

A Critique of Jonathan Zittrain, *The Future of the Internet-and How to Stop It*, Yale University Press, 2008

[Jonathan Zittrain](#)'s *Future of the Internet* is based on a myth. Zittrain needs a foundational myth of the Internet in order to praise its past openness and warn for a future lockdown of PCs and mobile phones. From the ancient world of Theory we know why people invent foundational myths: to protect those in power (in this case US-American IT firms and their academic-military science structures that are losing global hegemony). The Zittrain myth says that, compared to centralized, content-controlled systems such as AOL, CompuServe and Prodigy, the 'generative' Internet of the late 1980s was an open network. But this was simply not the case, it was closed to the general public. This foundational myth is then used to warn the freedom-loving guys for the Downfall of Civilization.

The first decades the Internet was a closed world, only accessible to (Western) academics and the U.S. military. In order to access the Internet one had to be an academic computer scientist or a physicist. Until the early nineties it was not possible for ordinary citizens, artists, business or activists, in the USA or elsewhere, to obtain an email address and make use of the rudimentary UNIX-based applications. Remember, this was the period between, roughly speaking, 1987 and 1993, before the World Wide Web when fancy multimedia CD-ROMs already ruled the PC world and the txt-only command line Internet already looked geeky and painfully outdated. Back then, the advancement of the ugly looking Internet was its interoperability. It was a network of networks-but still a closed one. This only changed gradually, depending on the country you lived in, in the early-mid nineties.

As an (indirect) response to this closed Net, NGOs, social movements and the cyberunderground maintained their own Bulletin Board Systems and participated in store-forward initiatives like FIDONET. The participants in this public network culture avant la lettre got used to high telephone bills. Until the mid nineties academic institutions subsidized the high costs for Internet connectivity and bandwidth, until Internet providers and telecoms took over and costs were spread over the millions of new customers that started to pay a monthly flat fee, which they continue to do so till today.

Pre-Internet high-level exchanges made it worth to stay up late and wait until you were able to get onto one of the rare dial-up lines. The artist network *The Thing* was a case in point. The same could be said of *The Well*.

These systems thrived on their lively forum culture and their ability to create new subcultures. The BBS cultures went into decay once they were exposed to the much larger Internet.

The difficult Internet access was contested by hackers who were not university students. This only changed bit by bit in the early nineties, in conjunction with the arrival of the colorful buttons and images. In the case of the Netherlands, the Internet became a public facility in May 1993, now 15 years ago — an [anniversary](#) recently celebrated by the hackers ISP Xs4all that played a pivotal role in this process of media democratization. In the meanwhile systems like CompuServe offered centralized gateways to the Internet email. Many might remember the email addresses with numbers such as 29086328@compuserve.com. In fact, these were the very first emails I wrote down in my address book, in 1991, without being able to use them as I wasn't an academic and lacked the connections to engineers and technologists at university to lend me their password or create a user-ID for me. For a period of at least five years BBS-alike systems were superior to the nerdy Internet. The BBS forums were as lively as Usenet and until the late nineties had no comparable Internet equivalent (some say they still don't).

Apart from a single reference to FIDONET, nothing remains of this early cyberculture in Zittrain's book. His scheme is simple: Internet good, AOL and CompuServe bad, early Apple II good, iPhone bad, and so on. The fact that millions of Americans for the first time experienced the Internet through services like AOL (and continue to do so) is a reality that Zittrain simply overlooks. Concerning the closed nature of iPhone (a rather marginal type mobile phone from a worldwide perspective), it would be more interesting to ask why hackers have ignored these vital communication devices for so long (I know, there are exceptions, but they are rare). Twice as many people use mobile phones compared to the PC and the potential, in particular in non-Western countries is high. Hackers by and large ignored the closed architecture of mobile phones and rather focused on the PC, even though they frequently use mobile devices (they have to stay in contact with their IT bosses who are not using IRC chat, MSN, Twitter and so on).

The mobile phone sphere needs to be opened up, literary hacked, *un très grand projet* compared to the Internet with its free software, in a state of public neglect. What we need is a broad movement that demands (and realizes) Open Access to Cellspace. However, it is the question if hackers and geeks, even if they would start a coordinated effort, would be able to

open up cellspace in the way that they achieved to define the rules for cyberspace. Once, at the CCC Hackers conference in Berlin, in December 2005, I attended a lecture of a guy who attempted to hack the hardware/software of an ordinary Samsung mobile phone. I was deeply impressed about his knowledge. But he did not get anywhere. The closed, proprietary nature of just about anything inside that phone was impressive, as was the temporary nature of all components. All these phone types change their hard and soft component every few weeks (if not more often). This extreme instability is one of the reasons why it is so useless, in a way, to open up a model, as in no time there will be another (sub)version of that same device on the market with slightly different components. I would have expected Jonathan Zittrain to address these issues, and somehow transcend the very US obsession with Apple products. Who cares about iPhone and whether it can and cannot guarantee full access to the Internet? Apple has always had its proprietary strategies and is not known for its commitment to freedom in the Richard Stallman style.

From a conservative techno-libertarian perspective mates of Jonathan Zittrain have criticized his proposal to start a 'Manhattan Project' to save the open Internet as being too centralized (see [Adam Thierer](#)). Like most Berkman scholars, Zittrain misses the ability for self-examination and has to operate within the rhetorical limits of American professional optimism (required for scholars that speak at Google headquarters like Zittrain). Within the code of these techno-libertarians is out of the question to criticize US-American companies, in particular when they are 'cool' (such as Google and all Web 2.0 firms). It is of course much easier, and in line with the White House, to criticize Iran and China. There is a structural unwillingness to take on the corporate world and this partial blindness results in Zittrain making somewhat naive propositions (even though I share a lot of his concerns). I do not believe in Thierer's 'hybridity' proposal in which the consumer decides what devices and application he or she uses will be open or rather closed. In a way, this market-driven techno-realism already exists. Concerning new ideas Zittrain offers surprisingly little for a professor in Internet Governance. It is in fact amazing that he doesn't mention ICANN and the domain name drama at all. Not that he needed to go into this rather large and complex field, but the least he could have done is list his own conclusions from the decade-long effort that is precisely trying to do what he demands (but then on the domain name level).

It would be worthwhile to deconstruct Zittrain's good intentions, not from an

evil-conspiratorial level but from the perspective of the NGO critique of organized good intentions and their disastrous consequences. The problem of a radical critique of the Berkman Center policies is that there is hardly any fundamental other position to start from. Even the most subversive, progressive hackers that I know, in the end, subscribe to the Berkman ideology, and are part of the larger liberal-libertarian current. In the end, everyone is against Internet censorship and favors open systems, no? It is hard to break this consensus culture, also from a social perspective, if one doesn't go for total isolation and retreat into a hopeless maverick status.

The larger problematic here is the lack of counter-hegemonic projects that could function as an alternative to the quasi monopoly of Berkman. It's unlikely to come from Latin-America. Europe or Asia then? The EU programs in this direction are all technocratic in nature and fail to understand the ideological-discursive importance that drives the development of Internet applications. As so often happens these days, there is no more (head)space for pure, negative criticism. The beginnings of a critique that is formulated here bounces back on the author, posing the question what is to be done on this side of the Atlantic in the form of concrete alternatives. The lack of a comprehensive analysis of techno-libertarianism as the default Internet ideology that rules from San Jose to Berlin, Nairobi and Bangalore is deeply felt here. The main reason why this research project has so far not taken off is the widely felt reluctance amongst (humanities) scholars and public intellectuals in general to take on the Internet as their project. Funding bodies worldwide, categorically refuse to fund fundamental humanities research that, like Zittrain, dares to look into the future. What we are left with are piles of PhDs that are condemned to remain unread as they merely map the impact the Internet on society-projects that are doomed to become history writing. How can we raise, and organize a new generation of technology-aware research that have the guts, and the creativity, to design a comprehensive field of critical concepts that can be implemented into code? We have to stop understanding the Internet, and start to shape it. That's the real Zittrain challenge.