LIVING WITHOUT THE INTERNET FOR A COUPLE OF WEEKS

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In the early 1980s, I was worried that the computer revolution was going to reinforce and amplify the divide between the (well-to-do, Western) technocrats and those around the world who couldn’t afford computers and similar high-tech gadgetry. I dreaded a particularly malignant sorting of the haves and have-nots, with the rich getting ever richer and the poor being ever more robbed of political and economic power by their lack of access to the new information technology. I started devoting some serious time and effort to raising the alarm about this, and trying to think of programs that would forestall or alleviate it, but before I’d managed to make any significant progress the issue was happily swept out of my hands by the creation of the Internet. I was an Arpanet user, but that didn’t help me anticipate what was coming.

We’ve certainly seen a lot of rich technocrats getting richer, but we’ve also seen the most profoundly democratizing and leveling spread of technology in history. Cell phones and laptops, and now smartphones and tablets, put worldwide connectivity in the hands of billions, adding to the inexpensive transistor radios and television sets that led the way. The planet has become informationally transparent in a way nobody imagined only forty years ago.
This is wonderful, mostly. Religious institutions that could always rely in the past on the relative ignorance of their flock must now revise their proselytizing and indoctrinating policies or risk extinction. Dictators face the dire choice between maximal suppression—turning their nations into prisons—or tolerating an informed and well-connected opposition. Knowledge really is power, as people are coming to realize all over the world.

This leveling does give us something new to worry about, however. We have become so dependent on this technology that we have created a shocking new vulnerability. We really don't have to worry much about an impoverished teenager making a nuclear weapon in his slum; it would cost millions of dollars and be hard to do inconspicuously, given the exotic materials required. But such a teenager with a laptop and an Internet connection can explore the world's electronic weak spots for hours every day, almost undetectably at almost no cost and very slight risk of being caught and punished. Yes, the Internet is brilliantly designed to be so decentralized and redundant that it's almost invulnerable, but robust as it is, it isn't perfect.

Goliath hasn't been knocked out yet, but thousands of Davids are busily learning what they need to know to contrive a trick that will even the playing field with a vengeance. They may not have much money, but we won't have any either, if the Internet goes down. I think our choice is simple: We can wait for them to annihilate what we have, which is becoming more likely every day, or we can begin thinking about how to share what we have with them.

In the meantime, it would be prudent to start brainstorming about how to keep panic at bay if a long-term disruption of large parts of the Internet were to occur. Will hospitals and fire stations (and supermarkets and gas stations and pharmacies) keep
functioning, and how will people be able to get information they trust? Cruise ships oblige their paying customers to walk through a lifeboat drill the first day at sea, and while it isn’t a popular part of the cruise, people are wise to comply. Panic can be contagious, and when that happens, people make crazy and regrettable decisions. As long as we insist on living in the fast lane, we should learn how to get on and off without creating mayhem.

Perhaps we should design and institute nationwide lifeboat drills to raise consciousness about what it would be like to have to cope with a long-term Internet blackout. When I try to imagine what the major problems would be and how they could be coped with, I find I have scant confidence in my hunches. Are there any experts on this topic?

SAFE MODE FOR THE INTERNET

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Sooner or later—by intent or by accident—we will face a catastrophic breakdown of the Internet. Yet we have no Plan B in place to reboot a rudimentary, low-bandwidth emergency communication network if the high-bandwidth system we’ve come to depend on fails.

In the event of a major network disruption, most of us will have no idea what to do except to try and check the Internet for advice. As the system begins to recover, the resulting overload may bring that recovery to a halt.

The ancestor of the Internet was the store-and-forward punched-paper-tape telegraph network. This low-bandwidth, high-latency system was sufficient to convey important messages, like “Send ammunition” or “Arriving New York Dec. 12. Much love. Stop.”

We need a low-bandwidth, high-latency store-and-forward message system that can run in emergency mode on an ad-hoc network assembled from mobile phones and laptop computers even if the main networks fail. We should keep this system on standby and periodically exercise it, along with a network of volunteers trained in network first aid the way we train lifeguards and babysitters in CPR. These first responders, like the amateur radio operators who restore communications after natural disasters, would prioritize essential communications,