

## **Empire@Play: Virtual Games and Global Capitalism**

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Amidst the current convulsions, global capitalism has one consolation left for its increasingly desperate subjects: you may have lost your job (or will never be able to retire from it), you can't afford to go out, but you can always stay home (if you still have one) and play a video game. As Lehman Brothers, Bear Sterns and Merrill Lynch fell and General Motors, Ford and Chrysler reeled round the edge of their grave, North American sales of game hardware and software hit all-time highs in 2008. Forecasters claimed virtual play was recession-proof; a maturing audience of stay-at-home gamers would cocoon around the Wii, Xbox360 or PS3, or migrate to *World of Warcraft* or *Second Life*, to enjoy a diversion from economic disaster. Such estimates of game-business resilience may prove optimistic: by 2009 job losses were hitting industry behemoths such as Sony and Electronic Arts (EA). But this latest iteration of bread-and-circuses culture-theory nevertheless provides a timely entry for a discussion of digital games as exemplary media of contemporary Empire.

We use "Empire" in the sense proposed by Michael Hardt and Antonio Negri to designate a post-Cold War planetary capitalism with "no outside" [1], but we modulate their account to take greater account of the internal frictions wracking this order since the

millennium. By Empire, we mean the global capitalist ascendancy of the early twenty-first century, a system administered and policed by a consortium of competitively collaborative states, among whom the US still clings, by virtue of its military might, to an increasingly fragile preeminence. This is a regime of biopower based on corporate exploitation of myriad types of labour, paid and unpaid, for the continuous enrichment of a planetary plutocracy. Empire is an order of extraordinary scope and depth. Yet it also is precarious, flush with power and wealth, yet close to chaos as it confronts a set of interlocking economic, ecological, energy, and epidemiological crises. Its governance is threatened by tensions between a declining US and a rising China which could either result in some super-capitalist accommodation, consolidating Empire, or split it into warring Eastern and Western blocs. Its massive inequalities catalyze resistances from below, some, reactionary and regressive, others, like the global justice and ecological movement, protagonists of a better alternative.

What makes virtual games' technocultural form exemplary of Empire is their identity with its key means of production, communication and destruction--the digital network. More than any previous media other than the book, virtual play is a direct offshoot of its society's crucial technology of power. Sprung from the military-industrial matrix that generated the computer and Internet, games are today a test ground for digital innovations and machinic subjectivities: online play worlds incubate artificial intelligences; consoles plug to grid computing systems; games are media of choice for experiments in neurobiological stimulation and brain driven telekinesis. And, once suspect as delinquent

time waster, virtual play is increasingly understood by state and corporate managers as training populations for networked work, war and governability.

We examine the relation between games and Empire in terms of the *virtual* and the *actual*, conjugating this couplet with intentionally fuzzy logic in two distinct yet overlapping ways. The virtual is the digital, the on-screen world, as opposed to existence “IRL”. But “virtual” also denotes *potentiality*; the manifold directions in which a given, actual, situation *might* develop [2]. The technological and ontological virtual are distinct and should never be conflated [3]. But they are related, through the practice of simulation. Computers create potential universes. They model, dynamically, what might be. Such simulation is vital to a power system engaged in the high-risk military, financial and corporate calculus required for globalized control. It is from such simulation that virtual games emerged, broke loose into ludic freedom--only to now be reintegrated into the assemblages of world capital, as a means of inducing the “flexible personality” [4] demanded by digital work, war and markets. Yet this ludic apprenticeship can generate capacities in excess of Empire’s requirements. Just as the eighteenth-century novel was a textual apparatus generating the bourgeois character required by mercantile colonialism (but also capable of criticizing it), and twentieth-century cinema and television were integral to industrial consumerism (yet screened some of its darkest depictions), so, we suggest, virtual games are the exemplary media producing subjects for twenty-first century global hyper-capitalism but also, perhaps, of exodus from it.

### **Global Game Factory**

Let's first reframe some conventionally celebratory factoids about virtual play. The global game factory is now a major cultural-industrial complex, dominated by the console corporations--Microsoft, Sony and Nintendo--and a cluster of super-publishers, such as EA, Activision, Konami, Ubisoft and THQ. Control of game finance, licensing and marketing enables these giants to harvest the creativity of thousands of game developers, from big third party studios to microenterprises, all around the world. The global revenues of this industry are about \$57 billion, five times the annual additional expenditures necessary to provide basic primary education to every child on the planet [5]. It is often claimed videogames are "bigger than Hollywood," but while North American sales rival the cinema box office, games lack the film's ancillary streams from advertising, DVD, and cable TV release, though advergaming and DLC sales may change this. Game factory revenues are, however, overtaking those of the music business, and growing faster than those of both film and music. More significantly, games are integrated *with* film, music, and other media: *Spiderman*, *Saw* and *The Simpsons* become games, *Lara Croft* and *Final Fantasy* films; EA's *Madden* games are part of the sports-media nexus; *Guitar Hero* and *Rock Band* are the new music platform.

Most of the sales of this "global" media are concentrated in rich planetary consumption zones: North America, Europe, and Japan, with the US still the largest single market; some 53% of Americans, 97% of college students, play; gaming is no longer a youth pastime; and while its testosterone bias has not vanished, it is declining, as online casual gaming and the Wii attract more girls and women [6]. The diffusion of online cybercafé

pay-per-play from South Korea--the most game-intensive culture in the world--to China is opening vast new player populations in Asia. For the majority of the world's inhabitants, and especially the 2 billion who subsist on less than 2 dollars a day, a mint copy of *Gears of War*, let alone the \$400 Xbox 360 on which it plays, remains an unthinkable luxury. But the market in old consoles and computers and mass pirating of game software give games a wider circulation into Latin America, the Middle East, and Southern Asia. Nonetheless, access to the game metaverse remains stratified by wealth, and by energy and Internet infrastructures. A quarter of the world's population lacks electricity. Meanwhile in Second Life--whose parallel universe, though free at the most basic level, is populated by the avatars of Europeans, North American, and Japanese with annual real life incomes of \$45,000 or more--the average resident uses about 1,752 kilowatts of electricity a year, as much as an average Brazilian, and generates CO2 emissions equivalent to a 2,300 mile journey in an SUV [7]. Virtual play is thus firmly embedded in Empire's unequal, destructive consumption of global resources.

In production, too, situating games in Empire shatters myths. For millions of young men (and many aging ones, and some women) from Shanghai to Montréal, a job making virtual games seems employment nirvana--a promise of being paid to play. And it is true that for designers, programmers, and producers the industry offers creative, well paid work involving the most positive possibilities of "immaterial labour"[8]: scientific know-how, hi-tech proficiency, cultural creativity, and workplace cooperation. But just as game development studios typify the gloss of new media labour they also expose its dark side. The slogan of work-as-fun legitimates the perpetual "crunch-time" culture whose

revelation in 2004 by the disenchanted partner of a programmer, EA Spouse, unleashed an industry wide scandal. Game studios, small and large, stratify permanent employees and a low-paid, precarious testers and contract workers. Behind these well-known studio labour flashpoints, however, lies the architecture of the digital play business organized, as part of Empire, in a “global hierarchy of production” [9].

What enables publishers to extract extreme hours is not only internalization of responsibility, but the threat of outsourcing. The global game factory, no longer constrained to a ‘core,’ comprises an increasingly distributed meshwork of satellite offices, subsidiary studios and contracted out work. A design team conceives a new game sipping espresso on the mountain vista patios of EA’s Vancouver studio, then sends elements of the game’s design to a World-Bank-funded company, Glass Egg, in Ho Chi Min City, where programmers earn about \$4000 annually, rather than \$60,000 in Canada; Lyon-based Infogrames (current owner of Atari), negotiating the game rights to Tom Cruise’s *Mission Impossible*, dispatches the graphics work on NPC’s to Dhruva, a Bangalore studio, paying a fraction of North American rates, shrewdly cushioning itself (but not its Indian workers) when the deal turns sour.

Labour in such peripheral studios is far closer to the all-too material processes indispensable to the game factory, though far less glamorous, and less visible, than studio work. The abyssal depths of this ladder were glimpsed in the coltan scandal of 2000. Prices for columbine tantalite, a rare mineral vital for cell phones, computers and game consoles were driven to extreme heights by the launch of the PS2, setting off a frenzy of

resource grabs on the open pit, child-labour mines of the Eastern Congo by the armies fighting Central Africa's ongoing multi-million death war. But the low-cost, no-care human infrastructure of the play industry has many other rungs: *maquiladora* plants where hand-helds are made up by nimble-fingered female labor; the regimented electronics assembly lines of South China from which Xbox 360s and PS3's pour; and the toxic e-waste sites of Nigeria and Delhi, where the products of Sony and Nintendo are amongst the most noxious disassembled by subsistence-wage scavengers.

Perhaps the best single demonstration of the game factory's stratified planetary space is, however, the online fantasy game *World of Warcraft (WoW)*. Of the 11.5 million participants of its virtual continent of Azeroth, about 25% play in North America, 20% in Europe and some 55% in Asia, mostly from Chinese cybercafés [10]. *WoW* was brought to Beijing and Shanghai by the partnership of its US developer, Blizzard, with Chinese game company The9, at once a neo-colonial penetration and a boost to China's own MMO (Massive Online Game) industry. Where Empire's inequities transform *WoW*, however, is via virtual trading. A "ludocapitalism" [11] by which virtual goods or skills exchange for real currencies generates an interdependence between North American players and as many as half a million planetary poor country "gold farmers," the majority probably in China, for whom looting monsters round the clock is an alternative to labour on the strike-swept assembly lines of the Pearl River cranking out the very computers on which *WoW* is played world-wide. Such migrant avatar-service work [12] at once sustains the gaming habit of time-stressed North Americans, incurs their racist antipathy for "ruining the game", and is repressed by Blizzard to control the property rights to its

game world. It thus typifies the bipolarity of "Chimerica" [13], the current US-China axis of Empire, virtually replicating a relation where one side is all play, the other all work. Such are the biopolitical forces mobilized in the global game factory.

### **Empire Plays**

To situate games in Empire we must, however, discuss not only their political economy but also the psycho-cultural valences. If virtual games are implicated in armored globalization, how do they support, or subvert, the subjectivities such a regime requires? And how can we answer this question without resort to notions of hypodermic "media effects" or at assuming the success of every ideological interpellation? In a spirit of radical empiricism, we look at the articulation of virtual and actual practices. That is, we identify concrete linkages between in-game and real-life activity, examining how virtual play is connected to and articulated with other institutions, sites and practices, plugged in to barracks and battle spaces, work cubicles and call centers, investment banks and stock exchanges to form new virtual-actual assemblages. Here, we'll quickly examine three nodes in this imperial gamespace--war, work and finance.

#### *Banal War*

The obvious, original bond of virtual games with imperial actualities is military. All the many claimants of the title "inventors of the videogame"--William Higginbotham, who made a simple tennis game on an analogue computer in 1958; Steve Russell, who created

*Spacewar* in 1961; Ralph Baer, who in 1966 devised the TV-connected game console; or Nolan Bushnell, who founded Atari, the first commercial game company, in 1972--were directly or indirectly employees of the US military-industrial complex. Game-like simulations were integral to the “closed world” of Cold War computing, a means of thinking the unthinkable--thermonuclear war with the Soviet Union--and fighting not so unthinkable hot wars such as Vietnam [14].

When Russell and the scientist-students of MIT’s Tech Model Railroad Club created *Spacewar* just for fun, they seemed to liberate computer simulation from this deadly instrumentality into a joyful world of pure play. But the get-away was far from clean. As the commercial game industry commodified hacker invention, it retained close links to the US military, borrowing technologies such as sideways scrolling display initially invented for anti-terrorist urban sims, and feeding back devices such as the tank-crew trainer based on Atari’s *Battlezone*. By the end of the Cold War, commercial games had advanced to become superior to the Pentagon’s in-house simulations; a briefly frugal military began to adapt them for training purposes (e.g. *Marine Doom*) and contract out work to private-sector studios. The so-called “Nintendo War”--the smart-weapon, video-bomb-sight slaughter in Kuwait in 1992--made visible how closely together an Informatic Revolution in Military Affairs had brought the screens of play and war [15].

9/11 put this symbiosis on steroids. While commercial game developers rushed to capitalize on market opportunities created by the invasion of Afghanistan and Iraq, funds poured into co-designed military-civilian simulations for the War on Terror. Developers

able to cite collaboration with the military gave their products the cachet of authenticity that console-warriors craved, while military trainers capitalized on new generation of recruits familiarity with the Xbox and PS2. Gaming became the keystone of what James Der Derian terms "MIMENET"--the "Military Industrial Media Entertainment Network" [16]. Today, a manifest continuum connects entertaining anti-terrorist games such as the Xbox Live hit, *Call of Duty: Modern Warfare*, current affairs game, like *Kuma War*, whose subscribers re-live recent war events as "playable missions"; the US Defense Department's multiplayer online shooter--recruiter, *America's Army*, now entering its third incarnation; civilian-military co-productions such as urban warfare sim *Full Spectrum Warrior*; released as both commercial game and infantry trainer; and a new generation of therapeutic simulators, such as *Virtual Iraq*, used in the treatment of post-traumatic stress disorder for those returning from the actual battlefield.

For a more futuristic example of how virtual games spawn in and out of imperial battlespace, we can, however, take DARPA's recently announced "Deep Green" project. Deep Green is not an ecological conversion, but a khaki super-computer, intended to generate automatic combat plans for military field commanders. It has several interlocking components: "Sketch to Plan" reads a commander's doodles, listens to his words, and then "accurately induces" a plan, "fill[ing] in missing details." "Sketch to Decide" allows him or her to "see the future" by producing a "comic strip" of possible options; "Blitzkrieg" quickly model alternatives, while "Crystal Ball" figures out which scenarios are most likely, and which plans optimal [17]. Skeptics say Deep Green will never work; but even as a multi-million dollar boondoggle, it will generate innumerable

spin-offs for the game industry. If it succeeds, future wars in Iran, Nigeria, Venezuela or Kazakhstan will be truly plug-and-play, separated only by a few orders of computing power from a commercial war game such as the recent Tom Clancy-scripted *Endwar* in which X-box players give voice-commands to armored, air and infantry units deployed in global combat theatres.

Our argument, need we say, is not that “games make you kill,” in the sense asserted in moral panics about the play of *Doom* or *Grand Theft Auto*. It is that digital games are systemically incorporated in the war-fighting apparatus of Empire, in ways that render developers and players material partners in military technoculture, and Defense Departments' systemic cullers of gamer subjectivities: this is what makes virtual play integral to “banal war,” the normalized state of perpetual conflict Empire’s global control demands [18].

### *Measureless Work*

Computerized war is, however, only one aspect of a broader process of virtualization vital to Empire--the shift from Fordist industrial work to the post-Fordist computer-mediated organization of labour crucial for capital’s globalization. Video-gaming’s rise from the 1970s to the present was part of this process, unlimited play that paradoxically apprenticed generations to a regime of measureless work. At first, virtual games were on the side of leisure, hedonism, and irresponsibility against clock-punching, discipline, and productivity, appearing in dubious masculine refuges from toil, bars and arcades, and

then, as the console entered the home, as machines for children and adolescents, devices on the border between innocence and delinquency. Game playing on the job was subversion, a refusal of work. Then a strange reversal occurred. As the US military followed the tracks of its runaway virtual slave and re-captured it, other state sectors, from city planners to air traffic control, explored the possibilities of simulation. In the 1990s, corporate capital latched onto games as a technology for training an increasingly digitized labour force. By the turn of the century this activity had become an industry in itself, and a major focus of an emergent Serious Games movement; the market for corporate “e-learning” was estimated at \$10.6 billion [19].

In this virtual apparatus for the subject-formation of post-Fordist labour, game-like simulations are integrated with electronic hiring tools, psychometric personality tests and cognitive skills measures. To competitively select management candidates from around the world, fashion giant L’Oréal uses an online simulation linked to a TV game show in which players invest in R&D, plan marketing and look for ways to cut production costs [20]. Canon has repairmen dragging and dropping parts into virtual copiers--a light flashes and a buzzer sounds if they get it wrong. Cisco prepares its teams for on-call crisis management by gaming repair of a network in a virtual Martian sandstorm. A California ice cream chain has trainees game scooping cones and perfecting portion control against the clock; “It’s so much fun,” says one manager, “I e-mailed it to everyone at work.” Games engage the affective dimensions of labor too. Minerva Software (formerly Cyberlore) is making service workers empathetic, in a virtual store complete with point-of-purchase display, where they cultivate sale skills; the basis of this

simulation is Cyberlore's earlier game *Playboy Mansion*, in which players had to "persuade" models in a lavish Hugh Hefner-esque pad to pose topless [21].

Yet more complete subsumption of games by work is offered by schemes such as Amazon.com's Mechanical Turk, which create an on-line, on-demand precarious workforce for tasks such as transcribing podcasts and labeling photos, processed on a piece-rate basis "in lieu of watching TV or fooling around on MySpace" [22]--or, playing games. In the so-called *ESP Game* a player, gaming with either a human or AI, strives to agree on words that match images within a set period of time to optimize search engines indexing on-line pictorial content [23]. Meanwhile, Stanford University spin-off, Seriosity promises to "steal sensibilities from games and virtual worlds and embed them into business." Observing people in MMOs like *Star Wars Galaxies* "spend countless hours carefully doing what looks like a job" not only battling Empire troops but also "building pharmaceutical manufacturing operations and serving as medics" the company is testing the possibility of "having players view real medical scans inside the game to find signs of cancer" which, it says, "gamers could do as well as an actual pathologist" [22].

The current corporate enthusiasm for virtual play extends, however, beyond training simulations and serious games. It is *all* games--silly games, time-wasting games, fantastic orc-slaying and alien-blasting games--that are seen as beneficial for the bottom line. As Steven Poole recently observed, whether playing an elf or a gangsta, many videogames follow the "employment paradigm" of career progression, asset management and

monetary accumulation [24]. Now hipster management theorists [25], drawing on serious cognitive studies of gameplay, argue that the content of games, be it car-jacking or dragon-slaying, is merely the occasion for intensive skill acquisition in multi-tasking, flexible role play, risk evaluation, persistence in the face of set backs, inventive problem solving, and on the fly decision making--all, of course, precisely what corporate employers claim to want. Now a high-score at *Space Giraffe* is *de rigueur* for the up-and-coming careerist. Games have turned their coat, transforming from workplace saboteur to the perfect managerial snitch for an imperial production machine, flexibilized and redistributed to a global cyber-precariat across networks running 24/7 around the planet.

### *Financialized Life*

Virtual play rose not only out of the era of information war and immaterial work, but also the casino economy. In his *Empire of Indifference* Randy Martin links the informatic risk management strategies of war and finance capital [26]. Video games are part of this conjugation. Their Golden Age was the time not only of Reagan's first strike nuclear options, but of deregulated banking, junk bonds, debt escalation and stock market populism. Making a financial play is a perennial theme of early video and computer games: *Wall Street Kid*, *Inside Trader*, *Wall Street Raider*, *Speculator: The Futures Market Game*, and *Black Monday* all gamed actual investment practices that were themselves becoming virtualized as global money circulated in networks second in sophistication only to the Pentagon's. On one side, these games blend seamlessly with software tools abetting the "financialization of daily life" [27]: as Atari created its hits it

also made “Bond Analysis” and “Stock Charting” [28]. On the other flank, these trading games form a continuum with the commercial empire-building “Tycoon” play genre; with the world of *The Sims*, where consumption proceeds divorced from work in the perfect virtual parable for the invested classes of long-boom America; and with the fully monetized economies of MMOs built around the fictive capital of digital platinum, gold and Linden Dollars. It is, we suggest, no coincidence that in the early twenty-first century “virtual trading” means both on-line stock market speculation and the buying and selling of digital game goods.

Meanwhile finance capital, ramping through the dot.com spree, the Internet bubble, and on to the great housing splurge, was, like the military, hot on games. In 1997 a junior trader training in the game-like simulator of a German finance house posted 130,000 bond futures on-line, believing the sale was just an exercise. But the play was for real. He had “pressed the wrong button,” creating a financial *Ender’s Game* scenario; his firm took a loss of some \$16 million. The stockbroker Ameritrade created *Darwin: Survival of the Fittest*, a game distributed free to teach customers online trading just in time for the 2001 crash. Undeterred, by 2004 trading houses working rapid market fluctuations “easily missed on a bank of computer screens filled with fast moving explicitly” said “it is unlikely that we would hire someone who didn’t show good proficiency at a Game Boy or online poker or similar video-type game” [29]. On the brink of their great fall, the “quants” on Wall Street were using video game graphics processing units to speed options analytics and other math-intensive applications necessary for derivatives and mortgage-backed securities [30].

They also prepared the future subjects of financialization. In 2008, at the moment of the crash, the annual cycle of *The Stock Market Game* was beginning in North American schools. The game, sponsored by Wall Street's largest trade group, the Securities Industry and Financial Markets Association, provides a "curriculum" for a "scholastic contest" in which players get "a hypothetical \$100,000 to invest in stocks bonds or mutual funds," and access to a computer system that executes the simulated trades, ranking teams for "bull and bear trophies." As the Dow Jones hit the worst week in its history, some 700,000 players from grades four through twelve tried to pick winners, time the market, and sell short. Two of the game's national sponsors, Merrill Lynch and Wachovia, were annihilated in the financial firestorm. They had bet virtual play would "prime the next generation of customers". Some students learned a different lesson; a thirteen year old confessed: "Before all this, I asked my mom to get me stocks for Christmas," but after experiencing the carnage of *The Stock Market Game* "told her not to do it" and "asked for a parakeet instead" [31]. Millions who didn't go for the bird lost to a ludocapitalism that apparently can't find "Resume Game."

### **Games of Multitude?**

Do Mario and Princess Toadstool still have a chance for liberation from banal war, endless work and monetized life? We approach this possibility through Hardt and Negri's concept of "multitude," a term we think conveys, better than any alternative their many critics can offer, the positive component of complex contemporary movements against

capital [32]. Appearing in the turn of the century anti-globalization protests, this “movement of movements” only a few years ago seemed decisively defeated by the shock and awe of neoliberal war on terror. But today economic crisis, deepening ecological catastrophe and military quagmires vindicates its activism and analysis, which were revived in however refracted, reformist mode in the global support for the Obama election campaign. Even as this present crisis incubates nationalism, racism, retro-fascism and ultra-militarism, it also makes new radical openings to exit Empire. There is no blueprint for this process; many would say it defies schematic planning. But there are multiplying, thoughtful sketches of what a post-capitalist society might look like; less free market, more decentralized, democratic public planning; less commodification, more commons; less wage labour, more self-management, less precarity, more universal provision of basic life-needs. Virtual play’s production of subjectivities for Empire is easy to see: are there also Games of Multitude?

Such potential exists because Empire is a contradictory system, cultivating the very creative, cooperative capacities it must repress and contain, not least of which is the innovation power of immaterial labour. Gamers are amongst the most eager of this sorcerer’s apprentices. As we saw, games originated in the excess playfulness of military science workers. As this hacker innovation was captured by the game factory, it has continued to generate surplus know-how that escapes complete capture in the commodity form. Ever more sophisticated game editing tools, the rise of modding and *machinima*, flash authorship, and MMO participation have all generated within virtual play culture a powerful drive towards user-generated content created in an intensely collaborative and

networked milieus. Some commentators see such “autoludic” activity as automatically empowering and democratizing [33]. We, however, insist on what Paolo Virno terms “the ambivalence of the multitude” [34]. Radical analysis post-2001 can no longer just applaud so-called “indymedia.” Rather it must recognize conditions of “immaterial civil war” [35] in which Web 2.0 applications, social software, the blogosphere and virtual games are both the terrain and the prize of a pitched battle, fought across a medley of devices and platforms, between two sides of the multitude’s collective subjectivity: creative dissidence and profitable compliance.

The turn to user-generated content stands in an equivocal relation to corporate control. It arises in part from digital capital’s drive to cut costs, exploit a knowledgeable fan-base, and make modders, MMO players, PSP home-brewers and Xbox DNA developers into farm teams of unpaid “playbour” [36]. But it also, simultaneously, effects a devolutionary socialization of the means of production, generating conflicts between gamers and game capital and lines of flight from imperial themes and practices. Games and gamers do get out of the control of their corporate-military sponsors, and although many of these departures are recouped by game capital, and others are black holes of pointless or destructive energy, all persuade us that it isn’t quite “game over” yet. So now we look at three assemblages of games and multitude, around piracy, protest and planning.

### *Pirate Games*

Piracy is as widespread in games as in music and films. Nothing better illustrates the virtual dilemmas of Empire than the attempt by EA (reminiscent of the “terminator seed” exploits of Monsanto) to shackle *Spore*, Wil Wright’s game of do-it-yourself species-being development, with draconian DRM measures--attempts sabotaged by a gamer multitude that downloaded the games via file sharing networks more than 171,000 times within days of its release. In much of Asia, Eastern Europe and Latin America game piracy rates run, by an admittedly dubious corporate calculus, as high as 80-90%. It affects PC games most, but consoles are far from immune. The game factory wages war on piracy by technological, judicial and police measures, ostensibly targeting big criminal software bootleggers. Industrial-scale game piracy is a reality, part of the transnational crime networks that are the shadow of neoliberal globalism. Nonetheless, the game industry crusade occludes many of the complexities, and all the politics, of piracy.

We call attention to just four points. First, not all piracy is for profit: much involves gamer cultures of swapping, sharing and “warez” accomplishment that are specifically anti-commercial. Second, piracy is the only way many people in, say, Brazil or the Philippines, or Egypt can afford games [37]. Third, virtual piracy is (alongside the smuggling of drugs, guns, exotic animals and maritime piracy) just one of the many avenues by which immiserated planetary populations make a *de facto* redistribution of wealth away from the bloated centers of consumer capital. Fourth, mass levels of piracy around the planet indicate a widespread perception that commodified digital culture imposes artificial scarcity on a technology capable of near costless cultural reproduction and circulation.

These points suggest digital piracy is a classic example of the criminalized social struggles that have always accompanied enclosures of common resources, responding in this case not to capital's "primitive accumulation" of land enclosures, but to its "futuristic accumulation" fencing-in digital resources. Though we sympathize with small game developers whose livelihood PC piracy threatens, we also agree with James Boyle's suggestion that corporate efforts to control digital copying are analogous to feudal lords and clerics contemplating tithe-rates for industrial threshing machines [38]. While the overt politics of game piracy range from anti-imperialism to the nihilism, the practice is a clandestine front of struggles whose liberal wing is "creative commons," and whose longer-range versions envisage new forms of open-sourced culture and public support for digital creation. Ongoing conflict over Intellectual Property Rights and Digital Rights Management in games is symptomatic of a *bona fide* contradiction between relations and forces of production, an antagonism of progressive technological capacities to the reactionary property rights into which they are forced.

### *Protest Games*

A new culture, however, does not just copy, but creates. The diffusion of game-making know-how and easy-to-use authoring tools has allowed activists, artists and dissident game designers to produce games that challenge virtual play's alignment with Empire. Feminist gamers such as Anne-Marie Schleiner were pioneers, hacking new skins and pacifist interventions to challenge the sexism and militarism of the game factory. Since

2001, however, radical game-creations have proliferated. These include ludic anti-war protests, like Gonzalo Frasca's *September 12*, showing the inevitability of "collateral damage," and the famous flash game *Gulf War 2* which, six months before the invasion of Iraq, predicted the consequent chaos; projects linked to migrant struggles, such as *Escape from Woomera*, a prototype mod exposing Australian detention camps, and *The French Democracy*, using *machinima* to replay Paris riots from the *banlieusard* side; O.U.T., "a live action wireless gaming urban intervention" in street demonstrations against the 2004 Republican New York convention; and even game cartographies of Empire itself in the work of Eastwood Real Time Strategy Group, whose *Civilization IV: Age of Empire* includes on its map "the military-entertainment complex," "immaterial labor," the "net economy," "surveillance mechanisms," and "governmentality."

For a sustained instance of game-multitude assemblage we should, however, look at Molleindustria, a Milanese collective of media activists and self-described "videogame detractors" who in 2004 emerged from a milieu crosscut by prime minister Silvio Berlusconi's monopolization of Italy's communication system, and the activist digital media of the counter-globalization movement. With a slogan, "Radical games against the dictatorship of entertainment," operating out of a social centre self-managed by and for activists, Molleindustria has a catalogue of small but hilariously effective web-based games sardonically addressing Empire's crimes and misdemeanors: *Tubo-Flex*, gaming the predicament of the post-Fordist precariat, part of the media promotion of EuroMayDay Parades; *The McDonalds Game*, satirizing the labour, nutritional and environmental consequences of fast-food empires; *The Free Culture Game* ("a playable

theory”) liberating digital resources from corporate capture; and, most recently, *Oligarchy*, making the player CEO of a petro-corporation: “explore and drill around the world, corrupt politicians, stop alternative energies and increase the oil addiction. Be sure to have fun before the resources begin to deplete” [39]. Perhaps a Molleindustria financial crisis game—*Bailout?*--is in the works.

Such tactical games, with characteristic stripped-down graphics and rudimentary production values, teeter between brilliant ludic alienation-effects and blunt didacticism. But, as Alexander Galloway observes, such “counter gaming” is about more than overlaying alternative imagery in established genre conventions; building “radical action” in game culture requires the creation of “alternative algorithms” [40]. Or, as Molleindustria says: “We often claim that it is important for us not to produce games to entertain radical people, but (to make) radical games” [41].

### *Planning Games*

Is it possible to go beyond agitprop games of virtual protest to games of exodus that actively help constitute a society beyond Empire? All game development is about designing alternative worlds, all game play about learning what can be done in these worlds. “Another world is possible” is thus a gamer slogan. Twenty years ago Bill Nichols in his study of “the work of culture in an age of cybernetic reproduction,” suggested video games could be emancipatory because they made the player engage with “systemic principles” of world design, inciting a glimpse of “the relativism of social

order” [42]. Since then, moreover, this world-building has become collectivized in MMOs and virtual social spaces coevolved between initial programming parameters and the activities of player populations numbered in millions. Given the imbrication of virtual play in actual Empire, it is no surprise the dynamics of these worlds frequently merely replicates and amplifies political economic premises of the world market: the basic formulae for MMOs, however fantastic their setting, is accumulation backed by force. Nonetheless the creation of such communal virtual laboratories allows social experiment simulating worlds with different rules.

For example, *agoraXchange* is an alternative MMO project devised by political theorist Jacqueline Stevens and game artist Natalie Bookchin. This is a virtual world clearly influenced by the new wave of writing about “life after capitalism.” Inheritance of personal wealth, as a mechanism sustaining class privileges over time, has been abolished; it will be redirected to international institution whose mandate is global redistribution to ensure basic human needs for resources like clean water are met. Borders have been opened to the flow of people, not just commodities. Private property has gone, too. Land will be in the trust of the state, leased to individuals and businesses. This is artist-activist collaboration in advance of the recent claim by an eminent computer scientist in the journal *Science* that online games enable large-scale studies of alternative governmental regimes, including explorations of “how individuals can be induced to cooperate in producing public goods” [43].

It may, moreover, be feasible to link such simulations to new political institutions. Many radical activists agree that a global-commons alternative to the world market requires processes of participatory planning and democratized economic decision making. Game-like virtual worlds can be part of such processes. In 2008, The Institute of the Future launched *Superstruct*, the “first massively multiplayer forecast game.” Set in the year 2019, it postulates that a Global Extinction Awareness System (GEAS) has forecast human self-destruction by the year 2042 as the result of five simultaneous “super-threats”: Quarantine, a result of “declining health and pandemic disease”; Ravenous, the global collapse of the world food system; Power Struggle, “as nations fight for energy supremacy and the world searches for alternative energy solutions”; Outlaw Planet, covering increased surveillance and loss of liberties; and Generation Exile, which a “massive increase in refugees” [44]. The aim is for players to collaborate, communicating not only in-game, but across email, blogs and social networks, to devise solutions to these problems. We don’t necessarily hold any brief for the answers *Superstruct* comes up with—as we’ve already indicated, the global demographics of game play promises plenty of scope for class bias. But the basic point remains: if the Pentagon and Wall Street can use virtual worlds to plan the Empire, why should not communards use them to think through their escape routes?

### **Conclusion: Magic Circles, Strange Contraptions**

Academic writing on virtual games often alludes to the “magic circle” of play proposed by the conservative medieval historian, Johan Huizinga, who in his famous *Homo Ludens*

wrote of games as an “autotelic” activity, engaged in for their own sake, segregated in space and time from the hurly-burly of everyday life [45]. Such accounts set play well apart from the turmoils of global markets, preemptive militarism and street protest. Yet Huizinga himself, writing in the shadows of a recently concluded World War I and of the approaching European fascism that eventually took his life, was well aware of what Ian Bogost describes as “a gap in the magic circle,” an inescapable relation between “magic circle” and “material power” [46]. This recognition, subtly present in *Homo Ludens*, is paramount in Huizinga’s less well-known study of decaying feudal order, *The Autumn of the Middle Ages*, where he shows how jousts and tournaments cultivated the skills of chivalric elite, whose supremacy his account, despite its romanticism, unmistakably reveals as based in military barbarism and armed expropriation. The medieval “magic circle” of play, with all its visual pageantry and elaborate rules, is firmly set in the context of declining empires convulsively gripped by plague, war, emptying treasuries and peasant revolt, with the game-theoretician’s eye “trained on the depth of an evening sky, a sky steeped blood red, desolate with threatening leaden clouds, full of the false glow of copper” [47]. It is such a light that we examine virtual games in today’s age of Empire.

“Gamers against Empire” is, we acknowledge, an optimistic concluding slogan to this somber examination, and an apparently unlikely one—but not, perhaps, as implausible as it may first seem. We ask of digital play what Félix Guattari asked of collective humanity: “how can it find a compass by which to reorient itself?” His response, by “remaking social practices,” was grounded in a reading of transformations already

underway. To speak of games of multitude is to assert that the possibilities of virtual play exceed its imperial manifestations, and the desires of many gamers surpass marketers' caricatures of them. Games of multitude are, in Guattari's conceptual terms, a "molecular revolution" involving "the effort to not miss anything that could help rebuild a new kind of struggle, a new kind of society." Not missing anything includes virtual games.

"Strange contraptions, you will tell me, these machines of virtuality, these blocks of mutant percepts and affects, half-object, half-subject," Guattari mused, perhaps, who knows?, contemplating a video game console--yet potentially, he insisted, such "strange contraptions" were "crucial instrument[s]" to "generate other ways of perceiving the world, a new face on things, and even a different turn of events" [48].

## Endnotes

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