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# Information Technology as a Universal Solvent for Removing State Stains

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The government's been in bed with the entire telecommunications industry since the forties. They've infected everything. They can get into your bank statements, computer files, e-mail, listen to your phone calls . . . every wire, every airwave. The more technology you use, the easier it is for them to keep tabs on you. It's a brave new world out there.

**Brill (played by Gene Hackman) in *Enemy of the State*, 1999**

Therefore ordinary information, mere facts, exploded like grenades, ripping the system and its legitimacy. How many skeletons, each with an NKVD bullet hole in the skull, were buried in Kuropaty Woods outside Minsk? Who were those classy apartments being built for? What can you buy on an average day on an average salary in an average American supermarket? The answers to such questions appeared in the pages of official newspapers, resounded from millions of radios and televisions, began to bounce around the country on photocopied leaflets and telefax news services.

**Scott Shane, *Dismantling Utopia:  
How Information Ended the Soviet Union*, 1994**

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The two passages quoted here give two alternative views of telecommunications technology. Both have some basis in reality. The tone of each suggests a common, fundamentally libertarian premise, namely, that it's bad for government to have control over people's lives and it's good when that control breaks down. The first view, which might be called the "Orwellian," is that telecommunications technology in relatively totalitarian societies is primarily antifreedom because it allows totalitarian governments to track closely what their citizens are saying and doing. The second view, which I shall call the "liberationist," is that telecom technology undermines totalitarian governments by uncovering lies and spreading truth.

Which view is correct? I could create suspense by waiting until the end of this article to give you my answer, but I won't. After having held the Orwellian view from about age seventeen to age forty, I now strongly believe that it is flawed, and that the liberationist view is correct. What has convinced me is the evidence of the last ten years or so, combined with some reasoning. A large part of the relevant evidence pertains to the Soviet Union in the 1980s; much additional evidence has poured in from China and other countries with oppressive governments during the 1990s.

### **Government Lies, Glasnost, and Information Technology**

A good case can be made that information technology helped bring down the Soviet Union. I am not referring here to the Internet, which was not in widespread use until the mid-1990s. I have in mind instead information technology that had been around a long time, including television and print media.

Harry Truman is reputed to have said that if you put a Sears catalogue in every Russian's mailbox on a Friday, by Monday communism would be dead.<sup>1</sup> Although the point is exaggerated, it contains a core of truth. To survive, totalitarian governments must squelch opposition. In extreme cases, they go so far as to murder millions of people, as the Soviet and Chinese governments did. In less extreme cases, they imprison tens of thousands of people. But taking such actions undermines the legitimacy of the government in the eyes of its subjects. Therefore, the government must concoct excuses for murdering and imprisoning. The typical excuse is that those who have been killed or incarcerated were spies or were somehow undermining the state. To gain acceptance of this "big lie," the governments use massive propaganda apparatuses: according to a Soviet political dictionary, in the late 1980s there were 2.5 million propagandists, volunteer and professional, in the Soviet Union (Shane 1994, 54).

Moreover, for reasons compellingly articulated by Ludwig von Mises and Friedrich A. Hayek during the 1920s and 1930s, socialism doesn't work; it doesn't produce goods and services for the vast majority of people who live under it to nearly

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1. The Truman Library was unable to find any evidence that Truman ever made this statement, but the point remains.

the same extent that free markets do. So, to keep people from becoming discontented and wanting a different system, what is a socialist government to do? Again, the government must lie. It must tell its own citizens how good they have it. If the downtrodden people start hearing about ordinary citizens in France or Germany or the United States who seem to have a much easier life—good food, comfortable homes, cars that work—the socialist government must convince the populace that only a tiny handful of people in the market-oriented countries enjoy such goods and that the vast majority of people there suffer from high unemployment, poverty, poor health care, and other miseries. In other words, again the socialist government must lie.

But the communications technology employed for spreading the lies can backfire. Lying in print is easy; lying with video footage is much harder. I remember hearing about a television report shown in the Soviet Union in the late 1970s, when price controls in the United States were causing long lines at gasoline stations. Of course, the report didn't mention the price controls as a cause of the lines (in that respect, the Soviet report was on a par with the vast majority of U.S. media stories), because the reporters were trying to portray the gasoline shortage as a fundamental crisis of capitalism. But to be effective, the report had to show that people were upset about the gasoline lines. So one scene showed a modest-income black man in an American inner city leaning against his car and complaining about the lack of gasoline. The reportorial strategy failed to anticipate its own internal contradiction: visible behind the complainant, all along the street, was a row of cars. The clear, if unintended, message was that ordinary people in the United States can afford cars.

A skillful propagandist can often find ways around this sort of problem. But there remains one huge challenge that the government has enormous difficulty in meeting: alternate sources of information, which can make the whole propagandist enterprise come crashing down. In the Soviet Union, the government used a massive censorship apparatus to suppress other sources of information, virtually from the beginning of communism in 1917 until the Gorbachev era starting in the mid-1980s. But Gorbachev wanted *glasnost* (openness) so that people could talk honestly about the problems of socialism and therefore improve the system. Once he let that genie out of the bottle, it could not be stuffed back in. The people of the Soviet Union “improved” socialism by ending it.

Now, one might argue that Gorbachev didn't have to opt for greater openness. But that's where information technology enters the scene. He didn't have much choice. With *glasnost*, socialism ended in the early 1990s. Without it, information technology would probably have ended it by the late 1990s. Why? There are two main reasons.

First, as the information revolution was creating a new economy in the United States and other industrialized countries, the Soviet economy was being left in the dust. Allowing people to act on their knowledge, as Hayek has shown, has always been crucial for a modern economy to function, and therefore it was inevitable that socialism would fail even in the 1930s through the 1960s. But the problem wors-

ened greatly with the onset of the information-technology revolution. Starting in the early 1980s, cheap personal computers made it possible for people to operate small and big businesses in much more sophisticated ways. Of course, if you allowed people access to the PC, you would scarcely be able to restrict what they would do with it. In the Soviet Union, where even the people who operated the photocopy machines were employees of the KGB (Shane 1994, 64), the government placed tight restrictions on who could have a PC. But that restriction was not a tenable long-run policy.<sup>2</sup>

Second, whether or not Gorbachev had allowed glasnost, the widespread availability of cheap information technology was bringing the equivalent of Harry Truman's Sears catalogue into millions of Soviet lives. The cheap technology took the form of VCRs and fax machines, imported by various people coming back from abroad, and cable television, which was installed in millions of Soviet apartments by thousands of entrepreneurs with not much more than a VCR and copper wire. People started watching radical movies, such as *Lethal Weapon*, *Harry and the Hendersons*, and *Die Hard*. What made these movies radical? The fact that in their backgrounds appeared everyday items that Americans took for granted but that were extreme luxuries even to Communist party officials—goods such as fresh oranges, modern refrigerators, well-furnished apartments, and upscale (to the Soviets) cars (Shane 1994, 204–9).

### Enter the Internet

If late-1970s technology such as the VCR and the fax machine could help bring down the Soviet Union, the Internet can help bring down any totalitarian government that allows its people, for whatever reason, to be provided with more goods and services. It so cheap to use, and its use is so hard to control.

Consider China. In October 1997, in my monthly article in the *Red Herring*, I made the following statement:

More free trade with China means more foreign currency earned by Chinese people, which would allow them to buy more fax machines, phones, video equipment, and PCs. The result: millions of Chinese would get better information from numerous sources. One could even imagine people in China reading this article on the Web. In cyberspace, the government would have more trouble suppressing information than its Soviet counterpart did in the '80s.

Sure enough, in its February 7, 1998, issue, the *Economist* reported that the Chinese government expected the number of Internet users in China to rise from 250,000

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2. U.S. Secretary of State George Shultz, a former economics professor, once briefed Gorbachev about the high cost of isolating the Soviet economy from the information-technology revolution.

currently to 4 million by 2000. By early 1999 the number had reached 2 million. (Although the government censors the Internet, the *Economist's* Web site is accessible to Chinese users.)

The Web is increasingly being used to spread news that the state-run press will not talk about. Consider a news story that appeared in the *Wall Street Journal* in January 1999. Entitled "In China, the Web Is Home to a Thousand News Stories" (Smith 1999), the story told of a family whose daughter had been murdered and who were trying to publicize the details of the murder. The story begins, "Few people would know anything about Wang Han's murder here if it weren't for an Internet press that is quietly eroding Beijing's control of the nation's media." The family, frustrated by its inability to get the government-run media to run articles about the crime, turned to its local Internet service provider. After a series of Web pages spread the story, it was the talk of China's cyberspace crowd.

The Internet is freeing speech in other countries as well. After Malaysia's prime minister, Mahathir Mohamad, imprisoned his free-market-oriented deputy, Anwar Ibrahim, a pro-Ibrahim Web site received more than 800,000 visits in one month, many of them presumably by some of the 500,000 Internet users among Malaysia's 22 million people (*Economist*, November 14, 1998). This information competed with the pro-government spin of the major Malaysian media. Even if nasty governments try to censor domestic Web sites, their citizens can still get access to servers in other countries, and at lower and lower prices. "Stopping such access," notes Frances Cairncross in *The Death of Distance* (1997), "would require cutting off international telephone service" (191).

The Internet is also curbing government power in the United States. When officials of the U.S. Libertarian Party in 1999 heard about the federal government's so-called "Know Your Customer" rules, they were outraged. Those rules would have required banks to track every customer's banking business and to report various details of a customer's transactions to the feds. As its national director, Steve Dasbach, said of the proposed rule, the Libertarian Party wanted to "drive a stake through its heart" (Libertarian Party Progress Report, March 1999, p. 4). So on February 17, the party established a Web site ([www.DefendYourPrivacy.com](http://www.DefendYourPrivacy.com)) that allowed people to sign an electronic petition opposing the regulation and giving any added reasons they cared to offer. Before the Web site was opened, according to Dasbach, the Federal Deposit Insurance Corporation (FDIC) had received 20,000 comments about the proposed rule, only a handful of which favored it. By February 23, only six days later, the FDIC's count was up to 78,000, and by February 25 it was up to 100,000. A majority of the comments came from the [DefendYourPrivacy.com](http://www.DefendYourPrivacy.com) Web site. By March 8, according to the *New York Times*, the FDIC had received about 257,000 comments, and all but about 50 opposed the proposed rule. Some 205,000 had arrived by e-mail, and of them a whopping 83 percent had been generated by the Libertarian Party's Web site (Raney 1999). The four federal regulatory agencies that had pro-

posed the rule—the FDIC, the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision— withdrew the rule.<sup>3</sup>

Had they been limited to snail mail or fax, probably only a few thousand people would have protested. Of course, the Internet also made it easier for 50 people to send messages favoring the proposed regulation. But the lopsided numbers favoring and opposing the rule suggest that the information revolution is a strong counterweight to government oppression.

## **Encryption Will Shield Us**

The Internet and the electronic commerce that it supports are also likely, in the longer run, to cut into the government's power to tax. My prediction is independent of the outcome of the current push by state governments to impose sales taxes on e-commerce. It is based solely on the nature of the technology. The particular technology I have in mind is encryption.

Low-cost encryption technology currently allows you to use a “private key” to encrypt a message, send it to someone, and have only that person be able to decode it using a “public key” that you have provided. David Friedman (1995) describes encryption accurately and succinctly:

I wish to send a message to you and prove that it is from me. I encrypt it with my private key. You decrypt it with my public key. The fact that what comes out of the decryption process is a message and not gibberish means that it was encrypted with my private key. Since only I possess my private key, I must be the source of the message. Thus public key encryption provides not only privacy but verification as well—a digital signature. By encrypting first with my private key and then with your public key, I can send you a message that is both secure and verifiable. Only you can read it, and only I could have sent it.

As Friedman has pointed out, encryption allows you, if you make your living as a consultant, speaker, or teacher, to sell your services to people who cannot identify you. Also, you could be paid in “digital cash,” based on an encryption procedure that allows neither the payer nor the payee to identify the other party and in which the creator of the cash cannot identify either party to the transaction.

What can't be tracked can't be taxed. Therefore a large and growing part of the economy will become off-limits to the IRS. Of course, the government could shift to

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3. This outcome is not as complete a victory as it seems. According to the FDIC, more than 85 percent of the banks it supervises already comply with a form of “Know Your Customer” regulations. The Libertarian Party is working to gain the repeal of the federal laws that currently authorize these invasions of financial privacy.

a system of consumption taxes. But remember that people will also be able to buy many consumption goods over the Internet, using encryption and digital cash, making a consumption tax difficult to enforce. Friedman suggests that taxes will increasingly be placed on goods that are easy to observe, such as food, housing, and fuel. I have my doubts. What if the providers of, say, food, sell it over the Internet? How will the government know which providers sell how much? Possibly the tax system will come to rely on people's honesty. But the U.S. government and other governments around the industrialized world are taking close to the highest percentage of GDP in taxes that they have ever taken in peacetime. And in the United States, as in other countries, an increasing portion of what government takes is given to other (usually older) people rather than used to purchase goods or services that benefit the general public. How long, then, would a tax system based on honesty last?

One might object that there is a strict limit on the kinds of goods and services that can be sold on the Web, because sellers need to establish reputations. How, if your customers did not know your identity, would you establish a reputation? Encryption solves that problem. As Friedman (1995) explains, "My business name and attached reputation are defined by my public key: I can demonstrate that I am the person who does business under that name by my ability to read messages encrypted with that key."

Does this story sound like science fiction? It certainly does. But, as my colleague Pat Parker put it recently, "If when you try to predict what may happen in ten years, your predictions sound like science fiction, you may well be wrong. But if your predictions ten years out *don't* sound like science fiction, you are certain to be wrong."

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