

10 GAMIFICATION AND POST-FORDIST CAPITALISM

PJ Rey

One bit of wisdom I gleaned from Patricia Hill Collins (a former professor of mine) is to approach inquiries into any new social phenomenon with a simple question: who benefits? And this, I am suggesting, is the way we must address the Silicon Valley buzzword du jour: *gamification*. Why does this idea now command so much attention? Who is promoting all this talk of gamification, anyway? What do these gamification advocates stand to gain? While gamification is a technique with a wide range of possible applications (many of them potentially positive), I want to focus, specifically, on the nature of the relationship between gamification and capitalism. I argue that the concept *gamification* is gaining currency, in large part, because it fits well with certain ideological assumptions native to contemporary, post-industrial capitalism and that it is promoted because it is believed to benefit those who already occupy a position of privilege within this system. By critically examining the negative consequences of gamification for individual producers and consumers, my hope is to change the conversation so that it is no longer acceptable for technology and business commentators to uncritically sing the praises of gamification.

Because this chapter is meant to be a sociological analysis of capitalism rather than a game studies tract on the nature of games, I will adopt here the

broadest possible definition of gamification: “the use of game design elements in non-game contexts” (Deterding et al. 2011). Beyond this basic definition, it is useful to acknowledge from the outset a few key assumptions from game studies and related fields about the nature of these game elements. It is important to recognize that economic analyses such as this one focus on behavior motivated by the accumulation of resources; however, we should be careful not to reduce game mechanics to mere accumulation (Deterding 2010). Instead, the relationship between games and their players are best understood through the framework of “motivational affordances” (Deterding 2011, p. 2), whereby

the relation between the features of an object and the abilities of a subject allow the subject to experience the satisfaction of such needs when interacting with the object. E.g., relative to my skills and knowledge, this Sudoku puzzle in front of me affords an opportunity to experience myself as competent when interacting with it.

In other words, there are a range of intrinsic motivators within a game situation that are relative both to the unique relations between game and player as well as to the social context in which they are embedded. This focus on affordances is particularly important in light of the fact that numerous studies have

demonstrated that extrinsic rewards (or punishments) may actually de-motivate players (Lepper, Greene, and Nisbett 1973; Deci, Koestner, and Ryan 1999; Deterding 2011).

Gamification can be put to many uses. As danah boyd (in Anderson and Rainie 2012) observed, gamification is “a modern-day form of manipulation. And like all cognitive manipulation, it can help people and it can hurt people. And we will see both.”

I am not attempting to argue that gamification is intrinsically beneficial or destructive to society; instead, I want to examine *how gamification fits with current widely held assumptions about society* and why, *at this moment in history*, it such an attractive concept to those in positions of economic power. My focus is how gamification is being appropriated as a much hyped and growing part of the post-industrial capitalist economy—in short, how it is being used to make money for capitalists.

The profit motive is undoubtedly a major reason for the hype surrounding gamification. It is telling that conferences like “For the Win: Serious Gamification” or “The Gamification of Everything—Convergence Conversation” are taking place in business (and not, say, sociology) departments or are being run by CEOs and investment consultants. The Gamification Summit invites attendees to “tap into the latest and hottest business trend.” Searching *Forbes* turns up far more articles (156) discussing gamification than the *New York Times* (34) or even *Wired* (45).¹ All this makes *Time* magazine contributor Gary Belsky (2012) seems a bit behind the time when he predicts “gamification will soon rule the business world.” In short, gamification is primarily promoted and championed not by game designers, those interested in game studies, sociologists of labor/play, or even computer-human interaction researchers, but by busi-

ness folks. And, given that the market for video games is already worth greater than \$25 billion (Anderson and Rainie 2012), it should not come as a surprise that business folks are looking for new growth areas related to gaming.

The basic appeal of gamification is that it has the potential to spur economic activity (i.e., production and consumption) by influencing the behavior of producers and consumers. But the gamification of economic activity (as with other forms of gamification) faces a certain paradox: how can gamifiers control behavior without ruining the game? The issue here is that volunteerism is an essential feature of games and play (Huizinga 1938; Caillois 1961/1958; Deterding 2011; Huotari and Hamari 2012). Roger Caillois (1961/1958, 6) explains:

Play must be defined as a free and voluntary activity, a source of joy and amusement. A game which one would be forced to play would at once cease being play. It would become constraint, drudgery from which one would strive to be freed. As an obligation or simply an order, it would lose one of its basic characteristics: the fact that the player devotes himself spontaneously to the game, of his free will and for his pleasure, each time completely free to choose retreat, silence, meditation, idle solitude, or creative activity.

So, if play is about freedom but the purpose of gamification is control, we seem to have a contradiction on our hands: how is it possible to control behavior and have that behavior still be voluntary?²

This apparent gamification paradox can be resolved through a nuanced understanding of power. Gamification is not a conventional form of power—it is not power as constraint. Thus, when we think of how power operates through gamification, we must move beyond the Weberian concept of power as

being “the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance” (Weber 1947, 152). Power, from this perspective, amounts to the ability to command obedience—to ensure that others will conform to your wishes even if it is against their own will.

In contrast, gamification is a form of soft power—it only works if it can entice individuals to genuinely want what the gamifiers want. Gamification is less about coercing unwilling subjects and more about creating willing subjects. Power, in this instance, should not be understood as a constraint; instead, power effected through gamification is better understood as taking the form of disciplinary strategy. As Michel Foucault (1975, 194) was fond of saying, “power produces.” Gamification is a process of “subjection” (Butler 1997) or “subjectification” (Davies 2006). Judith Butler (1997, 2) explains that

if, following Foucault, we understand power as forming the subject as well as providing the very condition of its existence and the trajectory of its desire, then power is not simply what we oppose but also, in a strong sense, what we depend on for our existence and what we harbor and preserve in the beings that we are.

That is to say, gamification cannot be seen as just one or more isolated instances of social control. Instead, gamification must be examined within a broader pattern of socialization—of producing and organizing innovative problem-solvers and self-motivated consumers. Gamification is one of myriad strategies for developing subjects that are compatible with the needs of late capitalism. It is a strategy that is just as flexible and mobile as its subjects. Such strategies need not be compulsory and enclosed like schools or

prisons but can be voluntary and ubiquitous. Gilles Deleuze (1992) observed that through such mechanisms, capitalism has transformed the “disciplinary society” (where socialization produced docile bodies in an archipelago of disparate institutions) into a “society of control” where motivated subjects are constantly (and willingly) reintegrated into the circuits of power (see also Hardt and Negri 2001). Deleuze (1992) observes that the late-capitalist subject is markedly complicit in the maintenance of the social order: “Many young people strangely boast of being ‘motivated’; they re-request apprenticeships and permanent training.”

As a flexible strategy of subjectification and a fluid mechanism of disciplinary power, gamification is a properly *post-Fordist* phenomenon. Fordism refers to principles of rationalized factory labor introduced by Henry Ford as well as the broader socioeconomic entanglements implied in the kind of corporate control Ford pioneered.³ Post-Fordism, or “flexible accumulation,” as David Harvey (1990, 147) calls it,

is marked by a direct confrontation with the rigidities of Fordism. It rests on flexibility with respect to labour processes, labour markets, products, and patterns of consumption. It is characterized by the emergence of entirely new sectors of production, new ways of providing financial services, new markets, and, above all, greatly intensified rates of commercial, technological, and organizational innovation.

An aspect of particular relevance to our analysis of gamification is that post-Fordist capitalism has achieved a degree of autonomy and spontaneity for workers that workers’ movements and more radical anti-capitalist movements were never able to realize (at least not as a durable and widespread set of

conditions). According to Paulo Virno (2003, 99), “the masterpiece of Italian capitalism [and that in other developed nations] consists of having transformed into a productive resource precisely those modes of behavior which, at first, made their appearance under the semblance of radical conflict.” If leisurely, non-alienated activity furthers consumption or can be exploited for profit, then it is not viewed as antagonistic to capitalism. In fact, the subjects of post-Fordist capitalism have demonstrated general acceptance of exploitation, and even manipulation, just so long as they are spared alienation (Fisher 2012; Rey 2012). Gamification is one mechanism through which post-Fordist capitalism appropriates such non-alienated activity and renders it useful to the capitalist goal of wealth accumulation. (I will discuss the specific forms this appropriation takes in the sections that follow.)

One key component in the subjectification of the post-Fordist subject is the valorization of fun. Peter Fleming (2005, 286) describes the shifts in managerial philosophy and corporate culture that took place in the 1980s and 1990s:

Through informal dress codes, office parties, games, humor, zany training camps, joking, and so on, organizational members are encouraged to loosen up and find more pleasure in their roles. In the 1980s, the benefits said to accrue from making work fun were flexibility, competitive advantage, and increased motivation. In the 1990s, the message was much the same but with the added emphasis on customer service, innovation, empowerment, and creativity.

This description stands in stark contrast to the Fordist era, where fun and work were clearly distinguished and perceived as belonging to separate spaces: the home and the workplace, respectively.

Karl Marx (1844/1959, 30) observed how industrialization exacerbated this separation:

In his work, therefore, [the laborer] does not affirm himself but denies himself, does not feel content but unhappy. ... He feels at home when he is not working, and when he is working he does not feel at home.

Though fun and leisure were kept apart from the workplace, in the early industrial era both were, nevertheless, celebrated as means of incentivizing labor. This fun was integrated in the capitalist economy through consumption. You worked so that you could have fun—so that you could access “the means of consumption” (Baudrillard 1998/1970; Ritzer 2009). For this reason, fun has been a subject of much criticism from the left (Marcuse 1964; Weitzman 2008; Roberts 2009; Horning 2011). Fun is viewed as a carrot dangled before the highly programmed masses—a mechanism of social control. Those who pursued fun are often portrayed as dupes. As Herbert Marcuse (1964, 75) stated somewhat contemptuously:

No matter how controlled the mobilization of instinctual energy may be ... no matter how much it may serve as a prop for the status quo—it is also gratifying to the managed individual, just as racing the outboard motor, pushing the power lawn mower, and speeding the automobile are fun.

From this perspective, fun is viewed as a form of false consciousness. Fun is a source of alienation because the desire for it, and for the commodities that it promises to provide to us, increases our dependency on the alienating labor that give us the wages to buy these commodities.

Fun in the Fordist era was also subject to criticism from the right. Work was seen as a heroic sacrifice, while play was a form of vice or waste. Weber

(2003/1905, 84), in his classic *The Protestant Ethic and the Spirit of Capitalism*, observed that “Protestant asceticism ... acted powerfully against spontaneous enjoyment of possessions; it restricted consumption, especially of luxuries.” He described the attributes of the proto-capitalist:

The ability of mental concentration as well as the absolutely essential feeling of obligation to one’s job, are here most often combined with a strict economy which calculates the possibility of high earnings, and a cool self-control and frugality which enormously increased performance. (21)

Restraint and austerity were important to maximize investment capital. Time spent on leisure and money spent on consumption were understood as having opportunity costs. As rationalization came to dominate modern life, “leisureliness was suddenly destroyed” (Weber 2003/1905, 24). In short, fun is anathema to the spirit of (early) capitalism.

Post-Fordism has undermined both theoretical positions. On the one hand, it offers the promise that fun activity can be productive. If this is true, fun no longer has the same opportunity costs that it appeared to have in previous epochs. On the other hand, it promises that labor will be less alienating, so that consuming fun things does not, necessarily, require us to act against our own best interests in avoiding toil. Both the critical and the conservative positions of the Fordist era took for granted binary distinctions between work and play, labor and consumption. In the post-industrial era, these binaries have been eroded. Fun has been fully integrated into the circuits of capitalism, and gamification is, perhaps, the most complete manifestation of this trend.

One last consideration before I can discuss the specific mechanisms at work in making economic activity more game-like is the need to distinguish the

types of economic activity in question. Historically, sociology has been characterized by a “productivist bias” (Ritzer 2010). More recently, in light of the abundance of the post-World War II era, many sociologists shifted toward consumption as a separate object of analysis within the subfield of economic sociology (Bourdieu 1986; Baudrillard 1998/1970; Ritzer 2009). In recent years, particularly in light of new forms of immaterial production and consumption such as social media (see Terranova 2000; Lazarato 2006/1996), there have been calls to analyze production and consumption as two fundamental aspects of the same process—a process that might be labeled “prosumption” (Ritzer and Jurgenson 2010). Gamification appears to manifest differently at the two extremes of the continuum of economic activity. Thus, I have chosen to devote the next two sections to gamification at each end of production-consumption continuum. However, it is important to keep in mind the ways in which production and consumption are often combined in gamification. In fact, gamification may even thrive most in conditions where production and consumption are imploded—an idea that I will return to in the final section.

The manner in which capitalism appropriates gamification may vary based on the specific type of economic activity in question, but in each application—whether to consumption, production, or some mixture of the two—gamification is employed as a strategy because it furthers the sole purpose of capitalism: to accumulate wealth for the capitalist. The overarching goal of this chapter, then, will be to describe how gamification furthers this end in the context of the various types of economic activity and, importantly, what consumers and producers (as well as “prosumers”) stand to lose if these applications of gamification are successful.

Gamification, Consumption, and Hypercommodification

In the economic sphere of consumption, gamification is a strategy to channel our attention and activity toward advertisements or commodities that will, ultimately, generate revenue for the capitalists who engineer the gamification. However, gamification does not alter the fundamental character of a commodity; it works at a representational level. In the context of consumption, gamification can be understood as a process that transforms commodities into what Jean Baudrillard called *hypercommodities*.

Baudrillard (1994/1981, 67) describes hypercommodities as “no longer linked to distinct exchanges and determined needs, but a kind of total descriptive universe ... incessant circulation of choices, readings, references, marks, decodings.” There is a lot to unpack here. First, he is saying that hypercommodities involve a de-contextualization or “disembedding” (Giddens 1991) of the commodity. A hypercommodity is removed from (or simply lacks) a native context (i.e., traditional reference points used to make sense of it and to attribute value to it). As a consequence, the value and meanings associated with a hypercommodity are extremely fluid. Second, Baudrillard is saying that hypercommodities are not consumed in order to fulfill simple biological needs; instead, they are consumed as part of a sophisticated social code. Finally, by detaching it from any specific indigenous symbolic order, the commodity becomes a surface upon which signs and signifiers circulate, endlessly being attached, detached, and reattached. That is to say, value and meaning become flexible like everything else in the post-Fordist economy.

Sociologists have long accepted that people consume things for reasons other than their apparent use value. Three Buck Chuck gets you just as

drunk as a fine vintage wine, and research demonstrates that it is only when we learn the price difference that we take varying degrees of pleasure in them (Goldstein et al. 2008). Our consumption choices are influenced as much by a commodity’s ancillary benefits (e.g., the cultural or social capital they might help us demonstrate or accrue) as they are by the basic function of that object (Bourdieu 1986). But, with hypercommodities, the signs and signifiers associated with objects become the primary reason for consuming them; the basic function of the object is just an afterthought. Once the signs and signifiers associated with various commodities become our primary motivation for consuming them, commodities themselves start to become interchangeable because signifiers are easily and rapidly reassigned. This is most apparent in fashion where, every season, we are encouraged to dispose of functional clothing and replace it with new clothing that offers no greater practical benefit but that makes the important symbolic statement that “I’m with it.”

Gamification transforms commodities into hypercommodities both by assigning new signifiers to a commodity and by redefining the purpose for which a commodity is consumed. We can see how this process plays out by examining, for example, the Monopoly game featured annually in McDonald’s fast-food restaurants. By attaching game pieces to each meal item, McDonald’s signifies food with a symbolic reward that can be accumulated. Each item consumed is a play made in the game—another tile earned. This “added value” is meant to incentivize consumption at McDonald’s in lieu of other food options. In extreme cases, consumers are driven more by the pursuit of another chance to win than

they are by the actual food (which they may not particularly like or be hungry for). In this sense, the commodity is made secondary to the game so that game play is the thing really being purchased. In short, customers are not consuming the commodity itself so much as what the commodity represents.

To the extent that the consumer finds the symbolic rewards or other benefits attached to a commodity more attractive than the commodity itself, the capitalist is relieved of the obligation of actually delivering the commodity in a manner that is appealing to customers. Ian Bogost (2011b) argues that gamification replaces real incentives for customer loyalty with “counterfeit incentives that neither provide value nor require investment.” Even if gamification is fun and rewarding for the consumer, it does not improve the fundamental nature of the commodity. Thus, gamification often serves to divert consumers from the fact that the commodity they have purchased fails to satisfy them. Critical theorists have long made similar arguments about the promises made by advertisements and the perpetual disappointment experienced when consumption fails to satisfy our appetites fully (which are socially constructed to be bottomless). Horkheimer and Adorno (1997/1944, 139), with their usual mix of eloquence and cynicism, observed that capitalism trains consumers simply to accept and live with misdirection and illusions:

The culture industry perpetually cheats its consumers of what it perpetually promises. The promissory note which, with its plots and staging, it draws on pleasure is endlessly prolonged; the promise, which is actually all the spectacle consists of, is illusory: all it actually confirms is that the real point will never be reached, that the diner must be satisfied with the menu.

But gamification’s post-modern maneuver is to turn around and say that dinner is the menu—the simulation is the reward. The hypercommodity comes at the expense of the commodity.

This is what makes gamification even more insidious than advertising. Advertising invents social needs and promotes a particular commodity as having the qualities necessary to fulfill that need. So, though advertising is resignifying the commodity, it still implicitly makes claims that the signs and symbols it invokes have some intrinsic connection to the commodity. A classic example is advertisements suggesting a need to be cool while also trying to convince us that certain cigarettes are best suited to fulfill this need in certain social milieux. Gamification, in contrast, says forgot the commodity, you are here to buy the sign (regardless of what it is attached to). The gamification of consumption completely negates any intrinsic value and meaning of the commodity (i.e., the “use value” of the commodity) and reduces its function to a medium of representation and exchange. The McDonald’s Monopoly game makes consumption so remote from any actual function of the commodity that the company might as well be selling empty cups and wrappers (and probably could if it were not for the disenchantment this blatant profiteering would surely cause, as I will discuss further in the final section). Players, in fact, do sometimes fish packaging out of the trash to have more opportunities to play. What this illustrates is that, when the logic gamification is taken to its limits, it becomes a complete and utter abandonment of the real. The gamified tail wags the hypercommodified dog.

Baudrillard argued that this sort of disassociation from the real characterizes post-modern society. This free flow of signifiers raises new issues related

to power and domination. Bourdieu (1986) famously observed that “symbolic capital”—the power to assign and reassign signifiers—is not distributed evenly. While Baudrillard (2008/1983) makes similar observations, he is self-admittedly, and perhaps overly, fatalistic about the ability of individual consumers to challenge “the code”—the logic of signification inscribed in, and controlled by, capitalism. He believes that late capitalism simply reappropriates any and all attempts to manipulate the system of signs and signifiers. Baudrillard’s fatalism aside, he makes an important argument about how hypercommodities produced by late capitalism reinforce existing power structures:

The objects are no longer even commodities; they are no longer even signs whose meaning and message one could decipher and appropriate for oneself, they are *tests*, they are the ones that interrogate us, and we are summoned to answer them, and the answer is included in the question. (Baudrillard 1994/1981, 75)

Here, Baudrillard makes the consumption of hypercommodities almost sound like a sort of game in that they come with their own rules and internal logic; however, he also observes that individual consumers have little say in how these systems operate—there is a lack of freedom and autonomy. As mechanism for the production of hypercommodities, gamification is imposed on the consumer, who can only either participate or try to ignore it.

Gamification asks us to accept that simulated “points” or the other psychological inducements of game mechanics are a legitimate motivational equivalent to any real material and immaterial benefits of the commodity itself. As such, gamification can be used to encourage behavior that might be harmful to the consumer (say, regularly eating fast-food). Pro-

ponents of play and gaming might, rightly, object that consumers are making a rational decision to choose gamified hypercommodities over traditional commodities (even if they cost more) because such commodities offer additional social and psychological benefits. While I accept the premise that commodities can, possibly, be more beneficial because they are gamified (though certainly not all games [e.g., slot machines] are intrinsically beneficial), the issue here is that by attaching game elements to consumption, capitalism encourages a pattern of behavior whereby we turn to consumption (and thus must pay) in order to receive these benefits, when as Huizinga (1938, 1) states, “play is older than culture ... human civilization has added no essential feature.” By imploding consumption and play, gamification makes play itself into a commodity, thus bringing it into the service of the capitalist system.

Through both the production of hypercommodities and the production of subjects that desire them, the gamification of consumption acts as a mechanism of social control; its purpose is to maximize the importance of the symbolic level of the game elements so that it can minimize resources devoted to producing or improving the commodity itself without losing its consumer base. (In light of this fact, Bogost [2011a] suggests that *exploitationware*⁴ would be an accurate description of platforms for gamifying consumption.) The cost to the consumer is that, by buying into the game (elements), the consumer has less attention and resources to devote to satisfying the need the commodity itself is supposed to fulfill. Moreover, to the extent that the game elements themselves provide certain social and psychological benefits, consumers now must purchase commodities to access what play has given freely from time immemorial.

Gamification, Production, and Exploitation

In the introduction to this chapter, I discussed how in recent decades the conceptual boundaries between work and fun were eroding within the post-Fordist reconfiguration of capitalist production. Now, as I move on to examining the gamification of production, it is necessary to explore a similar implosion between work and play. Play is generally fun (indeed, Huizinga [1938, 3] went so far as to claim that the “fun-element ... characterizes the essence of play”), so it often shares the same sort of valorization as fun. However, play is sometimes also observed to be “serious” in that it is not taken lightly by the players or in that it is oriented toward extrinsic and socially important goals (Rieber, Smith, and Noah 1998; Goggin 2011).

Already, this seeming contradiction points to the complexity in defining play. Given that interpretations of play have shifted throughout the course of history (from Aristotle to Kant to Huizinga and beyond), there is reason to believe that play—as well as the work/play divide—are historically contingent and that the nature and meaning of play transforms to match the cultural and political assumptions of the current social order (Connor 2005). However, here I must limit the scope of my analysis to the modernist conceptualization of play that is being challenged by recent phenomena and, particularly, the aspects of play that are relevant to work. Of particular importance is the belief that play is both free and unproductive.⁵ Both these ideals are contained in Huizinga’s (1938, 13) foundational definition of play:

Summing up the formal characteristics of play we might call it a *free activity* standing quite consciously outside “ordinary” life as being “not serious,” but at the same time absorbing the

player intensely and utterly. *It is an activity connected with no material interest, and no profit can be gained by it.* It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means. [emphasis added]

For Huizinga, play is voluntary (in that it is not coerced) and unproductive (in that its rewards are intrinsic).

Caillois, whose definition of play is a bit more refined than Huizinga’s, nevertheless retains these two ideas. First, regarding the voluntary aspect of play, Caillois (1961/1958, 9) explains that “playing is not obligatory; if it were, it would at once lose its attractive and joyous quality as diversion.” Here, Caillois is relatively in line with Huizinga. But, on the issue of nonproductiveness, he is more nuanced. Caillois (1961/1958, 5) takes issue with Huizinga’s absolute dismissal of material gain associated with play:

Huizinga’s definition which views play as action denuded of all material interest, simply excludes bets and games of chance—for example, gambling houses, casinos, racetracks, and lotteries—which, for better or worse, occupy an important part in the economy and daily life of various cultures.

In games where betting is involved, Caillois (1961/1958, 5; his emphasis) argues that, “*property is exchanged, but no goods are produced.*” This is an important, if subtle, distinction between productivity and material gain.

Nevertheless, like Huizinga, Caillois works to maintain a clear (and very modernist) division

between work and play. The rigidity of this binary becomes fully apparent when we take account of the fact that for Marx (1867/1887; focusing here on *Capital*) and other modern thinkers, the essence of work is the creation of value. Caillois (1961/1958, 5) emphasizes that play is wholly outside the sphere of production, noting “play is an occasion of pure waste.” Thus, play and work are, implicitly, set up as an oppositional pair.

Given this historical context, the gamification of production can be viewed as a post-Fordist assault on the modernist work/play binary. Gamification implodes play and labor into a phenomenon that has been labeled “playbor” (Kücklich 2005). In fact, we might say the *gamification is the production of (one form of) playbor*. Therefore, understanding playbor is key to understanding the gamification of production.

Playbor existed as a concept long before it existed as a word. Huizinga (1938, 199), for example, observed the existence of

Certain activities whose whole *raison d'être* lies in the field of material interest, and which had nothing of play about them in their initial stages, develop what we can only call play-forms as a secondary characteristic. [Professional] sport and athletics showed us play stiffening into seriousness but still being felt as play; now we come to serious business degenerating into play but still being called serious.

Julian Kücklich (2005) was the first academic to publish an article using the term *playbor* and is certainly among the most cited commentators on the topic of playbor. Kücklich presents video-game “modding” as the paradigmatic example of how play and labor are imploded in a way that primarily rewards capitalists, who retain property rights to all modifications that users make to games and thus the

exclusive right to profit from them (of course, modders accumulate a certain amount of cultural capital in the process).

However, I find this example of modding relatively unsatisfying because, in this case, it does not seem that we are using the concept of playbor to talk about new social phenomena. I suppose, modding is playbor in the same sense that someone must set up a hoop and inflate a ball before a basketball game can commence. Sure, in this case, play presupposes a certain degree of work, and it is not insignificant that the players also do some of the work necessary to make play happen. But, in these examples, play and labor remain relatively distinct activities that happen to have a degree of mutual dependency. Mutual dependency, however, is a far cry from the indistinguishability that playbor would seem to imply. In contrast to Kücklich, I prefer to frame playbor, in its ideal-typical form, as the implosion of work and play into the very same act.

A more compelling example of playbor is offered by Joyce Goggin (2011), who discusses “grinding” and “gold farming,” where workers in countries with cheap labor are paid to level-up characters in online games for buyers in wealthier countries who want to avoid the drudgery and repetitiveness of leveling these characters up on their own. For gold farmers, work is game-play. Of course, this also implies that, for the buyers, play has become so work-like that it is no longer an activity that one would engage in voluntarily. On both ends of the gold-farming equation, we see work and play imploding. However, though this example well captures the coextension of work and play, it is still distinct from the playbor produced by gamification, because the focus is on how play becomes work-like rather than how work becomes play-like.

Thus we need to turn to another example, the contemporary corporate landscape, which is rife with examples of work being made more play-like. Peter Fleming (2005) describes a call center where he conducted research:

The walls are painted yellow and red, the supporting pillars are purple, and the carpets are a vivid blue. These colors are designed to create a mood of verve and fun. Bright icons covering desks and pods proudly announce a team's client, accentuating the playfulness of working for this particular client firm. For example, the area dealing with an African-based airline project is decorated with green cardboard cutouts of jungle trees and photos of cheetahs and hyenas.

In other corporate offices, toys and games such as cargo nets and foosball tables are integrated into the work area.

Fred Turner (2009) describes how Google's headquarters is decorated with photographs from Burning Man. Turner (2009; his emphasis) argues that the Burning Man—an event embodying the kind of transgressive playfulness that Mikhail Bakhtin (1965/1984) has taught us to expect from festivals—provides a “*cultural infrastructure* for emerging forms of new media manufacturing.” Of particular interest is the Google “20 percent time” policy in which engineers devote 20 percent of their working time on projects of their own choosing. By introducing this sort of autonomy into the workplace, 20 percent time makes work look a lot like some form of serious play (though, of course, material gains are being made for the company).

It is gamification, however, through the insertion of game elements into the very logic of the workplace, that fully realizes this form of playbor *qua* playful work. In the production of playbor, gamification generally has two goals: to promote innovation

and/or to stimulate productivity. Game elements target cooperative and competitive impulses, often offering simulated rewards, including “virtual ... points, payments, badges, discounts, and ‘free’ gifts; and status indicators such as friend counts, retweets, leader boards, achievement data, progress bars, and the ability to ‘level up’” (Anderson and Raine 2012). There are myriad examples of how gamification has been embraced by corporate management and plenty of companies who pedal gamification services to them. Badgeville, “the #1 gamification and behavior management platform,” promises to “enhance employee productivity”; it boasts a client list including Microsoft, Panera Bread, Samsung, Fox, NBC, and eBay (Badgeville.com 2012). My Corner Office is a social networking and gamification platform that promises to help businesses “engage, motivate and reward their employees” (Springwise.com 2012). Though spatial realities necessitate that employees will inevitably be stuck working their lives away in cubicles, every employee can be awarded a symbolic corner office.

Returning to the two focal elements of play highlighted earlier in this section (i.e., its voluntary and unproductive nature), we can safely assume that the latter of these two elements is highly undesirable for the capitalist. A company has no interest in paying workers for unproductive activity. This fact highlights the need for the playbor concept (as distinct from play). Gamification does not attempt to transform work into play; rather, it tries to create the conditions for a play-like activity that is, ultimately, still productive.

The power of playbor is thus revealed in examining the other aspect of play: its voluntary nature. In the modernist conceptualization, work is separate from the rest of life and is something to be avoided.

It is certainly not something one does voluntarily. Of course, this modernist conceptualization of work focuses on the kinds of alienated labor occurring in the factories that dominated the economy in that period. But not all labor is coerced. In fact, Marx argues that labor (in its non-alienated form) is a fundamental expression of human nature. For Marx, (1844/1959, 30), “labor is shunned like the plague” by the worker only when “it does not belong to his intrinsic nature ... [and is] not voluntary, but coerced.” Gamification aims at making the labor less alienating—something that will be done willingly, even enthusiastically. This is particularly important in a post-industrial work environment where the capitalist needs the worker to engage not only her body but also her mind. Self-motivation, innovation, and profitability are linked in the context of creative work, so that if alienation impedes motivation, it ultimately impedes profitability. With playbor, this obstacle is removed.

The problem with gamification, of course, is that it does nothing to address Marx’s other major critique of capitalism; namely, that it is intrinsically and necessarily exploitative. An important clarification must be made here: the term *exploitation* is frequently used in common parlance (sometimes even with a positive connotation) to mean “take advantage of.” However, in this chapter, I am invoking a technical definition of exploitation, which is, primarily, derived from Marx’s (1867/1887) *Capital*.

For Marx, exploitation is an objective description of the structural conditions of the capitalist economy. In the simplest terms, we can say *exploitation is the process through which the capitalist enriches himself by selling commodities produced by workers and returning only part of the value of those commodities in wages*. Marx, observing the factories operating during his

lifetime, describes the workday as being divided into two parts. The first part is the “necessary labor” that creates, for the capitalist, value equivalent to that being paid in wages. The remainder of the day is “surplus labor” that is not remunerated to the worker but, instead, goes entirely to the capitalist in the form of “surplus value” or profit (Marx, 1867/1887, 148). The rate of exploitation is the ratio between surplus value and the value remunerated to the worker in the form of wages. Thus, if a worker spends half her day producing value equivalent to her wages and spends the other half of her day producing surplus value for the capitalist, then the rate of exploitation is 100 percent.

It is with this in mind that we can make sense of Marx’s (1844/1959, 28) seemingly paradoxical expression that “the worker becomes all the poorer the more wealth he produces, the more his production increases in power and size.” If a factory worker, for example, skips her lunch break to complete a task, she is simply increasing the amount of surplus labor done that day and, thus, increasing the rate of exploitation. The same logic applies to increases in productivity. If a worker’s wage is fixed, then increased productivity simply reduces the proportion of the day devoted to necessary labor and increases the proportion devoted to surplus labor.

Of course, since the early period of factory labor observed by Marx, myriad developments in the organization of capitalist enterprise have complicated these simplistic models. Moreover, critical economists have come to accept that the cultural code of signs and signifiers is equally as important in determining the value of a commodity as is the amount of labor put into it (Baudrillard 1998/1970). Nevertheless, wherever the capitalist engages in production (and not, say, speculation), exploitation is always an

essential component, because only through exploitation can the capitalist accumulate wealth that exceeds the modest limits of his own labor. For the capitalist, exploitation and the surplus value it produces “has all the charms of a creation out of nothing” (Marx 1867/1887, 149).

Gamification is the most recent addition to a long line of techniques and technologies employed by capitalists to enhance their ability to exploit workers (including many of the social media services now being incorporated into gamification platforms) (Dyer-Witheford 1999; Terranova 2000; Andrejevic 2002; Petersen 2008; Fuchs 2010; Fisher 2012; Rey 2012). By “de-alienating” (Fisher 2012) the workplace, gamification minimizes resistance and makes exploitation more efficient. If and when it achieves what it promises, workers will be lured into exploitative conditions by genuine interest and motivation instead of economic coercion. In fact, the capitalist’s ideal scenario would be to have the motivational mechanisms offered by the game element introduced into the processes of production simply eliminate the need for monetary incentives. Thus, gamification is simply another capitalist strategy pushing toward the realization of post-Fordist logic, which, if we trace its trajectory, culminates in a growing availability of “free labor” (Terranova 2000; Fuchs 2010).

Because exploitation enriches the capitalist at the expense of the worker (or, in this case, the playborer), then, to the extent that gamification increases exploitation, it must also produce greater social

inequality. From this perspective, gamification is not only an abstract economic issue, but also becomes a moral issue. Workers are now faced with a dilemma: is a less alienating work environment worth accepting intensified inequality and further consolidation of power in the hands of the capitalists? Or, is gamification something that should be resisted? Do workers even have the power to resist?

In a quote given in the introduction of this chapter, Harvey (1990) described flexibility as a central characteristic of post-Fordist capitalism. This, of course, has meant the dissolution of unions and other tactics used by workers to create inertia against the excesses of capitalism. Gamification may also serve to disempower workers. To the extent that gamification uses competition to motivate workers, it poses a potential threat to worker solidarity. In fact, this presents a reason we might expect to see capitalists favor competitive game elements over cooperative ones.

The gamification of production implodes play into work, producing playbor. Playbor, in principle, is less alienating than the traditional forms of labor described by Marx and other modern theorists, making it more likely to be done voluntarily or, at least, with less resistance and less need for compensation. Thus, gamification makes exploitation easier. Because exploitation creates inequality and because gamification promotes exploitation, the gamification of production can be understood to promote inequality (at least indirectly).

Gamification, Disenchantment, and Prosumption

In this chapter, I have argued that gamification serves capitalism’s singular goal of accumulating wealth for capitalists by transforming (possibly

unsatisfying commodities) into desirable hypercommodities and by de-alienating labor so that exploitation can be accomplished more efficiently. Moreover,

I have traced the extraordinary hype around gamification back to the banal and rather mercenary hope that it will enhance profitability in spheres of both consumption and production for the capitalists who employ it.

One final issue I would like to raise with regard to gamification is disenchantment. Disenchantment is a critique of the consequences of modernist—and, particularly, capitalist—rationality; it was most famously articulated by Weber (though adapted from Schiller). Weber scholar Richard Jenkins (2000, 12) explains that disenchantment is the product of two concurrent trends:

On the one hand, there is secularization and the decline of magic; on the other hand, there is the increasing scale, scope, and power of the formal means–ends rationalities.

Both aspects of disenchantment appear antithetical to the essence of play. Caillois (1961/1958, 10) suggests that (at least some) play involves a make-believe element that we could easily and appropriately describe as magical or enchanted, because “make-believe [is] accompanied by a special awareness of a second reality or of a free unreality, as against real life.” Similarly, Huizinga (1938, 18) says, “our ideas of ritual, magic, liturgy, sacrament and mystery would all fall within the play-concept.” This fantastical or magical dimension of play is opposed by rationalization, which tends to disenchant it.

The totalizing nature of rationality also means that nothing can exist separate from it. Separation is another of Caillois’ conditions for play. Likewise, Huizinga (1938, 9) also describes play as “distinct from ‘ordinary’ life both as to locality and duration.” While play may contain rational elements, play itself cannot be (formally) rationalized—that is to say, it cannot be integrated into the totalizing system of

rationality, lest it lose its distinctness. As soon as play is rationalized, it becomes disenchanting, and disenchanting play is no play at all. Huizinga (1938, 197) observes that when sports become rationalized, they are no longer play-like, saying that “with the increasing systematization and regimentation of sport, something of the pure play-quality is inevitably lost.”

In fact, if we adopt Huizinga’s understanding of the relationship between play and culture, then rationalization and play are in direct conflict. Huizinga (1938) observed that the play element in culture gives life its variable and multiplicitous sources of meaning. He argues that “the great archetypal activities of human society are all permeated with play from the start” and these activities include “law and order, commerce and profit, craft and art, poetry, wisdom and science” (4). Furthermore, he argues that

real civilization cannot exist in the absence of a certain play-element, for civilization presupposes limitation and mastery of the self, the ability not to confuse its own tendencies with the ultimate and highest goal, but to understand that it is enclosed within certain bounds freely accepted. (211)

Rationalization allows no such choice or freedom to determine meaning. Instead, as Weber (2003/1905, 91) put it, rationality acts as an “iron cage,” replacing playful possibility with means–end calculation. For Huizinga, the playfulness of culture is threatened by the seriousness of formal rationality (Henricks 2006, 79). Huizinga (1938, 198) concludes that Western civilization has experienced a “fatal shift towards over-seriousness.”

Rationalization works against playfulness in all facets of life, including the economy (which is our primary interest in this chapter). Weber (2003/1905, 29) explains “economic rationalism as the salient

feature of modern economic life as a whole,” which is characterized by “the extension of the productivity of labor ... through the subordination of the process of production to scientific points of view.” Simply put, rationality pervades modern capitalist institutions, which are organized around the most efficient means to the ends of maximizing accumulation. But wherever rationalization exists, disenchantment follows. This is even true in the sphere of consumption, where George Ritzer (2009, 48) explains that “rationalization tends to lead to cold, inhuman settings that are increasingly less likely to attract consumers.”

Clearly, gamification is meant to re-enchant production and consumption by making them more playful. Huizinga (1938, 205), for one, recognizes this possibility and finds it deeply upsetting, noting that “certain play-forms may be used consciously or unconsciously to cover up some social or political design. In this case we are not dealing with the eternal play-element... but with false play.”

In truth, the fact that gamification is a mechanism of enchantment appears so obvious that this point probably does not merit further attention. What I am really interested in is how gamification itself is threatened by disenchantment. Huizinga observes that games can become disenchanted when they are overly rationalized and commercialized, and he is clear that “commercial competition does not ... belong to the immemorial sacred play-forms” (Huizinga 1938, 200). Given these observations and because we know the ultimate (and highly rationalized) goal of the gamification (as employed by capitalists) is to maximize profit, it follows that gamification is intrinsically prone to disenchantment.

My contention is that in order to function effectively, gamification must obscure its own purposes

or, at least, redirect attention away from its own rationalized *modus operandi*. For this reason, I think gamification functions best in an environment (such as social media) where production and consumption are highly imploded. This is because, as Ritzer (2009, 120) explains, implosion produces spectacle, and spectacle obscures economic realities (including the fact that gamified consumption is manipulative and gamified production is exploitative). Ritzer (2009, 96) argues:

Spectacle has been used to overcome the liabilities, especially the disenchantment, associated with highly rationalized systems ... the spectacle associated with commodities is a kind of opiate that obscures the true operation of society (including its rationality). It also serves to conceal the fact that the goods and service purchased may ultimately be dissatisfying.

The implosion of production and consumption and the resulting spectacle helps to mask the material gain generated via economic gamification. In so doing, it makes a gamified system appear to conform better to the principle that play is unproductive. If the manipulative or exploitative aspects of gamification are too obvious, they will disenchant the gamified system, making it feel highly rationalized and not very game-like.

Whether or not this final point about implosion and spectacle holds, the overarching issue is that the gamification of economic activity faces an eternal struggle against disenchantment. To the extent that it succeeds in concealing its own rationalized logic, it becomes another tool in the arsenal of capitalists, who will continue to use every means available to accumulate greater wealth and further intensify economic inequality. In short, with gamification, we collect the points while the capitalists collect the dollars.

Notes

1. Based on an October 13, 2012, search of the word *gamification* on the publications' respective websites.

2. This paradox is not confined to gamification but has historical precedents in earlier attempts at workplace "funification" (Fleming 2005; Goggin 2011; Nelson 2012).

3. There were also, of course, other major figures who helped shape the organization of capitalism in the early twentieth century, including F. W. Taylor, whose influential tract *The Principles of Scientific Man-*

agement taught capitalists how to maximize productivity in the factory.

4. As I will discuss in depth in the next section, this use of the term *exploitation* is inconsistent with the definition derived from Marx's writings that is used by most academics, but we certainly get the point.

5. Of course, these two characteristics are not meant to be an exhaustive account of play, just the two aspects of play most relevant to the gamification of production.

References

Anderson, Janna, and Lee Rainie. 2012. *The Future of Gamification*. Washington, DC: The Pew Internet & American Life Project.

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.

Badgeville.com. 2012. Available at: <http://www.badgeville.com>.

Bakhtin, Mikhail. 1965 [1984]. *Rabelais and His World*. Trans. H. Iswolsky. Bloomington: Indiana University Press.

Baudrillard, Jean. 1994 [1981]. *Simulacra*. Ann Arbor: University of Michigan Press.

Baudrillard, J. 1998 [1970]. *The Consumer Society: Myths and Structures*. 1st ed. London: Sage Publications.

Baudrillard, Jean. 2008 [1983]. *Fatal Strategies*. Trans. Phil Beitchman and W. G. J. Niesluchowski. Cambridge, MA: MIT Press.

Belsky, Gary. 2012. Gamification will soon rule the business world. *Time*. August 28. Available at: <http://business.time.com/2012/08/28/six-reasons-why-gamification-will-rule-the-business-world/>.

Bogost, Ian. 2011a. Gamification is bullshit: My position statement at the Wharton Gamification Symposium. Available at: http://www.bogost.com/blog/gamification_is_bullshit.shtml.

Bogost, Ian. 2011b. Persuasive Games: Exploitationware. *Gamasutra*, May 3. Available at: http://www.gamasutra.com/view/feature/134735/persuasive_games_exploitationware.php.

Bourdieu, P. 1986. *The forms of capital*. In *Readings in Economic Sociology*, ed. N. W. Biggart, 280–291. Oxford: Blackwell.

- Butler, Judith. 1997. *The Psychic Life of Power: Theories in Subjection*. Redwood City, CA: Stanford University Press.
- Caillois, R. 1961 [1958]. *Man, Play, and Games*. Glencoe, NY: The Free Press.
- Connor, S. 2005. Playstations. Or, playing in earnest. *Static* (1).
- Davies, B. 2006. Subjectification: The relevance of Butler's analysis for education. *British Journal of Sociology of Education* 27 (4):425–438.
- Deci, E. L., R. Koestner, and R. M. Ryan. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin* 125 (6):627.
- Deleuze, G. 1992 [1990]. Postscript on the societies of control. *October* 59:3–7.
- Deterding, S. 2011. Situated motivational affordances of game elements: A conceptual model. In *Gamification: Using Game Design Elements in Non-Gaming Contexts, a Workshop at CHI*.
- Deterding, S. 2010. Pawned. Gamification and its discontents. *Playful*. Presentation, Playful 2010, September 24, 2010, London, UK.
- Deterding, Sebastian, Dan Dixon, Rilla Khaled, and Lennart Nacke. 2011. From game design elements to gamefulness: Defining “gamification.” In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9–15. New York: ACM Press.
- Dyer-Witheford, N. 1999. *Cyber-Marx: Cycles and Circuits of Struggle in High Technology Capitalism*. Urbana: University of Illinois Press.
- Fisher, E. 2012. How less alienation creates more exploitation? Audience labour on social network sites. *tripleC—Cognition, Communication, Co-operation* 10 (2):171–183.
- Fleming, P. 2005. Workers' playtime? Boundaries and cynicism in a “culture of fun” program. *Journal of Applied Behavioral Science* 41 (3):285–303.
- Foucault, Michel. 1975. *Discipline & Punish: The Birth of the Prison*. New York: Vintage.
- Fuchs, C. 2010. Labor in informational capitalism and on the Internet. *Information Society: An International Journal* 26 (3):179.
- Giddens, Anthony. 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Redwood City, CA: Stanford University Press.
- Goggin, J. 2011. Playbour, farming and leisure. *ephemera: theory and politics in organization* 11 (4):357–368.
- Goldstein, Robin, Johan Almenberg, Anna Dreber, John W. Emerson, Alexis Herschcowitsch, and Jacob Katz. 2008. Do more expensive wines taste better? Evidence from a large sample of blind tastings. *Journal of Wine Economics* 3 (1):1–9.
- Hardt, Michael, and Antonio Negri. 2001. *Empire*. Cambridge, MA: Harvard University Press.
- Harvey, David. 1990. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Oxford: Blackwell.
- Henricks, Thomas S. 2006. *Play Reconsidered: Sociological Perspectives on Human Expression*. Urbana: University of Illinois Press.
- Horkheimer, M., and T. W. Adorno. 1997 [1944]. *Dialectic of Enlightenment*. London: Verso.

- Horning, Rob. 2011. It's no game. *Jacobin*, September 9. Available at: <http://jacobinmag.com/2011/09/its-no-game/>.
- Huotari, K., and J. Hamari. 2012. Defining gamification: A service marketing perspective. In *Proceeding of the 16th International Academic MindTrek Conference*, 17–22. New York: ACM Press.
- Huizinga, J. 1938. *Homo Ludens*. New York: Beacon Press.
- Jenkins, R. 2000. Disenchantment, enchantment and re-enchantment: Max Weber at the millennium. *Max Weber Studies* 1 (1):11–32.
- Kücklich, J., 2005. Precarious playbour: Modders and the digital games industry. *The Fibreculture Journal* (5).
- Lazzarato, M. 2006 [1996]. Immaterial labor. In *Radical Thought in Italy: A Potential Politics*, ed. Virno and M. Hardt (trans. Paul Colilli and Ed Emory), 132–146. Minneapolis: University of Minnesota Press.
- Lepper, Mark R., David Greene, and Richard E. Nisbett. 1973. Undermining children's intrinsic interest with extrinsic reward: A test of the 'overjustification' hypothesis. *Journal of Personality and Social Psychology* 28 (1):129–137.
- Marcuse, Herbert. 1964. *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. New York: Beacon Press.
- Marx, K. 1844 [1959]. Economic & philosophic manuscripts of 1844. Available at: <http://www.marxists.org/archive/marx/works/download/pdf/Economic-Philosophic-Manuscripts-1844.pdf>.
- Marx, K. 1867 [1887]. *Capital*. Available at: <http://www.marxists.org/archive/marx/works/1867-c1/>.
- Nelson, M. 2012. Soviet and American precursors to the gamification of work. In *Proceedings of the 16th International Academic MindTrek Conference*.
- Petersen, S. M. 2008. Loser generated content: From participation to exploitation. *First Monday* 13 (3).
- Rey, PJ 2012. Alienation, exploitation, and social media. *American Behavioral Scientist*. 56: 399–420.
- Rieber, L. P., L. Smith, and D. Noah. 1998. The value of serious play. *Educational Technology* 8(6): 29–37.
- Ritzer, George. 2009. *Enchanting a Disenchanted World: Continuity and Change in the Cathedrals of Consumption*. Thousand Oaks, CA: Pine Forge Press,.
- Ritzer, G. 2010. *Focusing on the Prosumer: On Correcting an Error in the History of Social Theory. Prosumer Revisited*. Wiesbaden, Germany: VS Verlag für Sozialwissenschaften.
- Ritzer, G., and N. Jurgenson. 2010. Production, consumption, prosumption: The nature of capitalism in the age of the digital "prosumer." *Journal of Consumer Culture* 10 (1):13–36.
- Roberts, Martin. 2009. Productivity is fun. Presented at: *The Internet as Playground and Factory*, November 13, 2009, The New School, New York.
- Springwise.com. 2012. Gamified social network will help companies motivate and reward their employees. Available at: http://www.springwise.com/telecom_mobile/gamified-social-network-companies-motivate-reward-employees/.
- Terranova, T. 2000. Free labor: Producing culture for the digital economy. *Social Text* 18 (2): 33–58.

- Turner, F. 2009. Burning Man at Google: A cultural infrastructure for new media production. *New Media & Society* 11 (1-2):73-94.
- Virno, Paolo. 2003. *A Grammar of the Multitude: For an Analysis of Contemporary Forms of Life*. Trans. Isabella Bertolotti, James Cascaito, and Andrea Casson. Cambridge, MA: MIT Press.
- Weber, Max. 1947. *The Theory of Social and Economic Organization*, ed. Talcott Parsons, trans. A. M. Hender-son and Talcott Parsons. New York: Simon and Schuster.
- Weber, Max. 2003 [1905]. *The Protestant Ethic and the Spirit of Capitalism*. Trans. Talcott Parsons. Mineola, NY: Courier Dover Publications.
- Weitzman, Erica. 2008. No fun: Aporias of pleasure in Adorno's aesthetic theory. *German Quarterly* 81 (2):185-202.