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Research Article

Laboring Online: Are There “New” Labor Processes In Virtual Game Worlds?

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Abstract

As unemployment figures rise in the developed world, questions regarding the meaning of “labor” and the intrinsic “value” of work re-emerge. This paper examines labor practices in virtual game worlds to extend existing theoretical explorations regarding concepts of labor and work in the information systems field. The cases explored in this study observe the labor processes associated with two virtual game worlds. We explore whether labor processes are being replicated in virtual environments and, if so, whether “conventional” hegemonies identified by Marxist literature regarding labor are also found in these virtual worlds. This paper contributes to critical information systems research by exploring emancipatory claims regarding labor practices in ICT-enabled work. We present the findings from empirical studies of the Puzzle Pirates and Farmville virtual worlds where we examine the forms of labor undertaken online and their significance in the construction of hegemonic power relationships. The research utilizes a structured ethnographic-style methodology to explore daily working life found in these game environments. This paper contributes to critical information systems research by testing the robustness of existing theories of labor process in the problematic and expansive space of virtual worlds.

Keywords: Labor, Virtual Worlds, Labor Process, Division of Labor.

* Dubravka Cecez-Kecmanovic was the accepting senior editor. This article was submitted on November 29, 2011 and went through 4 revisions.

1. Introduction

In this paper, we discuss virtual game worlds as social environments that are fully enmeshed in the wider experiences of late capitalist production and consumption (including the processes of labor), and that are framed in a cultural environment that is driven and defined by the exploitation of and obsession with the spectacle in all its forms (Debord, 1995). Grover, Lyytinen, Srinivasan, and Tan (2008) outline the difficulties in introducing theory into the information systems (IS) domain. Supported by the works of Gregor (2006), Alvesson and Deetz (2000), DiMaggio (1995), and others, Grover et al (2008) encourage IS research to undertake the difficult challenge of expanding research approaches in a rigorous manner. This research attempts to "cross the ocean" by building on the exemplary research already carried out in the area of critical information systems (Howcroft & Trauth, 2006). We knowingly sidestep internal debates outlined by Thompson (2005) and Fournier and Grey (2000) regarding the inevitable contention between poststructuralist and Marxist thought. This irreconcilable ontological tension of materialist and idealist thinking brings varying theoretical applicability to the studies of management. Instead, we commence by acknowledging the notable shift that has occurred in critical approaches used in information systems after Orlikowski and Baroudi's (1991) premature announcement regarding the death of critical research in IS studies. While, for many, the meaning of the term "critical" is not self-evident when studying information systems, critical studies in the field have come to encapsulate a range of related theoretical approaches (Howcroft & Trauth, 2006). In this paper, we critically analyse play in casual games as a form of labor that reinforces and supports current capitalist modes of production. While other critical IS studies have taken up and applied critical theory (Horkheimer, 1976), critical management studies (Alvesson & Willmott, 1996), critical ethnography (Forester, 1992) and critical accounting (Mingers, 1992) the unifying element among all of these studies is the notion of equity (Brooke, 2002; Cecez-Kecmanovic, 2001). While generally unified in their ultimate aim, critical theory studies themselves can be wide and varied in focus (e.g., in their differing approaches to realism and relativism and in their diverse range of epistemological and phenomenological positions). Brooke (2002) argues that critical theorizing in IS has its foundations in the Frankfurt School of thought that is subsequently represented, for example, in Marxist approaches, actor network theory, feminist theory, with theorists such as Bourdieu, Dooyeweerd, Heidegger, and particularly with the works of Habermas (Ngwenyama, 1991). Burrell and Morgan (1979) were notable critical theorizing pioneers in their explorations of critical approaches to organizational studies and management. More recently, scholars now drawn on an ever-expanding range of critical approaches to explore a full spectrum of concerns in information systems research.

While this paper is related to earlier works that are positioned in the "critical" research milieu, it is relatively unusual in that it 1) examines the environment of a networked game to examine the nature and role of labor, and 2) subsequently uses this critical perspective base to interpret late capitalist labor processes. Late-stage capitalism is dominated by the fluidities of financial capital and by the increasing commodification and industrialization of ever more-inclusive aspects of human life. This form of contemporary capitalism is characterized by a new mixture of high-technology advances, the concentration of speculative financial capital, and an increasing differentiation between those who are better or worse off. A key element of this form of capitalism is the ever more-complex appropriation of social activities into the capitalist mode of production. This shift in the nature of capitalism constructs social life into forms of labor. The labor aspects of everyday life are hidden and couched as entertainment, leisure, and artistic endeavours. With so many casual games readily accessible online this discussion is timely. Each of these games are integral parts of contemporary high late capitalism that exploit the value of labor while recuperating gameplay as an extension of "hegemonic" capitalism. The game worlds simultaneously act as a training mechanism that produces a capable cohort of syntactic knowledge workers who serve the interests and as motives of this capitalism.

This paper is anthropological in its focus. but it deviates from the approach Avison and Myers (1995) describe. In contrast, we examine the embedded strangeness of virtual worlds. Embedded strangeness complements the consideration of anthropological strangeness by revealing "the forgotten, the background, the frozen in place" (Star, 1999, p. 378). In effect, recognizing

embedded strangeness enables the critique of the structuring elements of everyday life. We see a close affinity between this perspective and the observation that “the idea of syntactic labor is embodied in ordinary discourse and experience, although it is not necessarily made fully explicit” (Warner, 2002, p. 558). In contrast, and more commonly, seeking anthropological strangeness is a method for treating the observed world as unusual and surprising to the observer in order to reveal new anthropological insight found in directly visible cultural practices. The anthropological approach tends to encourage analysis of online practices in a specific site that are then observed entirely in this context without reference to other sites or everyday practices more generally. This is particularly true of social networking sites in which research can ignore the existence of other social networks (online or otherwise) beyond the specific site of analysis. A critique of this approach is its reliance on the observer to be capable of identifying the strange, and holds the real potential that they will inadvertently overlook wider systemic, structural, and embedded strangeness—the very aspects of social, cultural, and information systems that assist in perpetuating hegemonic power structures (Slezak, 1995).

We see syntactic labor practice (Warner, 2005, p. 559) as a key aspect of the embedded strangeness found in both the Puzzle Pirates and Farmville virtual worlds. Syntactic labor is described as “the primitive operations [such as] the writing, erasure, and substitution of symbols” and these operations are, “possible on discrete messages and labor as the work expended in these operations” (Warner, 2005, p. 559). In effect, we see much of the gameplay and, by extension, the appeal of the virtual worlds to be found in undertaking syntactic labor—the repetitive manipulation, transformation, and combination of existing goods. In fact, in the games we examined, it is very often the specific actions of syntactic labor that produce game-based rewards. These rewards are themselves often represented as some form of virtual currency. The inability to craft customised items, a capability of Second Life and other “gameless” virtual worlds, produces an absence of interpretive semantic labor that largely prevents conflict over ownership or any questioning of existing hegemonic relationships. By functioning at the level of syntactic labor, the key problem of reifying personal property and creating notions of ownership and possessions is overcome in Puzzle Pirates and Farmville. “One crucial difficulty [for virtual worlds] lies in the altered relation between selling and the exchange- and use-value of the product ... in selling a copy of an information product, the use-value of the product is retained while its exchange value is still realised” (Warner, 2005, p. 552). This is a key challenge to a game world where exchange practices become the basis for determining ability and success in accumulating goods, while scarcity and use-value is determined by the mechanics of the game itself. The specific scarcity of goods and the ability to acquire them is the artificial manufacture of the game. Kennedy (2008, p. 97) suggests that, “people tend to prefer playing in a game where there is scarcity: it has 'turned out to be a feature, not a bug'”. The notion and creation of scarcity in a virtual world is intimately tied, at least in the worlds we have examined, with the need to counteract this scarcity with the application of labor processes in specific game-defined ways. For us, in-game scarcity highlights the major distinction between gameplay and more-commonly recognised capitalist processes; the construction of a simulation that itself is only possible because it exploits the difference between human labor and the deferred form of labor performed by information technologies.

Labor delegated to information technologies ... is relatively and increasingly less costly than direct human labor. For instance, for the costs of automatically creating an index to a record would be minimal, once the information technologies for this (in both hardware and software aspects) are formalised and robust (Warner, 2002, p. 562).

By considering virtual game worlds rather than more clearly defined business information systems, we also take up Greenbaum's (1996, p. 230) position that “the lens of labour process analysis gives us pointers to what we miss when we focus too closely on work, instead of labour”. Our claim is that, as capitalist markets fully occupy the digital domain, it becomes necessary for the functioning of capitalist production to source labor and therefore to drill and rehearse the necessary skills required to participate and contribute to transformative value in such markets. Becoming an efficient and effective practitioner in the virtual game world provides the space to “practice” acts of labor.

In presenting this claim, we take our research focus from the observable surface-level comparisons of specific social networking sites towards established critical research agendas and theories in information systems and its reference disciplines to highlight two pivotal concerns of critical theorists: that of worker emancipation and the loci of hegemonic power.

2. Situationist Thought

Situationist thought emerged during a period of global post-war social unrest and a period in which traditional economic certainties were being questioned. The intellectual heritage of the period and of situationism itself is firmly located in a Marxist heritage, and advocates that, in order to achieve a superior quality of life, alternatives must be presented that contrast with those of the dominant capitalist order. Situationist thought encourages the use of non-conventional methods and even playfulness through the construction of situations and psycho-geographies that favor the political outcomes advocated by this form of thinking. The earliest expressions of situationism are notably for their use of dissemination methods drawn directly from the creative arts. This experimental approach affirmed the situationist resistance to definition as a theoretical position or as a theory. An indication of the power and complexity of this thinking are the varying positions taken up by writers considered to be situationist who still largely resist representation as a body of work. Authors claimed as proponents of situationist thinking include those concerned with artistic representation and expression that reveal the influences of the Surrealist and Dadaist movements (Internationale Situationiste, 1958). Others took up a line of thinking that emphasized the undervalued consideration of everyday life (de Certeau, 1988), while Plant (1997, p. 12) takes up a more philosophical view by describing situationalism as the “materialisation of ideology” and positioning it as a tension of power.

In this body of competing debates, Debord's *Society of the Spectacle* (1995) is the most cited theoretical work of situationist thought. Debord (1995) argues that the “spectacle”, those features of the everyday such as advertising and the mainstream media (and now the Internet and social networks) have a central role in perpetuating an advanced capitalist society. The plethora of competing spectacles propagates and presents a form of reality that masks the capitalist agenda that reduces human life to a subservient and functional position in a wider system of order. Significantly, this observation is a contemporary articulation and self-reflexive application of the Marxist concepts of alienation, commodification, and reification. Marx (1906) observed that, in the capitalist mode of production, we evaluate materials not by what purpose they serve or what they are actually useful for, but instead we recognise them based on their value in a market. The value of a commodity is abstract, has become detached from concepts of utility, purpose, or even critical aesthetic judgement, and is actively disentangled from its actual characteristics. An essential process of contemporary capitalism is to entirely commodify the material world.

We live in a spectacular society. Our lives are surrounded by an immense accumulation of spectacles. Things that were once directly lived are now lived through proxies of that experience. Once an experience is removed from direct experience within the 'real' world it becomes a commodity. As a commodity the spectacular is developed to the detriment of the real. It becomes a substitute for experience (Law, 1979, pp. 2-3).

For capitalism to persist as the dominant economic and social order, the spectacle offers a mechanism of control. The process of recuperation intercepts, modifies, and renders politically impotent any radical social and political ideas or images. Recuperation removes radical thought by commodifying and then incorporating these same ideas and images into the mechanisms of mainstream and capitalist society. A contemporary example of this recuperation process can be identified in the X Factor and other reality television programmes based on singing competitions. This systematised processing of musical talent that is ultimately commodified with a precise schedule for release at key annual peaks in retail purchasing is a distant remnant of the radical uses of music to construct and articulate sub-cultural and youth protests. Recuperation is a significant and powerful tool for the maintenance of hegemonic power that can obscure the importance of everyday practice and constant attempts to construct inequity. Situationist thought is intended as a view of, and from, everyday life. Because this paper takes situationist thinking into the research field of IS, it is important to place it in relation to other works.

Information systems research frames a diverse body of work from a range of theoretical sources. Core to this body of work are the works of Hirschheim and Newman (1991), Avison and Myers (1995), Kaarst-Brown and Robey (1999), and Berne (2003). However, a pivotal distinction found in information systems research is the presence of a theoretical self-awareness. This was originally revealed in Avison and Myers (1995), who list researchers in IS utilising ethnography to carry out fieldwork including Hughes, Randall, and Shapiro (1992), Orlikowski and Baroudi (1991), Suchmann (1987), Wynn (1991), and Zuboff (1988), and who argue that culture had largely been overlooked in IS research. Their conclusion was that more-critical approaches were needed to examine culture in an IS context. This challenge has been widely accepted, problematized, nuanced, and taken up by many researchers in the IS domain.

The argument presented here considers games and virtual game worlds as a form of information systems and as an unrecognised domain of labor that is “hidden in the light” through the spectacle of immersive virtual environments, cartoon-like graphics, and simplistic game mechanisms. Star argues:

Information systems encode and embed work in several ways. They may directly attempt to represent that work. They may sit in the middle of a work process like a rock in a stream, and require workarounds in order that interaction proceeds around them. They also may leave gaps in work process that require real-time adjustments, or articulation work, to complete process (Star, 1999, p. 385).

Star leaves no doubt that information systems are in multiple ways related to the everyday world of work and labor. Our work takes up this position specifically with a critical examination of the labor processes found in virtual game worlds. We adhere to Star's (1999, p. 378) methodological call to consider the “embedded strangeness” of social networking in order to identify defining practices in the integral structures of virtual worlds as information systems; however, while inspired by her writing about the mundane, we use a structured ethnographic approach to disentangle anthropological notions regarding the strangeness of everyday life found in games. Understanding these game worlds as being part of the society of the spectacle and spectacles in their own right allows us to elucidate the ways in which these games can enculturate players into the world of work as workers engaged in the de-skilled and compliant actions of “syntactic labor” that is Warner (2002, 2005, 2007) identifies and describes.

Warner (2007, p. 1786) emphasises that:

Following the late 20th century mechanization of mental labor, syntactic labor can be transferred to information technology, operating deterministically between intervals of human intervention, opening up and revealing a distinction between semantic and syntactic mental labor.

He also asserts that:

Semantic labor is concerned with transformations motivated by the meaning or signified of symbols, while syntactic labor is determined by the form alone of symbols, operating on them in their aspect as signals. Semantic labor requires direct human involvement while originally human syntactic labor can be transferred to information technology, where it becomes a machine process. Direct human labor has high costs while mental labor transferred to technology is likely to have relatively diminished costs, under modern conditions (Warner 2007, p. 1785).

Warner (2002) also identifies the relationship between semantic and syntactic labor, and their relationship to technology.

Syntactic labor is intimately bound up with physical labor (...) and performed directly by humans, assisted by the established technologies of writing. Direct human labor has

high costs, even under 19th century capitalism, where wages might be limited to the reproduction cost of that labor (Marx, 1976) in the diffusion of copying devices in the late 19th century, we can see the beginnings of a dynamic where machine labor, which was lower direct costs, is substituted for direct human syntactic labor (Warner, 2002, p. 558).

We identify the presence of both syntactic and semantic labor practices in games, and argue that it is through a familiarization with activities undertaken in gameplay that game players learn to undertake forms of labor that reassert hegemonic power. The significance of Warner's differentiation of syntactic and semantic labor, for this paper, is the manner in which it helps to reveal the processes of recuperation that can be identified in game worlds and other forms of everyday digital technology usage.

3. Games, Social Networks, and Virtual Worlds

The proliferation of research into social networking offers an extensive series of frameworks with which to examine virtual worlds. The majority of this work (e.g., Adler & Kwon, 2002; Chen, 2005; Ellison, Steinfeld, & Lampe, 2007) develops a broad sociological perspective that emphasizes engagement and interactions, and the social construction of trust and identity. Many of these works are cast in a generally critical interpretation but employ a transactional approach, with an underlying implication regarding the assumed positive aspects of these interactions. The observations presented in these earlier works do not necessarily disentangle the broader meanings and inter-relations of the practices of "social networking" from the design, representation, and capabilities of a specific site and its directly observable "anthropological strangeness" (Star, 1999, p. 379).

Virtual game worlds arguably present a "special case" in the framework of information system research, but the blurring of times for labor and times for leisure and play that commenced with the popularizing and theorization of teleworking (Gajendran & Harrison, 2007; Golden & Veiga, 2005), coupled with the significant participation rates in virtual game worlds (Ahmad, Keegan, Srivastava, Williams, & Contractor, 2009; Heeks, 2010), increasingly makes precise distinctions problematic. Kennedy (2008, p. 102) claims that "It could be argued that what occurs in the game world is play, not work but it is difficult to distinguish clearly between these" by suggesting that labor, irrespective of its provenance or ostensible purpose, remains labor and all of the associations that this brings with concepts of power and emancipation or their absence. Robey and Jin (2004, p. 151) claim that "work is increasingly mediated by technologies that potentially liberate workers from specific places and times", but this observation can equally be applied to the concept of play with equivalent meaning and consequences. The example of gold farming is instructive. The practice of gold farming involves skilled game players of virtual games worlds acquiring items of value including items, gems, and gold that can then be sold with the proceeds exchanged into conventional currencies. Dibbell's (2007) observation of Chinese gold farmers specifically reveals how blurred this relationship has become for the workers who have paid employment to acquire items in World of Warcraft, who then "to a man, [...] log into their personal World of Warcraft accounts and spend these precious free hours right back where they had spent every other [working] hour of the day: in Azeroth". Heeks' (2010) observation of gold farmers, their labor, and the income potential for working inside games shows that these practices can actually become play. The gold farmers maintain a work relationship as they are paid an hourly wage for their skills and exertions that their employer then benefits from by selling items and ultimately profiting from their labor. Bartle (2004, p. 6-7) also outlines notions of virtual property in game worlds that problematises the notion of the ownership of virtual property. Bartle (2004) sees the claims that "I own the product of my labor"—the subsequent virtual item—or "I'm selling my time" to craft the virtual items produced in the game as both potentially spurious claims by citing specific comparisons in actuality. The danger of uncritically dismissing these claims through the viewport of anthropological strangeness ensures that the embedded strangeness of game worlds will never be questioned and the impact they have in influencing and shaping players' worldview and skills development will always continue to be overlooked as "mere" play. Heeks (2010) is not so dismissive of the potential claims of players in virtual game worlds and cites Chinese examples where players have successfully won claims over the property created through their labor.

Neither Bartle (2004) or Ahmad et al. (2009) question the structural and social order created in the games by confining their analysis to the level of anthropological strangeness; in other words, they examine the game in the game as a game. Heeks (2010, p. 68), however, recognizes the exploitative aspects of gold mining and even suggests that it is “an ingenious, though controversial, way for poorer nations to earn money from information and communications technologies and a way for impoverished workers to build digital skills that might be later transferred to other information technology jobs unrelated to game playing”. Our own focus on virtual game worlds reveals their significant purpose and implicit agenda in perpetuating hegemonic power with the consideration that “the privatized family unit within capitalist society is underpinned by the need to ensure workers meet the physical and mental requirements of paid labor, and to bring up the next generation of workers” (German, 2003, p. 10). We argue that participation in game worlds that use syntactic labor as a structuring principal become training grounds for enculturating contemporary forms of labor (including telework). Structuring labor within gameworlds in this manner requires only a restricted skillset and potentially foreshadows future work environments. The acceptance and training of players in specific forms of laboring and the shaping of their conceptualizations of work practices have consequential political ramifications by accepting already experienced labor arrangements as a “norm”. Post-industrial economies require access to pools of suitably trained low-level (but nonetheless knowledgeable) workers in a manner similar to the requirements of industrialized and industrializing economies needing manual laborers.

The impact of participating in game worlds has still wider political significance:

For Marxists, the exploitation of some people by others, the existence of an oppressive state and subordination, are products of human history and therefore capable of being changed. In analysing worker's oppression and a disadvantaged position at work the Marxist focus is on the use made by capitalists of low paid workers (Wilson & Greenhill, 2004).

For Warner (2002), “living labor is required to reawaken the dead labor embodied in machinery and thereby to confer use- and exchange-value on inert stuff”. This is a practice that is observable in virtual game worlds generally made without any critical analysis of where, or by whom, the benefits of generated surpluses are then enjoyed. The anthropological differences found between these worlds cannot be overlooked, and we see this distinction in the types of labor that Warner (2002) labels as semantic and syntactic. However, in order to examine the subtleties of game-based labor in virtual worlds, we return back to the definitions of “labor process” and “work” developed from the work of Braverman (1974) and its subsequent critiques that are regularly cited in information systems research (Adler, 2007; Spencer, 2000; Tinker 2002).

4. Labor Process and Work

O’Doherty and Willmott (2009, p. 931) define the labor process as “a well established approach to the sociological study of work which attends to the instabilities of capitalism and, more specifically, to the volatile and contested nature of social relations at work”. We add to their call to extend existing studies relating to labor process analysis beyond the dualistic and (critical) realist assumptions that inhibit development of the theory in sociology and management. We also extend and develop a cross-disciplinary strand of labor process analysis here by exploring the labor processes of virtual environments. A comprehensive review of labor process theory is provided by O’Doherty and Willmott (2009). Central to this study is the notion of the “immediacy of labor power” that emerges from a Marxist tradition and relates to the transformation potential and the distinction of labor capital (i.e., the hiring of labor at an hourly rate) from realized labor potential (i.e., the goods and services produced). It is this transformational potential that remains the basis for contested labor relations creating disputes between the payment received for labor and the quality of workplace conditions, which echoes Batstone’s (1984) description of the “working order”. The cases explored in this study observe the labor processes associated with two virtual game worlds. We ask whether existing labor processes experienced elsewhere and whether the focus of previous Marxist analysis are being replicated in virtual environments and, if so, whether “conventional” hegemonies are also found in virtual worlds.

ICT-enabled work in contemporary discourse is currently presented in terms of “flexibility”. However,

the flexibility offered by ICT for new working patterns could also be seen as a way of allowing government and employers to sidestep any responsibility entirely to the individual by allowing her to adjust her life around paid work (Perrons, 2003, p. 73).

The rhetoric of work flexibility, however, is particularly hollow for two reasons: 1) absence from the employing organization brings a cost of “invisibility” from any reward system operated by management and, at the same time, 2) isolation rallies against traditional ways of collectively organizing workplace and labor-based resistance to the excesses of capitalist hegemony. Gajendran and Harrison (2007) and Mirchandani (1999) link the isolation of teleworking with workers’ disempowerment. Although some commentaries suggest that this powerlessness is by no means a certainty, none of the current literature completely denies the potential for this situation (Gajendran & Harrison, 2007; Golden & Veiga, 2005).

The definition of work as activity undertaken by an employee for an employer in exchange for some form of payment constrains the concept to the perfunctory execution of tasks for the organization that pays them. Other activities, such as socializing, completing a task to a high standard, and the engendering of a sense of worth are relegated in conceptual and managerial significance to the primary purpose of enlivening dead labor and producing profit.

Shin, El Sawy, Sheng, & Higa (2000, p. 85) say that “work performed at home or a satellite office to reduce commuting is attracting much attention as an alternative way to organise work”. Uncritical acceptance of the benefits of ICT-enabled work and teleworking further perpetuates the normalcy of existing labor hegemony and produces a subtle form of powerlessness by removing the visibility of labor from the socialized public arena where collective resistance can be organized and vocalized. A sufficient body of work (cf. Golden and Veiga, 2005) criticizes the perceived benefits to workers of telework against the actuality of increased hours of paid and unpaid labor activity in multiple locations. Telework coupled with an “always-on” accessibility to ICTs blurs any possibility for the neat isolation of labor from other aspects of everyday life. What activities and actions can be considered as labor (or the assumed association of labor and laboring with “work”) becomes problematic with the blurring of the differentiation of public and private spaces. The problematic nature of the relationship of work and labor is reflected in “standard” business studies texts such as Lines, Marcouse, & Martin’s (2006) *Complete A-Z Business Studies Handbook*, which does not offer a definition for either word and yet offers twelve definitions that employ either labor or work as adjectives, which implies that these pivotal concepts are assumed immutable givens, reinforcing their hegemonic centrality.

5. Research Design and Methodology

The empirical data gathered for this research is drawn from two popular social network games: YoHoHo! Puzzle Pirates and Farmville. These two worlds were initially chosen for their ease of access: Farmville is freely available through the Facebook website, and Puzzle Pirates can be freely downloaded via the Web and also more recently through the Facebook ecosystem. Additional factors that influenced the choice of these games included both game worlds’ being internationally popular with large populations of “casual” players, a feature that is distinct from many commonly studied virtual worlds such as World of Warcraft, but with more clearly defined game features than environments such as Second Life. A key aspect of both the game worlds studied, in the context of this discussion, is the need for players to undertake semi-regularized and specific labor on a day-to-day basis in order to participate and to progress in the game. While situationist thinking argues for the use of playfulness in approaching the object of critical analysis, this paper does not take up this challenge and confines the discussion of play to the existing mechanics of the games examined by incorporating the integral social aspects, participation, and voluntary labor found in game. A “playful” approach to research would have involved in-game activities that created art where labor was expected.

For YoHoHo! Puzzle Pirates (Y!PP), we used participant observation of in-game conduct and other qualitative data-gathering techniques including gathering blog postings and other third party documents describing players experience and understanding of the games. Several third party trade analysis websites also proved useful to interrogate existing in-game activities from a distanced and disentangled viewport. One of the most useful of these tools from both an analytical and game-play point-of-view is Pirate Commodity Trader with Bleach (pctb.crabdance.com), which provides live updates on commodity trading prices at different locations across the game world. The researchers were participants in Puzzle Pirates for 3 years and for approximately 2 years after the game world introduced free “Doublloon Oceans” as an alternative to its subscription-only game.

For Farmville, we used visual methods and player interviews to complement and confirm the observations made in the Puzzle Pirates environment. Our involvement with Farmville has been continuous from approximately three months after its release onto Facebook in June 2009. However, within 12 months of observation, the number of claimed active Farmville participants far exceeded that of Puzzle Pirates (the number was approximately 10% of all Facebook users or 62,800,000 monthly active users) (AppData, 2010). The scale and importance of Farmville as a game, a business, and a cultural practice was further reinforced in June 2010 when the Mozilla Foundation was forced to release a new version of their Firefox browser in direct response to Farmville players who complained that the previous versions of this browser prevented them from accessing and playing the game (Keizer, 2010). This incident reveals the power and prevalence of games and their pivotal importance in contemporary information systems. Analysis of the data acquired from both game worlds also employed qualitative approaches, including identifying and tagging those events and instances of activities associated with online labor, the transformative nature of labor, examples of reward and punishment associated with social activity, and how and when intention and transgressions occurred with community participants who were associated with the labor process supply chain. The body of evidence was subsequently scrutinized and examples extracted to exemplify the labor processes and power relations being activated in these virtual game worlds. The active research log documentation is over 125,000 lines in length.

YoHoHo! Puzzle Pirates can be defined as both a game and social networking interface. The virtual world is based on a simulation of a romanticized view of being a pirate and historical pirate “communities”. In this paper, we focus more specifically on the disentangling of the game and “laboring online” elements; however, there is a mutual dependence between gameplay and social networking that is a microcosm of systematized interaction carried out in a virtual world. As an example of late capitalist production and consumption, the interrelationship of social networking and gameplay is brought together through Y!PP’s economic system, which is integral to the success and ongoing daily interactions of millions of the game’s participants. A constant goal of Y!PP is to acquire Pieces of Eight (PoE) in order to purchase goods of higher value and increasing rarity including types of clothing and fixtures for land-based property or ships. The requirement to gather PoE necessitates a range of collaborations including laboring, casual socializing, and the development of more formal and regular in-game alliances. However, and importantly for progress in the game, individual players can easily change affiliation and roles in order to improve their income opportunities – most significantly by buying a ship and forming a crew. Y!PP does not require continuous or steady allegiance to a specific sub-group. As such, identity and affiliation can be extremely transient. From an economic point of view, this fluidity reflects the structures of a market-based economy which, in effect, is the model for Y!PP’s gameplay and its central structuring device. It is also a key reason why we explore the game as an example of late capitalist production and consumption. The wider-ranging social network of Y!PP is also reflected by third-party tools, add-ins, and systems built around Y!PP for the benefit of more-regular players. Examples such as Radio Free Cobalt, an online radio station, ArrBay, an auction site for items, and Pirates Community Trader with Bleach, a type of commodity price ticker all indicate the presence of a complex and rich economic environment that is ultimately built around the profits that are derived from labor: either one’s own or, more significantly in terms of this paper and in scale, from that of multiple others.

Farmville, in contrast to Y!PP, is attractive to casual players because of its relatively simple gameplay. The game’s casual nature has been a source of criticism from more-serious gamers (Riggall, 2010). They express dismay at the “grind” required to progress in the game—criticism that is similar to our

own. Riggall's summary of casual gameworlds also echoes this critique: "With no narrative, no action and no engagement beyond a drive for ever higher numbers these games really reduce players to dumb automatons" (Riggall, 2010). Being hosted on Facebook brings the social networking element to the game, rather than it being an in-built aspect of the game's design. Farmville is a simplistic simulation of an individual farm in which plants must be nurtured and eventually harvested for sale and ultimately a profit. Animals are kept in order to reap what they produce (e.g., elephants produce circus peanuts and pigs produce truffles, all of which can be sold). Facebook friends are encouraged to assist in the maintenance and development of the farm—which is at least a partial explanation for the viral increase in the game's popularity because a player cannot easily expand their farm without neighbours (in effect, an individual's Facebook friends who have also signed up to the game). However, the basic premise of the game is that players will expend a small amount of their virtual farm coins to buy seeds, trees, or animals. Through labor that simulates the processes of physical labor involving ploughing, planting, tilling, monitoring (waiting), and harvesting the crops, players can then earn more farm coins, provided that they have harvested the plants before they wither. Because the game runs in realtime, the player must regularly return to the game to tend their farm in order to profit from their labor. Because of this requirement, it was not uncommon among the regular game players we observed for them to interrupt other day-to-day activities in order to complete tasks required on their farm.

The features common to both of these games are also significant. The most important is the ability for players to buy—with legal currency—game credits to assist them to progress in the game more rapidly than if they were to rely on the efforts of their labor alone. In Farmville, this arrangement includes the "unwither" feature: three unwithers can be bought for 30 Farm Cash that would cost approximately USD\$5. The unwither feature enables plants to be harvested after they would conventionally have been wasted, although having friends and fellow farmers who are prepared to visit your farm can also unwither plants for free. Buying doubloons in *Y!PP* enables the purchase of items not normally available including weaponry, clothes, and transport, all of which make it easier to progress in the game. In both cases, the players prepared to buy goods are replacing the exertion of their own online labor with their capital obtained by laboring offline, effectively using the existing external economy to support the continuity of the virtual game world but with specific consequences to the power relationships in the game.

6. Results and Analysis

6.1. Puzzle Pirates

According to various reviews of *Y!PP*, there are an estimated 2 million registered users and 30,000 paying subscribers (Schubert, 2007). Navarro (2005) describes *Y!PP* as a:

Massively multiplayer online puzzle game. Those are the only possible terms you can use to properly describe Yohoho! Puzzle Pirates, one of the weirdest and most original puzzle games we've come across in quite a while... Imagine a persistent online world where people's little avatars - essentially Lego people in pirate regalia - sail the open seas, sword fight with one another, swab the decks, and even get in a few friendly parlor games, all through the magic of simple puzzles derived from some of the best concepts out there, like Tetris and Bejeweled. Now throw in a cutesy art style and a community chock-full of crazy people who want to talk like pirates, and you've got a pretty entertaining experience all around.

Krause (2004) identifies the economy of the game as a key aspect of *Y!PP*'s appeal:

One of the more interesting features of Puzzle Pirates is its fully player-driven economy. Player labor is responsible for all items in the game, from ships to swords. Governors of islands issue deeds to players to have shops built, which are then constructed, again, by player labor. ... The distilling puzzle is quite fun, but in order to play the puzzle, you must find a distillery that is hiring. The player owners of the shops decide whether they

want to hire or not and set wages. Players who take jobs in shops will affect the speed with which goods are produced. Some things, like wood and iron, are foraged off deserted islands and sold to the player shops (or they can be bought from markets). The player shops then turn those things into something usable and sell them to players or other shops.

The Puzzle Pirates game is generous with a low cost to entry through the free oceans that provide the initial basics needed to participate. New players have a single ability that enables them to progress in status and wealth through the game; their capacity to labour. In addition, each new player receives a shack on a random island that is complete with tattered curtains but unpainted and without furniture. A player must buy paint and a paintbrush (which also wears out over time) for their shack from an apothecary shoppe [sic]. After this they are able to buy furniture from one of the furniture shoppes [sic].

Y!PP is orientated around earning Pieces of Eight (PoE) by either taking a job (or "jobbing") with one of the various navies (one of the safest routes to securing an income because a small financial reward for your efforts is guaranteed) or by joining a pirate band to raid and pillage. Pirates are not guaranteed any reward for working on a ship but, when a ship is successful, the amount each pirate receives is usually higher than navy payments. As a sailor or pirate on a ship, labor is achieved by playing a variety of puzzle games. Depending on the size of the ship, there are a variety of stations where the pirate can perform a different task such as bilging, carpentry, or navigation. Some tasks require that the pirate (or sailor) is more skilled (meaning that they have more in-game experience), and the game will prevent an unskilled pirate from undertaking skilled tasks. There are rules to govern work conduct that are enforced by specifically appointed roles in the ship's crew including the Man at Arms (MAA). For example,

[22:25:23] Staycr shouts, "Rules: NO 1vs 1 (unless u are GM+)... DO NOT TH unless I say so... DO NOT leave the fray to TH"

This instructions tells players not to undertake a one-on-one fight against a non-player bot (game robot) unless they have a ranking of grandmaster or higher. The second instruction is not to undertake the Treasure Haul game while there is a team fight being undertaken because this takes players away from the fight. The Man at Arms' instructions protect the investment of the crew.

[22:25:34] Staycr shouts, "#1 Priority is ship. No ship, no poe so lets keep stations full at all times mates"

[22:25:40] Staycr shouts, "everybody (except gunners) please volunteer to defend"

[22:25:47] Staycr shouts, "you have 3 choices on our ships: #1 Station #2 Defend #3 Swim"

Ships' captain can also determine how attractive the pay is for individual pirates with a range of pay options for joining a ship available.

[01:16:26] Anniangel says, "what is jobbers delight?"

[01:16:27] Superhit laughs nice

[01:16:32] Anniangel says, "is it better than even?"

[01:16:34] Superhit says, "jobbers get higher pay"

[01:16:36] Antisniper says, "jobber's delight means that jobbers get more"

[01:16:39] Anniangel says, "actually even is good for crappy jobbers LOL"

[01:16:45] Jayyajjay says, "jobbers get fatter share"

[01:16:46] Antisniper says, "jobbers get 5 shares, crew gets 4"

[01:16:54] Anniangel says, "i'll change it then"

[01:16:54] Antisniper says, "means jobbers make more money really"

[01:17:02] Jayyajjay says, "i prefer even pay any day"

[01:17:12] Antisniper says, "even pay is good if you're on the actual crew"

[01:17:20] Anniangel says, "it will stay same i think even if i change now"

[01:17:24] Antisniper says, "but when you're jobbing, jobbers delight is what people look for"

[01:17:44] Avast! The crew upon whose boat ye sail has just changed its rules for dividing booty. If the voyage has already begun then these new rules will not take effect until after the booty division.

[01:17:44] Anni's Crystal Charm's articles have been changed.

The speed and accuracy with which the games are completed has an impact on the performance of a vessel. Failure to bilge rapidly will fill the ship with water and slow the vessel's travel speed. Similarly, if a vessel has sustained damage, those players undertaking carpentry must work quickly otherwise the bilging task becomes almost impossible. If a vessel has a poor navigator, this will result in the ship drifting and missing islands or other ships to pillage. Reviewers have tended to focus on the actual action in the gameplay playing of the puzzle games that constitute the basis of the labor tasks in-game. Gameplay action relating to playing the puzzles is, in effect, online laboring: a mundane but necessary aspect of the game (Figure 1).

[23:24:10] "i think its time to take a real good look and see who is not working and start planking here cause you guys seem to have alot of people that are doing nothing"

The most common mundane labor activity is sword-fighting. Despite the swashbuckling and romantic label, the game itself is a graphically updated two-player or team version of Tetris (Figure 2). Good sword-fighting skills are important in the game, and, like all the tasks, players are rated on their abilities. Players' rating also determine if pirate crews will consider a pirate's application to job. Better performing vessels will tend to have a captain who will be selective and have more tightly knit crews than those composed of primarily new or casual players.



This game is a form of Tetris that requires accurate placing of misshapen pieces into a semi-random space.

Figure 1. Labouring at Carpentry.



Swordfighting is a variant of multi-player Tetris in which shapes "cleared" by the opposite are depositing in the screen of the defending team. The shape of the blocks that land in the opponent's game are determined by the type of the pirate's sword.

Figure 2. Swordfighting.

These examples of game-based labor confirm assertions made by Heeks' (2010) in relation to gold farmers, their work practices, and the income potential of undertaking labor inside games to show that these practices can actually be described as play. The examples illustrate the impact of questioning the structural and social order created in game worlds, which reveals the social construction of notions of work, the relationship between computing skills developed in the online environment, and the need to extend discussion of the game beyond examination of the game in the game as a game. Y!PP's gameplay represents a form of recuperated spectacle. While Y!PP is a light and tongue-in-cheek simulation of an imagined pirate experience for the game player, it also embeds a systematized series of expectations and requirements that approximates the labor requirements for low- and medium-level IT and general workplace skills. These skills include, for example, the finding of appropriate resources, basic levels of customization and configuration, and general levels of group work and interaction. The ostensibly social nature of the game does not efface the fact that the game

is a distributed system with the tasks it requires to be completed being conducted individually at separated locations constructing a form of alienated labor. This distribution of labor at physically separated locations supports the maintenance of hegemonic power embedded in the game and is continuously maintained by its developers through their control over the economic system. In playing the game, the player's attention is diverted from the labor skills and ability required to achieve game-based success. As game participants are made familiar with these specific game-based practices, they are drawn (back) into the realm of systematized and conventional hegemonic power relations as obliging and willing labor for capitalist knowledge-based production.

6.2 Farmville

The economic processes to which labor activities contribute in Farmville are simpler than Puzzle Pirates, which also makes the gameplay easier to understand for a new player and arguably explains the high levels of participation this game has seen.

Reviews of Farmville reduce it to its simplest components:

FarmVille is first and foremost a game about crops. You'll plow plots of land, seed them, and harvest what grows. Ignoring all of the barn raisings and fertilizer, all of the elephants and maple trees, this simple three-step mechanic is at [the] heart of FarmVille. And unlike many games on Facebook, the only skill this one requires is patience. ... Growing and harvesting crops will earn you money and experience, which you'll use to buy more seeds and to level up. You'll also use the money earned to buy buildings and decorations for your farm. Once you get used to the main mechanic, you'll find that purchases like these become central to the gameplay experience (Squires, 2010).

There is no need to map the virtual game world of Farmville, unlike the efforts that have been made in YIPP, through third-party tools because the focus of activity is the farmer/player's own constrained farm. The only opportunity to "travel" in Farmville is the occasional visits to similar farms of friends to "help". This mutual support is sometimes rewarded with an egg or fuel. In effect, each action in Farmville either requires a payment of in-game currency or returns a payment. Playing the game conventionally means trying to ensure that the inward receipts are greater than the outgoing payments.



Each plant has a fixed cost to buy, a specified time from planting to harvest, and a fixed return for harvesting. Experience is also gained by planting and harvesting each plant.

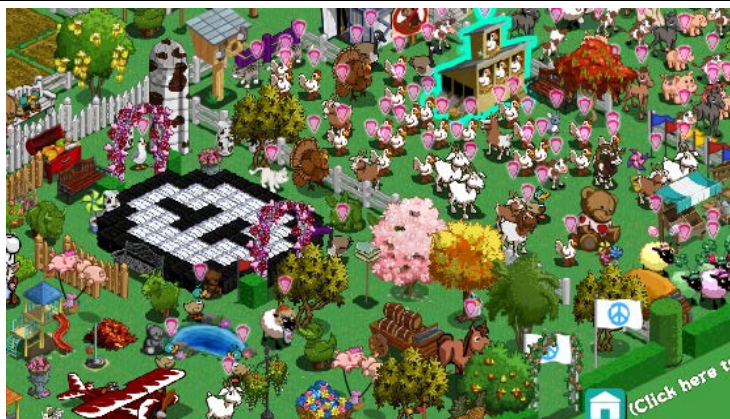
Figure 3. The Farmville Market

Outgoing payments of farm coins are made to the market for buying goods (Figure 3). The main items purchased that contribute to progression in the game are the seeds, trees, and animals. However, items such as vehicles can be used to help reduce labor time because the plough, seeder, and harvester all can complete these tasks more rapidly. As with everything in Farmville, there is a cost. Other items such as flags (which can only be acquired with purchased farm cash with the exception of the Zynga and Farmville flags) and buildings are aesthetic and serve no direct economic purpose. While it cannot be quantified, the extent of the decoration in a farm can be observed as an inverse indicator to the degree of seriousness with which the game is being played. Committed players will focus all of their resources on the items that produce a direct financial benefit (Figure 4). These players are fully committed to the economy offered by the game world and support its continuity by only engaging in productive labor that brings benefits to the holders of hegemonic power—the designers of the game world. In contrast, more casual players make use of the available items to craft larger landscape features such as a “Take That” symbol (Figure 5), potentially a tacit form of resistance to the implicit laboring agenda of the game. These activities do not bring direct benefits to the individual players in terms of the game economy, and their products create a type of “play despite the game”. However, these activities still support the hegemony of the game, albeit less efficiently, but significantly are still contributing to the tacit development of syntactic labor skills including decision making, scheduling, and timing of activities and the selection of groups with which to distribute their labor activities.



A utilitarian level 85 farm with only the house and barn not serving a direct economic purpose.

Figure 4. Utilitarian level farm



This free form farm design appear to indicate a more casual and playful response to the game play.

Figure 5. A “Take That” Symbol Within Part of a Farm

Farmville's internal gameplay mechanics and its association with Facebook introduces a range of social networking features that can be used to progress in the game. Many items required to progress are gained from engaging friends in a form of gift exchange. It is theoretically possible to progress in the game without interacting with friends, but it would be difficult and take a very long time. Players who do not interact with friends can progress by purchasing Farm Cash to buy the items needed to progress, and this becomes more and more necessary when as the player levels up. Players who make exchanges with friends will also ultimately find themselves assessing new strategies for increasing their exchange options as higher levels become harder to reach. Two options exist to achieve this: the purchase of Farm Cash, or finding more Farmville friends. These friends are added on Facebook only to increase the number of players who can be exchanged with. One of the players we observed had maintained a small set of 26 Facebook friends, but had added another nine friends to assist with Farmville. As a U.K.-based player, she described these additional friends collectively as her "American friends" because they were all U.S. based and the only U.S. friends on her Facebook account. Both the U.K. player and U.S. players only interact through Facebook games in order to add each other as necessary additional friends in order to progress through the levels of the games. The direct commitment of payment was substituted with the labor of identifying people—strangers—who were also seeking additional friends to support their Farmville activities. This included activities and time spent on third-party community websites that are specifically made available to facilitate the building of wider networks.

7. Conclusion and Discussion

7.1 Theoretical Contribution - Hegemony in Virtual Game Worlds?

Information systems has a long history of exploring the relationship between computing practices and the work environment. While Robey and Jin (2004, p. 151) have claimed that "work is increasingly mediated by technologies that potentially liberate workers from specific places and times", we argue that more-closely examining labor processes and bridging the theoretical foundations of sociology (that concern themselves with class relations and the daily work practices of late capitalism) and IS is necessary regardless of the technologies being used. Furthermore, we show how examples of labor processes in virtual game worlds viewed from an IS perspective provide valuable insight into labor in action. This situation is reconfirmed by the U.K.'s National Occupational Standards for IT Users (e-Skills UK, 2009) that reveals a number of comparisons being the expectations for IT Users and the activities undertaken in-game (Table 1). In this table, we have from the U.K.'s National Occupational Standards for IT Users (e-Skills UK, 2009) a selection of low-level categories such as "select and use interface features" and "access, navigate, and search" to identify experiential components of syntactic labor as "the primitive operations [such as] writing, erasure, and the substitution of symbols" (Warner, 2005, p. 229). In Puzzle Pirates and Farmville, the ability to "access, navigate, and search" are basic and observable skills that must be successfully undertaken in order to play the game. The tacit training provided by virtual game worlds develops these knowledge workers at no cost to employers with the players even paying (in many different ways) to play.

Table 1. Comparative Table of Occupational Standards for IT Users and Virtual Game Worlds

National occupational standards for IT users: performance criteria	National occupational standards for IT users: examples	Puzzle Pirates	Farmville
Select and use interface features	Drag and drop, zoom shortcuts	Interaction in the virtual world	Interaction in the virtual world
Access, navigate and search	Evaluate information	Choice of activities, find resources	Choice of crops to plant
Schedule activities	Send and respond to meeting invitations	Join a crew, participate in a Sea Monster Hunt	Visit friends, pick crops before they wither
Set up IT tools and devices	Outcomes of collaborative working	Change home island, success in Sea Monster Hunt	Change farm layout and focus

Throughout this paper, we discuss the significance of questioning the issue of whether syntactic labor is considered to be integral to a “work” practice or realized as an aspect of recuperation through gameplay in a virtual game world. While gameplay is itself voluntary with no compulsion to participate, this fact belies the persuasive and pervasive nature of hegemonic power. Games are a significant aspect of contemporary culture and represent a significant aspect of the economy. The games themselves are presented in a variety of forms as entertainment that attracts engagement. This is a desire that is supported and encouraged by contemporary capitalism through significant investment and even more-significant financial rewards. Among other reasons, people want to play games for the sense of social participation that they bring. This persuasiveness is the vehicle for the recuperation of key skills to the hegemonic order. In this paper, we focus specifically on the relationship of syntactic labor and the skills that this gameplay can produce that support the development of low-level knowledge workers. It is the skills learned in game that are internalized with the potential to be transferable to more conventional and visible forms of work. In order to evaluate the potential opportunities and threats that ubiquitous ICTs offer, we present a situationist and Marx-inspired critique of the networked computing phenomenon in the context of game-based virtual worlds. Situationist thinking allows examination beyond the superficial play elements of virtual game worlds to examine the everpresent and embedded strangeness of labor in games. We draw on the tradition initiated by Braverman (1974) to argue that a radical critique of the understanding of the use of technology in organizations is necessary because of the potential for the labor-based exploitation of gamers. For the researcher, this requires examining the construction and use of the labor of participants at both social and technological levels to assess whether, and in what, form exploitation in a game can occur. It is the voluntary aspects of gameplay that frames exploitation of labor in virtual game worlds. In contrast, traditional forms of exploitation in which surplus value is extracted from labor rely upon the need for workers to gain recompense from their individual and collective efforts (Marx, 1906, III.X.46). In choosing to participate in the spectacle of virtual game worlds, we describe a form of exploitation that does not have direct impact on individual sustenance and physical wellbeing, but in which labor is undertaken to satisfy needs and desires that are more broadly social but nonetheless present. Contemporary capitalism, as described by situationist thinkers, is dominated by the spectacle and the desire to participate in its performance. The multiple contexts of the spectacle are not easily differentiated into silos of work, leisure, and other activities. For example, in the cases presented in this paper, the skills developed in playing at planting and harvesting plants in Farmville is a contemporary extension of hegemonic practice and the normalizing of exploitation that can then be transparently continued through IT-oriented work in a conventional workplace. By building the spectacle of the virtual game world as an entertainment space, the owners of the game world directly profit from the surplus value generated by the labor of its participants. The recompense for in-game labor is entirely synthesised within the game as a virtual currency, a badge, or reward item. This specific shift in the motivations to undertake syntactic labor and why this might be done in games reflects a wider shift in the relationship of everyday life, social practices and the spectacle to labor. What remains constant in these shifting relationships, however, is the exploitation of labor in its many forms to benefit those who hold hegemonic power.

The mundane situation of this economic order benefits the developers of the game—in effect, the labor of players in both *Puzzle Pirates* and *Farmville* and other virtual game worlds creates a game of sufficient activity, interest, and popularity to make it worthwhile for some players to pay for in-game credits and thus contribute to out-game economic success. However, by extension, the labor of those players who do not buy in-game credits (and even those that do) constructs them as laborers—in the Marxist and traditional sense—in the service of the game’s developers and recuperated late capitalist agenda. Those who participate in online gaming are normalized to the expectation that the mundane and repetitive laboring practices acquired in gaming skills can and will be exploited outside of their control. Furthermore, it is not usual for gaming online to be seen as a form of unpaid labor, but this is partly the result of their distancing from one another in the same way as other forms of teleworkers who are consequently not able to organize or withhold their labor. The anthropological strangeness of these virtual game worlds obscures these power relationships and the opportunity to share in the profits enjoyed by the game developers. The gameplay of these worlds actively discourages players from identifying themselves in the role of laborer or from pinpointing the source of their exploitation. At first glance, the immediate response (especially for those who play these games) is to reject this claim, but the evidence of Heeks (2010) and Dibble (2007) show that only subtle changes in perspective can readily reveal the extent of this exploitation.

By using a situationist view of social networking, we have identified the defining practices in the embedded structures of two virtual game worlds as information systems. We explore the mundane practices of casual gaming and use structural ethnographic analysis to disentangle the interactions of everyday life found in these games. This examination reveals how the mundane daily practices of virtual worlds assist, at least partially, in explaining the appeal of these game worlds and the ways in which these games enculturate the players into structured labor relationships. As (unpaid) workers, the casual gamers are engaged in a process of active deskilling undertaking compliant actions of “syntactic labor” (Warner, 2002; Warner, 2005).

What we are observing is change in the relationship of work and labor to play and leisure and their increasingly subtle differences. More specifically, we are seeing a convergence of the notions of technologically enabled laboring with that of playing virtual game worlds.

A critical reading of the history of capitalist reforms in relation to work and working hours warn that outcomes may be quite different from expectations. We draw on Marx-inspired perspectives, focusing on new forms of labor in technology-mediated spaces to offer an alternative position for interpreting virtual game worlds. We explore how contemporary capitalism employs the recuperated spectacle to exploit forms of labor that are undertaken with uncritical acceptance. Echoing Couldry (2003), it is necessary to look to more fundamental issues such as the structure and design of the Internet-based services to address issues of emancipation and equity. While this paper documents voluntary labor and its potential to be exploited have, further potential exists to use the situationist perspective to deconstruct the labor embedded in other voluntary activities found in contemporary capitalism. Rich sites for understanding the embedded labor skills that are developed in technologically enabled spaces of the spectacle includes image sharing through Instagram or Flickr, concept “curatorship” on Tumblr, and the creation of “lols” on *icanhascheezburger.com*. Further opportunity for research exists in examining these games, and others, as metaphors for contemporary capitalism. We hope that further exploration of virtual worlds (game-oriented or otherwise) using Marx-inspired and situationist perspectives will offer the potential to resist the uncritical adoption of ICT-enabled work practices and environments.

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