

# HOW THE WEB WAS LOST

Hacks, viruses, leaks, and surveillance have been part of online life since the beginning



**1971**

The world's first computer worm, "**the Creeper**," is created.

**1981**  
Ian Murphy becomes the first American convicted of a cyber-crime after **hacking into AT&T's system** to give customers discounted calling rates.



**1982-83**

A teenage cyber-gang, **who refer to themselves as "the 414s,"** hack into the Los Alamos National Laboratory and Memorial Sloan Kettering Cancer Center.



**2001**

**President Bush** signs an order initiating the N.S.A.'s domestic-spying program.



**1996**

Hackers break into Web sites for the **United States Department of Justice**, the C.I.A., and the U.S. Air Force.

**2006**

As part of its **News Feed** launch, Facebook posts personal details of users.

**2009**

In a speech, **Berners-Lee** warns that the power of online information "is so great that the commercial incentive for companies or individuals to misuse it will be huge."



**2013**

Google acknowledges that **Street View**, its photo-mapping program, used its technology to collect data from home networks without people's knowledge.

**2014**

The *New York Times* reports that the N.S.A. is using **facial-recognition software** to store the images of millions of people.



**2017**

Facebook acknowledges that **Cambridge Analytica** collected data on more than 80 million users.

**2016**

BuzzFeed News uncovers at least **140 fake-political-news sites** designed to generate shares on Facebook by using false information, such as a claim that the Pope endorsed Trump for president.



## Tim Berners-Lee

in 1989, came up with the idea that eventually became the Web. Initially, Berners-Lee's innovation was intended to help scientists share data across a then obscure platform called the Internet, a version of which the U.S. government had been using since the 1960s.

But owing to his decision to release the source code for free—to make the Web an open and democratic platform for all—his brainchild quickly took on a life of its own.

Berners-Lee, who never directly profited off his invention, has also spent most of his life trying to guard it. While Silicon Valley started ride-share apps and social-media networks without profoundly considering the consequences, Berners-Lee has spent the past

three decades thinking about little else.

From the beginning, in fact, Berners-Lee understood how the epic power of the Web would radically transform governments, businesses, societies.

He also envisioned that his invention could, in the wrong hands, become a destroyer of worlds, as Robert Oppenheimer once infamously observed of his own creation. His prophecy came to life, most recently, when revelations emerged that Russian hackers interfered with the 2016 presidential election, or when Facebook admitted it exposed data on more than 80 million users to a political research firm, Cambridge Analytica, which worked for Donald Trump's campaign. This episode was the latest in an increasingly chilling narrative. In 2012, Facebook conducted secret psychological experiments on nearly 700,000 users. Both Google and Amazon have filed patent applications for devices designed to listen for mood shifts and emotions in the human voice.

For the man who set all this in motion, the mushroom cloud was unfolding before his very eyes. "I was devastated," Berners-Lee told me that morning in Washington, blocks from the White House. For a brief moment, as he recalled his reaction to the Web's recent abuses, Berners-Lee quieted; he was virtually sorrowful. "Actually, physically—my mind and body were in a different state." Then he went on to recount, at a staccato pace, and in elliptical passages, the pain in watching his creation so distorted.

"We demonstrated that the Web had failed instead of served humanity, as it was supposed to have done, and failed

in many places," he told me. The increasing centralization of the Web, he says, has "ended up producing—with no deliberate action of the people who designed the platform—a large-scale emergent phenomenon which is anti-human."

The power of the Web wasn't taken or stolen. We, collectively, by the billions, gave it away with every signed user agreement and intimate moment shared with technology. Facebook, Google, and Amazon now monopolize almost everything that happens online, from what we buy to the news we read to who we like. Along with a handful of powerful government agencies, they are able to monitor, manipulate, and spy in once unimaginable ways. Shortly after the 2016 election, Berners-Lee felt something had to change, and began methodically attempting to hack his creation. . . . By understanding these dangers, he hopes, we can collectively stop being deceived by the machine just as half the earth's population is on board.



The idea is simple: re-decentralize the Web. Working with a small team of developers, he spends most of his time now on Solid, a platform designed to give individuals, rather than corporations, control of their own data. "There are people working in the lab trying to imagine how the Web

could be different. How society on the Web could look different. What could happen if we give people privacy and we give people control of their data,” Berners-Lee told me. “We are building a whole eco-system.”

For now, the Solid technology is still new and not ready for the masses. But the vision, if it works, could radically change the existing power dynamics of the Web. The system aims to give users a platform by which they can control access to the data and content they generate on the Web. This way, users can choose how that data gets used rather than, say, Facebook and Google doing with it as they please.

BY JORDAN HOFFMAN

<https://www.vanityfair.com/news/2018/07/the-man-who-created-the-world-wide-web-has-some-regrets>

<https://solid.inrupt.com/>