

The New Yorker

Annals of Communications

The Search Party

Google squares off with its Capitol Hill critics.

by [Ken Auletta](#) January 14, 2008

Sergey Brin and Larry Page, the founders of Google, believe that expanding their company's lobbying operation in Washington, D.C., has become a necessity.

In June, 2006, Sergey Brin, one of the co-founders of Google, went to Washington, D.C., hoping to create a little good will. Google was something of a Washington oddity then. Although it was a multibillion-dollar company, with enormous power, it had no political-action committee, and its Washington office had opened, in 2005, with a staff of one, in suburban Maryland. The visit, which was reported in the *Washington Post*, was hurried, and, in what was regarded by some as a snub, Brin failed to see some key people, including Senator Ted Stevens, of Alaska, who was then the chairman of the Commerce Committee and someone whose idea of the Internet appeared to belong to the analog era. (He once said that a staff member had sent him "an Internet.") Brin told me recently, "Because it was the last minute, we didn't schedule everything we wanted to." It probably didn't help that his outfit that day included a dark T-shirt, jeans, and silver mesh sneakers.

Brin did meet with Senators John McCain and Barack Obama, and they spoke about "network neutrality"—an effort that Google and other companies are making to insure that the telephone and cable companies that provide high-speed access to the Internet don't favor one Web site over another. Around the time of Brin's visit, an organization called Hands Off the Internet, financed in part by telecommunications companies, ran full-page newspaper advertisements in which it accused Google of wanting to create a monopoly and block "new innovation"; one ad featured a grim photograph of a Google facility housing a sinister-looking "massive server farm." Brin recognized it as a warning. "I certainly realized that we had to think about these things, and that people were going to misrepresent us," he said. "We should be entitled to our representation in government."

Google's ambitions had not gone unnoticed by its competitors. What Google had created—an ingenious tool for searching the Internet—had evolved into something almost unimaginably far-reaching. The company's mission is "to organize the world's information and make it universally accessible and useful." Making information "universally accessible," though, is an ambitious goal that often clashes with those whose business is to own and distribute it.

In October, 2006, Google outbid Microsoft and the News Corporation to acquire YouTube, the dominant online video site. Alarms went off: Hollywood media companies feared that YouTube was hijacking television viewers by downloading their programs; and, last March, Viacom filed a billion-dollar lawsuit against Google for copyright infringement. Earlier, Google had declared that it wanted to digitize all the world's books, including those under copyright. Despite Google's assurances that it would protect authors and publishers, the company was unable to allay the fear that digitization would eventually cheapen the value of the books; and publishers and writers expressed concern that Google would profit from book searches without sharing the ad revenue. Newspapers were unhappy that Google was luring away readers and advertisers. And Microsoft, the world's mightiest technology company, feared that Google was becoming too powerful—that it was designing Web-based software applications similar to Microsoft's Office. (Microsoft sells Office in packages that reportedly produce profit margins of about seventy per cent.) Google already offers similar software—word processing to compete with Microsoft Word, spreadsheets, e-mail, instant messaging, managing business data and contacts, PowerPoint-like-presentation software, personal calendars—that is Web-based and, for the most part, free. Google calls this “cloud computing,” meaning that anyone with an Internet connection can store data in this “cloud” and retrieve it from any location.

In response to prodding by consumer activists, some government officials—notably Senator Herb Kohl, a Wisconsin Democrat—have begun to ask: Does Google, which today is among America's ten richest corporations, with a market value of just over two hundred billion dollars, have too much power? (ExxonMobil, valued at just under five hundred billion, is No. 1.) Unlike Microsoft, which in 2000 was found guilty of anti-competitive behavior, a finding upheld in a federal appellate court, Google has not been charged with violating any laws. But there has never been a company whose influence extended so far over the media landscape, and which had the ability to disrupt so many existing business models. And its competitors share a vague worry that Google is more or less out to rule the world. All this attention unsettled Brin and Larry Page, Google's co-founder.

In its 2004 annual report, Google, amending its basic corporate strategy, officially signalled its intent to be more than a search engine. The company announced that seventy per cent of its efforts would continue to be directed to its “core” mission, “our web search engine and our advertising network.” Another twenty per cent of its energies would be devoted to “adjacent areas such as Gmail”—the free e-mail accounts available to just about anyone who wants one—and the range of software that falls under the heading of “apps.” Finally, the report said, “the remaining 10 per cent is saved for anything else, giving us the freedom to innovate.” To other media companies, this sounded suspiciously like declaring, “We are in the search business, but we might be in your business.” Last spring, Google bested Microsoft, Yahoo, and the enormous advertising-marketing firm WPP to buy DoubleClick, the online advertising and marketing company. DoubleClick claims up to twelve billion daily transactions. Even without it, Google has amassed one of the world's largest databases—a resource that has helped in altering its mission. “We are in the advertising business,” Eric Schmidt, Google's C.E.O., told me not long ago.

Marc Andreessen, who helped create the first Web browser, Mosaic (which became Netscape), and who today is an Internet entrepreneur, says, “The game plan is to do everything. Google is Andy Kaufman”—the late, enigmatic comedian. “The whole thing with Andy Kaufman was you could never tell when he was joking. Google comes out with a straight face and says, ‘We’re just going to be a search engine. We’re not going to be doing any of this other stuff.’ But I am quite sure they’re joking.”

Google, which is based in Mountain View, California, now accounts for just over sixty per cent of the world’s Internet searches, and its power comes from the data it collects from all those searches. When a search is done on Google, a “cookie,” or fingerprint, is created and stored in the browser of the computer being used. It records what you’re looking for and what you read or simply what you’re curious about. Your search query is stored by Google for eighteen months. Over time, Google might be tempted to extract more and more user data to better target ads. This year, Google’s ad revenues are expected to reach sixteen billion dollars, approaching the combined national advertising revenues of the four major broadcast networks. The purchase of DoubleClick, for a proposed \$3.1 billion, has only heightened anxiety about Google.

Google’s executives have become wiser about the company’s image. “The product brand was very strong,” Alan Davidson, Google’s senior policy counsel, who is a computer scientist as well as a lawyer, and who oversees Google’s Washington office, told me. “The political brand was very weak. Because we were not here to define it, it was being defined by our enemies.” He paused a moment, and added, “ ‘Enemy’ is a strong word. It was being defined by our competitors.”

The modest one-man operation in Washington has expanded considerably and now includes about thirty people, among them Robert Boorstin, a former speechwriter for President Clinton; Johanna Shelton, a former senior counsel to Representative John Dingell, chairman of the House Energy and Commerce Committee; and Pablo Chavez, a former chief counsel to John McCain. In October, 2006, the company established its own PAC, called NETPAC, and since then it has hired three outside firms to lobby on its behalf: the mostly Democratic Podesta Group; King & Spalding, where Google works with former Senators Connie Mack and Dan Coats, both Republicans; and Brownstein Hyatt Farber Schreck, which hired Makan Delrahim, the former Deputy Assistant Attorney General in the Bush Justice Department’s Antitrust Division.

“We’ve been under the radar, if you will, with government and certain industries,” David Drummond, a Google senior vice-president, observes. Drummond, who is based in Mountain View, oversees all the company’s legal affairs. “As we’ve grown, we’re engaging a lot more. We’ve had to put a lot more emphasis on engaging.” Google’s Washington office reports to both Drummond and Elliot Schrage, the vice-president for global communications and public affairs, who is also based in Mountain View, and one of its immediate tasks has been to address the privacy issues raised by the proposed acquisition of DoubleClick. “Privacy is an atomic bomb,” a Google executive who does not want to be identified says. “Our success is based on trust.”

By the end of 2007, Google's overriding concern was that it avoid comparisons to the Microsoft of 2000. "No question that people here regularly discuss Microsoft's experience and use that as a cautionary tale," Schrage says. Brin says, "Microsoft is a bit of an unusual company. It doesn't seem to like any of us being successful in the technology space." This summer, Microsoft and Google competed for a small stake in the social-network site Facebook; in October, Microsoft won that competition, paying two hundred and forty million dollars for 1.6 per cent of the site, whose profits were meagre but which has about sixty million active users and competes with Google as a home page. When I met Facebook's founder, Mark Zuckerberg, for dinner in Palo Alto, Zuckerberg, who is twenty-three, sipped lemonade and chose his words about Google carefully, saying, "On the highest level, we're both trying to supply people with information that interests them."

Andy Grove, the former chairman and C.E.O. of Intel, who was an enthusiastic supporter of Google's founders when they started the company, in 1998, believes that there may be more worry about Google than there was about Microsoft. "Microsoft's power was intra-industry," he told me. "Google's power is shaping what's happening to other industries." Because of this, he says, Google is increasingly seen as a company "on steroids, with a finger in every industry."

The Google story, like the rise of Microsoft—or the Beatles—has already become a legend of popular culture. In 1995, Brin and Page, graduate students at Stanford, figured out a way to scan and index the Internet. Earlier search engines had done this, but Brin and Page did it better. By 1998, they had incorporated Google, coming up with a company name that suggested the audacity of their ambition. ("Googol" is the math term for the figure 1 followed by a hundred zeros.) And they came up with an informal company motto to signal their benign intent: "Don't be evil." In 1999, when Marissa Mayer was hired as the first female engineer and the nineteenth Google employee, the entire Google search index, she says, "was thirty million pages, and we did four hundred thousand searches my first day." Today, it reaches billions of pages. And, according to ComScore, Google does an estimated four hundred billion searches a year.

In 2001, Page and Brin hired their first C.E.O., Eric Schmidt, who had a Ph.D. in computer science and twenty years of management experience in tech companies; most recently, he had been the C.E.O. of Novell. They settled on an unusual power-sharing arrangement. As Schmidt describes it, "We've agreed that on any major decisions the three of us agree." By 2002, Google had become very profitable, thanks to a novel program called AdWords, in which advertisers bid to display their ads whenever a Google user searches for keywords. If the user then clicks on the advertisement—a "sponsored link"—Google earns revenue on a pay-per-click basis. In 2003, Google introduced its second advertising vehicle, AdSense, which sells advertising to content sites. For advertisers, the system is a lot more scientific than the way that ads are placed on television or in magazines, because they can count clicks; for Google, the monetary benefits are obvious. In 2004, Google went public, selling its stock at an opening price of eighty-five dollars per share. Page and Brin, each of whom owned about fifteen per cent of the company, became billionaires; so did Schmidt, who owned about six per cent.

Google's stock has at times climbed over seven hundred dollars a share, and a great many Google employees have become fabulously wealthy.

In 2005, Google, outbidding Microsoft, paid a billion dollars for a five-per-cent stake in AOL and a five-year contract to deliver all AOL searches and search-based advertising. But it was the intended purchase of DoubleClick, a company that specializes in display and banner ads and video advertising, that unnerved many in the advertising industry. Microsoft, joined by A.T.&T., claimed that the combination of DoubleClick and Google would be "anti-competitive," and pressed the Federal Trade Commission to block the merger. WPP also raised concerns. Not surprisingly, ad agencies worry that Google might steal their business—that it might create advertising as well as sell it. Mark Read, WPP's director of strategy and a member of its board of directors, says that an aggressive Google "makes our people nervous. They tend to talk to our clients directly. Traditional media has been much more respectful of the client-agency relationship than perhaps Google has been." Read is most worried about Google's vast database, which forms a "virtuous circle"—more searches produce more data, which attract more advertising dollars.

Tim Armstrong, Google's president of advertising and commerce for North America, says that the company has no desire to create advertising; it "requires too many employees, and we're a technology business." Google recently recruited Andy Berndt, a co-president of Ogilvy & Mather, to run its new Creative Lab division, but Armstrong insists that Berndt was hired to work on Google's brand and marketing, not to create advertising for clients. "Not only does the advertising industry have nothing to worry about; it should expect to ask, 'What are the three to five things you need from us?'" Armstrong says. Martin Sorrell, WPP's C.E.O., has claimed that his company is Google's largest advertising-agency customer. He also calls Google a "frenemy."

Unlike the advertising revenues of many traditional media companies, which have slowed or fallen steeply, Google's advertising revenues have been rising from year to year; for 2007, they are expected to have increased by more than thirty per cent. Google's advertising sales forces point out that Americans spend the same number of hours a week online as they do watching television—fourteen—yet only six per cent of advertising dollars is spent online, while television gets twenty-two per cent. DoubleClick would bring video ads, which generate more revenue, to Google.

Lawrence Lessig, who teaches law at Stanford and has long been a student of digital culture, says, "Google's brilliant because it architects its system so that, when people do what they want to do, they give something to Google. When I do a search, I give Google my evaluation of what the best search is. Google profits from that. If I want to send an e-mail, I give Google data." These data invite advertisers to bypass traditional media buyers and let Google manage their Internet advertising. When I asked Sergey Brin if Google would displace media buyers or media sales forces, he gave a somewhat elliptical answer: "We have no desire to screw a category of people, to trick them or something. We legitimately want these partners to be successful." He believes that "the nature of these functions" may change, just as the role of librarians has. Google, he says, should be

regarded as a tool to help media buyers, who for the most part serve large advertisers. He envisions Google doing more to serve small businesses, and of established media buyers he says, “Are they going to buy a one-hundred-dollar spot in a small newspaper?”

The Bush Administration is a reluctant regulator, believing that in most cases a free market provides its own regulation. Jeff Chester, the executive director of the nonprofit Center for Digital Democracy, takes the opposite view. A close reader of trade publications, he became obsessed by the power of Google to compile data on the behavior and interests of users. Chester runs a two-person organization that has an annual budget of two hundred thousand dollars, but his influence is surprisingly broad. (A decade ago, he and his wife, Kathryn Montgomery, a professor of communications at American University, successfully marshalled support for the Children’s Online Privacy Protection Act.) Chester speaks rapidly and passionately, jumping in mid-sentence from privacy to monopoly and then to a conversation he had that morning with an F.T.C. staffer. His small office, on lower Connecticut Avenue, is adorned with posters for movies attacking corporate power. Chester has little regard for the advertising industry, but he knows that if he railed against hucksterism and commercialism it would marginalize him, so he has stressed the privacy issue.

“The basic model for interactive advertising combines advertising with this very powerful data-collection business designed to know your interests in a daily, updated way,” he says. “This is then utilized to create very powerful multimedia to get you to behave in some fashion, whether it’s buying a product or liking a brand.” Chester urged Senator Kohl to hold a one-day hearing on the issue, and pushed for the F.T.C. to broaden its examination of Google to include privacy; in November, the agency held a desultory town-hall meeting to explore the issue.

Google acknowledges on its Web site that it collects information about users. However, it does not collect personal identifying data such as credit-card information, telephone numbers, and purchasing history unless a user signs up for a feature like Google Checkout. EBay and Amazon, among others, also collect user information, but Google is set apart by its reliance on advertising. Marc Rotenberg, the executive director of the Electronic Privacy Information Center, who works closely with Chester to advance privacy-protection measures, believes that the central question should be “Why does Google need to retain all this information?”

Eric Schmidt says that the more Google knows about a user the better the search results—that the idea is to anticipate a user’s intent in a search query. And with data suggesting that about half of all searchers use the ads to comparison-shop or to buy, Google believes that better-targeted ads serve both the user and the advertiser. “We think of the ad as content,” Google’s senior vice-president for engineering, Jeff Huber, says. As for risks to personal privacy, Eric Schmidt says that Google would never cross that boundary; if it violated user trust, “we’ll really be hosed.” When I asked Sergey Brin why consumers should trust Google with their personal data, he said, “How many people do you think had embarrassing information about them disclosed yesterday because of some

cookie? Zero. It never happens. Yet I'm sure thousands of people had their mail stolen yesterday, or identity theft."

Brin and his colleagues often say that they are eager to work with others, and the company has "ten thousand partners," including publishers who have agreed to have their books digitized, media companies that promote their programs on YouTube, and newspapers and magazines that recruit Google to sell ads for their online or print editions. Google has also taken a few modest steps to address privacy concerns. Last summer, it announced that it would voluntarily reduce from two years to eighteen months the time that it keeps the Web-search histories of its users. It endorsed the idea of uniform international privacy rules. When I spoke with Pablo Chavez, in Google's Washington office, he told me that the company is experimenting with "crumbling cookies," or smaller cookies "that collect a limited amount of data" and vanish over time.

In late December, the F.T.C. approved the acquisition of DoubleClick. The agency's role is to judge whether a merger impedes competition, and, according to a senior regulator in the Bush Administration, it tends "to wait for a violation before it acts." The Australian government recently approved the merger, but its fate is less certain in the European Union, particularly since the Europeans announced, in mid-November, that they would extend their investigation into whether it would violate European notions of privacy and anti-competitive activity, which are stricter than America's. If the E.U. rejects the merger, it seems likely that Google would abandon it.

Google's corporate home, within sight of the Santa Cruz Mountains, reflects the determination of the two founders to make sure that employees stay focussed. They keep them on the campus with perks—ranging from free physicals to free laundry service and a weekly car wash. Employees get a subsidy if they buy an environmentally friendly car; Brin and Page have both owned Priuses. (They also jointly own a Boeing 767, and are buying another jet.) Employees are urged to devote twenty per cent of their time to developing projects on their own. "It's a way of assuring people that they are scientists and artists," the Indian-born engineer Krishna Bharat, who used his time to invent Google News, says. All of this makes Google an attractive employer. The company, which now employs about sixteen thousand, receives more than a million résumés a year, and through much of 2007 hired about a hundred and fifty people a week—half of them engineers.

In the 2004 annual report, Page and Brin wrote of their six-year-old company, "If it were a person, it would have started elementary school late last summer . . . and today it would have just about finished the first grade." Eric Schmidt thinks that Google has skipped over adolescence and advanced to "middle age," and that with this has come the wisdom of experience. Tim Wu, a professor of law at Columbia University who once worked in Silicon Valley and closely follows events there, says, "It's a precocious company. Great grades. Perfect I.P.O. A typical high-school standout. The basic problem is whether it remains true to its founding philosophy. I don't just mean 'Don't be evil.'" He means, will it stay focussed on its "founding philosophy, which is really an engineer's aesthetic of getting you to what you want as fast as you can and getting out of the way," or will it

become “a source of content, a platform, a destination?” He says, “I predict that Google will wind up at war with itself.” Brin rejects this analysis, but when asked about his biggest worry he answers simply, “I worry about complexity. I admire Steve Jobs. He has been able to keep his products simple.”

The youth of the founders (Brin is thirty-four and Page is thirty-five) leads to jokes that someone like Schmidt, who is fifty-two, was essential to manage Google. “It borders on insulting to say that Eric provides ‘adult supervision,’ ” Elliot Schrage says. “It is insulting to both.” Yet there are times when Schmidt does supervise. One day, I asked him how he felt about the U.S.A. Patriot Act, which gives the government broad powers—including wiretapping and reading e-mail—to investigate terrorist suspects. “I’m not a big fan,” Schmidt said. “I’m offering you my personal opinion as a citizen.”

Later, at a press lunch attended by the founders and Schmidt, I asked about Google’s position regarding the government’s use of the Patriot Act. “I’m not an expert on the Patriot Act,” Brin said. “But it’s certainly a long-standing issue prior to the Patriot Act—”

“Can I?” Schmidt interrupted. Not waiting for permission, he proceeded: “The best way to answer this question is to say it’s the law of the land and we have to follow it.”

“Or, in some cases, we fought it in court,” Brin said, referring to Google’s successful challenge of a Justice Department request, in January, 2006, to hand over search data to aid the Bush Administration’s defense of an Internet-pornography law. The company accused prosecutors of a “cavalier attitude” and said that the government was “uninformed” about how search engines work. Again, Schmidt interrupted, saying, “We fought it legally, and we followed the law, and we won in court.”

“Every once in a while he does this unintentional condescending thing, and he does it in public settings,” a Google executive says of Schmidt. On Tuesdays, Brin, Page, and Schmidt hold product-strategy meetings, which are dominated by engineers. I was permitted to attend one, on the condition that the product, and the engineers, not be identified, but the tenor of the meeting was clear enough: Page and Brin had wanted an upgrade of an existing product, and they were unhappy with what they were hearing from the engineers. At first, they were stonily silent, slid down in their chairs, and occasionally leaned over to whisper to each other. Schmidt began with technical questions, but then he switched roles and tried to draw out Page and Brin, saying, “Larry, say what’s really bugging you.”

Page said that the engineers were not ambitious enough. Brin agreed, and said that the proposals were “muddled” and too cautious.

“We wanted something big,” Page added. “Instead, you proposed something small. Why are you so resistant?”

The head of the engineering team said that the founders' own proposed changes would be too costly in money, time, and engineering talent.

Schmidt—the only person at the meeting wearing a tie—tried to summarize their differences. He noted that Brin and Page wanted to start by deciding the outcome, while the product team focussed first on the process, and concluded that the engineering would prove too “disruptive” to achieve the goal.

“I’m just worried that we designed the wrong thing,” Brin said. “And you’re telling me you’re not designing the optimum system. I think that’s a mistake. . . . I’m trying to give you permission.”

The product team went on to make a slide presentation, but everyone there realized that the issues would not be resolved that day. Schmidt told the team to report back with a detailed design “that is responsive to Larry and Sergey’s criticism,” and to clarify “what it takes to build a good product,” and what it would cost in time and money. However, he balanced this with praise: “But this is very well done. I love it when people show me the flaws in our products.”

In meetings such as this, Page and Brin are like a tag team, taking turns as they chide employees for devising something that is merely a “cute” solution, not a fundamental one. Schmidt says, “They think about what should be, and they assume it is possible.” Brin and Page also introduce a measure of what Schmidt refers to, affectionately, as management “chaos.” Neither has an assistant. Executives check Google Calendar to learn if Brin or Page plans to attend a meeting. Sometimes, Schmidt says, the founders show up, unscheduled, for the wrong meeting. Sometimes they simply disappear—flying off on their Boeing, for instance, or indulging their newest sport, kite surfing.

Some outside Google believe that Schmidt operates with many constraints. “I learned that Google had an interesting management structure,” Philippe Dauman, the C.E.O. of Viacom, says, describing the negotiations that preceded the YouTube lawsuit. “Every time we thought we came down to a certain point, the Google people changed their minds. And they changed the people in the negotiations.” He explains, “I talked to their C.E.O., and then when Eric went down a certain path he had to have a discussion back in Mountain View with his two associates. Often, there would be a total change in direction.” Within Google, the view is different. Sheryl Sandberg has been a senior officer at the company for six years, and observes that the reason the troika works “is that whoever you go to for an answer, that answer sticks.” Brin says of Schmidt, “Eric is the leader for the company. Larry and Eric and I all share in the top-level leadership, but mostly Eric takes on the hardest challenges. Larry and I can spend more time on products and technology.”

For months, Schmidt tried to get the founders to write a corporate-strategy memo. Finally, on a business trip to Seville, he opened his e-mail and up popped a draft from Brin. Perfect, Schmidt thought, and he showed it to Page before circulating it to the

senior staff. “Why couldn’t I get them to write this in a normal way?” Schmidt asked me. “That’s not the way their minds work. Their ideas are much better than mine.”

The ads attacking Google and its “server farm” were a prelude to what may be Google’s next frontier: the mobile-telephone business. There are almost three billion mobile phones worldwide, and Schmidt expects a billion more in the next four years. If the phones use Google software to sell advertising, Schmidt thinks that over time it is “mathematically possible for Google to become a one-hundred-billion-dollar corporation.” Two vital markets are television, which is “easily attainable,” and mobile phones, which are “more personable” and more “targetable” than most advertising. To achieve this goal, Google would need to claim ten per cent of all global advertising, which now amounts to just under a trillion dollars.

Google’s interest in mobile phones surfaced last spring, when it announced that, to advance the goal of an “open net,” it was likely to make an initial bid of \$4.6 billion for a slice of the nation’s wireless airwaves. (The Federal Communications Commission is auctioning off the rights to the last significant corridor of the wireless spectrum this month.) In November, Google announced the formation of an Open Handset Alliance, made up of technology companies like Intel and smaller phone companies that would support free software designed by Google. Clearly, Google was intending to break the control that companies like Verizon and A.T.&T. have on deciding what services to allow on mobile phones. Google has decided to bid, though it is not clear whether it will bid alone or with a partner—or even whether the aim is simply to push competitors to open their systems.

Google may wind up bumping into its corporate ally Apple. Although the iPhone features Google Maps and Google search, Google wants to create an operating system for mobile phones the way Apple has—a potential conflict. Four of Apple’s eight directors are either Google directors or Google senior advisers. One of the Apple directors is Eric Schmidt, who now recuses himself from mobile-phone discussions at Apple board meetings.

As Google expands beyond search—in late November, Page and Brin announced that Google would invest hundreds of millions of dollars in developing environmentally friendly renewable-electricity technologies that would produce power more cheaply than coal-fired plants—the risk is that the company will come to believe that its engineers can master any business, solve any problem, and that Google will lose its focus. Terry Winograd, a professor of computer science at Stanford, was Larry Page’s academic adviser and mentor when Page and Brin were Ph.D. candidates. A friendly man with a white mustache and bushy eyebrows, Winograd, who has taught at Stanford since 1973, was given Google stock for work that he did early in the company’s history. He admires his former students, but he describes their impatience as both a virtue and a potential curse. “Larry and Sergey believe that if you try to get everybody on board it will prevent things from happening,” he told me. “If you just do it, others will come around to realize they were attached to old ways that were not as good. . . . No one has proven them wrong—yet.” Google’s potential weakness, Winograd says, is that its engineers see things “not from an institutional, political point of view but from this personal and

engineering point of view. ‘We would never do that sort of thing’—they believe that in their hearts.’ But the engineers’ passion, he said, also drives them to believe that they “are smart enough to make sure that it won’t happen by accident.” With that, Winograd arched an eyebrow and concluded that this entails “a certain amount of technical arrogance: ‘The system cannot fail, *cannot fail.*’ ”

Last August, Schmidt flew his own jet, a Gulfstream G550, to Aspen to give the keynote dinner speech to the free-market-oriented Progress & Freedom Foundation. He outlined four “basic principles” that he believes are vital for media and technology companies to embrace, among them freedom of speech and assuring universal broadband access. Missing from his presentation were thoughts about privacy and copyright—and how far Google might push the boundaries. For instance, when does fair use become copyright infringement?

A few weeks later, I sat with Schmidt in his cramped conference room on the Mountain View campus. I asked him why he hadn’t touched on the subject of privacy in the Aspen speech. There was a long pause before he said, “No particular reason. It’s sort of a given. If we violate the privacy of our users, they’ll leave us.” And copyright? “Maybe it was the altitude. I was just chatting away.” In addition, Schmidt said, copyright “is not an absolute right,” and has to be balanced by “fair use.” When I asked whether Google wanted to push the envelope on privacy and copyright, he said, “That’s probably correct. If there’s a legal case, we’re going to favor the legal one that favors users.”

What sets Google apart, Schmidt told me in another conversation, is that although people like him always assumed that “Google would be an important company, the founders always assumed that Google would be a defining company.” He remembers a day in 2002 when he walked into Page’s office and Page started to show off a book scanner he had built. “What are you going to do with that, Larry?” Schmidt recalls asking. “We’re going to scan all the books in the world,” Page replied. Eventually, Google began to do just that. It signed up Page’s alma mater, the University of Michigan, along with, among others, the Library of Congress, Stanford, Oxford, and the New York Public Library. And then it ran into trouble.

Google still faces obstacles from publishers and authors and television networks; search competitors like Yahoo! and Microsoft; so-called vertical search engines that rely on human experts; advertising agencies and telephone companies. One senior executive at Time Warner, who did not want to be identified, because Time Warner’s AOL division is a Google partner, says, “Sometimes I don’t know what to think of Google. We have the best relationship of anyone with Google. On the other hand, you always have to worry when someone gets so much more powerful than all the competition out there. This is why I come down to this: I hope the government starts understanding this power sooner rather than later.”

Eric Schmidt, not surprisingly, has another view. “In our society, bigness is often associated with bad,” he says. “There is no question that a company with the ambitions of Google will generate controversy, will have people upset with us. The question is: Where

does it come from? Is it coming from a competitor? Is it coming from a business whose business model is being endangered by the Internet? Or is it because we're behaving badly?" He believes that it often comes from companies threatened by change. "When you have a technology that is as engrossing as the Internet, you're going to have winners and losers. I'm not trying to sound arrogant. I'm trying to sound rational about it. The Internet allows people to consume media in a different way." He believes that because Google is "run by three computer scientists we're going to make all the mistakes computer scientists running a company would make. But one of the mistakes we're not going to make is the mistake that non-scientists make. We're going to make mistakes based on facts and data and analysis." He paused. Then he said, "What kills a company is not competition but arrogance. We control our fate." ♦

ILLUSTRATION: MARK ULRIKSEN