



ARTICLE

Production, Consumption, Prosumption

The nature of capitalism in the age of the digital 'prosumer'

GEORGE RITZER AND NATHAN JURGENSON

University of Maryland, USA

Abstract

This article deals with the rise of prosumer capitalism. Prosumption involves both production and consumption rather than focusing on either one (production) or the other (consumption). It is maintained that earlier forms of capitalism (producer and consumer capitalism) were themselves characterized by prosumption. Given the recent explosion of user-generated content online, we have reason to see prosumption as increasingly central. In prosumer capitalism, control and exploitation take on a different character than in the other forms of capitalism: there is a trend toward unpaid rather than paid labor and toward offering products at no cost, and the system is marked by a new abundance where scarcity once predominated. These trends suggest the possibility of a new, prosumer, capitalism.

Key words

consumption • Facebook • prosumption • social networking sites • Web 2.0

INTRODUCTION

Over the last few centuries, the economy of the developed (and much of the less-developed) world has been dominated by capitalism. Its early years were dominated by production, especially in the factory. Much more recently, the focus shifted to consumption (with the shopping mall coming to rival, or even supplant, the factory as the center of the economy).

However, it is our premise that the capitalist economy (and even pre- and non-capitalist economies) has *always* been dominated by prosumption (Ritzer, 2009). *Prosumption* involves *both* production and consumption rather than focusing on either one (production) or the other (consumption). While prosumption has always been preeminent, a series of recent social changes, especially those associated with the internet and Web 2.0 (briefly, the user-generated web, e.g. Facebook, YouTube, Twitter), have given it even greater centrality.¹ However, while capitalist forces and interests have sought to gain control over prosumption on these sites and elsewhere, they have thus far met with mixed success. Furthermore, to the degree that it has become involved, capitalism has had to make a series of compromises that leads one to wonder what type of capitalism it is (and even whether in the end it is capitalism as we have known it). The main focus of this article will be on capitalism in the age of the prosumer and the fact that it is quite different from capitalist systems that are more focused on either production or consumption. More specifically, in prosumer capitalism control and exploitation take on a different character than in the other forms of capitalism, there is a trend toward unpaid rather than paid labor and toward offering products at no cost, and the system is marked by a new abundance where scarcity once predominated. Before we can further explicate these theses, we need to offer an overview of production, consumption, and prosumption.

PRODUCTION, CONSUMPTION, PROSUMPTION

From the beginning of the Industrial Revolution, and for about two centuries thereafter, the economy of the West, if not western society in its entirety, was said to be defined by production. When one thought about the economy in that period, the focus was almost always on production. The term 'producer' might not have always been used before society, but that is certainly what most observers had in mind when they thought about the 'center' of society. The best example of such thinking is, of course, to be found in the work of Karl Marx who, although he fully understood that production always involved consumption (and vice versa), clearly believed that it was production that was pre-eminent in the capitalism of his day.

Production predominated for almost two centuries, but a rather dramatic shift began to take place, especially beginning in the USA, with the close of the Second World War. For one thing, the war, in the USA in particular, meant a focus on production, especially of war materiel, and there was, as a result, comparatively little for its citizens to consume. However, the relative absence of consumer goods did not destroy, and may have even

encouraged, a longing for them. For another, the production of consumer goods (e.g. refrigerators, automobiles) boomed after the war, and it was met by, and served to satisfy, at least to some degree, consumer demand. Furthermore, this process fed on itself as the success of the post-war economy in terms of the mass-production of consumer goods led to ever-increasing consumer interest and demand (Cohen, 2003).

Beginning largely in the 1960s,² production, especially in the USA, began a long decline as reflected in the problems in heavy industry devoted to the manufacture of consumer goods (steel, tires, etc.) and the emergence of the 'rustbelt' in the Midwest. Production was still seen as pre-eminent, but the pendulum was swinging in the direction of the centrality of consumption as reflected by the birth and expansion of the many 'cathedrals of consumption' in the 1950s and 1960s – Disneyland, indoor shopping malls, fast food restaurants, and many more (Ritzer, 2005). Of course, there was much more to the expansion of consumption in this period – changes and increases in the *objects* of consumption, the *subjects* of consumption (the consumers), consumption *processes*, as well as the kinds of consumption *sites* mentioned above (Ritzer et al., 2001). And this far from exhausts expansion in this area – there was also growth in marketing, advertising, branding, and the like.

Things began to grow worse for American heavy industry beginning with the oil crisis of 1973, the resulting rise – led by the Japanese automobile industry – of the small car, and the beginning of the painful decline of the American automobile industry (a decline that may have reached its nadir in 2009 with the bankruptcy of both Chrysler and General Motors). Of course, Americans continued to consume, in fact at an accelerating rate, but it was increasingly likely to be goods produced elsewhere, including and perhaps especially Japanese products, such as automobiles and electronics of all types. The various elements associated with consumption continued their relentless expansion as, for example, America's cathedrals of consumption proliferated and new ones – Wal-Mart, Mall of America, the reinvented and themed Las Vegas Strip – emerged. As the 20th century moved toward its conclusion, the cathedrals of consumption, the goods (increasingly produced in China) and services sold there, and the consumers who bought them, had to a large degree replaced the factory at the heart of the American economy and, more generally, American society.³

In spite of the centrality of consumption in the USA, it was not an American, but a French social theorist, Jean Baudrillard (1998[1970]), who very early on recognized this trend. He argued that especially but not exclusively in the USA, a 'consumer society' had emerged.⁴ Coming from

a Marxian tradition, Baudrillard had early in his career accorded central importance to production. However, as he was moving toward a break with Marxian theory and its focus on production, Baudrillard came to recognize the increasing centrality of consumption. He described an age of affluence in which many people surround themselves with consumer objects; he contended that 'consumption is laying hold of the whole of life' (Baudrillard, 1998[1970]: 10). He even recognized the importance of the cathedrals of consumption (or, using one of Marx's [1981[1884]: 471; see also Ritzer, 2005] less well-known concepts, the 'means of consumption'), although he accorded undue significance to the Parisian drugstore, which was to be far outstripped by many American cathedrals of consumption (e.g. the fully enclosed indoor shopping mall). Baudrillard also linked the importance of the growth in credit⁵ (especially in the USA) to the rise of the consumer society, an importance that was to increase greatly in the ensuing decades (Manning, 2000; Ritzer, 1995).

Many have since written about consumer society, while others have used the term 'consumer culture' to describe much the same phenomenon (e.g. Featherstone, 1991; Goodman and Cohen, 2004; Slater, 1997). Instead of focusing on the structure of consumer society, the notion of consumer culture draws our attention to the norms, values, and meanings associated with a society dominated by consumption. Whether it is called consumer society, consumer culture, or even consumer capitalism is less significant than the fact that all of these ideas draw our attention to the increasing importance of consumption, especially relative to production.

Thus, it has been argued that those in the USA (and others in most developed countries) have, for roughly the last half century, or less, been living in a society in which consumption is increasingly central. However, production, although of declining importance compared to consumption, continues to play a key role in the US economy and society. Yet, it is hard to ignore, especially in the USA, both the decline of production and the dramatic increase in the importance of, and accorded to, consumption. Manifestations of this are everywhere. For example, the US stock market is highly sensitive to changes in the Consumer Confidence Index (CCI; begun in 1985). Or, after 9/11, both the Mayor of New York and the President of the United States were so fearful that people would stop consuming and thereby undercut the economy that they urged citizens to get out and shop; it had seemingly become the 'public duty' of citizens to consume. In 2008, the federal government distributed a substantial tax rebate to most residents in an effort to help ward off a burgeoning recession. However, the government feared (correctly) that many would not

use the money to consume, but would rather pay off debts or even just save it (the savings rate did increase).

However, beginning in late 2007 *both* consumption and production declined as a result of the global 'great recession.' While the increasing pre-eminence of prosumption, and the growing attention to it, were not caused by the recession, the decline of both production and consumption, arguably, made space for greater scholarly interest in and concern with prosumption. There are signs that consumer (and producer) society is beginning to be challenged in importance by what might be called 'prosumer society'.

Prosumer society

The term prosumer is generally attributed to Alvin Toffler (1980) who devoted considerable attention to it in *The Third Wave*. Toffler argued that prosumption was predominant in pre-industrial societies; what he called the 'first wave'. It was followed by a 'second wave' of marketization that drove 'a wedge into society, that separated these two functions, thereby giving birth to what we now call producers and consumers' (Toffler, 1980: 266). Thus, the primordial economic form is neither production nor consumption, but rather it is prosumption. However, in Toffler's view, contemporary society is moving away from the aberrant separation of production and consumption and towards a 'third wave' that, in part, signals their reintegration in 'the rise of the prosumer' (Toffler, 1980: 265). Similarly, Ritzer (2009) has argued that it was the Industrial Revolution that, to some extent, separated production and consumption, but he also contends that even at the height of the Industrial Revolution production and consumption were never fully distinct (producers consumed raw materials; consumers produced their meals). The major social theorists of production (e.g. Marx) and consumption (e.g. Baudrillard) too strongly distinguished between these two spheres; they can be said to have suffered from either a productivist and/or a consumptionist bias. This false binary is rejected in this article (see also Ritzer, 2009), which, instead, is premised on the idea that the focus should *always* have been on the prosumer.

It is only recently that prosumption has become an important topic in the literature. Writing on business issues, Prahalad and Ramaswamy (2004) discuss this trend under the label of 'value co-creation' and Tapscott and Williams (2006) see the prosumer as a part of a new 'wikinomic' model where businesses put consumers to work. These models, as well as the whole idea of relying on consumers to produce, is criticized by Andrew Keen (2007) in *Cult of the Amateur*. Beer and Burrows (2007) see new relations between production and consumption emerging online, especially on Web

2.0, a topic we will elaborate on below. Humphreys and Grayson (2008) have discussed prosumption in relation to Marxian theory. Zwick et al. (2008) relate prosumption to Foucauldian and neo-Marxian theory, concluding that prosumption means companies are granting new freedom to consumers.⁶ They argue that ‘the ideological recruitment of consumers into productive co-creation relationships hinges on accommodating consumers’ needs for recognition, freedom, and agency’ (2008: 185). Xie et al. (2008) discuss the general propensity to engage in prosumption. Ritzer and Jurgenson (2008) theorize the emerging importance of prosumption and the prosumer, and Jurgenson (2010) argues that prosumption online marks a reversal of the historic trend toward increasing rationalization in favor of a *de*McDonaldization of, at least, the internet.

More concretely, in the *McDonaldization of Society*, Ritzer (2008[1993]) discusses how consumers have been put to work in the fast food industry; the ‘diner’ at a fast food restaurant, the consumer of that food, is also, at least to some degree, a producer of the meal. Among other things, diners are expected to serve as their own waiters carrying their meals to their tables or back to their cars, sandwich makers (by adding fixings such as tomatoes, lettuce, and onions in some chains), salad makers (by creating their own salads at the salad bar), and bus persons (by disposing of their own debris after the meal is finished).

This trend toward putting consumers to work – turning them into prosumers – accelerated after the birth of the fast food restaurant in the mid-1950s. Among the examples are:

- pumping one’s own gasoline at the filling station;
- serving as a bank teller at the ATM machine;
- working at the checkout counter at the supermarket by scanning one’s own food, bagging it, and paying for it by credit card;
- using electronic kiosks to check into a hotel and at the airport, to purchase movie tickets, etc.;
- co-creating a variety of experiences such as moving oneself through Disney World and its many attractions or serving as an ‘actor’ in the theatre ‘staged’ by Starbucks designed to create the image of an old-fashioned coffee house (Ritzer, 2008[1993]);
- using do-it-yourself medical technologies (e.g. blood pressure monitors, blood glucose monitors, pregnancy tests) that allow patients to perform, without recompense, tasks formerly performed by paid medical professionals;
- being a caller on a call-in radio show;

- being part of Reality TV (Andrejevic, 2003);
- being involved in amateur pornography (e.g. the Girls Gone Wild video series).

Then there is a wide range of subtler and less material examples of prosumption. Much of what transpires online, especially on what has come to be known as Web 2.0, is generated by the user. Web 2.0 is contrasted to Web 1.0 (e.g. AOL, Yahoo), which was (and still is) provider- rather than user-generated. Web 2.0 is defined by the ability of users to produce content collaboratively, whereas most of what exists on Web 1.0 is provider-generated. It is on Web 2.0 that there has been a dramatic explosion in prosumption. It can be argued that Web 2.0 should be seen as crucial in the development of the 'means of prosumption'; Web 2.0 facilitates the implosion of production and consumption.⁷ Examples include:

- Wikipedia, where users generate articles and continually edit, update, and comment on them (Konieczny, 2009).
- Facebook, MySpace, and other social networking websites, where users create profiles composed of videos, photos, and text, interact with one another, and build communities (boyd, 2006, 2008a, 2008b).
- Second Life, where users create the characters, communities, and the entire virtual environment (Herman et al, 2006).
- The blogosphere, blogs (Web logs), microblogging (Twitter) and the comments on them produced by those who consume them.
- eBay⁸ and craigslist, where consumers (along with retailers) create the market.
- YouTube and Flickr, where mostly amateurs upload and download videos and photographs.
- Current TV, where viewers create much of the programming, submit it via the internet, and decide which submissions are aired.
- Linux, a free, collaboratively-built, open-source operating system, and other open-source software applications, such as Mozilla Firefox, that are created and maintained by those who use them (Lessig, 2006; Stewart, 2005).
- Amazon.com, where consumers do all the work involved in ordering products and write the reviews. Also, the users' buying habits and site navigation are documented to recommend products.
- Yelp!, where users create an online city guide by ranking, reviewing and discussing various locations and activities in their area.
- The GeoWeb, which consists of online maps where, increasingly, users are creating and augmenting content with Google, Microsoft, and

Yahoo tools (Helft, 2007). Google Maps users, for example, can fix errors; add the locations of businesses; upload photos; link Wikipedia articles to, and blog about their experiences with, or reviews of, places on the map, thereby creating social communities. Additionally, new 'location awareness' tools, often used in conjunction with 'smart' cell phones with GPS technology, allow users to track where they are at any given moment and upload this information to websites such as Facebook, Twitter or one's blog. Some examples include Google Latitude, Yahoo's Fire Eagle and the Loopt mobile phone application.⁹

Prosumption was clearly not invented on Web 2.0, but given the massive involvement in, and popularity of, many of these developments (e.g. social networking sites), it can be argued that it is currently both the most prevalent location of prosumption and its most important facilitator as a 'means of prosumption'.

CAPITALISM IN THE AGE OF THE PROSUMER

Capitalism, at least as it was originally conceptualized (especially by Marx and the early Marxists), was focused on the relationship between the producers (workers, the proletariat) and the capitalists. The key site in (early) capitalism was the factory, a setting clearly focally devoted to production. Thus we have little difficulty associating early capitalism with production. It was clearly recognized that workers needed to consume (e.g. raw materials) in order to produce and that which flowed out of those capitalist factories had to be bought and used by consumers. However, consumption in early capitalism was clearly subordinated to production.¹⁰

Over time, as has already been pointed out, the consumer and consumption grew in importance, especially in the developed world, and production declined. Eventually, some developed societies (especially the USA) came to be defined more by consumption than production. While this was a dramatic change, some observers (e.g. Baudrillard) had little difficulty thinking of this new economic world in terms of capitalism, as consumer capitalism. While it was easy to see that the capitalist exploited workers, this was less clearly the case with consumers. Nonetheless, capitalists clearly 'overcharged'¹¹ consumers and this served to enhance their profits in a way similar to the way that subsistence wages paid to workers ('underpaying' them) were key to the high profits reaped by early capitalists.

However, the issue to be addressed here is whether the idea of capitalism, at least as we have known it, can be extended to the prosumer; are we

in, or entering, the age of 'prosumer capitalism'? To answer this question, we need to clearly distinguish between 'traditional prosumers' (e.g., those who clean up their own debris in fast food restaurants) and newer forms of prosumption (especially those associated with Web 2.0). In the case of traditional prosumers, it is difficult to accept the idea that we have entered a new stage of capitalism. Rather, it appears that capitalists have found another group of people – beyond workers (producers) – to exploit and a new source of surplus value. In this case, capitalism has merely done what it has always done – found yet another way to expand (others are globally, as well as colonizing the minds and bodies of those involved in the system).

The answer is much more complex in the case of the new forms of prosumption associated with Web 2.0. On the one hand, these prosumers can be seen as being involved in an extended form of traditional capitalism in the sense that they can be viewed as merely encompassing the roles (producer and consumer) already under the control of the capitalist. However, there are also unique characteristics involved in the relationship between capitalism and prosumption on the internet that make it possible to argue that capitalism has indeed entered a new and very different phase. There are indications that capitalism is having a difficult time gaining control over at least some of the prosumers on Web 2.0 (this is illustrated below). This means that, at the minimum, capitalists will have a different relationship with such prosumers than it has with producers, consumers, or more traditional prosumers (e.g., in the fast food restaurant). More extremely, it may well be that capitalism itself will be transformed, perhaps radically, in the prosumer age. Several factors lead us to this conclusion and they will be the focus of most of the remainder of this discussion.

The first is the inability of capitalists to control contemporary prosumers in the way – and to the degree – that they have been able to control producers, consumers, and traditional prosumers. There is greater resistance to the incursions of capitalism (e.g., efforts to gain greater control and greater profits) by at least some contemporary prosumers than by any of the others. Of course, at an earlier point in history, producers (through labor unions) and consumers (through consumer movements) offered much more resistance to capitalism (there is no evidence that traditional prosumers resisted the ways in which they were used by capitalists), but today neither offers much in the way of opposition to the capitalist system, at least in the USA.

Second, it is difficult to think of prosumers as being exploited in the same ways as producers and even consumers are exploited. The idea that the prosumer is exploited is contradicted by, among other things, the fact

that prosumers seem to enjoy, even love, what they are doing and are willing to devote long hours to it for no pay.

Third, there is at least the possibility of the emergence of a whole new economic form, especially on the internet. Capitalism involves the exchange of money for goods and services, and profits are made in those exchanges. However, little or no money changes hands between the users and the owners of many websites (for instance, users do not pay Facebook or Twitter to use the services). On the one hand, there is the unwillingness of corporations and other organizations to pay for work done by prosumers. On the other hand, prosumers increasingly prefer, and are able, to pay little or nothing for that which they consume on the internet (news, blogs, social networking sites, and so on) (Anderson, 2009). If capitalism is ultimately based on (unequal) exchanges based on a money economy, in such a 'free' economy can we be said to have capitalism in its traditional sense, or are we beginning to see the emergence of the outlines of a new form of capitalism? It is also the case that while this new form is apt to be capitalist in nature, it is also possible – albeit not likely given the power of capitalism – that it will develop into some entirely new economic system.

Fourth, traditional capitalism, either producer or consumer capitalism, is based on scarcity, but prosumer capitalism online is increasingly a world of abundance. In a world of scarcity, the economy is based, as Weber (1968[1921]) recognized, on rationality, especially efficiency. However, little attention in prosumer capitalism is given to maximizing efficiency; instead, the focus is on increasing effectiveness (Jurgenson and Ritzer, 2009). Almost unlimited resources can be devoted to finding effective results.

We will discuss each of these four points in turn in the following sections. The discussion will lead us to the conclusion that the world of presumption, at least as it occurs on the internet, is capitalistic, but it has enough unique characteristics to allow us to begin to think of it as possibly a new form of capitalism.

The inability of capitalists to control contemporary prosumers and their greater resistance to the incursions of capitalism

A major roadblock to capitalism, at least as we've known it, on Web 2.0 is the cyber-libertarian (Kelemen and Smith, 2001) or 'hacker' (Levy, 1984) ethic developed, implemented and supported by the early developers of the internet, and continuing to be a force to this day, especially on Web 2.0. The internet was – and is – seen by many as revolutionary and utopian. Cyber-libertarians are both strong believers in the internet *and* in radical individualism and democracy in their relationship with it and its sites. Some

have described this as 'digital socialism' (Kelly, 2009), while for others it is much in line with a radical right-wing orientation. In either case, its basic premises – most importantly, freedom – stand opposed to capitalist organizations that seek to control and exploit those involved in it (Turner, 2006).

However, toward the end of the 20th century, corporations increasingly became involved in incursions online and much of their involvement was, of course, oriented toward finding ways to profit from this new environment. This posed a profound threat to the cyber-libertarians. However, the bursting of the 'dot com' bubble in late 2000 had a profoundly negative effect on corporate presence on the internet. As corporations became wary of the internet and its profit potential, many people saw an opportunity to rebuild the cyber-libertarian project online. Wikipedia and open-source projects such as Linux are examples of the resurgence of cyber-libertarianism. As a result of this resurgence, as well as the fact that connection speeds increased dramatically because of the diffusion of broadband technologies, infinitely more people were able to access and utilize the internet, shrinking, in at least some senses, the 'digital divide' (Drori and Suk Jang, 2003). The web environment became more collaborative and social (Lacy, 2008). Nevertheless, corporations certainly did not abandon the internet. Many remained and many new ones were drawn to it by its enormous growth and potential. Today powerful and highly profitable corporations such as Microsoft and Google are battling for a greater presence and power on the internet. However, the orientation of capitalism and its goals – especially ever-increasing profits – are in conflict with the cyber-libertarianism that remains a strong presence online on sites such as Wikipedia, Linux, and Creative Commons communities. Thus, profit-making corporations cannot ride roughshod over the internet; they must find ways of adapting, at least for the moment, to this new web ethic, especially on Web 2.0.

This being said, it is quite apparent that an anti-corporate cyber-libertarian agenda is *not* universally shared online; many on the internet are completely unaware of it and unquestioningly accept and use sites and services of corporate entities such as Google, Yahoo, Flickr, and craigslist. Thus, in large parts of the internet, even those associated with Web 2.0, capitalism continues with little resistance.

However, not all prosumers are happy with this situation and in some cases have rebelled, especially against being asked to contribute to corporate sites without pay. While some of this resistance is rooted in an explicit or implicit cyber-libertarianism, it also stems from much more individual motives and desires. Further, much of it stems from capitalism itself and the

desire of those who work in the system – in this case prosume in it – to be paid for their services.

Take the example of LinkedIn, a Web 2.0 site devoted to professional networking with 42 million members worldwide (Newman, 2009). Its content is currently translated into four languages, but a mid-2009 survey asked its members, the prosumers of the site's content, whether they would be willing to volunteer to translate the site into other languages. That is, they were asked to do the work (translating) for no pay. This is highly skilled work for which people are well-paid in many other contexts.

LinkedIn is a profit-making organization, or at least it would like to be one, and one way of increasing its profitability is to reach a much larger audience (through many more translations of its content) *and* by getting members to do (more) work for them (they already do such work as downloading information about themselves) at no pay. LinkedIn is far from the only Web 2.0 site to attempt the latter. Google asked a number of illustrators to provide free art work for its browser, Chrome. Facebook asked for volunteers to translate explanatory language on its Web site into over 20 languages. The translators were asked not only to produce the language but also to vote among themselves on preferred wording.

The reaction to such attempts, as exemplified in the case of LinkedIn, has sometimes been strongly negative and it is an indication of the struggle between capitalists and prosumers over the process of prosumption, especially as it exists on Web 2.0. In the LinkedIn case, respondents were asked what *non-monetary* incentives (e.g. an upgraded LinkedIn account, no incentive needed 'because it's fun') they would prefer. Many said no to any of the choices provided, with one LinkedIn participant writing in that he would prefer 'cash' and later complaining about LinkedIn's 'effrontery to ask for a professional service for free' (Newman, 2009: B2). LinkedIn and other Web 2.0 sites defend such actions by saying that the exposure they are offering contributors could lead to paid work, will lead prosumers to become paid producers (in this instance as translators). Some members see the merit in this argument with one translator seeing it as a great opportunity and as a new way to market herself and her skills and abilities. However, many others clearly do not see it this way, as is evidenced by those upset with LinkedIn, or in other examples, such as AOL's struggles with volunteer labor and (non-)payment (see Postigo, 2003 and Terranova, 2000).

The point here is that opposition to capitalist incursion on the internet is not restricted to those who adopt an alternate ideology such as cyber-libertarianism. While some involved in the LinkedIn example may have

been motivated by a devotion to such an ideology, most undoubtedly opposed it for much more mundane and prosaic reasons. Thus, there is a wide base on Web 2.0 to resist the efforts by capitalists to control and exploit the prosumers found there. Capitalism will need to deal with both collective and individual resistance on the internet. The likelihood that such resistance will continue means that capitalism will need to adapt in various ways and it is at least *possible* that what will emerge, at least in this context, is a new form of capitalism. Such a transformation is made even more likely by the nature of exploitation on Web 2.0.

Can we say that the prosumer is exploited?

The fact is that many people seem to prefer and to enjoy prosuming, even in the cases in which they are forced into this position. Traditional prosumers being handed an empty cup and being forced to fill it – sometimes over and over – at the soda fountain in a fast food restaurant not only gives them the possibility of more soda at the same price, but also empowers them so that they can decide how much, if any ice, they want, as well as giving them the ability to create unique concoctions of various soda flavors. On Facebook, empowerment lies in the fact that one can choose exactly how one wants to present oneself and can alter that presentation at will. Further, many find Facebook an effective social tool in building and maintaining contact with others. In addition to modest gains and empowerment, people can gain quite materially from being a prosumer. This is most obvious on eBay, but one can profit by gaining recognition as a photographer on Flickr, or as a journalist on a blog, and use those successes to become a paid ‘professional’ photographer or journalist. One can build professional computer programming networks while editing Linux for no pay.

Thus, we cannot ignore the gains for individuals as reasons for the rise of prosumption. Beyond that, it seems clear that most prosumers seem to enjoy their activities. Many seem to truly like scanning their own groceries, using a self-serve kiosk at the airport, shopping on eBay, or finding and ordering the relevant books on Amazon.com. Of course, a Marxist might argue that this is all just a modern version of ‘false consciousness’, this time manifested by prosumers rather than the proletariat in a production-oriented economy. However, it is probably more likely that prosumers really *do* like doing these things and they are not simply being manipulated into such feelings by the capitalist. To this point, Paul Hartzog calls profit on Web 2.0 a ‘not too terribly important footnote’ and says that it is ‘not where the action is.’¹²

If participants like prosumer capitalism on Web 2.0, and it is also less intrusive, then to what degree can it be thought to be exploitative? From the point of view of, for example, the fast food restaurant owner/chain operator, the beauty of the prosumer system is that it serves to reduce the need to hire paid (albeit poorly paid) personnel to do this work. Instead, consumers do these formerly paid tasks for no recompense (and do it not only without complaining, but seemingly find it to be 'fun', at least at first). This serves to buttress the Marxian view of capitalism as an exploitative system that is constantly searching for new ways to ratchet up the level of exploitation. It is also consistent with the views of neo-Marxists such as Roemer (1982) who have moved away from seeing exploitation as occurring solely in a coercive production process. It can also occur, as it does in this case, as a result of the unequal possession of productive resources. That is, in the fast food restaurant (and the other entities of concern here), it is the owners, not the consumers, who own the productive resources and it is this that gives them the ability to exploit consumers.

In the fast food restaurant, it is almost impossible to exploit those who work there much more because the assembly-line nature of much of their work (e.g. on the griddle) already maximizes what they can do (or at least comes close to it) and the fact that the minimum wage law prevents them from being paid any less than they are already paid. However, using the consumer to do much of the work brings a whole new type and level of exploitation to the fast food industry. While the worker does this work for little pay, the consumer does it for absolutely *no pay at all*. Capitalism has discovered a way to exploit the labor power of a whole new population – the consumer as prosumer.¹³ From the capitalist's point of view (especially in terms of low-skilled work), the only thing better than a low-paid worker is someone (the consumer as prosumer) who does the work for no pay at all. In Marxian terms, while the worker produces a great deal of surplus value, the consumer who 'works' produces *nothing but surplus value*.

Exploitation is much more ambiguous in the case of Web 2.0. On the one hand, organizations (often corporations) 'own' the major resources on Web 2.0 (e.g. Amazon, Wikipedia, Facebook). Users are the producers, but the profit, or at least the potential for profit, still belongs to corporations. They give the users the use of at least some of the productive resources. Sometimes it is as little as giving users the resources needed to choose the color of their car, sometimes it is as large as allowing users to create their own Facebook profiles (with very little input from the company).

On the surface, this seems different from what transpires in, say, a fast food restaurant, where various productive resources are turned over to the

consumer (the material needed to make a salad or top off a hamburger; whatever is needed to make the coffee just the way one likes it, etc.). However, it is the case that on Web 2.0 something much more profound – part of the underlying system itself (e.g. the Facebook page and the ability to create its contents) – is turned over to the prosumer. This an important step and would be akin to doing something fast food restaurants would be highly reluctant to do – turn over the grill to those who want hamburgers, for example.¹⁴ Nevertheless, even on Web 2.0, while some of the productive resources may be turned over to the prosumers, the profits, or at least the profit-potential (from branding, etc.), are retained by the owners (e.g., in the case of Wikipedia, Jimmy Wales).

Tapscott and Williams (2006: 207), in an analysis of ‘Wikinomics’ (that includes much of Web 2.0), argue that: ‘calling it exploitation goes too far’. But, is it? In one of their examples, a manufacturer of high-end shoes obtains design ideas from customers and the best designs are those that are produced. Those who create the winning designs receive *no* royalties, but their names appear on the shoes based on those designs. In the case of Lego’s Mindstorm, the customers post new applications and as a result the value of Lego’s product is enhanced. Those who post these applications are expected to be satisfied with the joys of knowing that they have improved Mindstorm. Flickr does not share its advertising revenue with the creators of the photos on the site. The same is true of much else associated with Web 2.0.

Tapscott and Williams (2006: 193) see the need to go beyond ‘the culture of generosity’ that prevails in the world of wikinomics. That is, people are expected to contribute to connect with others, to create an online identity for themselves, to express themselves, to gain attention, but *not* to share in whatever profits can be wrung from their generosity. Tapscott and Williams argue that the system will work better if stakeholders (the consumer-amateurs) are ‘adequately’ rewarded. This is the logic of capitalism (although the capitalists’ sense of what constitutes adequate reward is severely limited), and therefore Tapscott and Williams are arguing that wikinomic systems need to be more, and more overtly, capitalistic. Where this step is taken, we will be back to a more traditional capitalistic system, albeit one without paid employees and their attendant costs (e.g., health care benefits).

The possibility of the emergence of a whole new economic form

While capitalistic organizations seek, by definition, to make a profit, they are opposed in this by the cyber-libertarian ethic, which is not only about

individual freedom on the internet, but is also very much concerned with making much of what is found on Web 2.0, especially information, free of charge and universally accessible (Levy, 1984). Cyber-libertarianism is the backbone of the open-source movement, and provides the ideological underpinning for the development and proliferation of non-profit web-browsers (Mozilla's Firefox as opposed to the for-profit Microsoft Internet Explorer), operating systems (Linux versus the for-profit Apple OSX or Microsoft's Windows), encyclopedias (Wikipedia versus the for-profit *Encyclopedia Britannica*), and so on.

As a result of the existence and success of these non-profit entities, and more generally of cyber-libertarianism, users increasingly expect that what is on the internet be made available free of charge. Obviously, such a notion and reality are anathema to capitalism, at least in its traditional form.

Companies have found it difficult, or impossible, to charge for their services on the internet. Chris Anderson's (2009) book, *Free*, demonstrates that much of the Web 2.0 economy is one where products and especially services are given away free of charge. One is not charged for access to YouTube, Flickr, Facebook, or Twitter, nor are there charges involved in uploading one's videos to YouTube, one's photographs to Flickr, or putting one's profile on Facebook or Twitter. One does not pay to read blogs or the reviews on Amazon or Yelp. Google's many services (search, online maps, email, online office suite, even its operating system¹⁵) are available at no cost to the user. The point here is that there is no charge for most of that which is prosumed online. Obviously, this presents an interesting dilemma for companies that want to make a profit. A company that expects its users to produce content is often expected, in turn, to offer access as well as the product to the prosumer at little or no cost. Flickr, for example, has come to dominate the photo-hosting market at least in part because it does not charge for its services. If it did, it would undoubtedly lose market share to its competitors or to new companies that would come into existence to fill the void left by the departure of Flickr for a profit-making world.

Web 2.0 companies are able, at least in the short-run, to give their products away free of charge because the cost of hosting photos, email accounts, videos, social networking profiles, and so on is very low and is ever-decreasing. While the initial infrastructure and design of a web service is quite high, the marginal cost for the business of adding another email account, or uploading an additional YouTube video or Flickr photograph, approaches zero (Anderson 2009).

The difficulties involved in giving one's product away free of charge have led many Web 2.0 companies to fail or to struggle to eke out a profit.

Currently, Facebook's expenditures far exceed its earnings. As of this writing, Twitter has yet to develop a profit model and has been operating on a continuous flow of new investment money (Miller, 2009). This is not to say that Web 2.0 companies cannot, or will not, become profitable. Indeed, some sites have already become profitable.¹⁶ However, they are the exceptions and the likelihood is that most Web 2.0 sites will continue to be unprofitable and even lose considerable amounts of money.

It is important to remember, however, that some Web 2.0 entities (e.g. Amazon.com) were, from the beginning, oriented toward making a profit. Others, however, are created for a wide range of reasons and with a very unclear sense of whether they could be profitable or even how profits could be earned from them (Lacy, 2008). The goal for most Web 2.0 companies is to create, and later enhance, the 'value' of their site (by, for example, turning it into a well-known brand). They do this by increasing the number of users through publicity and increasing visibility, by expanding what the site has to offer mainly on the basis of what prosumers contribute to it, by having the costs of development (largely labor costs and computer equipment) borne mainly by the prosumers developing the site, by branding the site and perhaps ultimately through the creation of various revenue streams. Obviously, the hope of some (and in some cases already the reality) is that Web 2.0 sites will produce profits, in some cases enormous profits. How do they, or will they, generate profits?

- Selling information, often for advertising purposes. Much of the enormous value of Facebook is traceable to the fact that all of the data provided there by users – and continually updated – can be used to generate profit in many different ways, primarily advertising. Google makes its money through advertising utilizing its AdSense and AdWords models.
- Generating spin-offs (e.g. Wikia from Wikipedia).
- Using the Web 2.0 site and brand as a base for success both online and in other domains. Web 2.0 brands (e.g. Facebook, Google, Wikipedia) are now highly valuable, not necessarily for what they are earning now but for the earnings they can generate in the future. In the new worlds of consumer and prosumer capitalism, the brand is all important, whereas in earlier production-oriented capitalism the goal was to create a profitable product with the hope that it, in turn, would generate a successful brand. Now, the situation is largely reversed and it is the brand that comes first, the profitable product will follow (it is hoped and assumed, not without good reason) once the brand is

institutionalized. For instance, Google hopes to exploit the popularity of the YouTube brand and ultimately to earn profits from it.

- Holding back part of what can be offered and charging for it (e.g., craigslist charges only for job ads; the Flickr 'pro' account); what is called a 'freemium' model (basic and free for most, premium and paid for some).
- Charging for maintenance, support and additions to the basic system

Ultimately, from a capitalist point of view, Web 2.0 is all about sites creating 'competitive advantages' vis-à-vis other sites. Those that succeed (e.g. Google) will be among the titans of what might be a new form of capitalism.

Abundance (rather than scarcity) and effectiveness (rather than efficiency)

Prosumer capitalism is based on a system where content is abundant and created by those not on the payroll. The costs for companies to host vast amounts of digital content is dropping and the sheer number of users creating content on sites such as Facebook is increasing, leading to a market increasingly characterized by *abundance* (Anderson, 2009). We have argued elsewhere that this abundance, this post-scarcity system, leads to less of a focus on efficiency and rationality than is the case in traditional capitalism and capitalistic organizations (Jurgenson, 2010; Jurgenson and Ritzer, 2009). In an abundant market, companies are less concerned with such things as maximizing the efficiency of producing, and the quantity of, output. When scarcity is removed from the equation, efficiency with respect to content becomes less important. Thus, because prosumers are unpaid and because they are producing so much, Web 2.0 sites do not care how inefficiently they operate or how inefficient it is to have so many people devote so much time to these tasks. Abundance is everywhere in the number of people involved, the time they devote to the tasks, their output, and so on. Such abundance is in stark contrast to the realities faced by traditional capitalistic systems.

Instead of focusing on efficiency, this new capitalism is largely focused on the creation of effective products and services. That is, the concern is with the *quality* of what is produced irrespective of what it takes to produce products or services. For example, Wikipedia is based on a system of nearly infinite inputs designed in the end to get an entry right and up-to-date no matter what it takes for the prosumers who create the entry. This model would be impossible in a traditional, profit-making competitor such as

Encyclopedia Britannica which, in order to make a profit, would need to limit greatly inputs from paid contributors to its entries.¹⁷

CONCLUSION

Thus, what we see with digital prosumption online is the emergence of what may be a new form of capitalism. Its uniqueness is made clear in the four major points in this article – capitalists have more difficulty controlling prosumers than producers or consumers and there is a greater likelihood of resistance on the part of prosumers; the exploitation of prosumers is less clear-cut; a distinct economic system may be emerging there where services are free and prosumers are not paid for their work; and there is abundance rather than scarcity, a focus on effectiveness rather than efficiency in prosumer capitalism.

The position taken here stands in contrast to Humphreys and Grayson (2008) who argue that when corporations are involved, prosumption is simply the creation of ‘temporary employees’ and thus does not indicate a fundamental change in capitalism. However, in our analysis, entire business models based around prosumers (the so called ‘temporary employees’) who are unpaid and given the product for free indicates the possibility of a new form of capitalism built upon the four principles outlined in this article.

In producer and consumer capitalism, corporations are likely to exert great control over the production and/or consumption of content (goods and services), but in prosumer capitalism companies are more likely to stand back and to meddle less with the prosumers who are producing and consuming the content. The idea is more to get out of the way of the prosumers than to seek to control them. Tapscott and Williams outlined something similar in *Wikinomics* (2006) arguing that companies should not try to predict what users will do with content production tools. Similarly, Zwick et al. (2008) discuss an economic politics of prosumption that is based on the freedom and creativity of the consumer.

To take a specific example, YouTube does not need to control the quality of videos it hosts. As it can host as many videos as people want to upload, YouTube does not have to make many decisions about what is created (besides issues relating to copyright, vulgarity, etc.). Facebook does little to dictate how its users use the site, but rather lets them use it the way they wish, even to the degree that when users complained about the privacy policy, the company put the new policy to a user vote (Richmond, 2009). Companies seek to create sites and services that users will find comfortable and useful in the hope that they can find a way of eventually turning a profit. To a large degree, companies do not seek to dictate how prosumers

use the sites because they do not have to and, if they did, the quality of what would be produced on the sites would likely decline.

While we offered a sense of the relationship between prosumption, Web 2.0 and capitalism as they exist circa 2010, all are undergoing dramatic changes, as are their relationships to one another. Each of these will need to be continually monitored in the coming years, as will their interrelationships. Of particular interest will be the ability of capitalism to adapt to new developments in prosumption and on the internet (e.g. the emergence of Web 3.0, and beyond). Given its past record of successes, it is difficult to bet against the adaptability and power of capitalism, but it is confronting a new, continually changing, and uniquely resistant environment.

Notes

1. We discuss Web 2.0 as a whole, although we recognize that there are important differences among the various sites associated with it (e.g. Linux as software and Amazon.com as a website).
2. There were certainly industries (e.g. textiles) that had begun to decline long before this.
3. In an effort to date the change more specifically and more generally (not restricting the change to the USA), Slater (1997: 10) contends that: 'The 1980s . . . heralded the subordination of production to consumption . . .'
4. Of course, John Kenneth Galbraith (1999[1958]), among others, had anticipated this idea in his work on the 'affluent society'. In fact, Baudrillard cites and draws on Galbraith's work as well as Veblen's even earlier (1994[1899]) thinking on consumption, especially conspicuous consumption.
5. At an even earlier date, Joseph Schumpeter (1942) had accorded credit a key role.
6. Zwick et al. (2008) discuss prosumption mainly using the term 'co-creation.'
7. This parallels Ritzer's (2005: 50) work on the 'means of consumption' to supplement the idea of the 'means of production'. He views the means of consumption as that which facilitates the acquisition of goods and services.
8. In recent years, eBay has moved away from user-generated auctions and toward those more dominated by traditional retailers and producers.
9. Google Latitude: <http://www.google.com/latitude/intro.html>; Fire Eagle: <http://fireeagle.yahoo.net/>; Loopt: <http://www.loopt.com/>; Twitter has also announced that it will allow users to embed their location when posting content with their service (<http://blog.twitter.com/2009/08/location-location-location.html>).
10. Keeping in mind the earlier point that producer and consumer capitalism really involve prosumption, even if they stress one dimension or the other.
11. By 'overcharged' we mean that consumers paid not only for the costs of production (and sale) and for a 'reasonable' profit for producers, wholesalers, and retailers, but in many cases far more than that leading to 'unreasonable' profits for all of those involved in the production-consumption chain.
12. This is from a debate between Trebor Sholz and Paul Hartzog from the online

- journal *Re-Public's* special issue 'Towards a Critique of the Social Web' (Scholz and Hartzog, 2008).
13. This whole orientation toward the dominance, even encouragement, of prosumption by capitalism is very different from Toffler's far more romantic view in which he saw the prosumer as a solution to some of the problems caused by the radical distinction between production and consumption in capitalism (and socialism), as well as by the market more generally (people will have a more balanced life, be more self-reliant, work less for the market and more for themselves). In Toffler's new 'trans-market' all sorts of wonders will be possible: 'New religions will be born. Works of art on hitherto unimagined scale. Fantastic scientific advances. And, above all, wholly new kinds of social and political institutions' (Toffler, 1980: 305).
 14. Some restaurants allow prosumers to cook their own meals on sites using equipment and ingredients provided to them at the site.
 15. In order, google.com, maps.google.com, mail.google.com, docs.google.com, googleblog.blogspot.com/2009/07/introducing-google-chrome-os.html.
 16. For instance, MySpace has earned profits, although the profitability of these sites fluctuates dramatically.
 17. It is of interest that *Britannica* has adopted some amount of user-generated content. However, they claim that they are not taking on Wikipedia's all-volunteer model and the encyclopedia will still be produced and edited by paid content experts.

References

- Anderson, C. (2009) *Free: The Future of a Radical Price*. New York: Hyperion.
- Andrejevic, M. (2003) *Reality TV: The Work of Being Watched*. Lanham, MD: Rowman & Littlefield.
- Baudrillard, J. (1998[1970]) *The Consumer Society*. London: Sage.
- Beer, D. and Burrows, R. (2007) 'Sociology and, of and in Web 2.0: Some Initial Considerations', *Sociological Research Online* 12(5). URL (accessed 28 October 2009) <http://www.socresonline.org.uk/12/5/17.html>
- boyd, d. (2006) 'Friends, Friendsters, and MySpace Top 8: Writing Community into Being on Social Network Sites', *First Monday* 11. URL (accessed 28 October 2009) <http://www.danah.org/papers/FriendsFriendsterTop8.pdf>
- boyd, d. (2008a) 'Taken Out of Context: American Teen Sociality in Networked Publics', unpublished PhD Dissertation, University of California, Berkeley, CA.
- boyd, d. (2008b) 'Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life', in D. Buckingham (ed.) *Youth, Identity, and Digital Media*, pp. 119–42. Cambridge, MA: MIT Press. URL (accessed 28 October 2009) <http://www.mitpressjournals.org/doi/pdf/10.1162/dmal.9780262524834.119>
- Cohen, L. (2003) *A Consumer's Republic: The Politics of Mass Consumption in Postwar America*. New York: Alfred A. Knopf.
- Drori, G. and Suk Jang, Y. (2003) 'The Global Digital Divide: A Sociological Assessment of Trends and Causes', *Social Science Computer Review* 21(2): 144.
- Featherstone, M. (1991) *Consumer Culture and Postmodernism*. London: Sage.
- Galbraith, J.K. (1999[1958]) *The Affluent Society*. New York: Mariner Books.
- Goodman, D. and Cohen, M. (2004) *Consumer Culture*. Santa Barbara, CA: ABC Clío.

- Helft, M. (2007) 'With Simple New Tools on Web, Amateurs Reshape Mapmaking', *New York Times*, 27 July, pp. A1, A16.
- Herman, A., Coombe, R.J. and Kaye, L. (2006) 'Your Second Life: Goodwill and Performativity in Intellectual Property in Online Digital Gaming', *Cultural Studies* 20: 184–210.
- Humphreys, A., and Grayson, K. (2008) 'The Intersecting Roles of Consumer and Producer: A Critical Perspective on Co-Production, Co-Creation and Prosumption', *Sociology Compass* 2: 963–80.
- Jurgenson, N. (2010) 'The De-McDonaldization of the Internet', in G. Ritzer (ed.) *McDonaldization: The Reader* (3rd edition). Thousand Oaks, CA: Pine Forge Press.
- Jurgenson, N. and Ritzer, G. (2009) 'Efficiency, Effectiveness, and Web 2.0.', in S. Kleinman (ed.) *The Culture of Efficiency*, pp. 51–67. New York: Peter Lang Publishing.
- Keen, A. (2007) *The Cult of the Amateur: How Today's Internet is Killing Our Culture*. New York: Doubleday.
- Kelemen, M. and Smith, W. (2001) 'Community and its "Virtual" Promises: A Critique of Cyberlibertarian Rhetoric', *Information, Communication & Society* 4(3): 370–87.
- Kelly, K. (2009) 'The New Socialism: Global Collectivist Society Is Coming Online', *Wired*, 22 May. URL (accessed 28 August 2009) http://www.wired.com/culture/culturereviews/magazine/17-06/nep_newsocialism
- Konieczny, P. (2009) 'Governance, Organization, and Democracy on the Internet: The Iron Law and the Evolution of Wikipedia', *Sociological Forum* 24: 162–92.
- Lacy, S. (2008) *Once You're Lucky, Twice You're Good: The Rebirth of Silicon Valley and the Rise of Web 2.0*. New York: Gotham Books.
- Lessig, L. (2006) *Code: Version 2.0*. New York: Basic Books.
- Levy, S. (1984) *Hackers: Heroes of the Computer Revolution*. Garden City, NY: Anchor Press/Doubleday.
- Manning, R. (2000) *Credit Card Nation: The Consequences of America's Addiction to Debt*. New York: Basic Books.
- Marx, K. (1981[1884]) *Capital: Volume Two*. New York: Vintage Books.
- Miller, C.C. (2009) 'The Obsession with Twitter's Business Model', *New York Times*, 26 March. URL (accessed 28 August 2009) <http://bits.blogs.nytimes.com/2009/03/26/the-twitters-verses-obsession-with-twiters-business-model/>
- Newman, A.A. (2009) 'Translators Wanted at LinkedIn. The Pay? \$0 an Hour', *The New York Times*, 28 June. URL (accessed 28 August 2009) <http://www.nytimes.com/2009/06/29/technology/start-ups/29linkedin.html>
- Postigo, H. (2003) 'Emerging Sources of Labor on the Internet: The Case of America Online Volunteers', *International Review of Social History* 48: 205–23.
- Prahalad, C.K. and Ramaswamy, V. (2004) 'Co-Creation Experiences: The Next Practice in Value Creation', *Journal of Interactive Marketing* 18(3): 5–14.
- Richmond, R. (2009) 'Facebook Tests the Power of Democracy', *The New York Times*, 23 April. URL (accessed 28 August 2009) <http://gadgetwise.blogs.nytimes.com/2009/04/23/facebook-tests-the-power-of-democracy/>
- Ritzer, G. (1995) *Expressing America: A Critique of the Global Credit Card Society*. Thousand Oaks, CA: Pine Forge Press.

- Ritzer, G. (2005) *Enchanting a Disenchanted World: Revolutionizing the Means of Consumption*. Thousand Oaks, CA: Pine Forge Press.
- Ritzer, G. (2008[1993]) *The McDonaldization of Society*. Thousand Oaks, CA: Pine Forge Press.
- Ritzer, G. (2009) 'Correcting an Historical Error', keynote address at the Conference on Prosumption, Frankfurt, Germany, March.
- Ritzer, G. and Jurgenson, N. (2008) 'Producer, Consumer . . . Prosumer?', paper presented at the annual meeting of the American Sociological Association, August, Boston, MA.
- Ritzer, G., Goodman, D. and Wiedenhof, W. (2001) 'Theories of Consumption', in George Ritzer and Barry Smart (eds) *Handbook of Social Theory*, pp. 410–27. London: Sage.
- Roemer, J. (1982) *A General Theory of Exploitation and Class*. Cambridge, MA: Harvard University Press.
- Scholz, T. and Hartzog, P. (2008) 'Toward a Critique of the Social Web' (online interview), *Re-public*. URL (accessed 28 October 2009) <http://www.re-public.gr/en/?p=201>
- Schumpeter, J.A. (1942) *Capitalism, Socialism and Democracy*. New York: Harper and Brothers.
- Slater, D. (1997) *Consumer Culture and Modernity*. London: Polity.
- Stewart, D. (2005) 'Social Status in an Open-source Community', *American Sociological Review* 70: 823.
- Tapscott, D. and Williams, A.D. (2006) *Wikinomics: How Mass Collaboration Changes Everything*. New York: Portfolio.
- Terranova, T. (2000) 'Free Labor: Producing Culture for the Digital Economy', *Social Text* 18: 33–57.
- Toffler, A. (1980) *The Third Wave*. New York: William Morrow.
- Turner, F. (2006) *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: University Of Chicago Press.
- Veblen, T. (1994[1899]) *The Theory of the Leisure Class*. New York: Penguin.
- Weber, M. (1968[1921]) *Economy and Society*, 3 vols. Totowa, NJ: Bedminster Press.
- Xie, C., Bagozzi, R.P. and Troye, S.V. (2008) 'Trying to Prosume: Toward a Theory of Consumers as Co-creators of Value', *Journal of the Academy of Marketing Science* 36: 109–22.
- Zwick, D., Bonsu, S.K. and Darmody, A. (2008) 'Putting Consumers to Work: Co-creation and New Marketing Govern-mentality', *Journal of Consumer Culture* 8: 163–96.

George Ritzer is Distinguished University Professor at the University of Maryland, USA. Among his books in metatheory are *Sociology: A Multiple Paradigm Science* (1980[1975]) and *Metatheorizing in Sociology* (1991). In the application of social theory to the social world, his books include *The McDonaldization of Society* (5th edition, 2008), *Enchanting a Disenchanted World* (2nd edition 2005), and *The Globalization of Nothing* (2nd edition, 2007). He was founding editor of the *Journal of Consumer Culture*. In conjunction with Nathan Jurgenson and others, he is editing a special issue of the *American Behavioral Scientist* on prosumption. His books have been translated into over 20 languages, with over a dozen translations of *The*

McDonaldization of Society alone. Address: Department of Sociology, University of Maryland, College Park, MD 20742, USA. [email: ritzer@socy.umd.edu]

Nathan Jurgenson is a doctoral student in sociology at the University of Maryland, USA, where he is working with George Ritzer on the theoretical implications of the bottom-up turn taken by the internet – what has come to be known as Web 2.0. He received his MA in sociology from Northern Illinois University, USA in 2007. Address: Department of Sociology, University of Maryland, College Park, MD 20742, USA. [email: njurgenson@socy.umd.edu]
