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How He *Really* Did It

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The Authority on the Future of Technology
October 2008
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Photos by Charles Ommanney/Getty Images (Obama) and Scott Olson/Getty Images (crowd)

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■ **www.technologyreview.com/tr35** Explore the TR35's research through videos, slide shows, and infographics.

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Meet the 2008 TR35

Join us at EmTech08 as we honor these outstanding young innovators!

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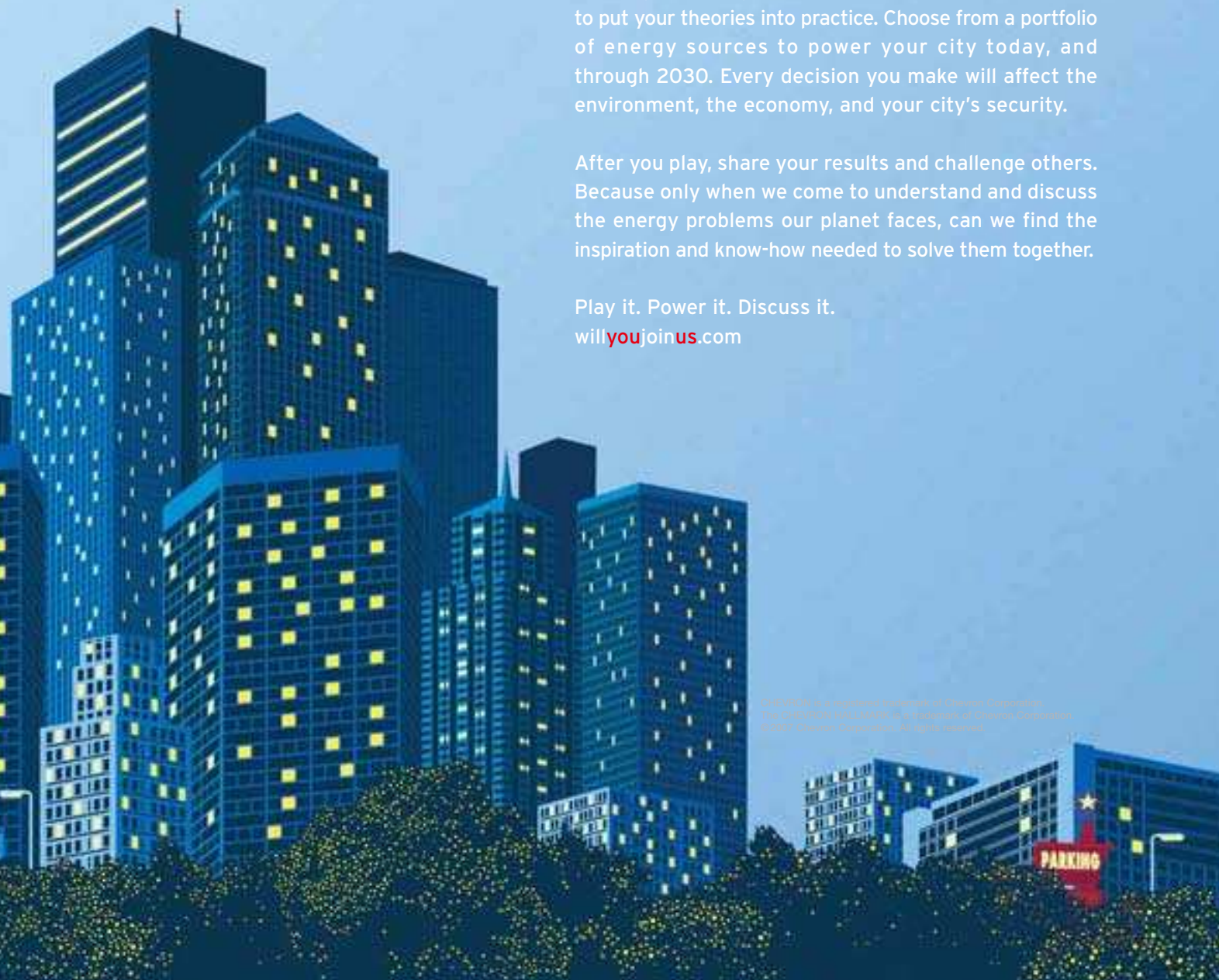

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DAVID TALBOT, in our cover story *("How Obama* Really *Did It," p. 78)*, reports that the Web has forever changed electoral politics—and one candidate was quicker to see this than others. "Barack Obama, more than Hillary Clinton and far more than John McCain, made new-media platforms and his own social-networking site fulcra of his campaign," says Talbot, who found the backbone of the Obama camp's Web strategy in the Boston offices of Blue State Digital, the firm that manages the accounts of more than a million members of Obama's social network. "It seems that the ward heelers of another age—going door to door and driving old ladies to the polls—have been reincarnated as geeks who adapt server resources, send out targeted e-mail and text-messaging blasts, and chop up phone-bank lists for thousands of supporters to handle at their home computers."

Winner of the Overseas Press Club award for International Environmental Reporting, Talbot is *Technology Review*'s chief correspondent.

JONATHAN FRANZEN has written a funny, biting, intimate essay *("I Just Called to Say I Love You," p. 88)* about our age's most cherished piece of personal technology: the cell phone.

"This piece grew out of a strange afternoon that I spent with my brothers in January on the occasion of my oldest brother's 60th birthday," says Franzen. "We were

all together in Oregon and took the opportunity to go through a bunch of boxes of our late parents' stuff. The most unsettling find was a slice of wedding cake, wrapped up in tissue paper and well preserved, from October 1944. But there was also a big cache of their early correspondence, much of it achingly personal. Writing this essay was my way of getting myself to sit down and read it. It was also, of course, my way of dealing with my rage against the cell phone."

Franzen is the author of three novels and two works of nonfiction. His novel *The Corrections* won the 2001 National Book Award.

EMILY GOULD draws parallels between Clay Shirky's celebration of social-networking technologies in his new book, *Here Comes Everybody*, and Walter Benjamin's warning—from the 1930s—of simulating reality through photography and film *("'It's Not a Revolution if Nobody Loses,'" p. 96)*.

"At times of upheaval caused by technological change, critics have a responsibility to make us pay attention to what's happening, even —or especially—when changes are happening so quickly that we barely notice them, and mentioning them seems like stating the obvious," says Gould. "But while Shirky's right to marvel at the ways blogs, wikis, and social networks liberate us, I don't think he worries enough about the ways these technologies alienate us. In looking at 'technological reproducibility,' Walter Benjamin had it right: he marveled *and* worried."

In a May *New York Times Magazine* cover story, Gould chronicled her exploits blogging for the gossip site Gawker. A book of her short stories will be published in 2010.

MISHA ANGRIST, an assistant professor at Duke University's Institute for Genome Sciences and Policy, writes about the health authorities' backlash against companies like 23andMe and Navigenics, which offer individuals analysis of their genetic information

("Personal Genomics: Access Denied?" p. 98). But as Angrist notes, it is far too late to begin denying people access to that information.

"I'm puzzled by the hysteria that these companies—and personal genomics in general—have provoked," he says. Angrist blogs at Genomeboy.com and has a book on personal genomics coming out next year.

GRIDLOCK

The problem discussed in your article "Internet Gridlock" (July/August 2008) is actually a side effect of a more profound transition in patterns of network usage.

While the Internet is often touted as a "general-purpose network" capable of supporting a wide range of innovative uses, in its present state it's actually a very uniform system tuned for short file transfers, like e-mail and Web browsing—transfers that are typically completed in less than one second each. The limited duration of these transactions makes bandwidth available for data from multiple users on shared pipes, and this multiplexing is the key to the Internet's economic efficiency. The usage pattern combines comfortably with the modest requirements of voice-over-Internet-protocol (VoIP) phone traffic, the most common exception to the paradigm of short file transfers.

July/August '08

Using the Internet as the conduit for high-definition video files is the game changer. The sheer size and popularity of these files challenges us to imagine more-complex traffic management systems. As a network engineer, I foresee that the Internet will certainly be required to manage more-persistent file transfer transactions in the future.

The most obvious way to approach this problem is with data stream classification and scheduling systems. Such systems are used to good effect in radio-based technologies such as Wi-Fi.

Classification and scheduling are routine parts of daily life, but their application to a system that has apparently worked well without them naturally arouses apprehension. Though change is often unsettling, it's the very essence of technical progress. Increased consumer awareness and higher standards of commercial disclosure are necessary to achieve more-sophisticated Internet traffic management. Larry Hardesty's article is a constructive contribution to this process.

Richard Bennett
Livermore, CA

WHO OWNS YOUR FRIENDS?

As an open-source advocate, I thought your article on how social-networking sites should incorporate data portability ("Who Owns Your Friends?" July/August 2008) touched on an important problem. We're making the transition from a Web made up mostly of documents to one of