Weaving the Dark Web: Legitimacy on Freenet, Tor, and I2P, by Robert Gehl, the Information Society Series, MIT Press, 2018, 288 p. \$30.00 (hardcover) ISBN: 9780262038263

If you search the term 'dark web' you will find the cliché imagery of guys with dark hoodies practicing in what seems like the black magic of computing. But is the dark web really that evil? Is it just the opposite of the web that we use everyday? Shedding light on the monster under the bed, Robert Gehl shows that there are 50 shades of gray to describe the dark web and that in fact, there is nothing dark about it at all. By doing so, Gehl follows a tradition of scholars such as Gabriella Coleman (hackers), Whitney Phillips (trolling), Jussi Parikka (computer viruses), and Aram Sinnreich (piracy), who examine and challenge our common understandings of deviant media and practices, and reveal the power relations that they represent.

So first, what is the dark web? According to Gehl it is "websites built with standard web technologies (HTML, CSS, server-side scripting languages, hosting software) that can be viewed with a standard web browser, such as Firefox or Chrome, which is routed through special routing software packages" (Gehl, 2018: 5). These special routing systems turn both the people and the sites into anonymous publishers. This is contrary to the World Wide Web that most people use, which Gehl terms the Clear Web, that identifies people through IP Addresses, cookies, digital fingerprinting and other technologies. But this technical feature has far reaching influences on the way people experience these technologies, and importantly, about how legitimacy is redrawn. And this is the core focus of the book, it is about constructing, negotiating and redrawing boundaries around the legitimacy of power, architecture and use of technology. Mixing media theory with software studies, sociology, and science and technology studies, Gehl peels off layers of common understandings about the Dark Web while focusing on three types of legitimacy—violence, propriety and authenticity. This is an important work not only for people who work in the tech industry and cyber security, or regulation but also internet researchers who often do not examine such technologies. In doing so they miss important aspects about the fringes of technology and why they have become fringe to the Clear Web.

Instead of focusing on regulators, journalists or other key figures in society and how they frame the Dark Web, Gehl chose to examine the users from within three networks—Freenet, Tor and I2P. Some of his insights have a lot of similarities with the field of subcultures and the way they define themselves and their communities by doing boundary work between the mainstream and underground. For example, in Chapter 6 in the Dark Web's social media Galaxy 2, we see how the common rules of gathering friends, likes and most importantly an increased attention to the self (via selfies for example) are turned around with oppositional culture capital such as pseudonyms and a strict approach towards less sharing. However, although these communities try to create alternative rules, Gehl shows that some cultural practices of discrimination, especially towards young women, persist even in these spaces. As he says "practices of inclusion and exclusion are incredibly important on the Dark Web" (Gehl, 2018: 37) and many times these are replicated from the Clear Web whereby women get harassed, and get asked to share more information to be seen as legitimate.

Contrary to formation of communities, in Chapter 4 Gehl tackles the new post-Silk Road Dark Web markets, which he calls operation security (OPSEC). This new generation distances themselves from communities-from-markets that were manifested in the era of Silk Road and inspired by Agorists (radical liberals who see human freedom in markets). OPSEC represents a rebellion against communities, an individualistic approach which draws from military logic and exhibits paranoid sociality. It is interesting to see how the same people who wanted to escape the violence of the state by establishing new models for social organization, also enact violence towards young women and less tech savvy people who want to be part of these spaces. As Gehl argues "the post-Silk Road market reinforces, rather than challenges, the power of the state by further associating communication with violence" (Gehl, 2018: 90). Here Gehl shows how just like the Clear Web, the dynamics, norms and values of such networks change within a few years, and how important it is do document such developments to understand and contextualize them. Who gets to be legit in illegitimate networks is a complicated and constantly changing topic which Gehl tackles with careful critical examination, while also pointing to the potentials of these networks.

In the conclusion Gehl sheds light on the Youth Liberation Front (YLF), which is a forum where young people can communicate without some of the 'dark' experiences they have to go through in the Clear Web such as bullying, trolling, harassing, and other abusive practices. In other words, for this youth, the Dark Web is more synonymous with a safe space where they can communicate anonymously, while not having to participate in the identity centered cultures. This is the main point of the book, the "Dark Web serves as a technological and political alternative to the Clear Web in that its emphasis on dissociating one's activities from one's identity is a direct challenge to the increasing surveillance and monitoring of all other digital activities" (Ghel, 2018: 223). Echoing cyber-feminist approaches, Gehl emphasizes how powerful anonymity can be for young people, the LGBTQ community but also activists, journalists and basically anyone who does not want to replicate the social order and categories of the Clear Web (and beyond).

With so many people, governments and organizations trying to find solutions to the dysfunctionality of the current business model of the web it seems like everyone has been looking in the wrong places. This is a moment where both the Dark Web and the Clear Web are going through 'trial of legitimacy' and the struggles for their use are an opportunity to reexamine how we want to engage with these technologies. If anything, Robert Gehl's book shows us that sometimes darkness can show us the light to an alternative and brighter future, and it is much nearer than we thought.

Elinor Carmi, Department of Communication and Media, School of the Arts, Liverpool University, UK.