Article

The Political Economy of the Internet: Social Networking Sites and a Reply to Fuchs

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Abstract

The privatization of the Internet meant not simply a passage from a state-logic organization to an economic one but something more complex. The year 1995 marked a disruption when the National Science Foundation (NSF), the public agency that controlled and exploited the network, transferred its regulatory responsibilities to the private sector. Despite the system's provision of free access to information, the Internet's entire economic logic was modified when advertising became the standard norm. The objective of this article is to summarize the history of the Internet and the points that are important to understanding its actual political and economic logic via an emphasis on social networking sites. Our argument also involves a Marxist critique of a theoretical element that Fuchs has contributed to this discussion.

Keywords

Internet, political economy of the Internet, social networking sites, class struggle, capitalism

Of Internet Political Economy: A Brief History

Supported by the Department of Defense during the Cold War, the U.S. government joined scientists and militaries to develop a network that could grant information security in case of nuclear attacks by the Soviet Union.¹ From their efforts, military and

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government officials, scientists, and high-tech workers created Arpanet. In this first phase—from the 1960s to the late-1970s—the network grew slowly and gradually via public investments. It focused on experimentation, which was crucial to the development of most of the network's technological advances we have today, such as Ethernet cable and Transmission Control Protocol/Internet Protocol (TCP/IP).

By the late-1970s, other entities entered the field when the public agency that controlled and exploited the network, the National Science Foundation (NSF), granted these same capacities to the private sector. In 1979, the first information service, known as Compuserve, was created. In 1985, the Domain Name System (DNS) ranked machine connections over the network. At the same time, the Bulletin Board System (BBS) started to be used as one of the first communications services through the network. It was developed by America Online, which became the world's first major Internet service provider (ISP) in the 1990s. The NSF made good use of these first backbones for the system it created. Besides these technical advances, people looked to create the necessary hardware to access the Internet. In 1989, Tim Berners-Lee and Robert Caillau, both scientists from the Organisation Européenne pour la Recherche Nucléaire (CERN), developed the web and released it in 1991 as the World Wide Web (WWW). The WWW involved a new language pattern that allowed multidirectional hypertext and required an Internet browser.

The year 1995 marked a disruption between these two models of organizing the Internet. The NSF solely managed the network infrastructure, while private companies, such as Prodigy, AOL, Compuserve, and Teletel (France), became the first major ISPs (Bolaño et al. 2011). This new regulation² allowed these companies to explore the market for the new network and profit from it.

Privatization allowed free access to information. Nevertheless, the entire logic of the Internet was modified when advertising became the economic model. This meant not simply the passage from a state-based economic logic to a commercial-based economic logic but something more complex. On one hand, from a public economy, focused on state investments, to a market one, according to different kinds of commoditization and, on the other hand, from a political-military logic to a privatization, regulation, and economical globalization one that intended to support the capitalistic restructuration and the maintenance of U.S. economical hegemony in international relations (Bolaño et al. 2011).

The possibilities of transforming small businesses managed by young college students to large Internet firms help to restore the old myth of "self-made man" brought into the Internet business environment. In fact, it is an example of a spatially concentrated cluster of innovation firms that benefited from political decisions, linked to important university centers, and was supported by major venture capital companies (firms specialized in earning money by owning equity in the new companies, usually start-ups and other high-risk and innovative businesses), the first investors of early-staged businesses.

The founders and CEOs of companies such as Yahoo!, Google, and Facebook, for example, came straight from Stanford University, where they were supported with infrastructure like data servers, and received, in crucial moments, the support of

venture capital investment companies such as Sequoia Capital that invested about US\$3 million in Yahoo in 1995³ and, lately, together with Kleiner Perkins Caufield & Byers, invested US\$25 million in Google (1999).

This scenario, with support from the academy, the private sector, and the State, was so attractive to venture capitalists that it was responsible for the Internet bubble in the early 2000s. When Amazon.com share values surpassed Boeing's in 1999, many other online infrastructure companies' shares had their shares overvalued. Nasdaq received a major influx of capital, overvaluing infrastructure companies like Cisco Systems, IBM, Informix, Oracle, Microsoft, and Sun Microsystems (Monteiro 2008). Then, the Internet bubble popped. The companies that grew afterward are the main Internet players that we know nowadays.

The bubble made companies change their strategies. Thenceforward, they used the Internet not only as a tool but also as a platform that was

characterized by the provision of services specifically the ones aimed at accessibility, communication and information (network access providers, content hosting, e-mail, interest groups, chat rooms, search engines, e-commerce, among others). So, companies that work and profit (production/processing/distribution) from information . . . represent a new phase of capitalist accumulation within the production of information. (Monteiro 2008)

The industrial capitalistic model of organization developed in the first half of the twentieth century produced and disseminated information, knowledge, and culture in uneven levels for different media. The Internet is not only an information and communications technology (ICT), nor it is not only some kind of new industry, but actually it is a space for the convergence of all industrialized cultural production. The Internet is the result of the development of new technologies and its interpretation through global expansion (Bolaño et al. 2011).

The technological development that resulted in the creation of the Internet was only the first step in establishing a new model of profit based in another model already known by the Cultural Industry, namely, the audience commodity. The audience commodity is an intermediary product, traded in an intra-capitalistic market (Braz 2011), that may attract the commercial and state interests at the same time. Much like the U.S. television market, in which programs are offered for free to the audience, many Internet services (e-mail, news, communication, weather, games, and freeware) are offered free of charge to the users in order to get their attention. As with television, the audience is the product. "The audience buyers are exactly the sellers of goods and services, authorities, politicians, or, in just one word, everyone who needs to communicate with the audience" (Bolaño 2000, 115-116). Or according to Monteiro (2008), "The migration of major trade companies, media and entertainment to the Internet transformed the international network into another Culture Industry and social commoditization vehicle." Before the Internet, companies never had as many opportunities to track and keep so much information about their customers. Today, the consumer's data chase the advertiser, not advertisers chasing consumers. This happened exactly because the new platform permitted so much data storage that then could be repurposed and exploited (Fuchs, 2011).

So, any product or services offered by Internet companies have a double feature. On one hand, they are commodities produced by informational companies. On the other hand, even though they are offered for free, they are also the means to reproduce advertisers' capital in the final stage of the mercantile circulation process. Advertisers effectively sponsor the system.⁴ Thus, we may conclude that there are no differences between political economy of Internet and the twentieth-century culture industries. In both cases, the concept of "commodity duplicity" (Bolaño 2000) will apply. At the same time, there is an important difference between the television and the Internet. To explain this difference, we turn to a discussion of social networking sites (SNSs).

The SNSs Model

In order not to confuse our topic with the ancient concept of a social network, we will follow Recuero's (2009) concept for SNSs as the Internet sites that host social networks. Although almost every communication system mediated with computers permit social networks, what makes the SNSs different from other systems is the possibility to construct and publish a social network through the web. SNSs allow users to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (boyd and Ellison 2007).

SNSs first appeared exactly when the Internet became available to ordinary users. SixDegrees was the first SNS with these features in 1997. Besides the profiles, the users could create friend lists and, in 1998, they could browse these lists. Despite one million early adopters, the website did not meet investors' expectations and closed the site in 2000. Afterward, other platforms were more successful due to their audience targeting. Live Journal, Asianavenue, Blackplanet, Migente, Fotolog, LunarStorm, Cyworld, and Ryze are the best examples. They gave way to three major SNSs in the early 2000s.

The first major SNS was Friendster. It had so many users that Google intended to buy it in 2003 (Dybwad 2009). Even though it lost some users to MySpace, the second big SNS, especially in the United States, Friendster received more than US\$50 million in venture capital. One of the main investors was MOL Global, the biggest Internet Company in Asia. Based in Kuala Lampur, Malaysia, MOL acquired the company in 2009 for more than US\$26 million (Arrington 2009). The company changed the focus of the platform to online games and other entertainment products for Asian consumers.

Another notorious SNS since 2004 was MySpace. It was propelled by musicians and indie groups using the SNS to publish their work and to host mp3 music files. In 2005, News Corporation bought MySpace from Intermix Media for US\$580 million. In the following year, the site faced phishing attempts, spam, and malwares, leading many users to abandon the network. When Yahoo! tried to buy MySpace, the SNS was said to be worth about US\$12 billion (Aamoth 2008; see also Bolaño et al. 2013). After a brief golden age, MySpace went into decline. It lost about 10 million users in just one month (Barnett 2011) when the board of directors decided to change MySpace from a SNS to a website that focused only on entertainment, music, TV, movies, and celebrities. In 2011, News Corp. sold MySpace to Specific Media for US\$35 million,

only 6 percent of what News Corp. had paid. Specific Media tried to revive the site, but the effort was not successful (Segall 2011).

The third great SNS market entrant was Orkut, a project designed by a Google engineer of the same name in 2001. Google now had a SNS. Together with its surveillance and monitoring systems, Google could manage the information collected by the SNS and cross-reference it with its other search engine databases. According to Bruno (2006, 155–56), Google collects various categories of personal data because

[I]ts main objective is not to produce knowledge about a specific individual, but about groups and populations organized by financial, biological, behavior, professional, educational, actuarial, racial, geographic categories, and so on. This is an infra-individual level of use. Meanwhile, the database is not merely an archive, but carries the functions of registering, classifying, predicting and mediating the data. Algorithms and profiles act to tell all and know how to control the past, present and future of individuals . . . The cross-referencing of the data categories will project, simulate, and anticipate the profiles that correspond to "real" bodies for surveillance, care, treatment, information, consumer deals, including those on or excluded from marketing lists, direct marketing, and public campaigns to prevent risk.⁵

The Orkut case might be generalized to other SNSs. In sum, consumers receive the service for free. The SNS company is paid by advertisers, as in broadcasting, but user reception is active, unlike broadcasting. Users insert their information into the SNS, which then fits users' information into categories matched to their other databases. This means the audience commodity can be extremely segmented for sale to the advertisers. SNSs make the work of company employees easier by helping them produce the statistics, interfaces, algorithms, and other mechanisms that compose their audience commodity.

The Internet as an Accumulation Platform: The Case of SNSs

What makes the capital accumulation process for the Internet different from broadcasting is precisely the way it acquires the audience commodity. Television advertisers buy statistics about potential viewer attention to advertisements, a passive audience model. Internet companies instead may offer and refine information collected from an active audience when users spontaneously provide data about their personal tastes, preferences, desires, and pathways through their browsers (see also Pariser 2012). Internet advertisers thus can more accurately target the audiences they intend to reach.

We are not affirming that this is the only model of capital accumulation on the Internet. Many different kinds of business organizations and models coexist with many other forms of communication that are not necessarily mercantile-based. In the case we are discussing, however, the final consumer does not pay anything; every product or service offered by the companies are financed by a third party, the advertiser, who buys the audience commodity obtained in this business model, also known as "the club logic" (Tremblay 1997). Under these conditions, the concept of audience

commodity—which was usually linked to the broadcasting system—now reemerges in this three-way mediation structure on the Internet. In analyzing SNSs, this structure is essential to evaluate the contemporary competencies among the companies that use the Internet as a business platform for buying and selling information, not just as a simple tool. Of course there is more of this story to be told. Significant moves among mobile phone networks and hardware sectors will lead to important changes in the near future, but that is beyond the scope of this article.

Fuchs (2012a, 2012b, 2012c) also highlights the transformation of the users as audiences. His concept of audience commodity, however, follows an old definition, proffered first by Dallas Smythe, and different from ours, as revealed in one crucial excerpt:

Due to the permanent activity of the recipients and their status as prosumers, we can say that in the case of Facebook and the Internet, the audience commodity is an Internet prosumer commodity (Fuchs 2012a, 711).

In Fuchs' capital accumulation model for SNSs, any user activity, as well as any content eventually produced by them, is only of interest to the Internet company as a raw material that, then, informational workers produce as the audience commodity and sell to advertisers. The workers are the only ones to produce economic value by refining users' data through software, algorithms, and other intellectual tools. Fuchs proposes here that the users' activity does not produce exchange-value. Instead, he argues that Internet companies exploit SNS users in two ways. First, companies mine user-produced content as raw material for its search engine's cataloging system. Without "free" content generated by the users, Google would never be able to retrieve its search results. Second, the companies' surveillance of users' browsing habits in either the search engine or via SNSs is based on users' tacit permission to allow these companies to track, stockpile, and manipulate the information derived from usage.

Actually Fuchs is identifying a more unique process, perpetuated by companies' most powerful mass subjectivity-capture search engines. Above all, this process is not a kind of exploitation, or even the two kinds of exploitation that Fuchs claims. Search engines use not only the information produced by users at no charge to them but also the information contained in their browsing traces. These produce, at the end of the process, the audience commodity. Thus, there is no productive work in the actions of what the author calls "prosumer." The following excerpt highlights the author's error:

Google does not pay the users for the production of content and transaction data. Google's accumulation strategy is to give them free access to services and platforms, let them produce content and data, and to accumulate a large number of prosumers that are sold as a commodity to third-party advertisers. (Fuchs 2012b, 45)

If SNSs followed a purely mercantilist logic with price exclusions, as in the case of cable TV, users would pay for access to the service. Nevertheless, Google would not have to pay users for the product that is offered to them, because the adopted financing

model consists of selling the audience commodity, just as in the case of standard broadcast television. The main difference between the latter two, as previously stated, is that the audience commodity is composed of the users' information. Smythe also made a mistake in arguing that people watching TV were working for the advertisers, but now this mistake returns in Fuchs's tour de force.

The productive labor in SNSs is precisely the work done by employees, engineers, researchers, and much other kind of professionals that produce statistics, interfaces, and algorithms that make possible the constitution of the commodity audience. The content produced by the users is simply the raw material necessary for that job role. Fuchs cannot see the problem of commodity duplicity, which is intrinsic to culture industries. So, he affirms that with the SNSs:

Not a product is sold to the users, but the users and their data are sold as a commodity to advertisers. Google's services are not commodities. They are free of charge. The commodity that Google sells is not Google services (like its search engine), but the users and their data. (Fuchs 2012a, 45)

When Fuchs says that Google services are free of charge, he does not consider the role of the advertisers. So, although they are free of charge for the user, someone else is paying for them.

What really occurs is more complex. The user receives the SNS service for free because there is a "third-payer" (tiers payant in French) that finances the process. Individuals do not pay, in other words, because advertisers pay for the process, also called "indirect commoditization" by Herscovici (2009, 9). In this case, the server (human or electronic) plays the central role and negotiates the rights of circulation through elaborating the marketing strategies and offering the products or services in exchange for a subscription (Tremblay 1997). At the same time, as we have argued, the audience is also produced as a commodity, with its own exchange-value, specific use-value, just as it was in the old broadcasting industry model. What is sold by Google, by the way, is not the users themselves, as Fuchs proposes in the above excerpt, because the advertiser does not buy any individual users or even their singular information. Advertisers buy only an amount of data about a target audience based on categories, as we have outlined.

Looking ahead, we agree with O'Reilly (2006) that the company that is capable of targeting a critical mass of participant-users and is able to transform it, or the information the users generate to be more precise, will be the winner. The capacity to invest directly in the personalization/relevance binomial is crucial to keeping competitive in this market, because "For marketers, more data could mean getting closer to the ultimate goal of advertising: Sending the right message to the right consumer at the right time" (Sengupta 2013, 2).

Conclusion

During the 1990s, the liberalization and restructuration of both the Internet and the telecommunications industry in accordance with the project to create a global

informational infrastructure started a new phase of commercialization which enabled the exponential rise in the number of corporations that sold infrastructural products and basic network services for the web. This phase came to end when the Internet bubble popped. The recent wave of market concentration has left a small oligopoly.

Yet the social logic for cultural industries is the same as before. Industries devise innovative services that can reach a massive number of viewers or users to amuse themselves, and to relinquish, at the same time, their personal information for the databases that are really responsible for corporate profits. In recent years, competition within this logic honed in on SNSs as the newest extension of this process. Google and Facebook are the biggest exemplars of corporations that, through tracking and collecting information, today are transforming collective subjectivity into profits.

In this article, we summarized the particularities of the political economy of SNSs and its similarities and differences in relation to broadcasting television's economic model. The production of the audience commodity is the permanent anchor of both systems. Fuchs perceived this well, but his theoretical reading suffers from the same disabilities that we have seen in the foundations of an Anglo-American agenda for a critical political economy.

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Notes

- We may distinguish the network (as known as the Internet nowadays) from World Wide Web (WWW). The former is the technical support. The latter is only the interface created in 1999. The web was a milestone in Internet history because it allowed ordinary people to access the network.
- 2. We use here the French School conception of regulation.
- See the Yahoo! Timeline at http://online.wsj.com/news/articles/SB1000142405297020351 3604577140950546379684
- 4. There is an extensive discussion among Marxism's core followers since Baran and Sweezy (1966), as interpreted by Smythe (1981), about the role of advertising in the process of capital reproduction. Here we follow the position taken by Bolaño (2000).
- 5. Here we are certainly building on approaches based on other theorists, such as Foucault and Deleuze, but our approach is strictly Marxist. As such, we consider any kind of technological development in capitalism useful to exploitation and domination systems in a contradictory way. The Internet is an example of this. On one hand, it is a large structure for horizontal communication, allowing many social movements to act. On the other hand, we cannot see this positive feature unilaterally with an optimistic or relativistic eye, which would see technological development as neutral.

6. There is no doubt that Smythe deserves the credit for formulating fairly, for the first time, the question about communication in the Marxist field, which led to the first school of Political Economy of Communication *stricto sensu* in the world. Nevertheless, his solution has a mistake that is well known in Anglophonic literature. In Ibero-American field, see Bolaño (2000). The Spanish edition of this book was published by Gedisa, in Madrid, in 2013 and the English edition is to be published.

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