Who Owns the Internet?

Ben Tarnoff's history of networked life and the rise of a corporate-controlled web doubles as a polemic, arguing for a people-first Internet.

By Evan MalmgrenTwitter September 28, 2022



Network cables at the HLRS supercomputing center in Stuttgart, Germany, 2021. (Photo by Marijan Murat / picture alliance via Getty Images)

What is the Internet, and who owns it? These are not simple questions; their boundaries are muddy. Most people would agree that the Internet encompasses physical infrastructure and physical networks —the satellites, radio towers, and fiber-optic cables, aboveground and underwater, that connect our devices—but does it not also refer to the content they carry? And how can one meaningfully distinguish between that content and the servers that host it; the software that translates it into legible form; the eyes and ears that consume it; the hands that build and maintain it? US Senator Ted Stevens was once mocked for describing the Internet as "a series of tubes," but his metaphor was about as accurate as one could hope for in so few words. The only trouble is that it's hard to say where the tubes begin and end.

In an opening salvo in the third issue of *Logic*, a small magazine dedicated to critically evaluating modern technology, the editors wrote that "the internet, once seen as our savior, looks more and more like a destroyer." That issue came out in December 2017, at the apex of the first major Bitcoin bubble, and as Donald Trump's Federal Communications Commission was pushing to kill net neutrality. If that statement felt timely then, the ensuing years have certainly confirmed the editors' prescience. According to 2020 polling by the Knight Foundation, 74 percent of Americans were "very concerned" about the spread of online misinformation; 77 percent of respondents reportedly held the opinion that major tech firms like Facebook, Google, Amazon, and Apple had "too much power." It is now a common belief that something has gone horribly wrong with the Internet, but as with anything so hard to define, the contours of its fault lines are blurry. Solutions, naturally, have proved even more elusive.

Internet for the People, a new book written by *Logic* editor and cofounder Ben Tarnoff, gestures at these solutions by working backward, in the fashion of a software engineer, through the labyrinth of inputs and decisions that created the Internet as we now know it. In doing so, Tarnoff tours some of the network's history, tracing important developments in the service of highlighting overlooked possibilities —those moments when the Internet might have not become so dominated by private industry and might instead have taken a more communal turn. Tarnoff underscores the disappointment of libertarian eBay founder Pierre Omidyar, for example, by detailing the idealistic underpinnings of the systems he developed and their eventual cooptation by the relatively ruthless Amazon. Omidyar once imagined the Internet as a medium for direct peer-to-peer interchange, but power has repeatedly shown its perseverance in finding ways to sneak back in and re-enclose the commons as they multiply into new dimensions. Tarnoff brings a materialist approach to such stories, humanizing and demystifying some of the Internet's arcane foundations and missed opportunities. Yet, while *Internet for the People* dives into history, it ultimately lives in the present and aspires to the future. Tarnoff's long-term aspirations are necessarily imprecise, but he broadly aspires to imagine a more socialized network.

The book opens with a chase scene worthy of the *Fast and Furious* franchise, following packets of data along an unlikely path from a mobile server setup in California to Norway, England, outer space, West Virginia, Massachusetts, and back again at breakneck speed. The high-speed chase took place on November 22, 1977, and the occasion was an American military experiment that served as proof of concept for a universal computing language to be used as the basis for a network of interoperable computer networks—what we today call the Internet. The experiment relayed data across "multiple networks and multiple mediums—radio, satellite, fixed-line—while arriving at their destination completely intact." It was, in Tarnoff's words, "the first real evidence" that such a system could actually work. In scenes like these, he brings to life events that might seem like staid episodes in less capable hands.

In the preface, Tarnoff describes *Internet for the People* as "not a manifesto in the traditional sense" but "in the sense that it tries to make something manifest." The book is not without technical detail the average reader will walk away with a strengthened understanding of how, exactly, the Internet flings data across the globe—but, more importantly, Tarnoff knows the value of metaphor in making sense of a system of incomprehensible scale. In his hands, the Internet is indeed a series of tubes, but it is also a stack, a language, a vascular system. Such terminology is imprecise, but Tarnoff is clear about the

limits of language and embraces imperfection as a liberating necessity.

While *Internet for the People* is not overly prescriptive, it does channel a certain Marxist perspective albeit more as a heuristic than a worldview. As with Marx and many writers in his tradition, Tarnoff commits a decent chunk of the book to defining terminology and questioning the "commonsense" metaphors that we use to discuss the Internet, in many cases suggesting alternatives while maintaining an abiding sense of the materialism inherent in the Internet. He argues that what we call "platforms" would be more accurately referred to as "virtual shopping malls"; that "the cloud" is an ethereal term masking a digital reproduction of the capitalist factory. In suggesting new vocabularies of the Internet, Tarnoff's chief concern is translating apparent mysticism into the more concrete language of political economy. In doing so, his greatest strength is synthesis, presenting triple-distilled highlights and contributions from a broad range of thinkers, from Wendy Brown to Shoshana Zuboff.

The book itself is split into two layers, respectively addressing the Internet's pipes and their contents. Everywhere it addresses these in terms of labor, ownership, and power. Tarnoff at times belabors a central point—that the modern American Internet's backbone was adapted from the publicly owned NSFNET, for example—but he also considers the structural implications of the fact that this predecessor was originally funded by the Department of Defense with military applications in mind. On the software side, he delves into the mechanisms by which private content ownership incentivizes virtual structures that engender passive consumption and put online experiences on discrete rails. Of course, today tech giants like Google, Facebook, Amazon, and Netflix are increasingly consolidating control across these layers by buying or building their own data centers and cable systems.

Tarnoff spends ample time in the weeds, but he does so in the service of sussing out patterns rather than attempting to build them into a complete picture. The overarching pattern is an ongoing struggle between privatization and popular control; the former has historically predominated in the Internet's development, but Tarnoff shows that the tendency toward private enclosure has never been inevitable, nor has it ever proceeded entirely without resistance. In doing so, he addresses privatization as a social process rather than as something intrinsic to the Internet's material existence. This process remains guarded by powerful interests—it has been secured over time through state power and back-door negotiations—but Tarnoff finds optimism in the fact that processes are always subject to revision.

As its title implies, *Internet for the People* contains more than a few proposals regarding what a peoplefirst Internet might look like. To this end, Tarnoff identifies most of today's Internet reform advocates as either single-issue-focused regulators or anti-monopolists, suggesting that a third path deprivatization—could prove more fruitful. For Tarnoff, the Internet is already of the people. The task ahead, in his view, is to remake it *for* them.

He draws proposals from case studies of publicly and cooperatively owned "community networks," for example, and champions open-source decentralization on the content side. Ideas like these are neither revolutionary nor strictly programmatic, but they are concrete, and thus may be of service to the relevant advocates, policy-makers, and frontline agitators—any of whom may find this book to be of practical use. In addressing this imagined audience, Tarnoff tries to strike a balance between centralization and decentralization, simultaneously calling for expanded federal funding for an Internetworked commons as well as creating structures to empower individuals to exercise greater agency over and within the digital networks that it comprises.

At its best, *Internet for the People* strikes a happy middle ground between technical history and polemic. Tarnoff addresses the Internet as a technology in the Heideggerian sense, as a product and mediator of social relations: "that setting upon that sets upon man." Readers will likely walk away from this book with a heightened familiarity with an entire realm of relevant literature. And while Tarnoff's presentation of the Internet's origins may seem bleak at times, he is ultimately optimistic about the direction of its possible evolution in the years to come.