

O Brave New World: The Dark Side of Cyberspace

Arthur Asa Berger

(Received 3 September 2016; accepted 15 November 2016)

Abstract

This article focuses on some of the negative aspects of cyberspace and cyberculture. First, it offers an examination of the impact of our use of social media, and Facebook in particular, on our psyches, pointing out that users of social media can be thought of as audiences. These audiences and information about them can be sold to marketers and advertisers. Next, it offers a case study of a widespread social problem in Japan, more than a million media-obsessed Japanese young men (and some young women), the *hikikomori*, who shut themselves off from society for months or years at a time. This is followed by a discussion of the impact of mobiles, primarily smartphones, on American adolescents, some of whom text one hundred messages a day to their friends. The effects of the enormous amount of face-time young people spend with screens—around ten hours per day—are also considered. Finally, there is an examination of the impact that Amazon.com, the leading e-commerce Internet site, has had on American shopping practices and American culture and society. The article concludes with a discussion of the work of Hubert Dreyfus about some negative effects of the Internet and, by implication, cyberspace and cyberculture, which, he argues, drain life of meaning.

Keywords: Facebook; social media; *hikikomori*; smartphones

Arthur Asa Berger: Professor Emeritus, Broadcast and Electronic Communication Arts, San Francisco State University, United States - Email: arthurasaberger@gmail.com

Journal of **Cyberspace Policy Studies** | Volume 1 | No. 1 | January 2017 | pp. 19-35
Web page: <https://jcpolicy.ut.ac.ir> · Email: jcpolicy@ut.ac.ir
eISSN: 2538-6255 · Print ISSN: 2538-6263 · DOI:10.22059/jcpolicy.2017.59868 19

Miranda:

O wonder!

How many goodly creatures are there here!

How beauteous mankind is! O brave new world

That has such people in't!

Prospero:

'Tis new to thee.

Shakespeare, *The Tempest* Act 5, scene 1

The literature on cyberspace is rapidly becoming a significant element in popular culture. Following Sterling (1990), cyberspace is best considered as a generic term which refers to a cluster of different technologies, some familiar, some only recently available, some being developed and some still fictional, all of which have in common the ability to simulate environments with which humans can interact. Other writers prefer the term computer-mediated communication...to refer to much the same set of phenomena.

Mike Featherstone and Roger Burrows. (1995). "Cultures of Technological Embodiment: An Introduction." In Featherstone and Burrows, *Cyberspace/ Cyberbodies/ Cyperpunk: Cultures of Technological Embodiment*.

The research examined the social and psychological impact of the Internet on 169 people in seventy-three households during their first one or two years online.... In this sample, the Internet was used extensively for communication. Nonetheless, the greater use of the Internet was associated with declines in participants' communication with family members in the household, declines in the size of their social circle, and increases in depression and loneliness....

Hubert Dreyfus. (2009). *On the Internet* (Second Edition)

We all know about the positive aspects of our brave new world of cyberspace and the wonders that computers and the Internet have brought to us. Radiologists in India review images taken in American hospitals at midnight, when American radiologists are not available. Grandparents can Skype with their grandchildren in distant cities and maintain contact. We have companies like

Uber and Google that have revolutionized our lives. One could go on and on about the marvelous things our new technologies and cyberspace have brought us. Howard Rheingold, a futurist who has written extensively on cyberspace, explains how the Internet has had a positive impact on our societies. He writes, in *Net Smart: How to Thrive Online* (2012, p. 148):

Mass collaboration has transformed not only the way people use the Internet but also how information is found (Google's PageRank), knowledge is aggregated (Wikipedia), science is conducted (citizen science), software is created (social production of the free Linux operating system and Firefox, the second most popular Web browser), computing power is harnessed for research (distributed computation), people are entertained (massive multiplayer online games), problems are solved (collective intelligence), news is gathered (citizen journalism), disaster relief is delivered (crisis mapping and emergent collective response), communities are formed (virtual communities), and commercial products are designed and tested (crowdsourcing). It isn't easy to think of a realm of human behavior that has not been influenced in some way by some form of mass collaboration.

It is Rheingold's conclusion, that the Internet and cyberspace have influenced just about every realm of our behavior, which is of particular interest to me and what I write about in this investigation.

This article differs from many positive or even Utopian perspectives on cyberspace in that it considers the 'dark side' of its impact on culture and society, examining topics such as Facebook's effects on our identities, the problem of social withdrawal by media obsessed Japanese youth, the fascination young Americans (and many older ones) have with their mobiles/smartphones and the cultural and economic impact of Amazon.com, all disruptive phenomena whose influence on our youth, our identities and our economies has been enormous. We are only now beginning to recognize how much cyberculture is affecting us—and in

many cases, its consequences have not been positive. One of the main problems societies face now is figuring out how to live with cyberspace and prevent it from dominating everyone's lives and disrupting our societies.

Facebook and Identity Problems

There are more than a billion people who use Facebook every day. They post photos of their children, their cats, their dogs, cute videos of one sort or another, and all kinds of other things. Something like 75% of Facebook is made of visual images. Most people see Facebook as a harmless means of communicating with others, of sharing images and thoughts that might be of interest to their friends—real and digital. Some people collect Facebook friends and may have thousands or hundreds of thousands of people who follow them on Facebook. Some people use Facebook as a means of self-promotion: to market themselves and services and products they sell.

In his book, *Social Media: a Critical Introduction*, Christian Fuchs reminds us that Facebook users are also an audience, a commodity to be sold to advertisers. While they market themselves to other people on social media like Facebook, they (and information about them) are marketed by Facebook and other social media to advertising agencies (Fuchs, 2013, p. 107).

Dallas Smythe (1981/2006) suggests that in the case of media advertisements models, media companies sell the audience as a commodity to advertisers.

Because audience power is produced, sold, purchased and consumed, it commands a price and is a commodity. [...] You audience members contribute your unpaid work time and in exchange you receive the program material and the explicit advertisements.

(Smythe, 1981/2006, p. 233, 238)

With the rise of user-generated content, free-access social networking platforms, and other free-access platforms that yield profit by online advertisement—a development subsumed under categories such as Web 2.0, social software and social networking sites—the web seems to come close to accumulation strategies

employed by capital on traditional mass media like TV or radio. Users who upload photos and images, write wall posting and comments, send mail to their contacts, accumulate friends or browse other profiles on Facebook, constitute an audience commodity that is sold to advertisers.

What Fuchs makes clear is that people on Facebook not only are using it for their own purposes but are also being exploited by Facebook, which makes billions of dollars from selling its audience and information about the members of this audience to marketers and advertising agencies.

There is another aspect of Facebook that is worth considering: the impact it has on our psyches. From a psychoanalytic perspective, we have to wonder: how accurate are the ways we present ourselves on Facebook? This question is complicated by the fact that people can have many different personas (the term 'persona' means mask) on Facebook. Someone who claims to be a doctor can be a bank clerk and vice versa. A child can claim to be an adult and an adult can claim to be a child.

An Australian psychiatrist, David Brunskill (2013), offers us some insights into the way people use Facebook and the profound impact Facebook often has on their lives. He writes, in his 2013 article "Social Media, Social Avatars and the Psyche: Is Facebook Good for Us?" that:

going on line leads to a "state of disinhibited and dissociated personhood," which becomes the basis of our online e-personality, a kind of vital and energetic representation of ourselves that differs markedly from our offline personalities because our online personality is not controlled by the traditional rules that shape our behavior.

So there is often a difference between our offline personalities and our online personalities that is worth considering. He concludes that our e-personalities tend to exhibit disturbing symptoms such as grandiosity, impulsivity, narcissism, darkness and a regressive quality, what he calls the 'Net Effect,' and writes:

Inherent to the experience of using social media is

the self- selection of favorable material to represent the individual. This process is cumulative, and effectively creates a socially-derived and socially-driven, composite online image ('social avatar'). Humans notably select their best aspects for presentation to others and the social avatar reflects this tendency, effectively facilitating the creation of a 'gap' between online image (representation) and offline identity (substance). The creation of a social avatar should therefore be an important and conscious consideration for all users of social media, not just those individuals already struggling with the task of integrating the multiple facets which make up modern personal identity. Social avatars appear to be an important factor in understanding the inherent potential for social media to affect the psyche/ contribute to psychopathology within the individual.

What Brunskill teaches us is that going online on Facebook (and by implication other social media) and creating our personas or e-personalities has certain dangers as far as our psychological development and well-being are concerned.

In his article "Cyberspace and the World We Live In," Kevin Robins (1995, p. 138) speculates on the matter of identity and cyberspace:

In cyberspace, "subjectivity is dispersed throughout the cybernetic circuit...the boundaries of the self are defined less by the skin than by the feedback loops connecting body and simulation in a techno-bio-integrated circuit" (Hayles, 1993, p. 72). In this accommodating reality, the self is reconstituted as a fluid and polymorphous entity. Identities can be selected or discarded almost at will, as in a game or a fiction.

We can see how these dangers posed by our behavior on the Internet can evolve into serious social problems if we look at the difficulties Japan faces now with its generation of socially withdrawn youth, the *hikikomori*.

The *Hikikomori* in Japan: A Case Study of a Silent Epidemic

In Steven T. Brown's book *Tokyo Cyberpunk: Posthumanism in Japanese Visual Culture*, he writes about some bizarre Japanese films such as Tsukamoto Shin'ya's *Tetsuo: The Iron Man* and Kurosawa Kiyoshi's *Kairo*. The latter film, a 'techno-horror' work, is of interest because Brown connects it to a widespread social disorder in Japan, which they call *hikikomori*. It means, literally, to 'pull away' and 'to seclude oneself.' The term, he explains, describes (2010, p. 118) "both the social disorder and those who suffer from it." Brown writes (2010, p. 117-118):

Hikikomori is a term coined by psychiatrist Saito Tamaki to describe the social withdrawal of reclusive youth, 80% of whom are male, who shut themselves in their rooms and avoid face-to-face interaction for six months or longer following acute social or psychological trauma, typically triggered by an event that has occurred at school, such as academic failure, bullying or jilted romance.... It is estimated that approximately 1.2 million Japanese men (20% of all adolescent males or 1% of the entire population) in their late teens and early twenties suffer from *hikikomori*, thus making it a social disease of nearly epidemic proportions. The majority of those suffering from *hikikomori* are eldest sons who live with their middle-class parents in the suburbs of Japan's largest cities. Many *hikikomori* sleep during the days and spend their nights in seclusion, playing video games, watching television, reading books and manga, and surfing the Internet.

Brown adds that this behavior is spreading to Korea and China. Brown quotes a Japanese scholar, Fujiwara Mariko, who argues that the problem has developed because Japanese teens spend so much time interacting with electronic devices that they've lost the ability to interact with others, face-to-face. A Japanese novelist, Murakami Riu, suggests that the *hikikomori* may be harbingers of a new kind of society, full of people who are socially withdrawn and whose problems are exacerbated by

their increased reliance on electronic media, the Internet, and the various gizmos that adolescents use to entertain themselves. These socially withdrawn Japanese youth rely to a considerable extent on the Internet and electronic devices to facilitate their self-imposed seclusion.

Brown suggests that Japan may be a special case, because of its distinctive cultural arrangements. It is a very conformist culture and those who do not conform are often ostracized or bullied. In Japan, traditionally fathers have relatively little to do with their children, there is tremendous pressure on young people to succeed academically, at all grades, and Japan's economic problems have had a profound impact on the sense of possibility of Japanese youth.

Research I did on the problem for a book I wrote on Japanese tourism and culture shows that when they do return to society, the *hikikomori* generally don't get full time jobs, don't find girlfriends and don't learn 'normal' lives. Brown concludes that the epidemic of social withdrawal has created a 'lost generation' that will be a burden on Japan's health and welfare system for many years.

A question now suggests itself. Is Japan, with its distinctive culture, an exception or are other countries, even if they aren't as conformist as Japan, heading in the direction of Japan as far as a problem with large numbers of socially withdrawn youth is concerned? Is it the culture that is at fault or the electronic gizmos that youth use so much? Or both? We turn now to an electronic device that has implications for the discussion we have just had, a gizmo that has revolutionized our lives since it was first introduced: Mobiles aka Smartphones.

Mobiles aka Smartphones and America's 'Alone Together' Youth Surveys suggest that 34% of Americans continually check their smartphones throughout the day. It has been estimated that many Americans check their smartphones from one hundred to one hundred and fifty times a day. Around 70% of American high school students have cellphones and smartphones and they use them to text endlessly. We know that some teenagers send as many as one hundred texts messages to their friends each day. An article on the Huffington Post's Internet site (2012) offers interesting statistics on this topic.

Teens might appear addicted to Facebook, Twitter, Tumblr or Skype, but according to a new report by the Pew Internet & American Life Project, texting ranks as the number one mode of communication among them. Kids between the ages of 12 and 17 text a median of 60 times a day -- up from 50 in 2009. To conduct the study, researchers surveyed almost 800 teenagers between April and July 2011 and conducted a series of focus groups. According to the report, girls take the lead as the most frequent texters (a median of 100 a day, compared to 50 for boys), but boys were responsible for a greater increase from 2009 -- they jumped from 30 texts daily.

About 77% of teens own a cellphone with one in four owning a smartphone. And most are texting. 75% said they actively text; 63% said they text every day. Their voices aren't as active as their thumbs, however, only 39% make calls daily. Those who texted the most were more likely to talk on the phone as well. Only 29% send messages through social networking sites -- surprising considering 80% of teens use them. Huff Post Teen blogger April H., recently wrote that "social media is like a drug" to many kids. Less than half of those surveyed, 35%, say they socialize face-to-face with friends outside of school. The study is on par with a Nielsen survey conducted in December which found that teens send an average of 3,417 texts a month, 7 times an hour. Girls were the most verbose in their findings too -- they send 3,952 messages per month compared to 2,815 by the boys (Samakow, 2012, March 19).

There is also the problem of screen time and young Americans. They spend around ten hours a day looking at screens: on television sets, on computer monitors and on their smartphones. And, as the Huffington Post citation shows, only 35% socialize face-to-face with their friends while 63% text every day.

This non-stop texting signifies that a change of major proportions is taking place in adolescent social behavior in

America, with texting taking the place of face-to-face interactions among young people. That explains why young Americans can be 'alone together,' as Sherry Turkle of MIT put it. Considering the nature of texting and the role it plays in the lives of adolescents, it seems reasonable to suggest that there is also an element of obsessive-compulsive behavior to texting one-hundred messages and day or around three thousand messages a month. The texts tend to be phatic in nature, but there is a certain amount of pressure on texters to like the right pop stars, films, songs and fashions.

We must wonder--American young children and adolescents (and by implication young people and adolescents in many other countries) may be 'alone together' now, but will they be alone and by themselves (like the Japanese *hikikomori*, stuck in their rooms for six months or ten years) in the future? There are aspects of culture in the United States and most other countries that suggest we won't develop a million shut-ins like the Japanese but the fact that so many young American children and adolescents are avoiding face-to-face interactions is troubling.

Amazon.com: The Great Disrupter

With the possible exception of Ali Baba in China, Amazon.com is the largest e-commerce company in the world. The statistics about Amazon.com are remarkable:

- 107 billion in net sales in 2015
- 230,000 employees
- 304 million users worldwide
- 40 million Amazon.com Prime members (who pay \$96 a year to belong)
- 89 gigantic Amazon warehouses scattered all over the world
- 2 billion products sold in 2014
- 3.4 million books on sale through Amazon.com
- 44% of web shoppers go to Amazon.com directly when contemplating a purchase

Amazon.com began as an e-commerce bookstore in 1994, founded by Jeff Bezos. It quickly expanded and now has a market

capitalization that is greater than Walmart, America's largest retailer. An article in *Statistica* describes how powerful a brand Amazon.com has become:

Amazon.com is an international e-commerce company offering online retail, computing services, consumer electronics, digital content as well as other local services such as daily deals and groceries. According to recent industry figures, Amazon is the leading e-retailer in the United States with more than 88.99 billion U.S. dollars in 2014 net sales. The majority of the company's revenues are generated through the sale of electronics and other products, followed by media and other activities. As of the third quarter of 2015, the e-retailer reported more than 294 million active customer accounts worldwide. Due to Amazon's global scope and reach, it is also considered one of the most valuable brands worldwide. The online retailer does not only lead in terms of desktop retailing but has also taken to mobile commerce. As of January 2014, Amazon had more than 14 million mobile-only visitors aged 25 to 34 in the United States. Recent data also indicates that the e-retailer also leads the global rankings regarding mobile conversion rate as 7% of mobile visits result in a sale on the website (Accessed 8/31/2016).

The Amazons were a race of gigantic women warriors in classic mythology. There is, then, implicit in the name of the company the idea of 'warfare' and 'battling' and of great size. In the case of Amazon.com, it is battling for the attention and money of consumers and is at war with conventional stores in 'brick and mortar' buildings. And it is winning.

Amazon was not profitable for many years because Bezos used Amazon's profits to build an infrastructure—the gigantic warehouses that are found scattered through the United States and are in other countries as well. Eventually Amazon was positioned to dominate e-commerce in the United States. As a result of the growth of Amazon.com, many weak 'second class' malls with anchors such as Sears, are going out of business. The same applies

to department stores like Macy's that anchor more upscale malls, which are also in trouble. Macy's recently announced that it is closing one hundred stores because they are not profitable.

Amazon also manufactures electronic devices, such as the Kindle, it's very successful e-book reader and the seven-inch Amazon Fire, which sells for fifty dollars. In comparison, an iPad mini 4, which is also seven inches, sells for three hundred dollars, though the iPad is technologically more sophisticated, with a higher resolution screen and better components. Amazon has other tablets that are in the same price range as the iPad mini. The Amazon Fire has Amazon's operating system, instead of the Apple or Android system, but you can get most of the apps on it that people are interested in, so it is quite an achievement. A review of the device on CNET reads as follows:

At its low price, the Fire is an attractive option for frugal customers who don't care about the latest and greatest technology. In fact, it's a great option for those who don't care much about technology at all. For an undiscerning user, the Fire is simply an inexpensive device for watching video, reading, light gaming, browsing the Web and, of course, shopping the Amazon store. At a price this low, you can buy six of them for less than the cost of one **Apple iPad Mini 2** -- you pay for five and **Amazon throws in** the sixth for free....

Amazon tried selling an expensive smartphone, in the same price range as the iPhone, but Amazon's smartphone was a failure. It had to write off more than one hundred and fifty million dollars on that venture. So it went to the downside of the market for tablets and has manufactured other devices with great success. The seven-inch Amazon Fire is one of Amazon.com's bestselling products, along with the Amazon Fire TV Stick, which competes with similar devices from Roku and Google.

Amazon created a new kind of electronic gadget, the Amazon Echo, which can play music (functioning as a kind of loud speaker) but also can answer questions the same way that Apple's Siri and Google's 'Okay, Google' programs do. Many news shows are now tailoring themselves so they can be used by Echo. The Echo uses

artificial intelligence and can learn, based on questions it is asked, so the longer you have an Echo, the more valuable it becomes. Now Apple and Google are racing to create their own versions of the Amazon Echo, which has been an enormous success. Google will call its device 'Home' and sell it for much less than the Echo. We don't know what Apple will call its device.

There are other important components of the company that produce a great deal of revenue, such as Amazon's cloud services and its streaming video which is free with Amazon Prime membership. One can watch many films and old television series on Prime, and, in recent years, television programming which Amazon has produced. Among the original shows are "The Man in the High Castle," "Mozart in the Jungle," and "Transparent." "Transparent" is in its second year and there are twenty episodes of it that are available. It has received excellent reviews.

In the United States, there is now what we might describe as a 'retail revolution' that is led by Amazon and other Internet e-commerce stores. Many traditional retailers have now set up e-retailing departments forming what is called 'bricks and clicks' stores. Whether these 'bricks and clicks' stores will be able to survive over the next few years is unclear. Upscale department stores, such as Nordstrom's seem well positioned but their fate is uncertain. Shopping in upscale department stores is an aesthetic experience, and many of them have excellent restaurants and coffee shops. But other run-of-the-mill department stores—and all kinds of other stores—are in serious trouble. Failed malls now are being remodeled and used for housing, medical facilities and office buildings. Amazon.com may be the leading cause of the demallification of the United States.

Jeff Bezos, who owns Amazon.com, recently purchased *The Washington Post*, one of the most important newspapers in America. Newspapers, like traditional department stores and other kinds of stores, have been profoundly affected by the Internet. Many Americans, especially young Americans, now get all their news from Internet sites or television comedy news shows. So we have the ironic situation of an Internet shopping company coming to the rescue of a print newspaper that like many print newspapers is having trouble surviving.

What Amazon.com will do next is anyone's guess but it

is reasonable to assert that it has had a profound impact on American culture and society. It has used the Internet to reshape the shopping experience of millions of Americans (and others in foreign countries). It is now producing television series and has entered the newspaper business. Where Amazon will cast its shadow next is worrying countless numbers of executives in all kinds of corporations in America.

The Empire Strikes Back

We've seen some examples of the disruptive nature of cyberspace. We play around with our identities on Facebook, often without realizing how perilous this can be for our psychological well-being. We see how the distinctive nature of Japanese culture, where children generally don't have much to do with their fathers and, from their earliest years are under enormous pressure to succeed academically, has led to the creation of more than a million youth in Japan who have withdrawn from society, the *hikikomori*. We have examined the impact that smartphones have had upon American culture and society, with a focus on adolescents who text messages endlessly and who, increasingly, shy away from face-to-face communication with others. And we've examined the impact that an Internet e-commerce company, Amazon.com, has had on the American economy and on shopping.

We might ask: What is to be done? Can anything be done? Should anything be done? Indications are that young people are now losing interest in Facebook, which they see as being used by middle-aged and older people, and migrating to other sites, such as Instagram. But will these other sites generate the same identity problems our adolescents experienced on Facebook? In Japan, there is a concerted effort to deal with the *hikikomori*, but if the problems of disaffected and socially-withdrawn youth are caused by the Japanese school system and Japanese culture, it will be necessary for Japanese culture to change. That is not easy, but it is possible. At one time there were many Salary men and Geishas in Japan, but now there are many fewer, so Japan is changing. But is it changing fast enough and in a way that will help it deal with its disaffected youth?

It may be that as we get older and mobiles become more common, our fascination with them and attachment to them will

wane. E-mail might be an example. People used to be amazed when they got e-mail messages but nowadays, as the e-mail messages seem to flow endlessly into our smartphones and computers, we have a different attitude towards them. Like so many things, they seem to be outliving their attractiveness. Too much of a good thing can become boring.

There is what I call an 'electronic imperative,' which is a term I use to describe the way people become attached to their electronic devices, most of which are connected one way or another to computers and the Internet. Many of the disruptive aspects of cyberspace I've discussed involve young people. Will they grow up and grow out of the problems generated by the dark side of cyberspace when they are adults or will they continue to be affected by their earlier experiences with cyberspace and cyberculture?

We might consider using public policy as a means of shaping the impact of cyberspace on our cultures, but it is difficult to design good public policies. It is not easy to get 'experts' to agree on policies and once they agree, it is difficult to implement those policies. What should the members of the United States Senate and House of Representatives do about regulating our use of cyberspace and the problems that cyberspace poses to American society? The disruptive matters I discussed above are relatively benign when compared to the problems posed by terrorists and hackers.

Much of what public policy experts do, it seems, involves rectifying mistakes made by previous public policy makers. Policy changes generally represent a top-to-bottom approach to dealing with social problems—such as from government bureaucrats to the general public—but more likely it will be a bottom-to-top change in people's attitudes and behavior that will help us deal with the kinds of social and cultural problems caused by cyberspace that I discussed in this article. One thing is certain: once we invented the Internet, the world changed.

At the conclusion of his book, *On the Internet* (second edition), philosopher Hubert L. Dreyfus writes (2009, p. 137):

Not only are we transformed by the way we use our tools...we are not aware of how we are being transformed, so we need all the more to try to make

explicit what the Net is doing for us and what it is doing to us in the process. I've suggested that, where meaning is concerned, what the Net is doing to us is, in fact, making our lives worse rather than better. Living one's life on the Web is attractive because it eliminates vulnerability and commitment but, if Kierkegaard is right, this lack of passion necessarily eliminates meaning as well. It should thus be clear that tolls are not neutral, and that using the net diminishes one's involvement in the physical and social world. This, in turn, diminishes one's sense of reality and of the meaning in one's life. Indeed, it seems that the more we use the Net, the more it will tend to draw us into the unreal, virtual worlds populated by those who want to flee all the ills that flesh is heir to.

Dreyfus does, later in the book, suggest there are some positive aspects to the Net or to what we think of as cyberspace, but his words imply that there are also negative consequences to our fascination with cyberspace of which we must be mindful.

Note

This article draws upon previous writings about the Internet and cyberculture in my books such as *Gizmos* or *The Electronic Imperative: How Digital Devices Have Transformed American Character and Culture* and *What Objects Mean: An Introduction to Material Culture*, but is an enhanced and revised version of these writings.

References

- Brown, S. T. (2010). *Tokyo Cyberpunk: Posthumanism in Japanese Visual Culture*. New York: Palgrave Macmillan.
- Brunskill, D. (2013). "Social Media, Social Avatars and the Psyche: Is Facebook Good for Us?" *Australian Psychiatry*, 21 (6), 527-532.
- Dreyfus, H. L. (2009). *On the Internet* (Second Edition). London: Routledge.
- Featherstone, M & Burrow, R. (1995). Cultures of Technological Embodiment: An Introduction. In F. M & B. R (Eds.), *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment*. London: Sage Publications.

- Fuchs, C. (2013). *Social Media: a Critical Introduction*. Thousand Oaks, CA: Sage.
- Hayles, K. (1993). "Virtual Bodies and Flickering Signifiers," *October* 66: 69-91
- Rheingold, H. (2012). *New Smart: How to Thrive Online*. Cambridge, MA: The MIT Press.
- Robins, K. (1995). Cyberspace and the World We Live In. In F. M & B. R (Eds.), *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment*. London: Sage Publications.
- Samakow, J (2012, March 19). Teen texting: New report shows they send 60 texts a day. Retrieved from http://www.huffingtonpost.com/2012/03/19/texting-and-teens_n_1365650.html.
- Smythe, D. W. (2006) 'On the Audience Commodity and its Work', pp. 230- 56 in M.G. Durham and D.M. Kellner (eds) *Media and Cultural Studies Key Works*. Malden, MA: Blackwell. (Orig. pub. 1981.)