

(The following is a transcript of a talk given on May 9 at the 2014 Symposium of the International Association of Privacy Professionals, based on my notes and on my recollections of those times I went off-script. It should be pretty close to the reality.)

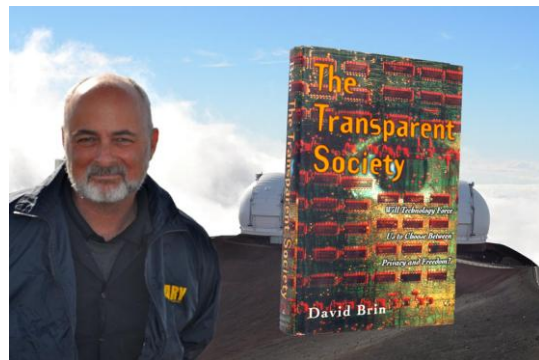
(However you define reality.)

The Scorched-Earth Society

A Suicide Bomber's Guide to Online Privacy

When I received the invitation to give this talk, my first reaction was that this had to be some kind of cruel hoax. Having seen some of the abstracts trotted out at this event so far, I gotta say I'm still not entirely convinced it isn't. I'm a midlist science-fiction author, after all; I used to be a marine biologist. What in God's name could anyone with my background say that would be of any use to you folks?

And yet I'm not the first SF author to make an appearance at one of these things. I'm not even the first SF author with scientific credentials. David Brin gave a talk at your Washington summit just a couple of months ago, on his so-called *transparent society*. I've seen him speak on the subject myself, so I'm reasonably familiar with the talking points. Brin claims that laws to limit government surveillance will never work, because we primates come with built-in dominance hierarchies. Telling our leaders they can't spy on us would be tantamount to poking a silverback gorilla with a stick; they just won't stand for it.



But, he says, they might let us look *back*— so we'll watch the watchers. The camera will point both ways. The playing field will be level.

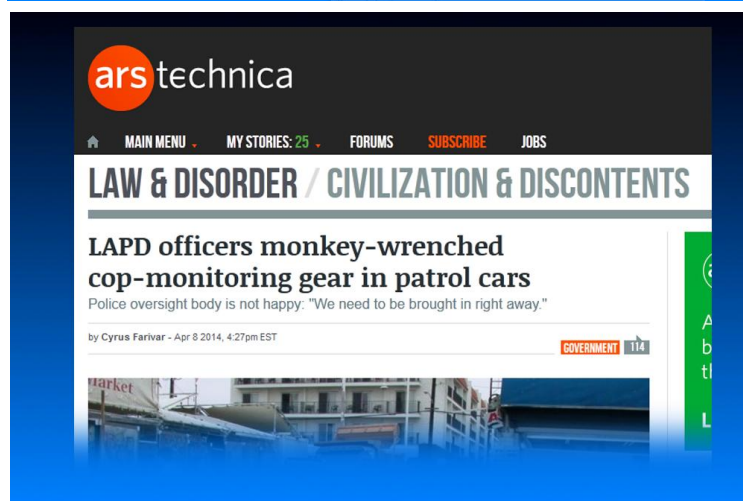
The dude's a physicist, so I suppose he can be forgiven for thinking that it's a good idea to get into a staring contest with an aggressive territorial 200-kg mammal who regards eye contact as a threat display. Speaking as a biologist, I really can't recommend it.

To pick a couple of obvious and infamous examples from our own species: Chelsea Manning looked back and they threw away the key. Ed Snowden looked back and got a target on his chest. (Certainly more than one silverback has publicly opined that they'd like to see the man assassinated.)

On a more modest and ubiquitous level, anyone who lives in a large city is likely aware of the endless litany of abuses visited by police upon the citizens they're charged with protecting. We're also familiar with how cops react to being recorded by civilians— or even worse, to the suggestion that we "look back" by sticking cameras in their cars. Over in LA they've already done that, only to find that vital bits of that cop-watching equipment keep going mysteriously missing. Apparently, the police don't like being spied on.

As ex-CIA employee Barry Eisler puts it, we are living in a society "where the government knows more and more about the citizenry and the citizenry is permitted to know less and less about the government." In this light, my own words come back to haunt me from my hassles with the US border patrol back in 2009: the last thing I said before they started throwing punches was "I just want to know what's going on."

And yet, if you look past the dumbness of Brin's gorilla example, you'll find a substantive truth underneath. We *are* mammals. Evolution tinkered us



into existence using the same hit-and-miss processes that shaped every other form of life on the planet. We *do* come equipped with a variety of hardwired responses forged in our evolutionary past, and anybody who thinks that their own behavior isn't informed by those legacy circuits hasn't been paying attention.

I'm going to talk about a couple of those circuits today. And I'm going start by suggesting that your whole organization may have been misnamed; maybe the hot-button issue isn't so much *privacy* as *surveillance*.



You might ask if that's even a difference that *makes* a difference. I think it does. A perfect example broke just yesterday: turns out the feds are collecting our facebook data. No *reason* anyone can tell, no specific investigation going on. They just like— keeping an eye on us. Nothing to see here.

Privacy obviously isn't the issue in this case.

No one on a social

network has any reasonable expectation of privacy. But you do assume that you're just one voice in a crowded room, and there's a visceral reaction to the realization that you're a *target* instead.

I think that reaction isn't so much philosophical as instinctive. I'm going to try to convince you of this by asking you to find God.



Turns out God is actually pretty easy to find. We think it got started with pareidolia— that cognitive glitch that lets us see faces in the clouds, or Elvis in a burrito. And we think pareidolia arose as an antipredator strategy. As it happens I've just finished writing a novel that explores the functional utility of religious belief,

so I'm going to steal an infodump from that book to help make the point:

Look, Brüks wanted to say: fifty thousand years ago there were these three guys spread out across the plain, and they each heard something rustling in the grass. The first one thought it was a tiger, and he ran like hell, and it *was* a tiger but the guy got away. The second one thought it was a tiger, and *he* ran like hell, but it was only the wind and his friends all laughed at him for being such a chickenshit. But the third guy, *he* thought it was only the wind, so he shrugged it off and a tiger had him for dinner. And the same thing happened a million times across ten thousand generations—and after a while everyone was seeing tigers in the grass even when there weren't any tigers, because even chickenshits have more kids than corpses do. And from those humble beginnings we learned to see faces in the clouds and portents in the stars, to see agency in randomness, because natural selection favors the paranoid. Even now, we are wired to believe that unseen things are watching us.

And it came to pass that certain people figured out how to *use* that. They painted their faces or they wore funny hats, they shook their rattles and waved their crosses and they said *Yes, there are tigers in the grass, there are faces in the sky, and they will be very angry if you do not obey their commandments. You must make offerings to appease them, you must bring grain and gold and altar boys for our delectation or they will strike you down and send you to the Awful Place.* And people believed them by the billions, because after all, they could see the invisible tigers.

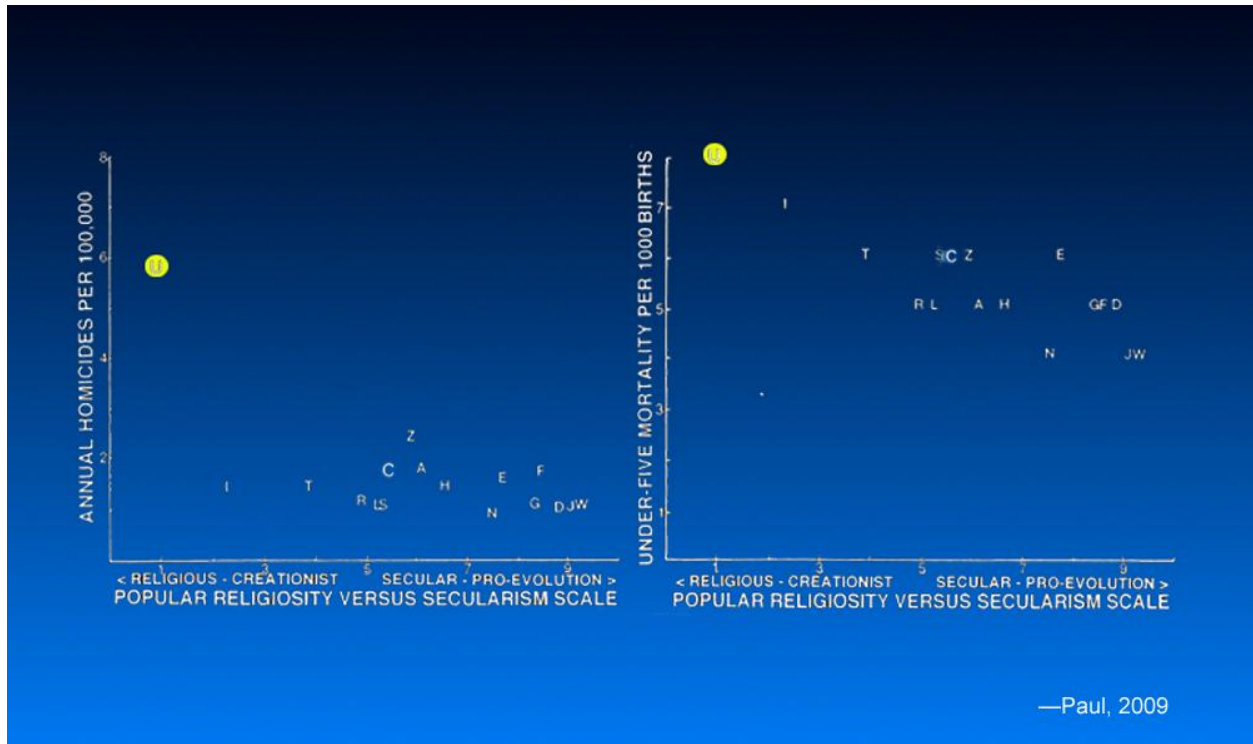
So: Cut to the present. For thousands of years people who *didn't* see agency everywhere were a bit more likely to get eaten. That's not so much of an issue now, but the program persists. We see patterns in everything: butterflies in Rorschach blots, faces in the clouds, we hear ghosts and monsters in the creaking of stairs at night. And we can make a testable prediction here: if all this *does* result from an ancient threat response, you'd expect false-positive pattern-matching to intensify when people feel especially vulnerable or insecure.

According to research out of the University of Texas, this is exactly what happens. People who feel helpless are more likely to see patterns in random visual static. They're more likely to see conspiracies and connections in unrelated events. Belief in god and astrology goes up during times of social unrest. Religion tends to prosper in lands where there's reason to be afraid; it's far more

Signs of the Times: False Positives

- Patterns in visual static
- Conspiracy theories
- Astrology
- Religion

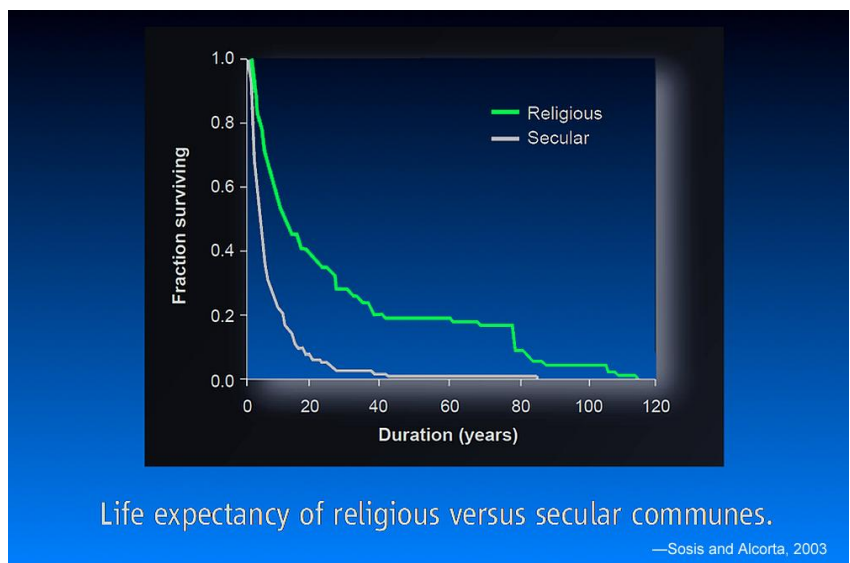
prevalent in developing than in developed nations, and the exception you might cite— that of the good ol' USA— actually proves the rule. Because in a very real way, the US is not a developed country.



Seventeen first-world nations: European, North American, Australasian. Social metric on the y-axis, societal religiosity on the X; the more fundamentalist your society, the further to the left it scales. (I've highlighted the US in yellow for easy identification.) In terms of pretty much any metric you'd care to name— I'm showing you homicide and infant mortality rates, but the same pattern holds for incarceration rates, life expectancy, STDs, teen pregnancy — a whole slew of variables I don't have time to show you— the US is consistently the worst of the lot.

It's also, by far, the most religious.

Not surprisingly, Religion appears to confer adaptive benefits— at least, religious communes persist significantly longer than secular ones, all other things being equal. And you might be surprised to learn that when you look *only* at religious communes, the ones that tend to last longest are those with the most nasty,



repressive, authoritarian rules: the faiths that preach patriarchal peeping-tom gods who see you masturbating and send you to hell for the wicked thoughts in your heart. Those societies generally last longer than faith-based communes that believe in a loving, forgiving deity.



A myriad studies support the idea that authoritarian religions based on fear of surveillance have a competitive edge in Darwin's universe. Even a picture of eyes thumb-tacked to the wall — not even a photograph, just a cheap-ass Gary Larsen *pencil sketch* of eyes — reduces the frequency of cheating on tests. So does dropping the word "ghost" into casual conversation. Something that abstract is enough to scare us, even subconsciously, into changing our behavior.

So when we talk about "privacy" we're probably not talking about some abstract cultural artifact that emerged wholesale from the Victorian era. That's the first take-home message: The link between surveillance and fear is a lot older, and a lot deeper, than your average post-privacy advocate is likely to admit.

The usual suspects have done a bang-up job of amping the fear side of the equation in recent years. But of course, that *also* amps up our sensitivity to potential surveillance; and despite the official narrative, when we look around we do not see brown-skinned terrorists doing the tiger's share of the surveilling.

What we *do* see is the invocation of "Terrorism" to cover up the fact that an innocent person's life was ruined for eight years because of a typo on the no-fly list. We see a woman denied entry to the states because US Customs has access to her confidential psychiatric records. I even experienced something similar myself; back in 1991, while I was living in Guelph, I got caught

turning right on a red while riding a bicycle at 2a.m. I asked some impertinent questions about my rights that got me hauled in for the night. I was never convicted of anything; it was such a trivial infraction that when we went looking we couldn't find a record of it in the Canadian archives. But two decades later US prosecutors cited that event to try and have me classed as a

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How Obama Officials Cried 'Terrorism' to Cover Up a Paperwork Error

BY DAVID KRAVETS 02.11.14 | 6:30 AM | PERMALINK

After seven years of litigation, two trips to a federal appeals court and \$3.8 million worth of lawyer time, the public has finally learned why a wheelchair-bound Stanford University scholar was cuffed, detained and denied a flight from San Francisco to Hawaii: FBI human error.

FBI agent Kevin Kelley was investigating Muslims in the San Francisco Bay Area when he [checked the wrong box](#) on a terrorism form, erroneously placing the scholar on a no-fly list.

What happened next was the real shame. Instead of admitting the mistake, Obama officials tried to cover up the error by claiming the scholar was a terrorist.

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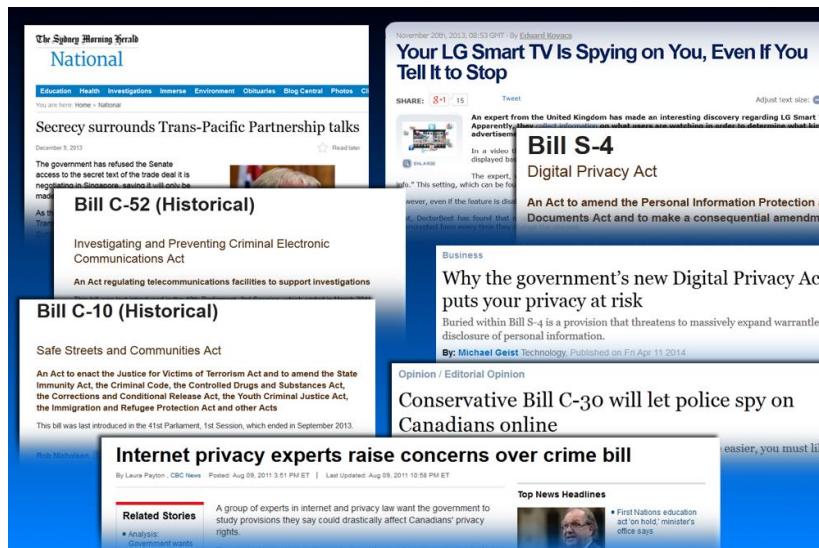
Police sharing of mental health information is a nightmare

The Globe and Mail
Published Thursday, Apr. 17 2014, 7:00 PM EDT
Last updated Thursday, Apr. 17 2014, 8:03 PM EDT

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Two years ago, Ellen Richardson made what she calls a "half-hearted" attempt at suicide while suffering from depression. A 911 call was placed, police duly arrived on the scene and, thankfully, Ms. Richardson survived. A year later, she was at Toronto's Pearson airport, about to depart on her "dream vacation" — a cruise — but she had to fly to the U.S. first. Ms. Richardson never made it. After checking in for her flight, she was stopped by a U.S. customs agent, grilled about the suicide attempt and her mental health, and then denied entry to the United States and barred from boarding the plane.

"repeat offender". That gives you some sense of the granularity of the data our masters were sharing a solid decade before 9/11 made it fashionable.



Turning from the personal to the corporate (not that corporations aren't people, of course), we see the Trans-Pacific Partnership being negotiated *entirely in secret*. We see consumer appliances spying on our behavior *even after we find the hidden menu that tells them to stop*. We see an ongoing series of government attempts to legislate online surveillance of Canadians without any of that messy warrant-or-disclosure stuff.

What we see, in short, is *stalking behavior*— and I mean that in the biological sense, not the sexual-harassment one. Corporate entities do it for profit, political entities for power, but in both cases what we see is stealth and concealment. We'd hear things rustling behind us even if there was nothing there; that's just the way we're wired. But it gets worse when someone invokes hackers and terrorists and creepy men in trenchcoats to justify poking around in our private lives (you may remember when Vic Toews labeled anyone who opposed C-30 as pro-pedophile). Many critics claim that blanket surveillance amounts to treating everyone like a criminal, but I wonder if it goes deeper than that. I think maybe it makes us feel like *prey*.

The good news is, there's increasing awareness that you can really damp down the alarm responses if you *just stop sneaking up on us*. Put your tracking policies front and center, make transparent the perfectly-reasonable trade of data for services, and you'll engender a lot less paranoia than if you secretly change everyone's privacy defaults and bury the controls to change them back under five levels of undocumented submenus. Even Facebook finally figured that much out.

The bad news is, even if you want to play fair and open, you're often not allowed to.

Government agencies seek telecom user data at 'jaw-dropping' rates

Government agencies are asking telecoms and social media companies to turn over Canadians' user data at "jaw-dropping" rates, with nearly 1.2 million requests in 2011 alone.

By: **Alex Boutilier** Staff Reporter, Published on Tue Apr 29 2014

OTTAWA—Government agencies are asking telecoms and social media companies to turn over Canadians' user data at "jaw-dropping" rates, with nearly 1.2 million requests in 2011 alone.

Which government and law enforcement agencies are requesting the data remains shrouded in secrecy. And the companies themselves are reluctant to disclose further details, according to Canada's privacy watchdog.

- Data handed over "hundreds of times every day without court oversight"
- 1.2 million requests in 2011 alone
- "companies have established special databases that grant law enforcement quick access to subscriber information without a warrant for a small fee"

Internet data routinely handed over without a warrant: Geist

Newly released data suggests Canadian companies have established special databases that grant law enforcement quick access to subscriber information without a warrant for a small fee.

By: **Michael Geist** Technology, Published on Fri Mar 28 2014

The lawful access fight of 2012, which featured then-Public Safety Minister Vic Toews infamously claiming that the public could side with the government or with child pornographers, largely boiled down to public discomfort with warrantless access to Internet subscriber information. The government claimed that subscriber data such as name, address, and IP address was harmless information akin to data found in the phone book, but few were convinced and the bill was ultimately shelved in the face of widespread opposition.

The government resurrected the lawful access legislation last year as a cyber-bullying bill, but it has been careful to reassure concerned Canadians that the new powers are subject to court oversight. While it is true that Bill C-13 contains several new warrants that require court approval (albeit with a lower evidentiary standard), what the government fails to acknowledge is that telecom companies and Internet providers already hand over subscriber data hundreds of times every day without court oversight. In fact, newly released data suggests that the companies have established special databases that grant law enforcement quick access to subscriber information without a warrant for a small fee.

You have a lot of valuable data, after all. Governments and law enforcement don't really believe that all of us are criminals, but they damn well know that *some* of us are— so why not spy on *everyone*, so that whoever the bad guys turn out to be down the road, you'll already have the relevant data in hand? It's so much easier to fish with a drift net than a long line; who cares if you tear up the whole damn seabed in the process?

So even companies who care about client privacy still have to give it up when the cops come calling. And as we all know, most companies *don't* care about protecting your privacy. Only last week, for example, we learned that Canadian telecoms don't just scrape your data for their own benefit; they've also laid it out in an all-you-can-eat smorgasbord for any hungry spooks who happen by, all for a reasonable "service fee" to cover the cost of mutual back-scratching.

The logo for Lapdog Security, featuring the words "Lapdog Security" in a white, italicized, sans-serif font against a dark blue background.A slogan in white, bold, sans-serif font: "Protecting your data, unless someone wants it." The text is centered on a dark blue background.

Still. Let's fantasize for a moment and imagine a company that really does try to protect client privacy. How do you do that when, at any moment, you can be conscripted as a police or government catspaw? This isn't the kind of slogan that inspires a lot of confidence.

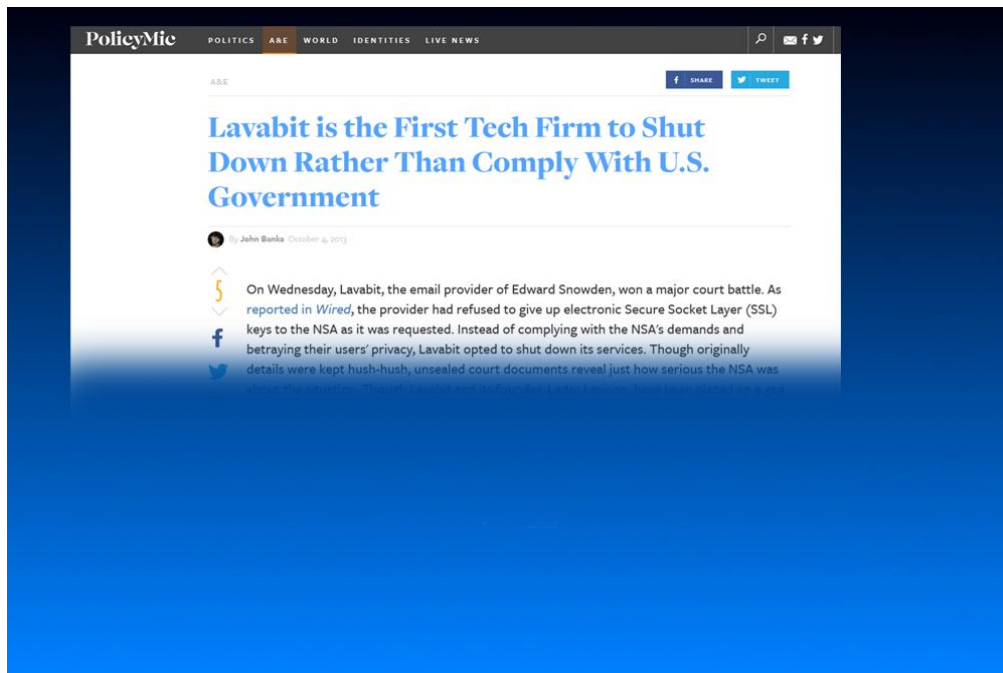
Here's a wild thought: don't just offer data protection, especially when you can't guarantee it. Offer data *destruction*. Not BrinWorld, where everyone knows everything and lions lie down with lambs; a more hard-edged place where, when the lions come calling, we burn down our chunk of the veldt rather than hand it over.

Forget the Transparent Society. Let's call this the Scorched-Earth society.

Just to be clear: I don't expect many of you to embrace this. I'm told a lot of lawyers tend to show up at these things, and my guess is the standard legal toolbox does not come with a middle finger to stick to the authorities. Then again, lawyers also know better than most what an ass the law is; they know that some are more equal than others, that cats write the laws for mice, that Bush and Cheney will never be indicted for war crimes no matter *what* the UN Convention Against Torture says. In this particular case, the goal is to blind Big Brother: does anyone seriously believe that the law will *ever* smile on such a goal, when the people who write and enforce the laws are the same people who do the spying? I think Brin's dead right on that point, at least.

So let's admit that almost by definition, any truly effective antisurveillance measures are likely to be on thin legal ice, and proceed for the sake of the argument. Say the government shows up and demands your metadata. You hit a kill switch: everything *evaporates*. There's nothing left to pillage.

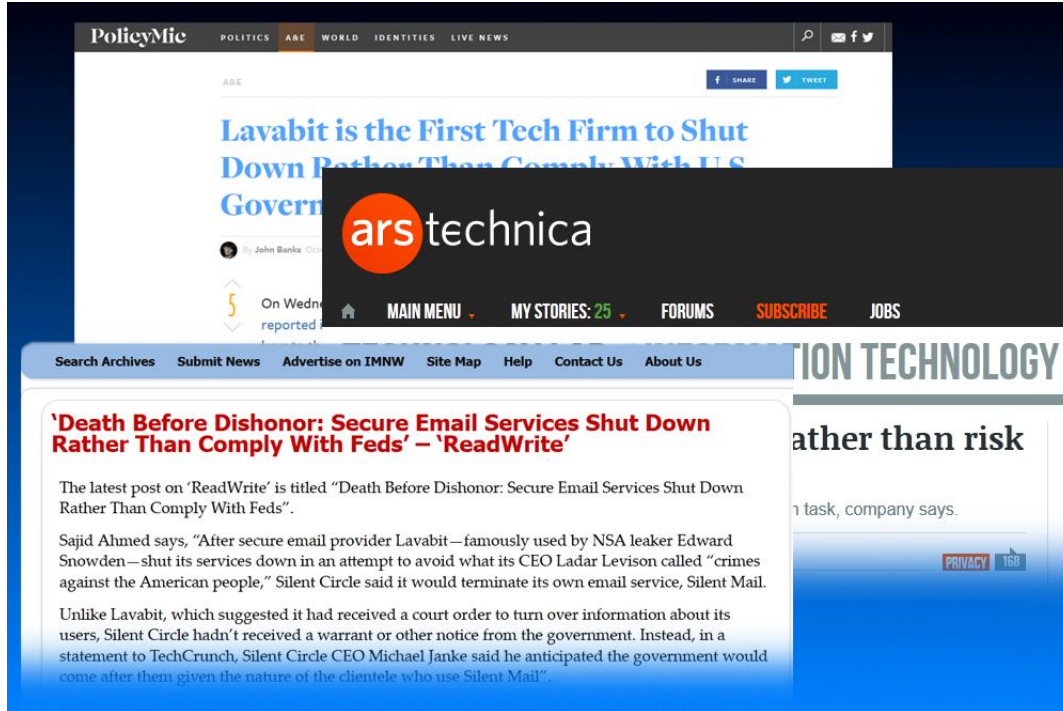
Pretty stupid, right? Just some childish revenge fantasy, giving the finger to The Man. You could find more emotional maturity in a Harry Potter novel. And it'd never happen; when the feds show up, you cave or you pay.



Okay, but Lavabit was all mixed up with Ed Snowden, so that's just an anomaly.



Okay, but twice could just be a coincidence.



Three times? Might be the start of a trend. At least three is a big enough sample size to get a standard deviation out of.

It will be painfully obvious by now that I don't know much about the law. What I do know something about is biology. I have a sense of where we came from as a species, and I know that ethics and morality are not human traits; they're *mammalian* ones. Capuchins feel empathy. Chimps have a sense of fair play. Any number of social species have what you might call a *justice instinct*: a drive to punish cheaters and freeloaders.

Our own species is hardwired for revenge, to the point that we'll go out of our way to punish those who have trespassed against us, *even if meting out that punishment costs us more than it costs our transgressor*. We will cut off our noses to spite our faces. This holds right across the board from financial games in which people feel cheated out of small sums of money, all the way up to suicide bombers— who,



despite what the public seems to think, are apparently not a bunch of ignorant wild-eyed religious zealots after all. They actually tend to be intelligent, well-educated, well-employed—even *secular*, sometimes. One characteristic they tend to share, though, is low self-esteem. A sense of humiliation, both personal and cultural. These people regard their own lives as so cheapened that they will actually gain value if traded in against higher-value targets. Net profit, in other words. Revenge economics.

But this isn't so much economics as simple brain-stem biology. And that's why I think that a scorched-earth approach, despite its fundamental irrationality— *because* of its fundamental irrationality— might actually take off. It ties into rage, it appeals to those of us who feel powerless and fucked-over and who'd really like to take back some measure of control, even if it costs us. I don't use cloud services, for example. I think anyone who trusts their data to the cloud is an idiot. But I'd sign up for an online scorched-earth service purely as an act of political support.

Hey, I'm a science fiction writer: wild imaginings are my stock in trade. Even I have some standards, though. You may not find the idea of self-destructing commercial databanks especially plausible; but I think it's as least as likely as a world of rainbows and unicorns in which the silverbacks lay down their fibertaps and their security certificates, and let you gaze deeply into their eyes.



And since most of you have finished eating, that's the image I'll leave you with.