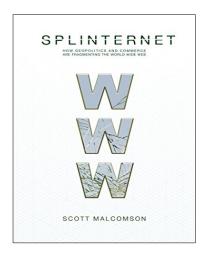
Scott Malcomson, **Splinternet: How Geopolitics and Commerce Are Fragmenting the World Wide Web,** New York and London: OR Books, 2016, 198 pp., \$16.00 (paperback).

Reviewed by Andrea Miconi IULM University, Milan, Italy

The idea behind **Splinternet: How Geopolitics and Commerce Are Fragmenting the World Wide Web** is well defined and useful for nonspecialist readers: The Internet must not be taken as a given, as its history needs to be analyzed with respect to the part played by different institutions. More specifically, within the discussion about the role of the nation-state in the fragmentation of the Web—the so-called Balkanization (Sunstein, 2017)—the book takes a different side. Rather than defining a linear evolution from global to regional Internet, author Scott Malcomson draws a cyclical trend, according to which the Web has been shaped in any decade by *both* the state and the market, public and private powers. In so doing, the author sheds light on the three main players involved in the history of the Internet: public institutions, high-tech companies, and countercultures.



Even though the book is organized around three thematic areas ("The Virtual Reality of Modern War," "Liberation Technology," and "The Splinternet"), we can usefully divide this story into five different periods. In the first one, at the time of World War I, the state plays a pivotal role in both technological innovation and propaganda research: in both cases "innovation came from war" (p. 20), as it often does in the history of modern communication, or modern industry in general. The foundation of the National Research Council, in constituting the "birthplace of the military-industrial-academic complex" (p. 23), is the peak of this first cycle. A short intercycle then occurs in the 1920s—also due to the disengagement of the state after the end of World War I—which rather deals with the rise of private companies. During the decade, Ford and General Electric are the driving forces behind the consolidation of the first "Machine Age" in human history—an age allegedly dedicated to peace and cooperation.

Then the Great Depression begins, and here, once again, media history is one with 20th-century history. In times of crisis, the role of public agencies returns to dominance, as it will for a very long period, starting in the 1930s and taking shape in the age of totalitarianism and World War II. This is when the military-academic complex reached the height of its power, by giving rise to such innovations as fire control systems, the cybernetics paradigm, and, of course, the computer. In the aftermath of World War II, American public institutions still control the destiny of technological innovation, due to the Cold War and the rise of the Soviet Union, resulting in nuclear weapons tests (1949) and the launch of Sputnik I (1957). The Advanced Research Project Agency (ARPA) as we know, is the most significant result of this stage, paving the way to the Arpanet infrastructure and to the digital, wired world as we know it.

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A fourth, different period then begins in the late 1960s, during which time the same project—the interconnection among computers—will be put to the test of a different ideology. Now subcultures, and specifically Californian countercultures, take the stage, as they start spreading a new idea dealing with the participative rather than the governmental potential of informatics. This real *rebranding* of the computer—which moved from being an academic resource to becoming a democratic tool and a "technology of freedom"—happens, according to the author, between 1967 and 1972. The role of *hackers*—which took this name in 1959, as it happens, in California—is a well-known aspect of the process, which would shape the Internet without any consideration for the role of the state:

These were not really government people. They had their own subculture which was apolitical or maybe antipolitical. It was a subculture that valued discussion and consensus, rather than campaigning and voting, and which valued smart work, specifically the work of writing code to solve real problems. (pp. 125–126)

So far, our story is quite familiar, as it differs little from many others, all focusing on the discontinuity between a public and private paradigm—as in Manuel Castells' (1999) transition from "technoelite" to hackers and eventually to the market stage; or in Robert McChesney's (2013) claim that capitalism eventually turned the Internet against itself. In Malcomson's work, on the other hand, there is a further period to consider—a period that affirms the return of the state in the age of globalization.

As to the beginning of the fourth period, all clues lead to U.S. Democratic President Bill Clinton, due to two main 1990s events. In 1995, Network Solutions, which took care of the maintenance of online naming, came under the control of the defense contractor SAIC (Science Applications International Corporation), while in the previous decade it existed as a subcontractor for foreign telecommunications companies. In 1998, the same task would be assigned to the brand-new ICANN (Internet Corporation for Assigned Names and Numbers), on behalf of the U.S. Commerce Department, this time, rather than the U.S. Defense Department—so that the conversion of the Internet from a military-academic to a business infrastructure is now a state of fact. Even if the goal of the Clinton administration was often considered the "privatization" of the Internet, according to Malcomson (and his most original contribution), "this wasn't quote right" (p. 133): we are rather witnessing the rise of a new alliance between the state and the market, with public and private companies going hand in hand.

If anything, events of the 1990s began the defeat of the third player, the counterculture, put out of business by its powerful competitors. What is perhaps missing, in Malcomson's historical overview, is the different profile adopted by the state, now acting as *regulator* more than as an investor. Maybe some space could be dedicated to this transition from classical to neoliberal state, capable of even working against its own interests and coming to terms with media corporations. In any case, the bursting of the high-tech bubble on Wall Street, in 2000, and the resulting financial instability, will eventually strengthen this relationship between public and private, by making evident the fact that the market is never self-sufficient, and the digital marketplace makes no exceptions to the rule.

Splinternet does provide a very interesting account of the evolution of the Internet, and some insights are original enough, namely, the role of the state in the age of 1990s postnational optimism, or the

unexpected governmental funding of Silicon Valley, at the very beginning of its history. As should be evident, though, *Splinternet* focuses only on the American case, which is totally understandable with respect to the first part of the story, while it is less convincing when it comes to the new century—when many states, and authoritarian states above all, play an even more decisive role in the Balkanization of the Web. As to American history, in its turn, some peculiar aspects—the fight against Web monopolies, or the debate about Net neutrality (Wu, 2011) —might have deserved some consideration.

Finally, I offer a few words from the theoretical standpoint of Internet studies—and here things may become more complicated. As stated, I consider Splinternet an ideal book for nonspecialists, but with respect to academic standards, some aspects are rather questionable, such as the unstable definition of open and closed systems, or the use of informal sources and "not-for-attribution discussions" in the final chapter, which makes it difficult to come up with a scientific evaluation. The main aspect I would focus on, though, is the lack of a sociological framework, which, if present, would have made readers able to better understand the relationship among different players, as it took place over the decades. To some extent, Splinternet tells an interesting but blind story, so to speak, with no space for the way innovation eventually spreads and is sold to the audience. This is not totally wrong, for sure, nor, in my opinion, is it only a matter of theoretical assumption and bibliographical references. A framework—the social construction of technologies, for instance (Bijker, 1995; Pinch & Bijker, 1987)—can obviously act at a hidden level, but it is needed, in any case, to deeply understand the relationships among the U.S. public agencies, the other states, global companies, the final audience, and the groups likely to mediate among them. In this sense, for a better understanding of the social history of the Internet, it is also necessary to investigate public discourse about innovation, the rhetorical construction of the information gateway as a common good, and what is more, the role of specific groups capable of defining and spreading this discourse. From this standpoint, we could easily reach a different definition of the third player, the countercultures, whose role in the rebranding of the computer proved to be organic to the overall organization of the state-companies complex (see Turner, 2006). Rather than being defeated by its competitors, the hacker subculture provided them with a powerful, democratic-like legitimization, acting as a "displaced mediator," to put it in Jodi Dean's (2010, pp. 20-32) words. If we consider this hypothesis, the story of the Arpanet/Internet can reveal a different pattern: not a simple conflict among groups, but the struggle for the definition of a new equilibrium among the different fields or spheres, from which international capitalism is made.

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