign. "There won't be a campaign that has this level of intensity, and I don't understand that." But as Wade Randlett says, it doesn't need to run that high. "I have \$40 million worth of intensity. Warren Buffett has \$2 million worth of intensity." At the same level, says Joy Alexiou, deputy director of the Democratic coordinated campaign in California, "if some part of them were to get into Democratic party politics, it could have a significant effect. If they decide they want to be more amenable to them, it would be more amenable to them, and it would take over a few years by spending more