

# American Behavioral Scientist

<http://abs.sagepub.com/>

---

## **Alienation, Exploitation, and Social Media**

P J Rey

*American Behavioral Scientist* 2012 56: 399

DOI: 10.1177/0002764211429367

The online version of this article can be found at:

<http://abs.sagepub.com/content/56/4/399>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *American Behavioral Scientist* can be found at:**

**Email Alerts:** <http://abs.sagepub.com/cgi/alerts>

**Subscriptions:** <http://abs.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations:** <http://abs.sagepub.com/content/56/4/399.refs.html>

>> [Version of Record](#) - Mar 21, 2012

[What is This?](#)

# Alienation, Exploitation, and Social Media

American Behavioral Scientist  
56(4) 399–420

© 2012 SAGE Publications

Reprints and permission: <http://www.sagepub.com/journalsPermissions.nav>

DOI: 10.1177/0002764211429367

<http://abs.sagepub.com>



P J Rey<sup>1</sup>

## Abstract

This article is a critical examination of how capitalism has adapted to the explosion of websites devoted to user-generated content (commonly referred to as *social media* or *Web 2.0*). The author proceeds by reviewing how Marx applies the concepts of alienation and exploitation to his paradigmatic example (i.e., the factory); the author then attempts to extend the logic of both concepts to determine what they might reveal about the structural conditions of social media. A difference of prime importance between the two case studies is that factory work is wage labor coerced by economic necessity, whereas use of social networking sites is apparently voluntary and done freely. The author concludes by arguing that social media users are subject to levels of exploitation relatively consistent with industrial capitalism, whereas the structural conditions of the digital economy link profitability to a reduction in the intensity of alienation. Finally, he infers that social media is not economically beneficial to most users.

## Keywords

alienation, capitalism, exploitation, prosumption, social medias

In the age of social media, the activities that dominate our lives would have been scarcely imaginable to Marx or any other thinker living through the Industrial Revolution. During that singularly transformative moment, social and economic theory aptly focused on the *production of material commodities*. However, as material realities shifted and society increasingly came to be characterized by material abundance rather than material scarcity, a new generation of critical theorists (most notably, the Frankfurt School and Jean Baudrillard) began to emphasize the centrality of *material consumption*

---

<sup>1</sup>University of Maryland, College Park, MD, USA

## Corresponding Author:

P J Rey, 2112 Art-Sociology Building, University of Maryland, College Park, MD 20742

Email: [pjrey.socy@gmail.com](mailto:pjrey.socy@gmail.com)

in structuring the social order. Yet, this moment, too, was short lived. The circumstances in which we presently find ourselves are not simply characterized by an abundance of material goods (and the distinct processes of production and consumption that surround them); instead, our time is defined, first and foremost, by an abundance of *digital information*. Of course, material conditions are no less significant and no less real, but they are, increasingly, *augmented*<sup>1</sup>—that is, encoded or overlaid—both figuratively and literally, with digital information. Moreover, production and consumption no longer appear as distinct as they once did when we examine the social circulation of hyperabundant digital information. Production is increasingly enacted at sites of consumption, and consumption is increasingly being made productive. In fact, when it comes to digitally mediated activity, virtually everything we do can accurately be described as *prosumption* (Ritzer & Jurgenson, 2010; Toffler, 1984). These are the conditions with respect to which I begin my inquiry into alienation and exploitation.

At this moment, the paradigmatic example of the prosumption of digital information is Facebook (although the social media landscape, and Facebook itself, is always evolving). On Facebook, users simultaneously produce and consume a variety of information: profiles, status updates, photos, “likes” and other clicks, streaming media, wall and direct conversations, and so on. Prior to the emergence of social media, much of this information was not conceived of as a commodity, and in fact, most users still do not perceive it as such because this information is produced “ambiently”—that is, as an almost invisible byproduct of the *digital augmentation* of everyday interaction (Jurgenson & Rey, 2010). Typical Facebook users expect no monetary compensation (i.e., wages) for the information they produce; however, this information (given its utility in identifying appropriate targets for various sorts of marketers) constitutes the primary profit model of these companies.

Prima facie, the conditions experienced by social media users could not appear more distinct from the coerced and “cattle-like existence” Marx (1844/1959) ascribed to workers in his paradigmatic example, the factory, where the worker

does not feel content but unhappy, does not develop freely his physical and mental energy but mortifies his body and ruins his mind. . . . His labor is therefore not voluntary, but coerced; it is forced labor. It is therefore not the satisfaction of a need; it is merely a means to satisfy needs external to it. Its alien character emerges clearly in the fact that as soon as no physical or other compulsion exists, labor is shunned like the plague. (p. 30)

The immediate and striking differences between social media and the factory naturally lead any careful observer to assume that both examples are unlikely to be explained by a unitary theoretical framework. Put bluntly, it would be naïve to assume that Marx’s theories, as originally articulated, will provide a satisfactory account of the conditions experienced by users of social media. Marx (1847/1955) himself recognized that “social relations are closely bound up with productive forces. . . . The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist” (pp. 48-49; cf. Shaw, 1979).

The broad question that arises—to which this article can give only a partial response—is, What social configuration will digital communication, particularly social media, give us? The voluntary nature of social media use seems to indicate that users are not alienated by it (an observation that will be defended in depth below). However, both social media and the factory are products of capitalism and are, ultimately, adapted to its purposes. Thus, below the surface, we might expect to find elements of structural parity. Most notably, both institutions are oriented toward enriching owners by expropriating value created by others—that is, exploitation (an observation that will also be defended in depth below).

I choose to start the project by tackling alienation—the process through which capitalism disrupts workers' natural relationships to the objects they create, their labor, their species-being, and to other people—because Marx focused on alienation earlier in the chronology of his own corpus. There has been some previous discussion of alienation and the Internet (e.g., Wellman, Haase, Witte, & Hampton, 2001) that used *alienation* as a technical term derived from social psychology. In fact, this appropriation of the social-psychological use of the term has long been a practice of social network analysts (e.g., Granovetter, 1973). The task of reconciling the Marxian and social-psychological use of the term is difficult because the former is a structural condition and the latter is a subjective state. And, as Kohn (1976) concedes,

in social-psychological usage, “alienation” is an extraordinarily vague and imprecise term. . . . Most definitions agree that alienation involves estrangement from (or disillusionment with, or lack of faith in) the larger social world or oneself. . . . The term has come to imply: powerlessness, self-estrangement, normlessness, isolation (or cultural estrangement), and meaninglessness. (p. 114)

For the purposes of this article, I strictly consider *alienation* in the Marxian sense, which means diverging from this extant literature.

I then proceed to examine exploitation—the process through which capitalists enrich themselves by selling commodities produced by workers and returning only part of the value of those commodities in wages. As user-generated content has come to dominate the web, many commentators have criticized the exploitative structures that are emerging (Andrejevic, 2002; Dyer-Witheford, 1999; Fuchs, 2010; Terranova, 2000; Petersen, 2008).

Christian Fuchs (2010) offers the most systematic attempt at an orthodox Marxian interpretation of exploitation on social media, arguing that, because Internet users are generally paid little or nothing in return for the value they create for social media platforms, the rate of exploitation approaches infinity. Fuchs defines this situation as “overexploitation,” likening it to

employing illegal migrants, unemployed compulsory or illegal workers, students, and precarious and informal workers, [so that] capital can produce goods at a value that is lower than the average social value because its wage costs are lower than in a regular employment relationship. (pp. 187-188)

Citing Dallas Smythe (1981/2001), Fuchs does note that the contemporary conditions in which users/consumers/audience become a source of value are significantly different from Marx's frequently used example of cotton production. I will argue that this difference is even more profound than Fuchs (and others) have recognized insofar as social media prosumption invalidates many of Marx's assumptions about owners', workers', and consumers' basic relations to use value and exchange value. Furthermore, I contend that, although exploitation certainly occurs in social media and remains central to the business model of these platforms, it does not occur at the unprecedented levels that Fuchs and others have claimed because users are compensated for their labor in a manner other than wages.

Because I discuss alienation and exploitation in two separate sections, this article may feel somewhat disjointed, yet I find this approach is preferable, as the two concepts themselves were largely separated in Marx's own work. In fact, the conventional interpretation (inherited from Althusser) is that Marx abandoned his early humanist work in which alienation is the central critique and proceeded to adopt a structuralist perspective in which exploitation is the central critique. Althusser (1964) argued that "in 1845 [around the time he wrote his *Theses on Feuerbach* and *The German Ideology*], Marx broke radically with every theory that based history and politics on an essence of man," which formed the basis of his critique of alienation. Later theorists (e.g., O'Neill, 1982) have argued that Marx is relatively consistent throughout his corpus. In truth, Marx does, occasionally, discuss alienation and exploitation in tandem. For example, in Volume 1 of *Capital*, Marx (1867/1995) describes capitalism as a set of conditions in which "the labourer . . . constantly produces material, objective wealth, but in the form of capital, of an alien power that dominates and exploits him" (p. 625). However, Marx never makes a sustained and systematic attempt to bridge the two concepts, leaving his interpreters with much to argue.

It is somewhat unfortunate that I must enter this rather abstract hermeneutic debate because it threatens to distract from the greater purpose here, which is to contribute to the still rather paltry conceptual arsenal that exists for critically theorizing the web. Nevertheless, the debate over the consistency of Marx's thought does have a stake in this project. Although I am not invested in defending a particular interpretation, the project I propose happens to serve as an empirical test to evaluate whether alienation and exploitation consistently correlate throughout all modalities of capitalism (lending support to Althusser's critics) or whether they fluctuate differentially as capitalism moves through various historical moments (lending support to Althusser).

Ultimately, the intent of the project is to add nuance to the ongoing critical discussion surrounding structural conditions of social media—how capitalism has adapted to social media (or, perhaps, how social media has been adapted to capitalism)—not to defend the enduring utility of Marxist theory. My approach is, self-admittedly, an ad hoc (as opposed to a systematic or, even, dogmatic) application of Marx. However, I do attempt to retain the critical edge of Marxist inquiry by engaging with his major critiques of capitalism and demonstrating capitalism's current relationship to these two historical and supposedly inalienable aspects of its own nature.

Given my assumption that social media signifies a set of social conditions that are fundamentally distinct from the factory, it is certainly questionable whether Marx's theory and economic vocabulary reasonably can and should be stretched this far. Reinterpreting Marx's concepts is likely to prove insufficient to the task fully elaborating the structural conditions of social media use, but it is a useful place to start. I proceed with the assumption that weaknesses in Marx's theory—that is, its lack of explanatory power regarding certain aspects of recent phenomena—may, in fact, prove useful in helping us to identify the points at which entirely new theorizing is required. In short, I make no claim that Marx's theory can provide an exhaustive analysis of social media (or that an exhaustive analysis is even possible). I claim only that the application of Marx's theory may help move the critical-analytical process forward.

## Part I: Alienation

In the *Economic and Philosophical Manuscripts of 1844*, Marx (1844/1959) criticized the structure of early capitalism, detailing how conditions in its factories disrupt workers' natural relationships with objects, labor, species-being, and others (cf. Ollman, 1977; Ritzer & Goodman, 2003; Wendling, 2009). Alienation was particularly troubling during that period because it was unavoidable by most workers. Capitalism brought about an economic transformation that left few alternatives for subsistence except to sell one's labor-time to someone who had ownership over the means of production. This grim reality of *coerced* alienation is what Marx meant when employing the slightly more nuanced term *estrangement* (Wallimann, 1981). In this section, I argue that the structural conditions of social media do not coerce users into the same mechanistic activity traditionally experienced by factory workers. In fact, a general diminution of alienation actually enhances the capacity of social media to generate value. Nevertheless, certain subtle forms of alienation persist and are structurally necessary to this model.

For several decades now, prominent Italian Marxists (cf. Hardt & Negri, 2001; Lazzarato, 1996; Negri, 1989; Terranova, 2000; Tronti, 1966; Virno, 2001) have been discussing the many ways in which immaterial modes of production—including the production and distribution of digital information—are structurally distinct from, yet codeterminate with, traditional material modes of production. This line of thought bills itself as an extension of Marx's (1857-1861/1973) so-called "fragment on machines" in the *Grundrisse*. In this work, Marx describes a transformative moment in human history where the complexity of machines increases (and the complexity of labor is reduced) to the point that machines can replace humans in the labor process, so that

the creation of real wealth comes to depend less on labour time and on the amount of labour . . . but depends rather on the general state of science and on the progress of technology, or the application of this science to production. . . . Labour no longer appears so much to be included within the production process;

rather, the human being comes to relate more as watchman and regulator to the production process itself. . . . He steps to the side of the production process instead of being its chief actor. In this transformation, it is neither the direct human labour he himself performs, nor the time during which he works, but rather the appropriation of his own general productive power, his understanding of nature and his mastery over it by virtue of his presence as a social body—it is, in a word, the development of the social individual which appears as the great foundation-stone of production and of wealth. (p. 704)

To summarize, workers in the advanced stages of capitalism are transformed from engines of physical labor power to transmitters of society's collective wisdom (or "general intellect"). Once the physical labor required for continued economic growth is reduced to a minimum, and such labor is, instead, replaced by knowledge work, virtually all intellectual-capacity-enhancing activity—and, thus, virtually all social activity—becomes productive. This observation led Maurizio Lazzarato (1996) to argue that the primary value generated by immaterial production—even beyond its contribution to scientific or artistic knowledge—is in the organizational power of communication:

Immaterial labor continually creates and modifies the forms and conditions of communication, which in turn acts as the interface that negotiates the relationship between production and consumption. . . . Immaterial labor produces first and foremost a social relation—it produces not only commodities, but also the capital relation. (p. 142)

The Italian line of thought, thus, breaks from conventional Marxism in arguing that, in the current economy, the production of subjectivity eclipses material production in importance.

I find the Italian adaptations of Marx useful to the project of social media because I believe that Marx, in fact, displays a twofold materialist bias in his development of a concept of general intellect. First, he assumes that the ultimate purpose of immaterial labor is to enhance the productivity of material labor. Contemporary scholars, following consumption theorists, from Veblen (1899) to Baudrillard (1970/1998) and beyond, tend to accept the premise that—because human desire is mutable and often oriented toward immaterial resources—our activity is often oriented toward the production or acquisition of those immaterial objects as ends in themselves. Second, and relatedly, Marx tends to focus on general intellect as it is objectified in productive machinery (so-called fixed capital) rather than how it manifests as a capacity of individual laborers. Paulo Virno (2001) defines this expression of general intellect in the labor capacity of individuals as "mass intellectuality," saying,

Mass intellectuality . . . is the depository of cognitive competences that cannot be objectified in machinery. Mass intellectuality is the prominent form in which



the general intellect is manifest today. . . . All the more generic attitudes of the mind gain primary status as productive resources; these are the faculty of language, the disposition to learn, memory, the power of abstraction and relation and the tendency towards self-reflexivity.

This notion of mass intellectuality is more suitable to analyzing social media (than Marx's notion of general intellect objectified in machinery) since users, generally, are not modifying the platform on which they are operating (with the notable exception of open-source products like Firefox or Linux) but are, rather, creating immaterial products on those platforms. Thus, although platform mechanics are, no doubt, derivative of the general intellect, they play a secondary and supportive role in production. Users (and the "mass intellectuality" they manifest) are still directly involved in, and primarily responsible for, what the industry has aptly labeled *user-generated content*. Tiziana Terranova (2000, p. 33) similarly concludes that the Internet is just an extension of the "social factory" (cf. Tronti, 1966) and is, ultimately, subsumed by it, saying "the 'outernet'—the network of social, cultural, and economic relationships that criss-crosses and exceeds the Internet—surrounds and connects the latter to larger flows of labor, culture, and power" (p. 100).

Once we accept that, on the web, productivity become embedded in—or "imbricated" with (Sassen, 2002)—sociality, the need for a close examination of alienation becomes clear. Historically, cyber-Utopians—many of whom are also cyber-capitalists—have championed collective intelligence while uncritically dismissing the possibility of new modalities of alienation. Don Tapscott (1996), for example, asserts that whereas the factory worker

tried to achieve fulfillment through leisure [and . . .] was alienated from the means of production which were owned and controlled by someone else, in the digital economy the worker achieves fulfillment through work and finds in her brain her own, un-alienated means of production. (p. xiii)

However, a satisfying analysis would not merely state this as fact but would attempt to logically demonstrate how a shift in structural relations between the paradigm of material and immaterial production would alter the causal chain of events that, ultimately, leads to the alienation of individual workers. I will now proceed to make a brief attempt at such an analysis.

As illustrated in the previous quotation from the *Grundrisse*, Marx himself predicted that, as the physical labor necessary for basic subsistence was diminished through gains in productivity made possible by mechanization, abstract intellectual labor would replace physical labor as the basis of the economy. Interestingly, Marx (1857-1861/1973) also predicted that this transformation would result in a disjunction between productivity and alienated labor in a capitalist economy, saying "the *theft of alien labour time, on which the present wealth is based*, appears a miserable foundation in [the] face of this new one, created by large-scale industry itself" (p. 704). In his



early etiology of alienation, Marx (1844/1959) highlighted spontaneity and intentionality as essential aspects of the productive nature that characterizes humans' "species-being," saying in the 1844 manuscripts, for example, that "the whole character of a species, its species-character, is contained in the character of its life activity; and *free, conscious activity* [emphasis added] is man's species-character" (p. 31) We can infer from the later *Grundrisse* fragment on machinery that the efficient causes for the apparent diminution of alienation are twofold: (1) Productive activity is no longer separated from the *intentions* of the intellect, and (2) productive activity is no longer coerced (i.e., productivity is allowed to be *spontaneous*).

*Intentionality.* For Marx, imagination is not only an essential aspect of human nature but also the very thing that defines us in contrast to other animals. Marx (1867/1995) states this quite plainly in a passage of *Capital* that reads:

A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality. At the end of every labour-process, we get a result that already existed in the imagination of the labourer at its commencement. He not only effects a change of form in the material on which he works, but he also realises a purpose of his own that gives the law to his modus operandi, and to which he must subordinate his will. And this subordination is no mere momentary act. Besides the exertion of the bodily organs, the process demands that, during the whole operation, the workman's will be steadily in consonance with his purpose. This means close attention. The less he is attracted by the nature of the work, and the mode in which it is carried on, and the less, therefore, he enjoys it as something which gives play to his bodily and mental powers, the more close his attention is forced to be. (p. 124)

This focus on the objectification of consciousness is, no doubt, an inheritance of Hegel's (1809/1979) phenomenology in which the projection of oneself into an object via one's labor becomes an important moment of self-realization because one is then able to recognize (a reflection of) oneself in the object. In this sense, the subjective and the objective are always dialectically related for Hegel, and any separation would be artificial.

Yet, the separation of intellectual life and physical activity—and the consequent alienation—was at the heart of life in the factory. By increasing specialization—making tasks more efficient, more repetitive—to the extent that virtually no thought was required to complete them, humans themselves were reduced to machinery. The exercise of imagination was left solely to the capitalist (and other elites, such as engineers) who orchestrated the means of production, whereas the worker was simply exploited as a source of raw, physical labor power. Marx (1844/1959) explains that the early organization of capitalism "replaces labor by machines, but it throws one section

of the workers back into barbarous types of labor and it turns the other section into a machine. It produces intelligence—but for the worker, stupidity, cretinism” (p. 30).

In contrast, however, advancements in late-industrial productivity prove increasingly contingent on the breakthroughs of the intellect, and it is in the capitalist’s interest to maximize opportunity for such innovation. The transition toward the decentralization of creative work is, probably, best illustrated with the now famous example of “quality circles” in Toyota factories, whereby every worker is incentivized to develop means for reducing the time necessary to complete a task on the assembly line (LeMoyné, Falk, & Neustadt, 1994; Ritzer & LeMoyné, 1991). The logical consequence, of course, is that these workers are participating in bringing about their own obsolescence.

Moving beyond the decades of late-industrial innovation in material production, we have, more recently, begun to witness a postindustrial explosion in immaterial production. As mechanization advances and, ultimately, supplants the need for human physical labor power, postindustrial work takes on a new and increasingly creative character. The conditions of material abundance free the imagination from the pursuit of basic biological necessities and allow it to assume primacy over the physical in directing human activity. Expanding markets for cultural products now depend fully on the fruits of mass intellectually wrought by society’s “multitude” (Hardt & Negri, 2001) of cultural prosumers. As Marx (1857-1861/1973) himself predicted, capitalism becomes “instrumental in creating the means of social disposable time, in order to reduce labour time for the whole society to a diminishing minimum, and thus to free everyone’s time for their own development” (p. 707). We must be clear, however, that within an information economy, labor expended on individual development is always also a contribution to the general intellect through which that labor is reabsorbed into the economy. That is to say, the capitalist does not have a direct *humanitarian* interest in reducing the amount of physical labor required of the workforce, but in reducing the amount of physical labor input by human workers, the capitalist, ultimately, accomplishes two goals: He both minimizes labor costs and, more important, frees up the worker to develop new (immaterial) needs and, thus, new markets. Lazzarato (1996) captures this point well, saying,

The role of immaterial labor is to promote continual innovation in the forms and conditions of communication (and thus in work and consumption). It gives form to and materializes needs, the imaginary, consumer tastes, and so forth, and these products in turn become powerful producers of needs, images, and tastes. The particularity of the commodity produced through immaterial labor (its essential use value being given by its value as informational and cultural content) consists in the fact that it is not destroyed in the act of consumption, but rather it enlarges, transforms, and creates the “ideological” and cultural environment of the consumer. This commodity does not produce the physical capacity of labor power; instead, it transforms the person who uses it. Immaterial labor

produces first and foremost a “social relationship” (a relationship of innovation, production, and consumption). (p. 137)

Recast in a different vocabulary, Lazzarato is arguing that the immaterial labor economy is, necessarily, a prosumer economy insofar as communication itself is, necessarily, presumptive. This fact is significant to our inquiry into alienation insofar as it is the total integration of the mechanisms for capturing value (usually targeted marketing, in the case of social media) into a prosumption cycle that allows activity to be productive while also being self-directed. That is to say, immaterial laborers, in general, and social media users, in particular, are motivated, not by the prospect of conventional consumption that is only possible once work is complete and wages earned and spent, but by consumption that is possible because it is simultaneously productive. Because consumption is, generally, closely linked to subjective intentionality and because consumption has, itself, been made productive, immaterial labor (or, rather, immaterial *prosumption*) need not be alienating for capitalism to function. Rather than directing the activity of individual users, capitalism simply becomes an “interface” (Lazzarato, 1996) or an “apparatus of capture” (Deleuze & Guattari, 1987) through which spontaneous activity is monetized (or, in the Marxian lexicon, “valorized”).

Social media have become the primary interface for this new digital economy. For this reason, the characteristic of isolation implied by the term *cyberspace* (Gibson, 1984) has always been somewhat misleading. Cyberspace, as populated by various social media platforms, is merely the “grid” (cf. the movie *Tron*; Lisberger, 1982) of cultural production. It is not a virtual reality—that is, separate and distinct from the world—but a communicative and presumptive medium of mass intellectuality through which the structural relations of the world are now “augmented.” The augmented reality of social media avoids separating activity from intentionality because it is built with the purpose of facilitating and enhancing those activities in which we are already engaging (while, of course, extracting value from those activities all the while).

*Spontaneity.* The life of the factory worker differs from that of the slave or the feudal serf in that the violence that compels the individual into servitude is less direct. Whereas the slave and serf faced certain death at the hands of their masters if they failed to comply with orders, the “free” laborer within a capitalist economy is forced to sell his or her labor to the capitalist through systematic denial of access to the means of production, which are necessary for the worker to provide for his or her own survival. In the 1844 manuscripts, Marx criticizes this new, indirect mode of coercion, saying that, under such conditions,

labor is external to the worker, i.e., it does not belong to his intrinsic nature. . . . His labor is therefore not voluntary, but coerced; it is *forced labor*. . . . The external character of labor for the worker appears in the fact that it is not his own, but someone else’s, that it does not belong to him, that in it he belongs, not to himself, but to another. Just as in religion the spontaneous activity of the human imagination, of the human brain and the human heart, operates on the

individual independently of him—that is, operates as an alien, divine or diabolical activity—so is the worker’s activity not his spontaneous activity. It belongs to another; it is the loss of his self. (p. 30)

This passage indicates that, for Marx, it is not enough for workers to utilize the intellect; they must also be free to pursue their own purposes through their labor. The veracity of Marx’s assertion is demonstrated by the fact that the vast array of cubicle jobs comprising many sectors of the contemporary economy would, no doubt, be “shunned like the plague” by white-collar workers in the absence of economic coercion. For labor to be unalienated, it must be self-directed.

In the digital economy, labor itself is no longer coerced by the threat of deprivation of biological needs. However, this does not mean labor processes have become unorganized or anarchical. Some scholars argue that the digital economy has become an extension of Foucault’s (1975/1995) disciplinary society and that social media platforms themselves have become ever-more-pervasive disciplinary institutions, replacing the “carceral archipelago” with a virtually omniscient apparatus of documentation and surveillance. Coercion becomes unnecessary because the processes of subjection and social normalization yield a subject that desires the very things needed by the system. From this perspective, social media creates a contradiction—making the user “at once free and controllable, creative and docile” (Zwick, Bonsu, & Darmody, 2008).

A somewhat more radical contention (itself derived from Foucault’s later work on biopower and subjectivity; cf. Coté & Pybus, 2007) is that disciplinary society has given way to a “society of control” (Deleuze, 1992; Hardt & Negri, 2001), where cultural transmission and normalization occur via individual interaction and where the role of institutions as mediators is minimized. This new social organization is structured to promote and reward self-motivation (Deleuze, 1992)—to program independent “desiring machines” (Deleuze & Guattari, 1980/1987) with the creative energies necessary to support the rapid cycles of a contemporary information economy. For such post-Modern subjects, institutions can only get in the way of the self-expression of one’s desires and the presumption necessary to fulfill them.

The empowered subject of late capitalism spontaneously produces and pursues desires that are fully integrated into the circuits of capitalism and is responsible for maintaining both aspects of the economy: supply and demand. Nowhere is this more apparent than with the social media prosumer. Users voluntarily seek these platforms, not to passively consume the communications of others, but to produce communications so as to elicit new communication from others. The horizontal postreply circuit of social media could not be more different from the system of top-down mass media historically criticized by Horkheimer and Adorno (1947/1997) as producing “a system which is uniform as a whole and in every part” (p. 120), where productivity reached new heights and led to unprecedented abundance, but where coercion manifests itself as a lack of alternatives in a consolidated and centrally controlled economy. The subtler, consumer-side coercion of mass media is fed by a “circle of manipulation and retroactive need” (Horkheimer & Adorno, 1947/1997, p. 121), meaning consumers are

forced to repress many of their own desires in order to render themselves compatible with what centralized industry provides. In their words, the consumer must “attempt to make himself a proficient apparatus, similar (even in emotions) to the model served up by the culture industry,” and further, “freedom to choose an ideology—since ideology always reflects economic coercion—everywhere proves to be freedom to choose what is always the same” (Horkheimer & Adorno, 1947/1997, p. 167).

In the “long tail” of the web (Anderson, 2006), users are encouraged to articulate their own unique needs and then to pursue their own means of fulfilling them. Every post is another cycle in the prosumption circuit, and every cycle potentially creates new desires, new data, which, collectively among all users, create new markets and feed the continued growth of capitalism. In this sense, prosumption is not just a structural reality of the digital economy; it is also its ideology—an ideology that, above all, privileges self-expression *and* self-efficacy in the perpetual reimagining and rebranding of the subject and “explicitly situates this subjective turn within the active and ongoing construction of virtual subjectivities across social networks” (Coté & Pybus, 2007).

Capitalism in the digital age does not merely diminish the need for mindless, coerced labor but actually reconfigures itself to promote and benefit from intentional, spontaneous activity (i.e., unalienated labor). Rather than inhibiting such activity, capitalists have learned to extract new forms of value from it. However, this configuration is only feasible under conditions of material abundance, which have been realized, in part, by gains in productivity due to mechanization and, in part, due to exploitation of labor outsourced to the developing world.

Despite the fact that late capitalism generally benefits from the minimization of alienation, it would be incorrect to say that alienation is no longer structurally necessary. Rather, the remaining forms of alienation have simply been hidden from the prosumer. In the physical confines of the factory, the worker was always directly aware of the objects of his or her labor and, ultimately, his or her separation from them. In the paradigm of digital information, users are often unaware of the full extent of the information that they are producing. In fact, even the knowledge of what information is being gathered on a particular site is often proprietary. To the extent that users are generating information that they are altogether unaware of, we can call them “ambient” producers (Jurgenson & Rey, 2010).

Ambient production is possible because the physics of digital economies function differently from that of the material world. Material commodities must be individually produced. They cannot be reproduced in the same sense that digital information can. With material commodities, generating a prototype is only the first step. Most of the labor in a factory is devoted to creating copies of that initial prototype. The labor expended in creating the prototype is always less alienated than the labor expended reproducing it. This is because, although creativity is required in making an original, it is antithetical to the purpose of reproduction. So, in a factory paradigm, most labor is alienated. Digital information, however, requires a negligible amount of resources to copy and distribute. As Fuchs (2010) explains,

Knowledge only needs to be produced only once, can be infinitely reproduced at low costs, and can be distributed at high speed. There is no physical wear and

tear of the product; knowledge is not used up in consumption, but can be reworked and built upon. (p. 190)

More important, users can retain access to the products of their labor, even if the platform owner (as well as many other users) also possesses it. Of course, abundance has always been an attribute of information (even stored in analogue media). Authors of books, for example, have this same sort of relationship to their work; they continue to be able to access the content they have created and it is attributed to them, despite the fact that it is simultaneously held by others and even profits some of them.

Collectively speaking, however, social media users seldom retain collective control of the aggregate data they produce. Although an individual can access the bulk of the data he or she produces on a social media site, users (individually or collectively) are, usually, expressly forbidden from compiling even a (representative) sample of the data produced on that site.<sup>2</sup> Of course, aggregate data (or statistics concerning these data) have the greatest value to marketers, and therefore, aggregate data are most profitable. In this sense (although not, necessarily, in others), social media resembles Foucault's (1975/1995) panopticon: Those who run the institution are able to view the activity of all its constituents, whereas typical members can view only the activity of persons who occupy very specific positions with respect to themselves. For example, on Facebook, one can view much information about friends, quite a bit of information about friends of friends, but significantly less about others. This partial relationship that one class (i.e., the multitude of users) has with their objects of production continues to be the enduring legacy of alienation in the digital age, although, given the nature of its concealment, it is felt far less acutely than in previous epochs.

## Part 2: Exploitation

Unlike alienation, which makes assumptions about human nature, exploitation is wholly a theory of structural relations. The concept, as originally articulated, assumes that labor is the source of all value, and therefore, the amount of money a commodity fetches at market should (under ideal conditions) be a reflection of how much labor was put into it. According to this labor theory of value, any money received for a commodity (after costs) that is not returned to the worker amounts to uncompensated labor. Capitalists use their control over the means of production to take a cut of whatever value workers' labor generates and reinvest it, further enriching themselves and further consolidating their control over the means of production. This relationship of exploitation is fundamental to capitalism's self-perpetuation, and its rate can be formulated as the difference between the value produced by a worker's labor and the value returned to the worker in the form of wages.

Exploitation was necessary to make factories profitable because material objects produced by a laborer cannot be at two places at once; therefore, they cannot be controlled or possessed by two people at once. Thus, the original division between capitalists and the proletariat is materialist, owing to the fact that material objects



are scarce. Moreover, the means of production for material objects are also scarce, insofar as they, too, are material in nature and, thus, can only be used by one person at one time (e.g., the object of factory-based production must be passed down the assembly line, whereas social media users can simultaneously edit sites like Wikipedia). Whoever controlled the means of production controlled the objects of production. The capitalist always has a structurally determined interest in maximizing the amount and value of the commodity produced by the worker, while returning only the minimum amount necessary as compensation for the worker's labor-time. Under these conditions, the worker must lose whatever the capitalist gains, leading Marx (1844/1959) to conclude that "the worker becomes all the poorer the more wealth he produces, the more his production increases in power and size" (p. 28).

The most significant characteristic of material production, insofar as this article is concerned, is the impossibility of simultaneously deriving use value and exchange value from the same object. For example, I can either use a shovel or I can sell it, but I cannot use a shovel I have already sold or sell a shovel I am currently using. In fact, with respect to the material world, exchange value is derivative of use value (i.e., I can exchange something *because* it is useful). So, although the two are related and equatable, a material object can provide either one form of value or the other to its possessor at any given time. This logic of scarcity around which the factory was organized simply fails to obtain for digital information, which exists in a realm of abundance. Facebook can sell (i.e., exchange) the information on my profile all it wants, and my "friends" and I still can use that profile without interruption. In fact, Facebook's advertisers only buy my information from Facebook *because* they expect me to use my profile. Social media users have an expectation that the content they create will continue to have a sustained use value—that is, they are producing things that they intend to consume and share indefinitely. The social part of *social* media is predicated on the assumption that a user's desire to produce content is tied to her desire to share that content with others—to, in effect, consume *others' consumption* of the content that she has created. This desire for co-utilization and co-consumption of content drives much of the (intentional) digital prosumption on the web, particularly with respect to our paradigmatic case, Facebook. Because information is not scarce, online user-generated content can be consumed virtually anywhere at virtually any time by an effectively limitless number of other users—and, also, by the platform operator (e.g., Facebook).

The manner in which I am employing the term *use value* certainly expands beyond Marx's original characterization of the concept, which was reflective of the (perhaps historically appropriate) materialist bias of his work in general (excepting the aforementioned "fragment on machines"). For the purpose of theorizing the immaterial environment of social media, utility must be reconceptualized to include an accounting of the immaterial benefits an object can bestow. Clearly, social media platforms (and other websites or applications, for that matter), although immaterial, have very real functions in assisting us to accomplish very real goals. These platforms are the products of human labor and augment subsequent human labor, fitting the classic definition of "fixed capital." The chief difficulty with integrating the idea that immaterial



objects have real benefits into conventional Marxian economic models is that these benefits tend to be subjective in nature and, thus, resistant to quantification. Yet, we cannot ignore the systems of immaterial objects that we produce and consume, simply because they are difficult to measure or model. In fact, the need to introduce variables that mediate objective and subjective, quantitative and qualitative measurement long predates the emergence of social media.<sup>3</sup> Pierre Bourdieu (2008) made this case most forcefully when he introduced three forms of capital—social, cultural, and symbolic—to supplement economic value. More recently, commentators have discussed affective economies, attention economies, and other systems of immaterial value. For the very broad theoretical purposes of this article, I have simply chosen to subsume all these forms of value under my revised description of use value—not because I think that this language, ultimately, best captures the various benefits derived from immaterial systems, but because it is most consistent with the vocabulary Marx originally used to articulate his theory of exploitation, which I have set about to reexamine.

The fact that it is possible for both the users and site owners to access, use, and possess the *immaterial* information that exists on social media sites makes it possible for each party to derive a distinct type of value from the site. The fact that the site owner benefits from the exchange value of the information on the site in no way impinges on the user's ability to enjoy the use value of that site. Occasionally—on certain blogs, for example—the site owner and the site's content producers are one and the same persons, so these owner-producers derive both use value *and* exchange value from the same content simultaneously. Marx (1857-1861/1973) himself anticipated a disassociation of use value and exchange value in an information economy, saying,

As soon as labour in the direct form has ceased to be the great well-spring of wealth, labour time ceases and must cease to be its measure, and hence exchange value [must cease to be the measure] of use value. (p. 704)

And, as Kroker (2004) observes, these conditions are met in “virtual capitalism [which] breaks forever with its epistemological preconditions in a logic of dialectics that situated use-value and exchange value as necessary antinomies” (p. 118).<sup>4</sup>

The possibility that use value and exchange value can be derived, simultaneously, from the same objects requires us to revisit Marx's concept of surplus value. Traditionally, surplus value is understood to be any value produced through a worker's labor that is retained by the owner rather than being returned to the worker in the form of wages. Marx formalized the rate of surplus value as

$$\text{surplus value} / \text{value of labor power.}$$

Generally, the capitalist only paid for labor equivalent to the minimal cost of living in a given social milieu; the rest of work labor-time can be thought of as surplus. This surplus labor creates surplus value, which is susceptible to “exploitation” by the capitalist. Under the harsh conditions of early capitalism, labor was maximally exploited,

so the rate of surplus labor is also directly equatable to the rate of exploitation, which is captured in the following formula:

$$\frac{\text{surplus value}}{(\text{value of labor power} - \text{surplus value})} = \frac{\text{unpaid labor}}{\text{paid labor}}$$

In the factory conditions Marx was observing, wages were the primary form of compensation for the labor-time that workers sold to owners. To capitalize on surplus value produced by workers, owners exchanged the objects of production for money, which they could then reinvest to further enrich themselves. Thus, we can also equate the rate of exploitation to the following formula:

$$[\text{exchange value} - (\text{wages} + \text{operating costs})] / \text{wages}$$

From the modern capitalist's perspective, our most basic life activities—our social relations, our habits, our tastes—are all modes of production. All manner of information about ourselves is bought by and sold to anyone who seeks to manipulate our behaviors. From this perspective, we are always laboring, always potentially generating value that can be tapped by those with the proper tools to collect, organize, and package our information. In fact, it could be said that, by merely living, we are producing ourselves as highly valuable commodities. Social media users can be exploited every second of the day, transforming society into a sort of “factory without walls” (Negri, 1989). Under such conditions, all human activity becomes *productive activity*—“free labor” through which “knowledgeable consumption of culture is translated into productive activities that are pleurably embraced and at the same time often shamelessly exploited” (Terranova, 2000, p. 37). To update this formula to describe a paradigm of information production—where use value and exchange value can be derived simultaneously—we need to add the value of compensation in the form of use value to the value of compensation in the form of wages:

$$\frac{[\text{exchange value} - (\text{wages} + \text{use value} + \text{operating costs})]}{[\text{wages} + \text{use value}]}$$

Because, in the case of social media, wages are almost invariably null, we can simply drop wages from the equation, producing a final equation for the rate of exploitation of social media:

$$(\text{exchange value} - [\text{use value} + \text{operating costs}]) / \text{use value}$$

Or, simplified:

$$\text{surplus value} / \text{use value}$$

Here, we can see, mathematically, that the rate of exploitation on social media is inversely related to the utility of the content to the prosumer. The more useful content is to the prosumer, the less exploitative prosumption is. The reason that social media users are not economically deterred from engaging in prosumption of content is that they find this content to be so useful that the rate of exploitation winds up being relatively minimal—at least no more than in their other laboring.

This equation remains more theoretical than practical, since, as mentioned earlier, immaterial use value is extremely difficult to quantify. No doubt, any equivalences made between immaterial and material capital are tenuous due to the degree of subjectivity and particularity associated with the immaterial forms. Nevertheless, formalizing this relationship helps us to understand the basic operating logic of exploitation in the digital age. As a vast literature concerning the role of the web in enhancing social capital demonstrates, the development of an online profile has a variety of immaterial benefits (e.g., Hampton & Wellman, 2003; Shah, Kwak, & Holbert, 2001; Wellman et al., 2001). In fact, in many subdemographics of the population, nonparticipation in social media carries enormous opportunity costs (e.g., not being invited to social events, missing out on news or gossip, being looked over for a job, being aloof to various trends or fashions, etc.). Social media prosumers are continuously developing and utilizing their online profiles as a tool to garner social, cultural, symbolic, and other immaterial forms of capital that, ultimately, have material consequences. Beyond using one's online profile to produce various forms of immaterial capital, use value may also come in the form of services like storage of and universal access to large files, public distribution of content, time-saving organizational tools, and access to vast repositories of information.

To account for the priority of immaterial capital in the circuits of the digital economy, I propose we redefine the rate of exploitation in the following way: *Exploitation is the degree to which the value of the labor input by the social media user exceeds both the production costs borne by the owner and the use value that social media provides the user.* From this, we can deduce that, wherever companies make profits, exploitation is still occurring. This exploitation, however, is not infinite, as some have claimed, because it is tempered by the use value the user derives from social media. In this sense, not much has changed, even though the model of production itself is very different.

## Conclusion

Exploitation remains a central aspect of the capitalist production of social media just as it was a central part of capitalist production in the factories of Marx's era. However, exploitation has been adapted to the new conditions of immaterial production. Rather than keeping most of the exchange value of the commodities produced and returning a small amount in the form of wages, the capitalist keeps all of the exchange value from the lease or sale of information commodities, whereas the user, simultaneously,

derives use value from the very same commodities. Wherever companies profit (by converting the exchange value of immaterial products into surplus value), exploitation still occurs as much as ever.

In contrast to exploitation, social media subjects its users to little alienation, and to the extent that it does, the nature of this alienation is largely concealed. Whereas the factory simply compensated for alienation by intensifying coercion, the digital economy feeds off of a multitude of prosumers trained to be self-motivated and requiring only a platform through which to express themselves. One need not be a trained researcher to readily observe that the user's experience on social media bears little resemblance to Marx's (1844/1959) description of the factory, in which

the inevitable result for the worker is overwork and premature death, decline to a mere machine, a bond servant of capital, which piles up dangerously over and against him, more competition, and starvation or beggary for a section of the workers. (p. 5)

In contrast, Internet users are willing, even eager, to participate in activities that profit companies, so long as nothing interferes with their ability to do whatever it is that they want to be doing. In short, social media provides evidence that people are rather tolerant of exploitation so long as whatever activity they are involved in is not particularly alienating.

Several significant implications follow from my argument that social media is characterized by exploitation in the (relative) absence of alienation: (a) We can deduce that exploitation is not a sufficient condition for alienation and alienation is not a necessary condition for exploitation. (b) Exploitative labor where alienation is not present threatens to further solidify economic inequalities. Internet users appear more content to be used by companies than factory workers do, considering they require no economic coercion to continue using social media. As Marcuse (1964) once cynically stated, "Loss of consciousness due to satisfactory liberties granted by an unfree society makes for a *happy consciousness* which facilitates acceptance of the misdeeds of this society" (p. 76). If people are ignorant of, or unconcerned with, the value they create for companies, exploitation becomes only more insidious. And, wherever exploitation exists, social inequality follows in its wake. (c) Finally, we must ask, Who benefits from social media? The emergence of an industry on the web where exploitation can occur with minimal alienation is clearly beneficial to the capitalist goal of continual growth because, instead of profit making being limited to a nine-to-five work schedule, we now produce information commodities virtually every waking second of our lives, including what we consider to be our leisure time. Of course, this also means that the social media user is exploited nonstop. Moreover, as of yet, there is no indication that the average person is forced to bear any less alienated labor in his or her life (i.e., the length of the normal work week and the quality of such work has remained static), despite an increase in the overall value that each person contributes to industry. Given

these realities, it is difficult to conceive of social media as an *economic* gain for most users, even if it has a variety of uses that enhance most every aspect of our lives.

### **Acknowledgments**

This work is part of a much larger collective project to critically theorize the web. It draws liberally from work being done in many communities: The Prosumer Studies Working Group led by George Ritzer; the participants of the Theorizing the Web conference; contributors to the Cyborgology blog; and, particularly, ongoing discussions with Nathan Jurgenson, Paul Dean, and Zeynep Tufekci.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### **Notes**

1. The connotation of the term *augmented*, as used here, is the same as in the phrase *augmented reality* (i.e., a reality characterized by the implosion of atoms and bits).
2. For example, the very limited aggregate data Facebook provides are insufficient for any inferential analysis. Moreover, users are expressly forbidden from sampling these data themselves. According to Facebook's ([http://www.facebook.com/apps/site\\_scraping\\_tos\\_terms.php](http://www.facebook.com/apps/site_scraping_tos_terms.php), April 15, 2010) Automated Data Collection Terms, "You will not engage in Automated Data Collection without Facebook's express written permission. . . . You agree that any violation of these terms may result in your immediate ban from all Facebook websites, products and services." Twitter is a high-profile exception, having made a large public data dump to the Library to Congress.
3. No doubt, the production aspect of much of the prosumption occurring online (e.g., that of the Google algorithm) remains remain unintentional, invisible, or "ambient" (Jurgenson & Rey, 2010).
4. Nevertheless, some examples of production in the immaterial world of digital information appear to conform quite well to Marx's schema. Consider pay-per-task systems like Amazon's Mechanical Turk, an online platform where users sign up to do freelance jobs, which are generally completed online for sub-minimum-wage compensation. These tasks often are highly rationalized and have a preassigned duration of time for completion. The freelancer agrees to rent her labor for a specific period of time, although she must complete the task in order to be paid, and there is no possibility of overtime. The content produced has little or no intrinsic value to the worker. Often, it will not even be attributed to her. The capitalist who posted the ad clearly intends to gain value in excess of what she pays the worker. Note that even the phrase "Mechanical Turk" implies the worker is like a machine, an

object, a commodity. Of course, a machine cannot be exploited, so this sort of reified relationship “for the capitalist, has all the charms of a creation out of nothing” (Marx, 1995/1867, Chapter 9, Section 1). By finding a way in which to subvert minimum wage laws so that workers are selling their labor-time for a mere fraction of what it would yield in the conventional labor market, the Mechanical Turk allows exploitation to vastly exceed its former limits (cf. Fuchs, 2008).

## References

- Althusser, L. (1964). *Marxism and humanism*. Retrieved from <http://www.marxists.org/reference/archive/althusser/1964/marxism-humanism.htm>
- Anderson, C. (2006). *The long tail: Why the future of business is selling less of more*. New York, NY: Hyperion.
- Andrejevic, M. (2002). The work of being watched: Interactive media and the exploitation of self-disclosure. *Critical Studies in Media Communication*, 19(2), 230-248.
- Baudrillard, J. (1998). *The consumer society: Myths and structures* (1st ed.). London, England: SAGE. (Original work published 1970)
- Bourdieu, P. (2008). The forms of capital. In N. W. Biggart (Ed.), *Readings in economic sociology*. Oxford, UK: Blackwell Publishers Ltd. doi: 10.1002/9780470755679.ch15
- Coté, M., & Pybus, J. (2007). Learning to immaterial labour 2.0: MySpace and social networks. *Ephemera Theory and Politics in Organizations*, 7(1), 880-106.
- Deleuze, G. (1992). Postscript on the societies of control. *October*, 59, 3-7.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. Minneapolis: University of Minnesota Press. (Original work published 1980)
- Dyer-Witheford, N. (1999). *Cyber-Marx: Cycles and circuits of struggle in high technology capitalism*. Champaign: University of Illinois Press.
- Foucault, M. (1995). *Discipline and punish: The birth of the prison*. New York: Vintage. (Original work published 1975)
- Fuchs, C. (2008). [Review of the book *Wikinomics: How mass collaboration changes everything*, by Don Tapscott and Anthony D. Williams]. *International Journal of Communication*, 2. Retrieved from <http://ijoc.org/ojs/index.php/ijoc/article/view/250/125>
- Fuchs, C. (2010). Labor in informational capitalism and on the Internet. *Information Society: An International Journal*, 26(3), 179-196.
- Gibson, W., 1984. *Neuromancer*. New York, NY: Ace.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360.
- Hampton, K., & Wellman, B. (2003). Neighboring in Netville: How the Internet supports community and social capital. *City and Community*, 2(4), 277-311.
- Hardt, M., & Negri, A. (2001). *Empire*. Cambridge, MA: Harvard University Press.
- Hegel, G. W. F. (1979). *Phenomenology of spirit*. New York, NY: Oxford University Press. (Original work published 1809)
- Horkheimer, M., & Adorno, T. W. (1997). *Dialectic of enlightenment*. London: Blackwell Verso. (Original work published 1947)

- Jurgenson, N., & Rey, P. J. (2010, April). *Marcuse, the web, and the new means of ambient production*. Paper presented at the VII Annual Social Theory Forum on Critical Social Theory: Freud & Lacan for 21st Century, Boston, MA.
- Kohn, M. L. (1976). Occupational structure and alienation. *American Journal of Sociology*, 82(1), 111-130.
- Kroker, A. (2004). *The will to technology and the culture of nihilism: Heidegger, Marx, Nietzsche*. Toronto, Canada: University of Toronto Press.
- Lazzarato, M. (1996). Immaterial labor. In P. Virno & M. Hardt (Eds.), *Radical thought in Italy: A potential politics* (pp. 133-149). Minneapolis: University of Minnesota Press.
- LeMoyné, T. L., Falk, W. W., & Neustadt, A. (1994). Hyperrationality: Historical antecedents and contemporary outcomes within Japanese manufacturing. *Sociological Spectrum*, 14(3), 221-240.
- Lisberger, S. (Director). 1982. *TRON* [Motion picture]. United States: Disney.
- Marcuse, H. (1964). *One-dimensional man: Studies in the ideology of advanced industrial society*. Boston, MA: Beacon Press.
- Marx, K. (1955). *The poverty of philosophy* (Original work published 1847). Retrieved from <http://www.marxists.org/archive/marx/works/download/pdf/Poverty-Philosophy.pdf>
- Marx, K. (1959). *Economic and philosophic manuscripts of 1844* (Original work written 1844). Retrieved from <http://www.marxists.org/archive/marx/works/download/pdf/Economic-Philosophic-Manuscripts-1844.pdf>
- Marx, K. (1973). *Grundrisse: Outline of the critique of political economy* (Original work written 1857-1861). Retrieved from <http://www.marxists.org/archive/marx/works/1857/grundrisse/>
- Marx, K. (1995). *Capital: Volume 1. A critique of political economy* (Original work published 1867). Retrieved from <http://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>
- Negri, A. (1989). *The politics of subversion*. Cambridge, England: Polity Press.
- Ollman, B. (1977). *Alienation: Marx's conception of man in a capitalist society* (2nd ed.). Cambridge, England: Cambridge University Press.
- O'Neill, J. (1982). *For Marx against Althusser*. Washington, DC: Center for Advanced Research in Phenomenology and University Press of America.
- Petersen, S. M. (2008). Loser generated content: From participation to exploitation. *First Monday*, 13(3). Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2141/1948>
- Ritzer, G., & Goodman, D. J. (2003). *Classical sociological theory* (4th ed.). Boston, MA: McGraw-Hill.
- Ritzer, G., & Jurgenson, N. (2010). Production, consumption, prosumption: The nature of capitalism in the age of the digital "prosumer." *Journal of Consumer Culture*, 10(1), 13-36.
- Ritzer, G. & LeMoyné, T., 1991. Hyperrationality: an extension of Weberian and neo-Weberian theory. G. Ritzer, *Metatheorising in Sociology*, Lexington Books, Lexington, MA, pp. 93-115.
- Sassen, S. (2002). Towards a sociology of information technology. *Current Sociology*, 50(3), 365-388.



- Shah, D. V., Kwak, N., & Holbert, R. L. (2001). "Connecting" and "disconnecting" with civic life: Patterns of Internet use and the production of social capital. *Political Communication*, 18(2), 141-162.
- Shaw, W. H., 1979. "The Handmill Gives You the Feudal Lord": Marx's technological determinism. *History and Theory*, 18(2), 155-176.
- Smythe, D. W. (2001). On the audience commodity and its work. In M. G. Durham & D. M. Kellner, *Media and cultural studies: Keywords* (pp. 253-279). Malden, MA: Blackwell. (Original work published 1981)
- Tapscott, D. (1996). *The digital economy: Promise and peril in the age of networked intelligence*. Boston, MA: McGraw-Hill.
- Terranova, T. (2000). Free labor: Producing culture for the digital economy. *Social Text*, 63, 18(2), 33-58.
- Toffler, A. (1984). *The third wave*. New York, NY: Bantam.
- Tronti, M. (1966). *Operai e capitale* [Workers and capital]. Turin, Italy: Einaudi.
- Veblen, T. (1899). *The theory of the leisure class* (Reissue). New York, NY: Oxford University Press.
- Virno, P., 2001. General intellect. In U. Fadini & A. Zanini (Eds.), *Lessico Postfordista*. Milan, Italy: Feltrinelli Editore. Retrieved from <http://www.generation-online.org/p/fpvirno10.htm>
- Wallimann, I. (1981). *Estrangement: Marx's conception of human nature and the division of labor*. Westport, CT: Greenwood Press.
- Wellman, B., Haase, B. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 436-455.
- Wending, A. (2009). *Karl Marx on technology and alienation*. New York, NY: Palgrave Macmillan.
- Zwick, D., Bonsu, S. K., & Darmody, A., 2008. Putting consumers to work: "Co-creation" and new marketing govern-mentality. *Journal of Consumer Culture*, 8(2), 163-196.

## Bio

**P J Rey** (@pjrey) is a Ph.D. student in sociology at the University of Maryland. He is currently working on theoretical issues pertaining to social media, including the blending of online/offline, the cultural implications of visibility, and digital labor.