VIDEOGAME CULTURE AS TRANSNATIONAL MEDIA: ONE NEOLIBERALISM, MANY RESISTANCES

BY
DENNIS R. REDMOND

DISSERTATION
Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Communications in the Graduate College of the University of Illinois at Urbana-Champaign, 2012

Urbana, Illinois

Doctoral Committee:
Professor Angharad Valdivia, Chair
Professor Isabel Molina
Professor Antoinette Burton
Professor Paula Treichler, Emeritus
ABSTRACT

This dissertation analyzes two best-selling videogames, Hideo Kojima's *Metal Gear Solid 4* (2008) and Square Enix' *Final Fantasy 12* (2006), as sites of contestation between commercial media corporations on the one hand, and communities of artists, consumers and non-commercial digital users on the other. I argue that *Metal Gear Solid 4* rewrites the stealth espionage thriller into a critique of neoliberalism's financial speculations and neocolonial wars, while *Final Fantasy 12* rewrites the fantasy role-playing videogame into a critique of the colonial and neocolonial legacies of fantasy and role-playing fiction. Using the tools of critical communications theory, postcolonial media studies, and digital media scholarship, I argue that these videogames narrate the struggle between neoliberalism (i.e. the ideology of late 20th century market fundamentalism which exerted global hegemony during the thirty years from 1975 to 2005) and a wide range of anti-neoliberal social movements, developmental states (especially those of the BRIC nations, i.e. Brazil, Russia, India and China), and non-commercial networks of digital production, distribution and consumption. I also argue that these videogames frame the politics of transnational media production and transnational audience reception in productive ways. At their best, they offer new ways to critique digital capitalism as well as its shadowy obverse, financialized neocolonialism. I conclude that videogames have become an important space for anti-neoliberal cultural critique and political mobilization, and that videogame narratives offer unique insights into transnational identity-politics, the institutions of the digital commons, and the geopolitics of the emerging multipolar world.
| CHAPTER 1: INTRODUCTION | 1 |
|-------------------------------------------------|
| CHAPTER 2: VIDEOGAMES AS TRANSNATIONAL MEDIA | 14 |
| 1.1 Constructing The Transnational Audience | 18 |
| 1.2 Neoliberal Corporations versus the Digital Commons | 34 |
| 1.3 Videogames as Transnational Commodities: From Game Studies to Digital Class Struggle | 46 |
| 1.4 Towards a Theory of Videogame Culture | 61 |
| CHAPTER 3: PLANET METAL GEAR | 63 |
| 2.1 Transnational Platforms and Videogame Franchises | 66 |
| 2.2 Transnational Media Genres | 78 |
| 2.3 Transnational Media Institutions | 90 |
| 2.4 Diagnosing Neoliberalism | 102 |
| CHAPTER 4: SOLID BRICS, LIQUID COMMONS | 118 |
| 3.1 Videogame Studios and the Transnational Division of Labor | 119 |
| 3.2 Historicizing Neoliberalism | 127 |
| 3.3 Critiquing the Lineages of Empire | 133 |
| 3.4 From Anti-Imperial Lineages To Anti-Neoliberal Uprising | 144 |
| CHAPTER 5: PIRATES OF THE SKY | 173 |
| 4.1 The Transnational Audience and Postcolonial History | 178 |
| 4.2 Videogame Localization as Transnational Aesthetics | 198 |
| 4.3 Videogames as Transnational Multimedia | 206 |
| 4.4 From Postcolonial Brotherhood To Transnational Sisterhood | 218 |
| CHAPTER 6: THE POSTCOLONIAL AS THE DIGITAL | 237 |
| 5.1 Replayability And Narratives of Equal Exchange | 243 |
| 5.2 Lineages of Anti-Imperial Resistance | 251 |
| 5.3 The Sky-pirate as Transnational Audience | 260 |
| 5.4 One Neoliberalism, Many Resistances | 269 |
| CHAPTER 7: CONCLUSION | 280 |
| REFERENCES | 285 |
CHAPTER 1
INTRODUCTION

Long ago, Theodor Adorno wrote that there is a secret affinity between great works of art, and the regressive or mass-cultural kitsch these latter just barely avoided becoming. Behind every soaring symphonic theme lurks the ad jingle, behind every great novel lurks the press release, behind every awe-inspiring film panorama lurks the tourist snapshot. The contemporary version of this contradiction is the secret affinity between the greatest videogames of the present era, and the neoliberal financial bubbles they just barely avoided becoming.

This contradiction lies at the heart of the videogames which form the major case studies of this dissertation, namely Hideo Kojima's *Metal Gear Solid 4* (2008) and Square Enix's *Final Fantasy 12* (2006). Both videogames are best-selling digital commodities, produced by some of the largest commercial publishers (Konami and Square Enix) in the videogame industry. They were produced by the labor of hundreds of professional artists, technicians, coders and testers, at the cost of tens of millions of dollars. They are played on oligopolistic commercial platforms, namely the Playstation 2 and Playstation 3, which are owned exclusively by the Sony Corporation. Finally, both videogames are best-selling iterations of transnational franchises in the console gaming market, a market which comprises roughly four-fifths of world videogame revenues.

Yet both videogames are far more than digital commodities. As works of art, they are fiercely critical of neoliberalism, a.k.a. the dominant ideology of transnational capitalism from the mid-1970s to the mid-2000s. Far from celebrating neoliberalism, their storylines identify its
internal contradictions with surgical precision. Their modes of game-play turn the democratic potential of online public space, a.k.a. the digital commons, against neoliberal consumerism. Their game-worlds draw upon the non-commercial and informal networks of digital production, distribution and consumption flourishing in the transnational audience. Most remarkable of all, both videogames culminate with the spectacle of democratic resistance movements successfully defeating neoliberal empires.

However, these videogames do more than simply tell the stories which the mainstream neoliberal media attempted to silence or marginalize. Their greatest contribution is to make the contradictions of neoliberalism playable. Put more provocatively still, the greatest videogames of our time are real-time walk-throughs of neoliberalism. They teach players to play through, critique, and ultimately resist the global factory. Where the ideology of neoliberalism transforms digital labor into simulacra of play, videogames turn digital play back into simulacra of digital labor.

Before delving deeper into this contradiction, however, it is important to specify the term “neoliberalism” with greater precision. As its name implies, neoliberalism is a modified version of the doctrine of Britain's Victorian-era economic liberalism expounded by Adam Smith and David Ricardo, and critiqued by Karl Marx and Frederick Engels. Liberalism proclaimed the private ownership of the means of production, distribution and consumption to be the end-point of human history, and argued that market competition with a minimum of state interference always results in the maximum social good. In practice, to be sure, liberalism relied on the non-market power of the British state and its globe-spanning colonial empire.

Twentieth century partisans of neoliberalism such as Friedrich Hayek, Milton Friedman,
Ayn Rand and Francis Fukuyama rewrote classical liberalism into a doctrine celebrating transnational financial speculation and corporate ownership as the end-point of human history. Just like its liberal predecessor, neoliberalism extolled markets while denouncing state authority, but was always deeply complicit with the power of the state. Critics of neoliberalism such as economists Ha-Joon Chang and Joseph Stiglitz, sociologist Pierre Bourdieu, and social geographer David Harvey have pointed out that just as classical liberalism was the mask of illiberal institutional power, a.k.a. the military and political hegemony of the British Empire, so too was the doctrine of neoliberalism the mask of First World (i.e. the combination of US, EU and Japanese) corporate and imperial domination of the planet.²

The one point the apologists and detractors of neoliberalism will agree on, however, is the hegemonic nature of neoliberalism. Neoliberalism was by far and away the single most powerful ideology of the world-system from the mid-1970s to the mid-2000s. To be sure, its hegemony was never absolute, but was always contested by local and regional challengers – most notably, the developmental state capitalisms of the East Asian region, the welfare state capitalisms of the Central European social democracies, and the state-led industrialization projects of certain postcolonial and industrializing nations. That said, neoliberalism was the only ideology which exerted a truly global reach over every level of the world-system, ranging from the policies of financial deregulation and plutocratic wealth concentration adopted by the elites of the fully industrialized nations, all the way to the debt-induced austerity and neocolonial immiseration adopted by the elites of the industrializing nations.

It is this precisely this global hegemony which MGS4 and FF12 critique, by critiquing the system of neoliberalism with systemic means. It is no accident that their strategy recalls to mind
the critical communications methodology of Ben Bagdikian's *The Media Monopoly* (1983), Edward Herman and Noam Chomsky's *Manufacturing Consent* (1988), and Dan Schiller's *Digital Capitalism* (1999). None of these authors blame the problems of the mass media on a few unethical business executives or media firms. Their point, rather, is that any corporate-owned mass media will systemically privilege the interests of advertisers and corporate elites over the interests of consumers and the general public. Neoliberalism does not deliver the best of all possible media and communications systems to audiences and consumers, but rather the one most profitable to plutocratic elites.

Similarly, *MGS4* and *FF12* critique neoliberalism not from a moral standpoint, but by acknowledging a key tenet of neoliberalism’s hegemony as their narrative starting-point. This tenet is the primacy of the individual speculation, or what neoliberalism terms “freedom”. It is worth emphasizing that what made neoliberalism such a powerful political force was that unlike older forms of reactionary or conservative politics, it did not frame its project in terms of allegiance to a specific state apparatus, political persona or even a specific social elite. Rather, it repackaged the oldest hierarchies in the garb of the newest individual choice. Strange as it sounds, the entire project of neoliberalism was built on the premise of freedom: the freedom to borrow, to consume, and to speculate for maximum individual self-interest. In essence, neoliberalism cloaked its agenda of plutocratic self-enrichment with the utopian belief-system of market populism.

From a sociological perspective, this may explain why the fullest flowering of the neoliberal project occurred in the US, simply because market populism had far deeper indigenous roots in the US than in the nations of the European Union or late-industrializing
Japan. Since the mid-1970s, US neoliberal ideologues sought to transform public primary, secondary and tertiary public school systems into profit-driven testing-mills, to replace guaranteed pensions with risky individual retirement accounts (subject to layers of Wall Street fees), to replace national standing armies with for-profit mercenary companies, to transform healthcare into profit-centers for biotech, pharmaceutical and health insurance firms, and to turn political elections into auctions determined by the highest campaign finance bidder. All this went hand-in-hand with the dramatic expansion of the commercial media, including the rapid growth of the videogames industry.

What makes MGS4 and FF12 so significant is that they embody the moment when the disparate resistance movements against specific aspects of neoliberalism – say, the resistance of digital consumers to punitive copyright laws written by commercial oligopolies, and the resistance of parents and schoolteachers to neoliberal testing and privatization schemes – began to unite on a transnational scale. As we shall see, their respective game-worlds are by no means digitalized versions of false consciousness, nor are their online communities replicas of the digital trading networks of Wall Street firms. Rather, both games embody forms of collective story-telling and mobilization with the power to disrupt neoliberalism both where – and when – this latter is strongest: inside the core institutions of digital capitalism, and during its most mundane daily operations.

The source of this disruptive power is the fact that videogames are enmeshed with some of neoliberalism's most explosive systemic contradictions. Nomi Prins, a former Goldman Sachs employee, pointed out that Wall Street firms invented an alphabet soup of speculative assets in order to banish local forms of systemic risk, but thereby exacerbated the problem of a
transnational collapse. In like manner, the neoliberal-era spread of computers and telecommunications, designed to turn consumers into privatized, isolated monads susceptible to marketing campaigns, also gives videogame players the tools to communicate, to construct their own digital media, and to mobilize by means of non-commercial networks. The neoliberal expansion of consumerism, designed to transform daily life into a free-fire zone of corporate media, has triggered the construction of billion-strong digital publics with the means and motive to pirate and refunction that media. Neoliberalism's digital culture-industries, designed to quell or commodify local forms of dissent, unwittingly disseminated many of the key institutions and practices of the digital commons.

In a nutshell, while the videogame industry is one of the purest incarnations of neoliberalism imaginable, transnational networks of videogame audiences, artists and fan communities are some of the most powerful and effective agents of resistance to that neoliberalism. Put bluntly, the same neoliberal subject which can speculate and take financial risks, can also learn to organize unions, share digital goods, and join social movements.

This dialectical recoil recalls to mind Adorno's aphorism on the Wagnerian phantasmagoria, that 19th century antecedent of the 20th century Hollywood spectacle: “Where the dream is at its most sublime, the commodity-form is closest to hand.” It is precisely where neoliberalism's dream of bodiless, frictionless markets is at its most sublime – namely, the fantasy of digitized subjects playing digital games – that it comes closest to the subversive potential of the workers whose labor produces and sustains those markets and games.

This potential is the possibility that the digitally-connected workers of the world will change the rules of the neoliberal game. At their most radical, videogames foreshadow the
negation of plutocratic fiat by democratic fair play. Where neoliberalism games the total system, by expropriating the digital labor of others, videogames systemize gaming, anticipating the possibility that the expropriators might themselves be expropriated.

*MGS4* and *FF12* anticipate this radical possibility in three ways. First, their game-worlds are useful metrics of some of the most prolific media genres of the present era. These genres include the science-fiction, espionage and action thriller narratives in the case of *MGS4*, and fantasy and science fiction role-playing narratives in the case of *FF12*. More specifically, *MGS4* critiques the action and espionage genres as the symbolic projects of neoliberalism's financial empire, while *FF12* critiques the fantasy role-playing videogame as a vehicle of neocolonialism and neoliberal mass tourism.

Second, the networks of artists, fans and audiences specific to these franchises successfully resisted some of the largest culture-industries of the neoliberal era. These audiences do not merely share commercially-created media. They are also producing and distributing increasing amounts of non-commercial media through informal channels of production, distribution and consumption – channels which are beginning to challenge commercial networks in terms of their size, scale and complexity.

Third, these videogames are indispensable case studies of digital labor. This is a term which has a complex pedigree, ranging from Peter Drucker's thesis of the US knowledge economy in the 1960s to Robert Reich's economy of symbolic analysts in the 1990s, and from Maurizio Lazzarato's concept of immaterial (i.e. informational and communicational) labor to Michael Hardt and Antonio Negri's affective labor.¹⁰

One of the most suggestive aspects of digital labor is its capacity to shuttle between the
level of the micrology (the most ordinary or daily experiences of human beings in neoliberalized societies) and the level of the macrology (how the largest human collectivities are created and sustained). By their very nature as mass media artifacts and collective online spaces, videogames are an invaluable index of such digital labor. They embody the vast expansion of the digital laboring class during the neoliberal era from a few tens of thousands of engineers and electronics factory workers, to literally billions of laboring players, who construct a wide range of digital entertainment and online spaces (some commercial, some non-commercial) through fan labor, user-generated content, and social networks.

However, this vast new collectivity of player-audiences did not emerge overnight, or within a cultural vacuum. It overlapped with analog media-systems and other forms of digitalization. To make sense of this process, the next chapter of this dissertation argues that the rise of the videogame audience must be understood as part and parcel of the rise of the transnational media. This includes the rise of transnational audiences, as well as the spread of both commercial and non-commercial transnational media networks.

Chapter 2 argues for a critical approach to videogames based on three overarching constellations. These three constellations are (1) the geopolitical struggle between First World media oligopolies on the one hand, and the media-systems of the postcolonial and industrializing nation-states (especially those of Brazil, Russia, India and China) on the other; (2) the economic struggle between commercial media-systems and the non-commercial networks of the digital commons; and (3) the contradiction between videogames as prototypical transnational commodities, and their role as sites of anti-neoliberal resistance and mobilization.

The first constellation argues that the transnational audiences of the industrializing
nations, by dint of their economic success and sheer size, have become a significant counterweight to First World media corporations and First World audiences. One of the most important contributions of postcolonial literary and media scholarship to the study of videogames is its critique of some long-standing assumptions about US media hegemony – in a phrase, the notion that the most advanced media is always produced by the West and then copied by the rest.

While this model had critical and theoretical relevance during the initial decades of neoliberalism, i.e. the 1970s and early 1980s, it is in urgent need of an overhaul today. The reason is that the BRIC nations (Brazil, Russia, India and China) have all become geopolitically significant producers and consumers of their own media.

The BRICs are 42% of the planet's population, generate two-fifths of all feature films produced annually, comprise one-third of the world's internet users, and account for a tenth of the world videogame market. Currently, the largest media firms of the BRICs are producing media content which can compete head-to-head with First World media productions, while smaller producers in the BRICs have learned to adapt and thrive amidst the informal or unofficial media-systems of the industrializing world.

One of the factors which gave the BRICs some room to maneuver is the fact that neoliberalism was founded primarily on transnational trading and financial networks organized by politically independent nation-states, and only secondarily on direct military coercion or colonial annexation. What this meant was that it was the indigenous national elites of Brazil, Russia, Indonesia and other industrializing nations who co-administered the Washington Consensus, a.k.a. the IMF structural adjustment policies imposed on sixty percent of the planet between 1975 and 2004.11
In the short run, this strategy allowed neoliberalism to spread rapidly throughout the world-system, as national elites bent on maximum self-enrichment could be individually bought off or pressured into compliance by neoliberalism's united front of multilateral lending institutions and First World financial firms. The biggest drawback of this strategy, however, was the risk that large numbers of the citizens of specific nation-states might reject neoliberal policies, and use digital tools to form transnational networks of their own.

Since the turn of the 21st century, anti-neoliberal political and social movements have done exactly that. In the field of politics, they have won elections or overthrown neoliberal autocracies across Latin America, Asia and Africa. In the field of economics, they have built powerful developmental states and constructed multilateral institutions such as ALBA, UNASUR, IBSA, the SCO, and the BRICS. In the field of culture, the digital audiences of these nations have constructed a wide range of informal and non-commercial institutions, practices and networks of file-sharing, media production, distribution and consumption, which have effectively disrupted neoliberalism's copyright and intellectual property monopolies.

The second constellation focuses on theories of the digital commons, and argues that they enable us to understand the struggle between neoliberal corporations on the one hand, and digital artists, fans and communities on the other. This struggle is illuminated through case studies of the failure of advergaming strategies in the videogame industry, and through a critical reading Henry Jenkins' notion of participatory and fan culture and Yochai Benkler's theory of social networking effects. Theories of the digital commons are especially helpful to understand the internal dynamics of the videogame culture, due to the existence of multiple and overlapping commons – the programming commons, the digital music commons, the animation commons,
The third constellation argues that videogames should be analyzed as transnational commodities, suffused with the categories of digital class struggle. These categories are not simple empirical facts or a set of summary statistics, but are complex mediations, which require the cognitive and interpretive labor of laboring subjects. To unpack this complexity, we argue that the insights of game studies scholars such as Mia Consalvo, Ian Bogost and Hector Postigo need to be conjoined with the insights of media theorists such as Lev Manovich and Janet Murray.

Chapter 3 of the dissertation moves from theories of the transnational media to a close reading of Hideo Kojima's *Metal Gear Solid* videogame franchise. The chapter argues that Kojima largely invented the stealth espionage genre as a covert critique of the US military-industrial complex and its neocolonial wars, on the specific grounds of the secret agent thriller and the first-person shooter. *MGS4* overcame many of the structural constraints of these narrative forms, by integrating the themes of aging and mortality, the influence of emergent digital media (typified by the character of Drebin, who symbolizes the pirate media culture of the industrializing world), and the contradictions of neoliberal-era gender and sexuality into the overall framework of the espionage thriller. *MGS4* also features a transnational character-system which critiques the identity-politics of US imperial masculinity and neoliberal whiteness.

Chapter 4 illustrates how Kojima anchors this character-system in some of the key institutions of the multipolar world. These institutions include the space of the semi-periphery (rendered in *MGS4* as playable versions of the Middle East, Latin America and Eastern Europe), the developmental institutions located in the largest nations of the semi-periphery (state-owned
industries and sovereign wealth funds), as well as four specific counter-neoliberal lineages or archives of resistance. Each of these lineages is tied to a specific sub-plot and a specific set of characters in the storyline (the four lineages are embodied in Sunny and Naomi, Meryl's team and Drebin, Rose and Raiden, and Eva and Solid Snake). Note that these lineages are not located in the semi-periphery, but symbolize various aspects of the digital commons and the transnational audience. The conclusion of *MGS4* expands on the self-critique of the stealth espionage narrative as a form, by staging the symbolic insurrection against neoliberalism, thereby anticipating the 2008 crash as well as the dawning post-neoliberal era we are entering right now.

Chapter 5 moves from the stealth espionage thriller to the realm of the fantasy role-playing videogame. The chapter argues that Square Enix's *Final Fantasy* franchise, one of the preeminent role-playing franchises of all time, has a deeply conflicted relationship to postcolonial history and its neocolonial legacies. This relationship is rooted in the colonial and neocolonial legacies of the role-playing genre, which was a primarily Anglo-American live-action, literary, and cultural innovation.

Despite these legacies, *FF12* was one of the the first role-playing videogames to resist the neocolonial policing of race, gender, sexuality and nationality, by depicting six playable characters who embody gender egalitarianism, interracial romance, and transnational solidarity. Second, *FF12* draws on the tools of postcolonial theorists to critique colonialism and neocolonialism, while avoiding the twin traps of unfairly castigating ordinary citizens for the sins of their empires, or unnecessarily celebrating all forms of anti-imperial resistance, no matter how revanchist or reactionary they may be. Third, *FF12* portrays a complex and credible game-world
called Ivalice, whose history frames the transition between the US-centric or unipolar world of
the late 20th century, and the emerging multipolar world of our own day.

Chapter 6 further expands on the themes of postcolonial theory and postcolonial history,
and emphasizes the fact that videogames are marked by many of the same social contradictions
as the neoliberal service and entertainment sector, especially mass tourism. FF12 critiques
neoliberal tourism, by deploying sky-piracy as a symbol of the informal and non-commercial
media-systems of the industrializing world (e.g. in the fictional game-world of Ivalice, the
Feywood is the equivalent of Nigeria's Nollywood video industry, or India's regional Bhojpuri
film and music cultures). We argue that the impending convergence of the digital with the
postcolonial, driven by the expansion of digital audiences across the planet, does not mean an
automatic end to neocolonial violence or neoliberal immiseration. It marks, rather, the emergence
of a new set of transnational struggles against such. The chapter concludes with a meditation on
what FF12 might teach us about the political possibilities of postcolonial media audiences and
transnational digital publics in the dawning post-neoliberal era.

Last but not least, Chapter 7 draws some provisional conclusions concerning the legacy
of MGS4 and FF12 on videogame culture, as well as on the larger field of the transnational
media. It also offers some closing speculations on where digital media studies and videogame
culture might be headed in the future, given the prospect of the rapid expansion of the digital
public from today's 2 billion to 4 or even 5 billion tomorrow.
CHAPTER 2

VIDEOGAMES AS TRANSNATIONAL MEDIA


Videogames are unquestionably one of the largest culture-industries on the planet. In 2010, US trade group Electronic Software Association estimated total US consumer spend on videogames at $25.1 billion, a figure more than twice as large as US cinema box office receipts that same year. Analyst firm DFC has estimated world videogame sales (based on all countries and all digital platforms) at $66 billion that same year. Based on such numbers, one might assume that the videogame industry ought to be completely dominated by the hegemonic ideology of the late 20th century, namely neoliberalism. In the case of the US videogame industry, content analyses by critical communications scholars have documented the narrative hegemony of neoliberalism in the categories of racialized whiteness, imperial masculinity, and heteronormativity depicted by best-selling videogames. More perniciously, videogames are structurally complicit with the corporate broadcasting oligopolies of neoliberalism. The three biggest firms in videogames, Sony, Nintendo and Microsoft, are transnational corporations headquartered in Japan and the US. The videogame industry is thus marked by what Nick Dyer-Witheford and Greig de Peuter's Games and Empire (2009) diagnose as a digital imperialism which legitimates the US Empire and upholds neoliberalism's agenda of plutocratic wealth concentration.

Yet this is by no means the whole story. Videogames are also the site of some of the most deep-seated and effective resistances to neoliberalism. Nowhere is this contradiction more
apparent than in two of the landmark works of contemporary videogame culture, Hideo Kojima's *Metal Gear Solid 4* (2008) and Square's *Final Fantasy 12* (2006), hereafter referred to as *MGS4* and *FF12* respectively.

*MGS4* and *FF12* are not obscure or niche works of art. They are the blockbuster exemplars of best-selling franchises. Between 1998 and 2011, the *Metal Gear Solid* franchise sold 27.9 million official copies\(^{14}\), while in the same time period, the iterations of the *Final Fantasy* franchise sold 73.5 million official copies\(^{15}\).

Despite their commercial success, both *MGS4* and *FF12* actively critique neoliberalism, by narrating one of the key geopolitical tensions of the early 21\(^{\text{st}}\) century. This tension is the struggle between neoliberal financial and economic elites on the one hand, and the emergent forms of the transnational collectivity which opposes those elites on the other. These forms include the cultural practices of the digital commons, the economic institutions of developmental states, and anti-neoliberal political mobilizations.

Indeed, one of the most intriguing features of videogame culture is the extent to which it is inextricably linked to non-commercial networks of media production and distribution. Dyer-Witheford and de Peuter encapsulate this contradiction as follows:

Game production, like that of film, music, and all digital arts, exemplifies conditions where creativity rests on derivation from preceding works, boundaries between producers and consumers blur along a continuum, and restrictions on illegal copying and circulation can only be achieved, if at all, by deep invasions of privacy and restrictions of technological capacities. The conditions are, in short, those of highly socialized production, a de facto commons that is incompatible with stringent de jure intellectual property rights. Game culture, we would say, exemplifies practical open-source and Creative Commons practices, even though it continues to be governed by conventional intellectual property regulations. It is a practical reality of multitude, ruled by the old law of Empire.\(^{16}\)
This may explain why *MGS4* and *FF12* are hardly unique or isolated cases of anti-neoliberal critique. The clash between the digital practices of the multitude and the financialized claims of neoliberal capitalism typifies many of the best-selling videogame franchises of all time. Rockstar's *Grand Theft Auto* franchise created game-worlds filled with mock logos, parodic radio skits, and fake television programs which satirized neoliberalism and US consumerism.\(^\text{17}\)

Far from driving its audience away, the *Grand Theft Auto* franchise sold 96.8 million official copies of its games between 2001 and 2011.\(^\text{18}\) Similarly, the studio artists at Sony Santa Monica who created the *God of War* franchise fused the materials of the Greek mythology action thriller with the literary form of the late 20\(^{\text{th}}\) century neo-slave narrative, selling 18.3 million official copies of the franchise over the same time period.\(^\text{19}\)

This is not to argue that sales figures are in any way a substitute for the construction of anti-neoliberal political and social movements. The importance of works such as *MGS4* and *FF12*, however, is that they narrate the contradictions of neoliberalism in new ways. These contradictions include the emergence of the digital commons, the cultural logic of multipolarity, and the rise of the media-systems of the largest industrializing nations.

One of the lessons these works have to teach us is that transnational audiences – a group which is not limited to residents of the industrialized nations, but comprises literally billions of citizens in the industrializing nations – can sometimes resist the onslaught of profit-driven media corporations, on the grounds of one of the most heavily capitalized media industries of them all.

In order to think through this resistance, this dissertation will employ the concepts of critical communications scholars, postcolonial theorists, digital humanities scholars and game studies scholars. These concepts will be deployed in the form of three overarching (and
occasionally overlapping) constellations: postcoloniality and the transnational audience, the struggle between corporations and the commons, and videogames as sites of digital class struggle.

The first constellation covers theories of the transnational audience which address the rapid expansion of the mass media of the postcolonial and industrializing nations, as well as the acceleration of transnational flows of media during the neoliberal era – the 21st century convergence of the postcolonial and the digital. This convergence is by no means devoid of internal contradictions, nor does it signify the summary end of neocolonialism or the abolition of centuries-old inequalities of power and accumulation. What it does mean is that the digital media-systems and audiences of the industrializing world need to be taken seriously, as significant players in transnational media markets and as participants in non-commercial media networks.

The second constellation encompasses theories of videogames as a field of transnational media production, or what can be termed the clash between the profit-driven media oligopolies of neoliberalism, and the egalitarian institutions and practices of the digital commons. Videogames have deep and abiding links to the key institutions of this commons, as well as to the commons of other mass media (especially those of comics, animation and music).

The third constellation comprises theories which analyze videogames as transnational cultural commodities. These commodities are exemplars of digital capitalism, as well as products of digital labor. As such, they are enmeshed in forms of digital class struggle which do not necessarily correspond to older notions of class mobilization or hierarchical forms of vanguardism, but which are beginning to manifest their own unique organizational forms.
Each of these three constellations will be explored in greater detail below.

1.1 Constructing The Transnational Audience

One of the most significant features of the 21st century media is the emergence of the transnational audience. Today, for the first time in human history, the majority of human beings on the planet are literate, live and work in cities, vote in electoral democracies, are citizens of independent nation-states, and have access to a wide range of locally-produced mass media (print, radio, TV, film, cellphones, videogames and other digital media). 20

This is not to argue that all media industries have equal power, or that centuries-old structures of colonial and neocolonial domination have vanished. The largest Hollywood movie franchises continue to wield far more financial resources than their analogues in India's Bollywood film industry or Nigeria's Nollywood video industry, and Japan's videogame industry is still larger than that of China. That said, there can be no doubt that some of the largest industrializing nations of the world have vibrant and competitive media systems, more than capable of holding their own against foreign imports.

This process is also marked by extreme unevenness and inequality, both between nation-states, as well as inside nation-states. For example, in March 2010 the rate of teledensity or cellphones per capita in rural India was only 24.29, compared to 52.74 for India as a whole. 21 That said, the sheer demographic size of the industrializing nations, plus large-scale urbanization, has permitted the creation vast new media audiences. As Jeremy Tunstall points out:

Domestic, or nonglobal and non-American, media in fact exist in many countries at four different levels. First are the national media coming from the biggest city and using the main national
language. Second are the regional media based in that region and often using the regional language, as well as reflecting regional policies and politicians. Third are often the local media, such as newspapers and radio stations, which may appeal to a smaller minority, distinct from the regional media and language. Fourth are often the foreign media coming from a neighboring nation-state; often a language group straddles an international frontier – for example, people in both eastern India and in Bangladesh speak the same Bengali language. Added together, these four different categories of domestic media typically attract much bigger audiences than do the current crop of Euro-American imports.

Even in small population countries the majority of audience time goes to national media. In larger population countries the national, regional, local, and across-the-border media typically achieve audiences between 6 and 12 times those of global or American media.

What this means is that the mass media of the industrializing nations are key sites of contestation, where the political struggles of increasingly urbanized, literate, and technologically-savvy publics are being fought. One of the genuine difficulties in understanding these struggles is the fact that these publics are only imperfectly represented by commercial indexes of media consumption. Below are the official sales of the world's largest recorded media markets in 2010, which include the market share of the BRIC nations (Brazil, Russia, India and China), the four largest economies of the industrializing world. Back in 1999, the videogame industries of the BRICs were miniscule. By 2010, they generated $6.2 billion in sales, about 9% of world revenues:
Table 1. World Recorded Media Sales in 2010, by Sector.\textsuperscript{23}

<table>
<thead>
<tr>
<th>Mass Media</th>
<th>World Totals 2010</th>
<th>Largest Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videogames</td>
<td>$67.4 billion</td>
<td>Europe $24.5 billion (36%), US $22.5 billion (33%), Japan $6.6 billion (10%),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BRIC nations $6.2 billion (9%)</td>
</tr>
<tr>
<td>Film (box office)</td>
<td>$31.8 billion (MPAA) (19% at 3D theaters)</td>
<td>US $10.6 billion (33%), EU $8.2 billion (26%), BRIC nations $5.2 billion (16%),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japan $2.7 billion (8%)</td>
</tr>
<tr>
<td>DVD/Bluray sales plus rentals</td>
<td>$33 billion (2009 data, initial reports suggest $29 billion in 2010)</td>
<td>The US and EU remain the dominant markets, but informal copies and non-commercial downloads prevail elsewhere</td>
</tr>
<tr>
<td>Music</td>
<td>$15.9 billion (IFPI)</td>
<td>29% digital ($4.6 billion)</td>
</tr>
</tbody>
</table>

It would be all too easy to conclude that the BRIC nations are on track to replicate other, presumably more advanced First World media markets. However, there is abundant evidence to suggest that the industrializing nations are not following the model of plutocrat-controlled media oligopolies typical of the US. What has occurred instead is the rise of informal alliances between transnational audiences and producers. These alliances are not necessarily organized as official bodies, but consist of a range of unofficial practices, informal institutions, and democratic networks of production of exchange.

To understand the importance of these informal practices and networks, it is worth reviewing some of the key insights of postcolonial theorists and media scholars. The South Asian scholars are especially helpful in this context, due to India's role as the largest and in some ways most influential media producer of the industrializing world. Sujata Moorti and Sangita Gopal have emphasized how India has exported its postcolonial film, music and literary productions to other nations, especially those of the industrializing world, thereby anticipating the accelerating South-South cultural flows of the digital era.\textsuperscript{24} Arguably, the complexity and dynamism of India's
mass media makes it a useful metric with which to map out the media systems of other industrializing nations.

When Purnima Mankekar's ethnography *Screening Culture, Viewing Politics* analyzed the audience reception of one of India's first blockbuster television serials in 1987, the total Indian television audience was an estimated 80 million viewers. Today, this audience is closing in on the 800 million mark. India not only produces one quarter of the world's feature films each year, its films are produced in between thirty to fifty separate languages, corresponding to the immense linguistic and cultural diversity of the subcontinent. In addition to the big-budget, Hindi-language films and broadcasts, there is a plethora of regional-language media in Bengali, Tamil, Marathi, Malayalam and innumerable other languages. India's regional-language media industries are building studio infrastructures which rival those of Mumbai, the traditional center of Bollywood.25

These contradictions permeate India's postcolonial state media. Mankekar writes eloquently about the interplay between the official nationalism of India's state broadcaster, Doordarshan, and the heterogenous consumer consciousness of the viewing public, in the era just prior to the Indian elites' official turn towards neoliberalism in the early 1990s:

> Viewers' engagement with television narratives was central to their constitution as gendered and national subjects, to their construction national and communal pasts, and to their understanding of violence committed in the name of the nation – thus revealing the political [italics in original] significance of texts dismissed by many social scientists as fictive and therefore inconsequential, as 'mere' entertainment or, less charitably, kitsch. The viewers I worked with intimately engaged themselves with the characters and predicaments depicted in Doordarshan's narratives, thereby blurring the lines between fantasy and experience, fiction and reality.26

While India's state broadcasting channels no longer have the dominant market share they enjoyed in the 1980s and 1990s, the Indian state retains significant regulatory capacity over film
distribution, television broadcasting, cellphone spectrum allocation, and many other aspects of the digital media.

In fact, the state has played an indispensable role in the cultural, political and economic renaissance of the four largest industrializing economies of the world, namely the BRIC nations of Brazil, Russia, India and China. To understand the importance of this reinvention of the state, it is worth reconsidering Immanuel Wallerstein's theory of the capitalist world-system, designed to track long-term changes in economic and geopolitical power. In Wallerstein's terminology, one in seven people on our planet (15%) reside in the “metropole”, a.k.a. the fully industrialized nations of the planet. Another one in seven live in largely agrarian nations, the so-called “periphery” of the world-system. The remaining five out of seven – roughly 70% of humanity – live in the global semi-periphery. These are regions of the world where a significant degree of industrialization and urbanization has taken place, albeit with the legacies of precapitalist social institutions and agrarian modes of production. The demographic, economic and educational indicators of these three sectors of the world-system are listed below:
Table 2. The contemporary world-system divided into groups of high, middle and low income countries in 2010.\textsuperscript{28}

<table>
<thead>
<tr>
<th>Category</th>
<th>Population (millions)</th>
<th>GDP (trillions)</th>
<th>GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income countries</td>
<td>939</td>
<td>40</td>
<td>$42,500</td>
</tr>
<tr>
<td>Medium income countries</td>
<td>4995</td>
<td>22.5</td>
<td>$4,500</td>
</tr>
<tr>
<td>Low income countries</td>
<td>931</td>
<td>0.6</td>
<td>$650</td>
</tr>
</tbody>
</table>

Since the emergence of the capitalist world-system in the mid-16\textsuperscript{th} century until the late 20\textsuperscript{th} century, the periphery and semi-periphery have accounted for the demographic majority of humanity. Scholars such as Walter Rodney and Andre Gunder Frank have detailed the process whereby colonial-capitalist empires and financial neocolonialism extracted the wealth of these regions, in order to finance metropolitan elites.\textsuperscript{29} While a few semi-peripheries did manage to industrialize – the early United States, pre-Meiji Japan and Bismarck's Germany are the classic examples – most ended up in the purgatory of chronic stagnation and underdevelopment.

It is only during the last fifteen years of world-history that large numbers of nations in the global semi-periphery have become key centers of accumulation in the world-system. By rejecting neoliberal policies and constructing developmental states, the largest economies of the semi-periphery grew from less than one quarter of the world economy in 1999 to one third by 2010:\textsuperscript{30}
Table 3. GDP of Largest Developing Countries at Market Exchange Rates, 1999-2010.31

<table>
<thead>
<tr>
<th>Region or Country</th>
<th>GDP in 1999 (US$)</th>
<th>Percent of World in 1999</th>
<th>GDP in 2010 (US$)</th>
<th>Percent of World in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest 10 developing economies (by GDP)</td>
<td>4.0 trillion</td>
<td>7.0%</td>
<td>15.0 trillion</td>
<td>24.1%</td>
</tr>
<tr>
<td>Largest 20 developing economies (by GDP)</td>
<td>5.2 trillion</td>
<td>9.0%</td>
<td>17.8 trillion</td>
<td>28.7%</td>
</tr>
<tr>
<td>Largest 40 developing economies (by GDP)</td>
<td>5.8 trillion</td>
<td>10.1%</td>
<td>20.1 trillion</td>
<td>32.5%</td>
</tr>
<tr>
<td>EU</td>
<td>8.9 trillion</td>
<td>28.9%</td>
<td>16.1 trillion</td>
<td>26.0%</td>
</tr>
<tr>
<td>US</td>
<td>9.2 trillion</td>
<td>30.0%</td>
<td>14.6 trillion</td>
<td>23.6%</td>
</tr>
<tr>
<td>Japan</td>
<td>4.5 trillion</td>
<td>14.5%</td>
<td>5.4 trillion</td>
<td>8.7%</td>
</tr>
<tr>
<td>Subtotal: BRIC nations (Brazil, Russia, India, China)</td>
<td>2.3 trillion</td>
<td>4.1%</td>
<td>10.7 trillion</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

In a nutshell, the twenty largest developing economies tripled in economic size between 1999 and 2010. While their per capita income is still far below the comparable figures for the industrialized countries, collectively they generate three times the output of Japan, and are already comparable in size to the economy of the European Union or the US.

This unprecedented economic dynamism has transformed the neoliberal world-system in ways we are still struggling to understand. It has driven a boom in sales of cellphones, television sets, game consoles and computers throughout the industrializing nations. It has also driven the creation of new forms of political contestation, by facilitating the spread of electoral democracy.
and deepening the forms of democratic participation throughout the industrializing world. Whereas analog digital technologies such as videocassettes, videotapes, and transistor radios played a critical role in the democracy movements of South Africa, Indonesia, Russia and Eastern Europe in the 1990s, fully digital platforms played an equally important role in the democratization of Turkey, Nigeria and Pakistan in the 2000s, and the revolutions of Tunisia, Egypt and Libya during 2011's Arab Spring.

One of the most striking cultural expressions of this dynamism has been the expansion of the BRIC media cultures. In 2009, the BRICs produced one third of the roughly four thousand feature films released in theaters around the world. The nations of the European Union and the wealthy European countries produced about one quarter of all such films, while the US accounted for slightly one-eighth of all such films. For its part, Japan produced about one-tenth of the total:

Table 4. World Feature Film Production 2009.32

<table>
<thead>
<tr>
<th>Region or Country</th>
<th>Feature Films Produced 2009</th>
<th>Percent World Film Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIC nations (China includes Hong Kong)</td>
<td>1,466</td>
<td>30%</td>
</tr>
<tr>
<td>Industrialized European region (EU-27 countries, Switzerland and Norway)</td>
<td>1,271</td>
<td>26%</td>
</tr>
<tr>
<td>US</td>
<td>677</td>
<td>14%</td>
</tr>
<tr>
<td>Industrialized East Asian region (Japan, South Korea, Taiwan plus Singapore)</td>
<td>629</td>
<td>13%</td>
</tr>
</tbody>
</table>

While Hollywood blockbusters continue to earn the bulk of the world's cinema revenues, the
BRIC nations alone create more films than Europe or the US, while nearly half of all the feature films in the world were produced in the industrializing world. Nor was 2009 an exceptional year in the film industry. Screen Digest estimates that the BRIC nations generated between 35% to 40% of the world's films between 2004 and 2008.\textsuperscript{33}

What is true of cinema, one of the most expensive mass media to produce and distribute, is even more true of print, radio, and music, where galloping urbanization and rising literacy rates have created vast new reading publics and listening audiences throughout the world. Nowadays, almost every large industrializing nation with more than 65 million inhabitants produces and consumes mostly indigenous television, radio, music and video.\textsuperscript{34} The classic mid-20\textsuperscript{th} century monopolies of US consumerism – Hollywood's monopoly on films, Madison Avenue's monopoly on advertising, and Tin Pan Alley’s monopoly on music recording – have been replaced by a more complicated landscape of transnational media corporations and informal media networks.

One of the best studies of this process is the Social Science Research Council's \textit{Media Piracy in Emerging Economies} (2010), an excellent compendium of country studies examining informal media networks and the enforcement of copyright law in a number of key industrializing nations of the world, including three out of the four BRIC nations (Brazil, Russia and India).\textsuperscript{35} The country reports note that many of the key institutions of digital culture – file-sharing, open source software, and fan production – are pervasive and socially accepted practices of the media-systems of industrializing nations. The report also found that the most important constituency driving the expansion of digital media networks was the lower-income and poor majority of the citizens of these nations:
The second and, in many countries, more significant consumer shift is the growth of mass markets for recorded media among the very poor and – in many cases – mass production of recorded media by the very poor. The contours of this revolution can be traced back to the profoundly democratizing and piracy-enabling recorded media technologies of the 1980s – the audio cassette and the cassette player (Manuel 1993). The much larger current wave of digital media production is built on the proliferation of a cheap VCD and DVD infrastructure in the past decade, including multiformat players, computers, burners, and discs – both fueling and fueled by the availability of cheap pirated content. Consumer practices at this level are organized differently, with less attachment to CDs or DVDs as elements of a private collection than as goods shared within extended families and communities. Collective consumption – viewing and listening – is more common in this context, reflecting the lower numbers of TVs, computers, and DVD players in poor households.36

While the SSRC study does not cover mainland China, there is a great deal evidence that identical processes have occurred in China since the early 1980s. For example, the early success of China's largest search engine company, Baidu, was due primarily to the popularity of its MP3 search service among urban Chinese youth – a service which openly flouted US copyright law.37

Interestingly, one of the preconditions for this massive digital expansion was the internal transformation of the nation-state. At the turn of the century, key decision-makers within the BRIC nations all realized that the internet was an essential infrastructure of the 21st century. While the reasons for this policy change varied from state to state, the result was that all four nations invested significant public funds in national broadband and telecommunications networks. State educational systems connected schools and universities to the internet, state regulators constructed competitive rather than oligopolistic cellphone markets, and state industrial policies jump-started indigenous digital cultures and local media industries.38

The scale of this investment is staggering. China spent close to $642 billion of public funds to create a national internet infrastructure between 1997 and 2009, or roughly $41 billion a year.39 Beginning in 2005, Russia launched a program to connect all of its primary and secondary
schools to the internet via its Priority National Projects, large-scale public investments in education, healthcare, agriculture and housing. Brazil boosted its rates of internet access through the state-funded Computers for All program, as well as significant investments by regional and local authorities in community telecenters and open source software. State-owned Telebras plans on spending $6.1 billion between 2010 and 2014 to expand broadband access throughout Brazil. India's central government provided incentives to expand internet access, particularly in rural communities, and carefully regulated cellphone markets to maximize price competition, driving prices down and enabling several hundreds of millions of consumers to purchase phones.

While all of these policies were successful for the country in question, they generated an unexpected collective outcome. The BRIC nations became the global “sweet spot” of internet usage, i.e. accounted for the largest single slice of the online audience:

Table 5. World Internet Users, mid-2011.

<table>
<thead>
<tr>
<th>Country or Region</th>
<th>Internet users in millions, end of 2000</th>
<th>Internet users in millions, mid-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRICs (Brazil, Russia, India, China)</td>
<td>36 (10% of world)</td>
<td>721 (34% world)</td>
</tr>
<tr>
<td>European Union</td>
<td>94</td>
<td>338</td>
</tr>
<tr>
<td>US</td>
<td>95</td>
<td>245</td>
</tr>
<tr>
<td>Japan</td>
<td>47</td>
<td>99</td>
</tr>
<tr>
<td>All industrializing countries</td>
<td>103 (29% of world)</td>
<td>1,362 (65% of world)</td>
</tr>
<tr>
<td>All industrialized countries (Australia, Canada, EU, Japan, Norway, Switzerland, Singapore, US)</td>
<td>258 (71% of world)</td>
<td>741 (35% of world)</td>
</tr>
<tr>
<td>World total</td>
<td>361</td>
<td>2,095</td>
</tr>
</tbody>
</table>

As late as 2000, about two-thirds of the 361 million internet users in the world were residents of
the industrialized countries. By mid-2011, two-thirds of the 2,095 billion users in the world were citizens of the industrializing nations. This new transnational audience is not just planetary in size and linguistic diversity, it is structurally linked to a far more diverse array of media-industries and media platforms than the primarily US, Japanese and European-based internet audience of the late 1990s.

The rise of this transnational audience has had two noteworthy effects on videogame culture. First, it enabled the mass media productions of the semi-periphery to circulate more widely within the media markets of the industrial nations, and to become part of the aesthetic vocabulary of Japanese, European and US videogame artists and designers. For example, the iconic moving train sequence of Sony's action-adventure videogame *Uncharted 2* (2009) is a patent homage to Bollywood's signature shots of railroads and trains – transportation infrastructures which have long symbolized the contradictions of colonial modernization and postcolonial modernity for South Asian audiences.

Second, the proliferation of cheap digital platforms as diverse as cellphones and netbooks has accelerated cultural interactions between industrializing nations. The International Telecommunications Union estimated that by the end of 2010, citizens of the industrializing world will account for seven out of ten (3.8 billion out of 5.3 billion) of all cellphone subscriptions on the planet. For centuries, colonized cultures and peoples had to communicate with each other by employing the languages, trading networks, and communications systems of the colonial empires. This did not change radically in the immediate postcolonial era, as many newly independent nations discovered that what Ngugi wa Thiongo famously diagnosed as “flag independence” did not translate into economic autonomy or communicatory independence.
Yet from the standpoint of the world-system as a whole, the 2000-2010 period ushered in the transnational dissemination of media and communications networks very different from the networks constructed by colonial empires, or the one administered by 20th century media oligoplies (as in the US), one-party states (as in Maoist-era China or Brezhnev-era USSR) or unelected oligarchies (as in military-ruled Indonesia or Brazil).

One example of this is the market for ringtone and music-related mobile downloads, features described by the telecom industry as the market for “VAS” (value-added services). While per capita incomes in the industrializing nations are still low compared to fully industrialized nations, the sheer number of cellphone users in the former means that their mobile media markets generate significant market activity. Beijing-based Caixin Online has estimated China’s mobile music industry at $3.1 billion in 2009 revenues. A study by the European Commission, citing research by Netsize and PWC, estimated Chinese mobile online gaming revenues mushroomed from $87.9 million in 2004 to $377 million in 2008.

Estimates for the comparable Indian market vary, but the most credible are by research firm Informa Research Services and the Internet and Mobile Association of India (IAMAI). Informa pegs the total Indian VAS market (this includes all forms of messaging, gaming, and media downloads) at $3.7 billion in 2009, while IAMAI estimates the same market at $2.1 billion. Assuming that mobile music and ringtones make up about 30% of total sales, India’s mobile music market is likely somewhere between $630 million and $1.14 billion.

In fact, the digital media cultures of the industrializing world take a wide variety of forms, ranging from Bollywood’s flourishing ringtone market to the rise of online gaming in China. It has also led to the proliferation of videogame studios throughout the industrializing
countries. Below is the current list of such studios (note that foreign affiliates or local subsidiaries of First World videogame companies are excluded):\textsuperscript{51}
Table 6. Active Videogame Developers and Publishers of Industrializing Nations, November 2010.

<table>
<thead>
<tr>
<th>Country</th>
<th>Firms</th>
<th>Indigenous Videogame Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>3</td>
<td>Platico Games, QB9, Sabarasa, Three Melons</td>
</tr>
<tr>
<td>Belarus</td>
<td>2</td>
<td>Awem Studio, Eligame Studio</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>1</td>
<td>5th Floor Productions</td>
</tr>
<tr>
<td>Brazil</td>
<td>21</td>
<td>44 Bico Largo, Aquiris, Calibre Games, Continuum, Devworks Game Technology, Dynamic Games, ENE Solutions, Ex Games, Flockin Games, Hoplon, I2 Technology, iMax Games, Interama Games, Jynx Playware, Lumentech, Manifesto Game Studio, Meantime Mobile Creations, O2 Games, Oniria, TechFront, Webcore Games</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3</td>
<td>Dagger Games, Haemimont Games, Masthead Studios</td>
</tr>
<tr>
<td>Colombia</td>
<td>1</td>
<td>Immersion Games</td>
</tr>
<tr>
<td>Croatia</td>
<td>1</td>
<td>Croteam</td>
</tr>
<tr>
<td>Chile</td>
<td>3</td>
<td>ACE Team, Amnesia Games, Atakama Labs</td>
</tr>
<tr>
<td>China</td>
<td>16</td>
<td>Boonty Games, Maggi Game, M-Inverse, NetEase, Object Software, Perfect World, Playfish, Rekoo, Shanda Interactive, Soco Soft, Spicy Horse, Tencent, The9, TQ Digital Entertainment, Typhoon Games, Virtuos</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>6</td>
<td>Bohemia Interactive, Mindware, Nostromo, Pterodon, SCS Software, Vatra Games</td>
</tr>
<tr>
<td>Egypt</td>
<td>1</td>
<td>Timeline Interactive</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1</td>
<td>Fair Play Labs</td>
</tr>
<tr>
<td>Hungary</td>
<td>4</td>
<td>Black Hole Entertainment, Digital Reality, Invictus Games, Zen Studios</td>
</tr>
<tr>
<td>India</td>
<td>7</td>
<td>Csharks Games, Dhruva Interactive, Eivaa Games, FX Labs, Indiagames, RZ2 Games, Version2 Games</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1</td>
<td>Serenity Mega Media</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1</td>
<td>Ivolgamus</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4</td>
<td>Codemasters Studios, GameBrains, E-One Studio, Sherman 3D</td>
</tr>
<tr>
<td>Mexico</td>
<td>3</td>
<td>Anemona, Larva, Xibalba</td>
</tr>
<tr>
<td>Peru</td>
<td>1</td>
<td>Bamtang</td>
</tr>
<tr>
<td>Country</td>
<td>Count</td>
<td>Companies</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Philippines</td>
<td>2</td>
<td>Anino Games, Flipside Game Studios</td>
</tr>
<tr>
<td>Poland</td>
<td>15</td>
<td>Artex Mundi, CD Projekt, City Interactive, ComAngle, Detalion, Exor, Frontline Studios, Infinite Dreams, Jabler, Ganymede, Nibris, Orchid Games, Reality Pump, Techland, Teyon</td>
</tr>
<tr>
<td>Russia</td>
<td>28</td>
<td>1C Company, Akella, Alawar Games, Astrum Online Entertainment, Burut, Creat Studios, Discus Games, DAT Media, Eagle Dynamics, Exclusive Games, G5 Entertainment, Gaijin Entertainment, GameOver Games, K-D Lab, KranX Productions, Lesta, Madia Entertainment, NevoSoft, New Edge, Nikita, Russobit-M, Sky Fallen Entertainment, SkyRiver Studios, Space Dream Factory, Targem Games, Time Zero, Ural Development, Nival Interactive</td>
</tr>
<tr>
<td>Serbia</td>
<td>2</td>
<td>CGS Software, Eipix</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1</td>
<td>Zootfly</td>
</tr>
<tr>
<td>South Africa</td>
<td>1</td>
<td>Luma Arcade</td>
</tr>
<tr>
<td>South Korea</td>
<td>33</td>
<td>Actoz Soft, Ani-Park, Axis Entertainment, Blueside, CCR, ChoiRok Games, CJ Internet, CR-Space, Dragonfly, Gala Lab, GameHI, GameUS, imcGames, Inix Soft, JCE, JellyOasis, Mgame, ndoors, NeoPle, NCSOft, Nexon, NHN, Neowiz, Ntreev, Nurien, Phantagram, Skonec, SmileGate, SoftnYx, Sunny YNK, Webzen, Wemade Entertainment, Windysoft</td>
</tr>
<tr>
<td>Syria</td>
<td>1</td>
<td>Afkar Media</td>
</tr>
<tr>
<td>Turkey</td>
<td>10</td>
<td>Ceidot, Infosfer, MagiClick, Momentum Digital Media, Sobee, Taleworlds Entertainment, Tiglon, Tikle Games, Yogurt, Zootrope Interactive</td>
</tr>
<tr>
<td>Thailand</td>
<td>6</td>
<td>Asiasoft, Corecell Technology, Game Square, Sanuk Games, Viqua Games, Virus Studios</td>
</tr>
<tr>
<td>Ukraine</td>
<td>9</td>
<td>4A Games, AeroHills, Boolat Games, Creoteam, Deep Shadows, Digital Spray Studios, Frogwares, GSC Game World, Persha Studia</td>
</tr>
<tr>
<td>Vietnam</td>
<td>3</td>
<td>Emobi Games, Glass Egg, VNG</td>
</tr>
</tbody>
</table>

33
It is no accident that 69% of these companies are concentrated in just seven nations: Brazil, China, Poland, Russia, South Korea, Turkey and Ukraine. These are all industrializing nations with significant histories of indigenous media production, effective systems of national governance, and large urban populations (China is the only member of this group with a majority rural population, but the 49.7% of its population classified as urban residents in its 2010 census amounts to 665 million people). The states of Brazil, China, Russia and South Korea all invested heavily in broadband internet, education, and computer access, EU accession subsidies aided Poland and Turkey, while Soviet-era traditions of excellence in education and computer science were instrumental in the success of the Ukraine.

1.2 Neoliberal Corporations versus the Digital Commons

The second major constellation of this dissertation is the struggle between neoliberalism's transnational media corporations and the commons. Every major aspect of videogame culture, ranging from game design to audience reception, and from marketing to fan-created media, is a site of transnational contestation. Videogames are where many of the most important battles of the digital commons – who creates culture, who circulates it, who may access it and under what conditions, and whether it is the monopoly of the few or the democratic heritage of the many – are being fought.

One of the most striking signs of the power of the commons is the failure of in-game advertising campaigns or “advergaming” – the placement of ads inside game-worlds or videogames. To understand why this failure is so shocking, it is worth remembering that
advertising expenditure or “ad spend” is a key driver of most large-scale media industries. Analyst firm ZenithOptimedia has estimated world ad spend at half a trillion dollars in 2010, which means advertising is an indispensable source of revenue for numerous media industries. Indeed, the past thirty years have witnessed the prodigious expansion of ad spend in every national media-system on the planet. The most extreme case is mainland China, where advertising expenditure was almost nonexistent in 1979, but reached an estimated $74 billion by 2009.

Yet videogames are in the unique position of being one of the few culture-industries to retain their financial and cultural autonomy vis-a-vis the advertising industry. Videogame industry revenues consist almost entirely of final sales to consumers. To this day, fans can spend countless hours in their favorite game-worlds, without being forced to watch a single ad or hear a single commercial jingle.

This is not because there are any significant technological or legislative barriers preventing advertisers from inserting advertisements into videogames. Indeed, the advertising industry has made repeated attempts to introduce advergaming since the early 1990s. One of the most famous attempts occurred in 2004, when executives of Massive, a firm specializing in advergaming, enthused about how an estimated $80 million market in 2004 would expand into a billion-dollar juggernaut by the end of the decade. In the ensuing market buzz, Massive's stock was purchased by Microsoft for somewhere between $200 million to $400 million.

The strategy failed, resulting in Microsoft's closure of Massive and a sizable loss on its original investment. Recently, an analyst for DFC Intelligence estimated total game-related advertising expenditure for the North American market at $1 billion in 2010 – a tiny fraction of
videogame sales ($25 billion) in this region. However, this figure consists primarily of traditional advertising, e.g. television ads for upcoming videogame releases. The DFC analyst was forced to conclude that the future was not in-game advertising, but “around-game” advertising.\(^{56}\)

What stopped advergaming was an informal alliance of digital audiences, fan communities and studio artists. On the most pragmatic level, consumers regard videogames as another form of recorded media. They would not tolerate advertisements popping up in the middle of their games, any more than they would tolerate prerecorded advertisements burned into the middle of the DVD or Bluray version of a purchased film.

More importantly, players spend significant amounts of time playing and replaying their favorite games, and interact extensively with communities of players online. While this aspect of videogame culture has received the most scholarly attention in the context of massive multiplayer online games (MMOs), e.g. the work of Dmitri Williams, Nick Yee and others on commercial MMOs such as *Everquest*,\(^{57}\) there is no question that contemporary videogame franchises are intensely social spaces. The experience of online multiplayer gaming and the proliferation of digital fan communities has enabled players to become deeply attached to their favorite online communities and game-worlds. While this attachment has similarities to the kind displayed by sports fans vis-a-vis their favorite teams, videogame fans have much greater structural power than their sports-based counterparts, for a number of reasons.

First, sports franchises rely heavily on broadcasting revenues generated by oligopolistic media markets, precisely where videogame franchises depend almost entirely on final sales to players. Second, only a tiny handful of athletes ever move from sandbox scrimmages to the world of professional athletics. By contrast, almost every videogame fan can become a full-
fledged player in their favorite game-world. Conversely, many videogame genres – this is especially true of action-based multiplayer games – are exciting to play, but excruciatingly dull to watch as spectators.

Third, the owners of professional sports franchises are accountable only to player unions comprised of hundreds of individuals, and to inchoate masses of fans who are not necessarily organized into pressure groups. By contrast, the owners and publishers of videogame franchises are accountable to millions of players who are already digitally organized, and retain the power to exit the franchise en masse, punishing unscrupulous studios or greedy publishers with bankruptcy. 58

Interestingly, players have also rejected forms of advergaming which do not necessarily disrupt game-play – e.g. attempts to put ads onto “loading screens”, static displays which signal to the player that their console or digital device is busy loading data for the next game-play sequence. When advergaming firm Double Fusion attempted to plaster ads onto the loading screens of a Sony Playstation Network title called WipEoutHD [sic] in 2009, the result was intense player hostility. Thousands of enraged fans pointed out that the ads were not only distracting and ludicrously irrelevant to the game-world, they damaged game-play by increasing the loading times of the game, and promptly posted online videos to prove their point. To its credit, Sony pulled the advertisements the very next day and vowed to abstain from any such advertising in the future – a promise it has kept. 59

The fans' rejection of advergaming has been given tacit support by the vast majority of videogame artists and professional studios within the industry. From a game design perspective, in-game ads are much worse than a passing distraction. They can easily unravel the finely-crafted
balance of environments, pacing, and game-play which defines the game-world in question.

Nintendo has long followed a policy of excluding advertising completely from its videogames, which makes sense given its competitive roster of internal franchises, and its specialization in children's and teenage-oriented videogames. By contrast, Sony has permitted certain forms of advergaming, but only in the carefully monitored context of a few social gaming spaces within its Playstation Network platform. For example, there are commercial booths advertising specific games located inside Sony's online Home social gaming space, the PSN's version of an MMO which is open to any consumer with a Playstation Network account free of charge. However, there is no compulsory barrage of advertising comparable to what television viewers or theatre movie-goers routinely face.

The failure of advergaming to become a dominant norm of the videogame industry highlights one of the central lessons of Henry Jenkins' *Convergence Culture*. This is the fact that the commercial firms which dominate cultural production are locked into permanent contestation with their fans:

Convergence, as we can see, is both a top-down corporate-driven process and a bottom-up consumer-driven process. Corporate convergence coexists with grassroots convergence. Media companies are learning how to accelerate the flow of media content across delivery channels to expand revenue opportunities, broaden markets, and reinforce viewer commitments. Consumers are learning how to use these different media technologies to bring the flow of media more fully under their control and to interact with other consumers. The promises of this new media environment raise expectations of a freer flow of ideas and content. Inspired by those ideals, consumers are fighting for the right to participate more fully in their culture. Sometimes, corporate and grassroots convergence reinforce each other, creating closer, more rewarding relations between media producers and consumers. Sometimes, these two forces are at war and those struggles will redefine the face of American popular culture.60

We will argue that in the field of videogame culture, Jenkins' concluding thesis requires two additional qualifications. First, these struggles are not restricted to the domain of US popular
culture, but are transnational in scale and scope. Second, corporate convergence and grassroots convergence are in ceaseless and unremitting conflict. The reason is that the former is just another word for the commercial drive to extract maximum profits from any given media commodity, whereas the latter is fundamentally non-commercial in nature.

The space where these two opposing forces collide is the space of the videogame commons. It is where transnational audiences access the tools, skills and institutions of videogame culture – the space, in short, of videogame participation.61

One of the best examples of the power of this commons is the transformation of the videogame trailer or promotional footage. In the past, trailers provided short samples of gameplay or cut-scenes, designed to be displayed to prospective publishers or else utilized in paid advertising campaigns. Thanks to the digital commons, however, the game trailer has become a transnational art-form.

While trailers do function as advertisements for the game in question, they differ from traditional paid advertising in two ways. First, they are released and viewed primarily as free downloads on the web, and only secondarily on commercial networks. Second, they are increasingly produced with the direct participation of the videogame artists themselves, mostly because their narrative materials depend on in-game assets.

Both changes are the result of the videogame commons. The first change is due to the rise of free- to-view platforms such as YouTube, Youku and countless other sites. Instead of paying for expensive and limited air-time, studios could publish their trailers online, and allow fans, bloggers, and other digital communities to view the content for free. Because these trailers did not need to fit into thirty or sixty-second time slots, they could be longer and feature more
complex and challenging narratives than typical radio or television ads.

The second change was also triggered by the rise of the videogame commons. In the 1980s and 1990s, it was common for videogame ads to use simulated or mock game footage which had nothing to do the crude, blocky graphics of actual game-play. By the early 2000s, videogame players were able to quickly and easily post screenshots of simulated footage next to screen captures or other evidence of the actual game, triggering vitriolic denunciations by fans who felt betrayed by false advertising. As a result, today's trailers rely almost exclusively on in-game footage edited in creative ways, or else use live-action sequences which are clearly differentiated from actual game-play. Some of these trailers are minor marvels of story-telling – most notably, the trailers for Hideo Kojima's *Metal Gear Solid 4*, which we will examine more closely in chapter 2.

Yet videogame trailers are just one of the innumerable forms of partly or completely non-commercial production, reception, and participation proliferating throughout the videogame commons. Listed below are some of the leading institutions and practices of this commons, listed next to their closest commercial analogue. Note that the dividing line between the commons and commerce is not always clear, and may vary between specific videogame genres and networks of non-commercial production:
Table 7. Role of the Videogame Commons vis-a-vis the Videogame Industry.

<table>
<thead>
<tr>
<th>Category</th>
<th>Non-Commercial Production (Commons)</th>
<th>Commercial Production (Culture-Industry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound-track</td>
<td>Open source media formats, editors, players and distribution; community co-creation of player-cues and game-play; non-commercial sampling and pastiche (structural overlap with digital music, and community-rooted aspects of hip hop culture)</td>
<td>High-definition sound formats and standards; commercial sound-stage, studio and orchestral production; contract musicians and composers; voice actors; foley artists (sound-effects)</td>
</tr>
<tr>
<td>Script and dialogue</td>
<td>Fan-created voice-overs, subtitles, and translation-based media; transnational audiences can pressure game companies to avoid repressive identity-politics</td>
<td>Scriptwriters with literary, cinema, TV and web experience; commercial pressure for multilingualism due to world market (rise of global English, but also media languages such as Chinese, Japanese, Hindi, Tamil, Bengali, Portuguese, Russian, Korean, etc.)</td>
</tr>
<tr>
<td>Editing/shot technique</td>
<td>Fan-created movies and other media; videogame franchises are a potential engine of improvement rather than mediocrity; overlap with transnational animation/anime fan cultures</td>
<td>Motion-capture actors; cut-scenes</td>
</tr>
<tr>
<td>Game-play</td>
<td>Expansion of digital social networks; creation of game-based media (achievement guides, walk-throughs, user reviews)</td>
<td>Democratization of interfaces; beta-testing by fans</td>
</tr>
<tr>
<td>Game-world</td>
<td>Fan mods and machinima; non-commercial user-generated content begins to drive game production (e.g. LittleBigPlanet); spread of fan art and fan fiction; fan-operated websites; licensing strategies which respect rather than commodify fan and community labor</td>
<td>Easter eggs (free hidden content located inside commercial products); free downloadable demos; use of downloadable add-ons to finance game development; displacement of paid advertising by game trailers and other free digital media</td>
</tr>
<tr>
<td>Field of cultural</td>
<td>Fans actively resist the commodification of game-worlds via digital social networks; pervasive links to developmental states (e.g. state-financed broadband and digital mass media, most visible in Brazil, Russia, India, China)</td>
<td>Videogame industry depends on final consumer demand, not advertising (ads are less than 5% revenues); high-skill studio culture resists oligopolistic mediocrity; transnational talent pool</td>
</tr>
<tr>
<td>production</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Before asking what new forms of collective creativity, cultural democratization, and transnational solidarity might be emerging from the videogame commons, it is worth reflecting for a moment on the relationship of the videogame commons to the larger category of the digital commons. In 2003, Yochai Benkler delivered one of the most influential accounts of the digital commons, in an essay which provided the basis for his 2006 text *The Wealth of Networks*. Benkler insisted that non-commercial digital social networks are locked in structural contestation with commercial oligopolies:

But the democratic advantages, the individual freedom, and the growth through innovation that is made possible by the emergence of nonmarket and decentralized production will not emerge inexorably. The industrial giants that dominated information production and exchange in the twentieth century will not lightly relinquish their dominance. As we transition to a networked information economy, every point of control over the production and flow of information and culture becomes a point of conflict between the old, industrial model of production and the new distributed models. At the physical layer, ownership over wires and wireless licenses that are necessary to communicate provides a point of leverage for control. At the logical layer, necessary standards, protocols, and software – like operating systems – provide a point of control over the flow, and therefore the opportunities of production, of information and culture. At the content layer, intellectual property and business models that depend on tight control over existing information and culture – a central input into new creation – threaten to provide their owners with the ability to control who gets to say what to whom with the core cultural signifiers of our time.63

Just as what is perfectly rational for any individual firm (e.g. avoiding paying for carbon emissions) can be toxic to the society (e.g. the destructive effects of climate change), what is rational for any individual media corporation, i.e. profit maximization via oligopoly control, can be toxic to the interests of society as a whole.

Following Benkler's lead, the digital commons can be provisionally defined as the sum total of the non-commercial networks of production, distribution and consumption of digital media and information. Only a small part of these networks coincide with what media corporations castigate as “piracy”, i.e. the unauthorized sale of commercial media. Rather, the
digital commons is characterized by diverse forms of exchange, some partly commodified and others wholly non-commercial in nature, which take place across a planetary array of communities, markets and institutions.⁶⁴

One of the reasons videogame culture is so dynamic is that it is structurally enmeshed in all three of Benkler's information layers, simultaneously – that is to say, the physical layer of hardware platforms, the coding layer of software, and the content layer of narrative and representation. These layers are more than just a site of specialized practices or technologies. They are zones of contestation between transnational media corporations on the one hand, and digital creators, fans, and digital communities on the other. As a result, videogames openly register the clash between commercialism and the commons, in ways which have few parallels to the forms of non-commercial participation typical of previous forms of mass media.

During the heyday of analog television broadcasting, for example, commercial oligopolies (in the case of CBS, NBC and ABC in the US, or Globo in Brazil) or oligarchic state authorities (in the case of the Soviet Union and Maoist-era China) controlled everything from the technical specifications of television sets to the occupational specializations of film studios. Individual directors had limited power to challenge Hollywood studio bosses or their Soviet counterparts. Similarly, during the 1970s, television audiences could register their preferences only through a narrow slice of Benkler's content layer – i.e. through consumer purchases or viewer ratings.

By contrast, every layer of videogame design is enmeshed in some form of democratic contestation. The hardware layer has been democratized by the need of gaming platforms to be accessible to the largest number of consumers and to the widest pool of game developers
possible. The software layer has been democratized by the power and productivity of open source software tools, as well as the need for a highly-trained, culturally literate workforce to build and test game code. Finally, the content layer has been democratized by the expansion of the digital audience from roughly 350 million consumers in the mid-1990s to 2 billion by 2010, not to mention the multiple media booms of the industrializing nations.

The response of Sony's Santa Monica Studio, creators of the *God of War* franchise, to this democratization is paradigmatic in this regard. The onerous demands of the physical layer (everything from multicore programming for the Playstation 3 system, to effective use of Sony's game controllers) meant that the design team had to collaborate with a vast network of other Sony studios and first-party partners all across the world. In the software realm, the Santa Monica team relied, like all videogame studios nowadays, on inputs of open source software as well as forms of egalitarian teamwork with literally hundreds of other skilled culture-workers.

As far as the content layer is concerned, the Santa Monica studio took care to evolve the franchise over time in close collaboration with the fan community. Many studio artists encouraged fan media and user-generated content, as well as offering a variety of free media and low-cost downloadable content. For example, Sony Santa Monica artist Andy Park began posting samples of his *God of War* artwork on a fansite as early as 2007. In Park's words:

I've been wanting to post more of my artwork here for awhile but most of my work I've been doing for the past 2 years is held up in NDAs [non-disclosure agreements]. I've been busy working on the upcoming PS3 game, God of War III. I can't show any of that stuff yet but here's a bunch of images I can show as a follow up to my initial posting of God of War II stuff.

Park's entry is followed by a series of samples of “concept art”, pictures which provide an aesthetic reference point for the work of the game programmers and designers. There are no anti-
copying restrictions or other limits on copying these image files, i.e. Park is openly encouraging fans to download the concept art and disseminate it further.\textsuperscript{67}

Park’s connections with comics and animation fan culture are broadly typical of the personnel employed by leading videogame studios. They underline the deep structural affinities between the videogame commons and two of its most important cultural antecedents, namely the musical commons of hip hop and the visual commons of comics culture. Both commons have significant links to the immediate predecessors of internet distribution – cheap music cassettes for hip hop, and affordable videocassette tapes for the comics artists.

Hip hop first emerged in the African American and urban communities of color in the United States during the late 1970s and became a transnational art-form in the 1980s and 1990s. Tricia Rose has documented how the hip hop commons borrowed and sampled from popular US genres such as R & B, blues, and funk music, as well as the archives of African American poetry and literature.\textsuperscript{68} The musical specialists or DJs (disk jockeys) employed turntables and record scratching to create a transnational fabric of sound, anticipating the use of digital recording technology, while the lyric specialists or MCs (emcees, “master of ceremonies”) reappropriated commercial brand-names and mainstream media icons as anti-neoliberal critique. Finally, artists would advertise their music through fan-produced or fan-distributed informal recordings and cassette tapes (so-called mixtapes).

A similar process of local innovation, non-commercial fan production, and dissemination by transnational audiences occurred in the Japanese comics (manga) and animation (anime) industries during the 1970s and 1980s. Mizuko Ito has noted that the anime and manga commons flourished thanks to “otaku”, comics enthusiasts who borrowed themes from the archives of
European, US and Japanese science fiction and fantasy culture. Contrary to the myth that otaku were obsessive loners, comics fans formed communities to share their own pantheon of visual styles (the use of typographic symbols to denote emotions, greatly enlarged eyes to generate emotional affect, etc.). These styles became templates for Japan's commercial cartoon and comics industries, and also inspired the work of animation artists and fan communities around the world.

During the 1990s, Japanese anime and US hip hop evolved into genuinely transnational forms, as the tools of file-sharing and the ethos of non-commercial collective production spread worldwide. Since 2000, many industrializing nations have developed world-class hip hop cultures of their own, most notably Brazil and Russia. Derek Pardue has shown that Rio de Janeiro in Brazil has become a vibrant center of hip hop media, while a plethora of talented rap artists have emerged in St. Petersburg and Moscow, Russia.

1.3 Videogames as Transnational Commodities: From Game Studies to Digital Class

Struggle

The third major constellation of this dissertation comprises theories of videogames as transnational commodities, and as products of digital labor. While videogames have certain similarities to other interactive media, especially digital comics and digital music, they also have some unique differences. Videogames must be playable, in the same way that animation must be viewable and music must be listenable. Above all, videogames are, in Espen Aarseth's words, “ergodic experiences,” which depend on the player's internalization of rule-sets and the validity
of player choices within what Aarseth calls cybertexts. This is a concept this dissertation subsumes under the concept of the “game-world”, for reasons which will be explained later in this chapter.

The contradiction between rule-sets and player choice has been a long-standing bone of contention in the field of game studies. Proponents of ludology (the study of games as pure form) focus on how videogames are played, while partisans of narratology (the study of games as pure content) focus on what the games mean. While both approaches are useful, each needs to be understood as the necessary corrective on the others' tendency to reduce videogames to a single overarching logic. Jesper Juuls points out in *Half Real* (2005) that while videogames are a comparatively new historical phenomenon, their internal structures, logic and forms are entwined with a much longer history of social games and meaningful rituals:

The video game is thus a little more than forty years old, and it has been part of popular culture for around thirty years. Compare this to the roughly seventy-five years of television, a hundred years of film, and five hundred years of the printing press. Therefore, video games are a comparatively new cultural form, intimately linked to the appearance of computers, postdating literature, cinema, and television. However, if we think of video games as games, they are not successors of cinema, print literature, or new media, but continuations of a history of games that predate these by millennia.

No matter how imaginary they may aspire to be, videogames must always situate themselves in some sort of historical context, by either referring to real social institutions, processes and conflicts, or else incorporating these latter in symbolic or coded form. In a nutshell, playability is its own form of historicity. This insight recalls to mind Johan Huizinga's oft-quoted formulation of the magic circle of play in 1938:

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play
and ritual, so the ‘consecrated spot’ cannot be formally distinguished from the play-ground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc, are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart.\textsuperscript{73}

The magic circle is not just a set of rules, it is also the performances authorized by those rules. Huizinga's insight anticipates one of the hallmarks of videogames as a form, namely its fusion of play with ritual – or put into more modern parlance, the player is the game (this tendency is especially noticeable in online multiplayer games, many of which are almost unwatchable for anyone who is not a participant). It is also significant that Huizinga identifies the tension between the discourse of the sacred – that which is socially approved – and the principle of the ritual or symbolic repetition – that which must be reenacted. Indeed, community sanction and community repetition lie at the heart of two key institutions of videogame culture, namely fan communities and franchises.

What the tools of ludology cannot provide, however, is an explanation for anything outside of the realm of immediate signification. The player may be the game, but no game is ever the player. Put more bluntly, there is no sacred space without its opposite, the desacralized or mundane, and there is no ritual without its antipode – that which is contingent and unrepeatable, whether it is the scandalous shock or the once-in-a-lifetime epiphany.

This is where Ian Bogost provides a useful corrective on ludology's emphasis on form. “Instead of focusing on how games work,” writes Bogost, “I suggest that we turn to what they do – how they inform, change, or otherwise participate in human activity.”\textsuperscript{74} This emphasis on the material context of videogames opens up a number of additional avenues of critique, ranging from the examination of the internal construction of videogames (the politics of game design), to
the complex histories of the programming tools and hardware platforms specific to the industry (the struggle of open source tools versus closed, proprietary systems), all the way to the affinities and discontinuities between videogames and other branches of the mass media. Above all, insists Bogost, we must grasp videogames as documents of social processes:

Comparative videogame criticism would not turn its back on functionalist approaches, but rather would recognize the utility of functionalist approaches to games as a useful lever for explication. Such a criticism would focus on the aesthetic meaning revealed by a cybertext's parts. Functionalist questions about videogames – what they are, or how they function – are not invalid or even unwelcome. But equally, or dare I say more important questions exist: what do videogames do, what happens when players interact with them, and how do they relate to, participate in, extend, and revise the cultural expression at work in other artifacts?5

Bogost's own suggestion here is that we should think of videogames as bodies of procedural rhetoric, or what he terms “unit operations” (rule-sets) strung together in discursive formations, or what could be considered the grammar of game-play.7 This grammar refers not to linguistic content, but to the highly structured and sequenced set of player actions which constitute game-play, e.g. defeat opponents, score points, acquire items, sell loot, escort a non-player-character, etc. What procedural rhetoric gives us is a way to link game-play to other forms of media production, and thereby decode the specific features of game-play in the context of the digital production and circulation of texts, images, animation, sound and music, etc.

This dissertation slightly revises Bogost's formulation, by employing the concept of “replayability”. While replayability performs much the same conceptual work as Bogot's procedural rhetoric, it expands its scope to include the element of temporality. That is, replayability measures the transformation of multiple unit operations (modes of game-play) over time. Examples of replayability include everything from the historical evolution of game-play within a specific franchise, to the diffusion of game-play innovations across different genres, all
the way to the creation of new modes of game-play (as well as the concomitant decline or
disappearance of earlier modes).

The demands of replayability put enormous pressure on videogame designers. These
latter must strike a delicate balance between iteration and innovation, between the repetition of
what players have come to expect from a particular franchise or genre, and the creation of new
types of game-play which may clash with tradition game-player or have other unintended
consequences. The deeper contradiction here is the fact that replayability is mediated not by the
acumen of game producers, but by the category of player skill.

Nearly all players will improve their game-play skills over the course of a game, by
discarding less effective tools and strategies and choosing more effective ones. Consequently,
nearly all videogames have variable skill gradients, i.e. they are easiest at the beginning and
more challenging towards the end. Constructing these skill gradients is one of the perpetual
challenges for videogame designers, and a focus of much industry research.\textsuperscript{77}

If the game-play is too difficult, players will become frustrated and may cease play
altogether. If the game-play is too easy, boredom sets in, and players lose any incentive to
become better players. One of the most common pitfalls of skill gradients is the dreaded
“difficulty spike”, the bane of game designers everywhere. These occur when the difficulty of a
game seems to arbitrarily skyrocket, preventing all but the most highly skilled or dedicated
players from progressing further. These spikes are notoriously difficult to predict in advance, for
the simple reason that player skills vary enormously across millions of individual players. Even
the most accessible game-design in the world will produce some level of frustration in large
numbers of players, simply because each player must learn to master the videogame in their own
unique way.

All of this may help to explain one of the most counterintuitive aspects of replayability. This is the fact that it drives the field of videogames towards pedagogy. All videogames train, while they entertain. Indeed, the scope and scale of this user-education differs profoundly from the types of cultural training typical in analog-era media-systems. No full-length novel begins with a literacy lesson, television programs do not begin with instructions on how to operate a television set, and theatrical films do not begin with tutorials on how to run theatrical projectors.

Yet this is precisely what videogames must do, simply because they are an interactive art-form. Every game must make itself playable, in the sense that it must teach a transnational audience with diverse player skills, languages, and cultural backgrounds to access and master increasingly complex and narratively dense game-worlds. For commercial videogame franchises, the penalty for failing to train its players is the loss of sales to competitors who succeed; for non-commercial or fan-created videogames, the penalty is the relegation of the work to obscurity.

As a result, certain aspects of user-education have become standard features of contemporary videogames. One of the most obvious examples is the “tutorial level”, short stretches of game-play which are smaller, self-contained playgrounds within the larger play-realm of the game-world. Tutorial levels allow players to learn the game's controls and test out new skills and abilities, without unfairly penalizing them for their inexperience.

The ubiquity of this phenomenon has led educator James Paul Gee to celebrate the “situated learning” specific to videogames as a form. Gee argues that videogames can not only teach important life-lessons about community, the importance of sharing, and the value of earning rewards through hard work, they are also an opportunity to critique the neoliberal assault
on public education and the conversion of schools into punitive and polarizing test-mills. Where the profit-motive drives other mass media to dumb their audiences down, the necessity of user-education drives the videogame industry to level its audience up:

Because video games (which are often long, complex, and difficult) are simulations of experience and new worlds, and thus not unlike a favored form of human thinking, and because their makers would go broke if no one could learn to play them, they constitute an area where we have lots to learn about learning. Better yet, they are a domain where young people of all races and classes readily learn specialist varieties of language and ways of thinking without alienation.78

Gee's critique of neoliberal testing regimes is supported by extensive research which confirms that testing does not improve educational outcomes, an issue ably summarized by Diane Ravitch's *The Death and Life of the Great American School System.*79 That said, his argument that videogames can be democratic spaces accessible to all classes and social groups is more utopian hope than achieved reality.

This is the central lesson of Mia Consalvo's critique of “gaming capital”. Gaming capital consists of the internalized aptitudes, consumer skill-sets, training and socio-economic privilege necessary for audiences to access and operate videogames. The term is a variant of Pierre Bourdieu's critique of the marketplace of taste in *Distinction*, a marketplace which does not democratize culture, but systemically advantages those with the most symbolic and cultural capital over those with the least.80

As Consalvo points out, access to gaming capital is subject to the same limitations and social inequities which afflict all other forms of mass media. What may seem to be creativity on the part of fans is sometimes compulsory adaptation to the demands of the culture-industry:

Games aren't designed, marketed, or played in a cultural vacuum. I would argue that it is somewhat futile to talk about the player or a game in the abstract, as what we know about players
can change over time, and be dependent on such elements as player skill or age. Likewise, even the most linear game can be experienced in multiple ways, depending on a player's knowledge of past games in that genre or series, including previewed information from magazines or Web sites, and marketing's attempt at drawing attention to certain elements of the game. All of that knowledge, experience, and positioning helps shape gaming capital for a specific player, and in turn that player helps shape the future of the industry.

Specific segments of the game support industry have shaped important elements of gaming capital over the past several decades. The contents of game magazines and strategy guide as well as the development of Game Genies and mod (short for 'modification') chips have had critical impacts on how all gamers evaluate, play, and talk about games.

And players themselves further shape gaming capital, especially as new media forms offer individuals more opportunities to share and the game world grows even larger.81

Gaming is thus the site of intense struggles over forms of gaming capital, ranging from overt competition between players to trophies and other forms of symbolic compensation, all the way to the commercial competition between rival franchises, studios, and videogame publishers and hardware producers.

However, this is not the end of the story. There is a long tradition of theorists, from Karl Marx down to Pierre Bourdieu, who have argued that capital is not so much a thing, as a complex set of institutions and social relations, enmeshed in specific histories and teeming with systemic contradictions. We will argue that the flip side of gaming capital is the category of gaming labor, a subset of the networked and digitized labor typical of 21st century transnational capitalism. In contemporary videogame culture, gaming labor has three major forms: the cognitive labor of players, the mediatic labor of the transnational audience, and the coding labor of game producers.82

Each of these forms of labor teems with its own specific contradictions. The cognitive labor of players can generate new forms of equal cultural exchange, cosmopolitan learning, and transnational solidarity, but it can also reaffirm pre-existing hierarchies and inequalities.

Similarly, the mediatic labor of transnational audiences can spur the democratic
production and diffusion of works of art, and create egalitarian and cosmopolitan forms of cultural exchange. Yet the same forms of mediatic labor can also be used by plutocratic elites to foster the most reactionary nationalisms, xenophobia and other toxic identity-politics, as a means of securing their own plutocratic self-interest.

Finally, the coding labor of videogame producers can facilitate open source file-sharing and cultural democratization. However, it can also facilitate the most predatory forms of commercial exploitation, ranging from the outsourcing of mundane production tasks to sweatshops, to the “gold farming” of player labor, wherein arduous, labor-intensive tasks in massive multiplayer online videogames (MMOs) are outsourced to low-wage player-workers in industrializing nations.83

It is one of the peculiar ironies of game studies that the sheer complexity of these multiple forms of labor, which are both internally contradictory as well as the sites of external contestation, can only be grasped by means of the theoretical tools of narratology. Janet Murray outlined the potential of narratology as early as 1997:

Not only is the computer the most capacious medium ever invented, but it also allows us to move around the narrative world, shifting from one perspective to another at our own initiative. Perhaps this ability to shift perspectives will lead to the technical innovation that will rival the Shakespearean soliloquy. Cyberdramatists of the future could present us with a complex world of many characters (like a global Victorian novel) and allow us to change positions at any moment in order to see the same event from the viewpoint of another character.84

While both MGS4 and FF12 have the narrative scale and complexity of a multi-volume Victorian novel, there is one important structural difference. The Victorian texts were distributed in periodical form to domestic British audiences, to the audiences of the English-speaking settler colonies (America, Canada, Australia), and to the colonial administrators of the British Empire.
By contrast, videogames are inherently digital forms, and connected to transnational audiences and their media-systems through digital infrastructures.

What this means is that the perspectives Murray identifies are not necessarily those of in-game characters, but are somehow linked to the players acting within the game-world. Given the digital nature of gaming, it is possible to record and disseminate the record of player actions – their virtualized labor – as data. One of the key insights of digital media scholar Lev Manovich's *The Language of New Media* is to think through the social consequences of the democratic production and distribution of massive amounts of this data, which videogames organize into databases:

After the novel, and subsequently cinema privileged narrative as the key form of cultural expression of the modern age, the computer age introduces its correlate – database. Many new media objects do not tell stories; they don't have beginning or end; in fact, they don't have any development, thematically, formally or otherwise which would organize their elements into a sequence. Instead, they are collections of individual items, where every item has the same significance as any other.

…

Different types of databases – hierarchical, network, relational and object-oriented – use different models to organize data. For instance, the records in hierarchical databases are organized in a treelike structure. Object-oriented databases store complex data structures, called "objects," which are organized into hierarchical classes that may inherit properties from classes higher in the chain. New media objects may or may not employ these highly structured database models; however, from the point of view of user's experience a large proportion of them are databases in a more basic sense. They appear as a collections of items on which the user can perform various operations: view, navigate, search.

User-created databases have been one of the most ubiquitous features of videogame culture, most notably in the form of in-game “saves” which preserve the player's progress through the game, and inventory systems which preserve the in-game objects, tools or skills gathered or acquired by the player. The point of game saves and inventory systems was to allow the player to avoid the drudgery of replaying an entire game or sections of the game from the beginning.
However, Manovich's insight has consequences far beyond the realm of graphical interfaces. The exponential increase of the power of computing hardware, and the proliferation of open source models of file-sharing, has allowed user-created databases to proliferate throughout every nook and cranny of game design. Most contemporary videogames feature save systems which permit players to share and purchase an ever-expanding variety of in-game character avatars and items, as well as to export video clips of their in-game exploits. Conversely, the inventory systems invented by earlier generations of videogames have systematically expanded, and nowadays include everything from the acquisition of in-game trophies (symbolic awards given for especially noteworthy player actions), to the creation and downloading of player-created game content.

The influence of user-generated databases is especially apparent in the expansion of multiplayer game-play. Whereas the earliest forms of multiplayer gaming were limited to the physical presence of co-players nearby or in the same room, today's networks allow tens of millions of players to interact online. Seventeen of the twenty best-selling videogame franchises of 2010 feature multiplayer modes, offering everything from one-on-one matches to team scrimmages.86

More recently, user-generated databases have become a key driver of game design. Hector Postigo has noted that this tendency began in the personal computer games of the late 1990s, when hobbyists and game enthusiasts created non-commercial, downloadable customized game modifications or “mods” for a variety of videogame franchises.87

One of the premier examples of the power of user-generated databases is Media Molecule's *LittleBigPlanet* franchise for the Playstation 3, first released in 2008. At first sight,
the game appears to be little more than an exceptionally charming puzzle-platform videogame, similar to Nintendo's SuperMario platformer franchise. However, LittleBigPlanet's true appeal lies in its powerful and easy-to-use content creation tools. Players are encouraged to create their own objects, items and playable levels, and then share these with the entire community, by uploading their creations to Sony's online servers. Players can also search, download, and play through as many fan creations as they wish. It should be emphasized that there is no charge for creating, uploading or downloading these creations – the only cost is the original purchase of the videogame.

These creations are subject to minimal censorship, i.e. Sony has an online moderation system which discourages commercial advertising and abusive behavior (fans can suggest the moderation of other user-creations, although Sony's moderators have the final say). However, the game's end-user license agreement explicitly renounces any commercial claim on fan-created items or content. Sony hosts the content, but does not exercise ownership rights over such. Players are the final arbiters of their own creations, and can post, revise or delete them as they wish.

The only limitation on player ownership is that once players post their creations on the LittleBigPlanet servers, they cannot prohibit other players from borrowing or reusing this material to use in their own creations. In short, LittleBigPlanet's user-created levels are essentially a form of community property. The result has been an extraordinary wave of community-driven creativity. As of January 2012, fans have uploaded 6 million user-created levels, some of remarkably high quality.

One of the inherent contradictions on this community property, to be sure, is that Sony
retains ultimate control over the server infrastructures and is the enforcer of community norms. There is a permanent structural tension between Sony's core mission of profit-seeking as a commercial enterprise, and the core mission of the *Little Big Planet* community, which is the non-commercial, egalitarian sharing of what Humphreys and Banks term the “unpaid labour of the user-producers”.  

This tension may explain why many of the most interesting innovations of user-generated content are located at some distance from any commercial industry. The subgenre of fan videos known as machinima are a case in point. Machinima are fan-created video sequences created by using the software tools that professional game studios use to create videogames. The rapid spread of these tools in non-commercial networks of production and distribution has catalyzed the circuits of audience reception and critique in interesting ways. Of course, this dissemination does not mean that every fan automatically has the capacity to create their own games or machinima creations, or that the gaming capital required to operate these tools is equitably distributed. In fact, the production of machinima involves a wide range of subsidiary struggles and contradictions, a dynamic summarized by Mizuko Ito as follows:

> Non-commercial, amateur, and peer-based production scenes thrive on models of open participation and access, but processes for differentiating participation, recognizing leadership, and developing status and reputation are also central to the scene. Competitions, ratings, and other systems of recognition provide important incentives that drive the quest for quality and innovation among the more committed creators. While certain forms of fannish subjectivity and practice have become much more visible and accessible to casual media consumers, fan cultures still retain a resilient subcultural core that resists absorption by the mainstream. Participatory media making scenes are simultaneously becoming more accessible and more exclusive; these dynamics are in fact integrally dependent one another.  

One of the best examples of this dialectic of increased accessibility and increasing aesthetic specialization in machinima culture is Ross Scott's *Freeman's Mind* (2007 to the present).
*Freeman's Mind* is a long-running machinima series which parodies Valve Software's science fiction videogame *Half Life* (1998). Using a variety of open source and Valve-authored software tools available to the *Half Life* mod community, Scott records play-throughs of the original videogame, while dubbing in his own voice. It should be noted that the main protagonist of *Half Life*, scientist Gordon Freeman, does not speak a single word of dialogue in any of the *Half Life* videogames. In contrast, Scott's version of Freeman speaks constantly (the narrative conceit here is that we are listening to Freeman's internal monologue).

What distinguishes *Freeman's Mind* as a work of art, however, is its sophisticated blend of scriptwriting, voice-acting, and modding software to narrate the game-world. Unlike most videogame walk-throughs, where the player's field of vision moves in unpredictable and jarring ways, Scott smooths out all camera movements, and scripts all in-game events (including subtle details of character movement and animation) for maximum effect. The script employs a combination of gallows humor, deadpan comedy, and credible scientific jargon, which pays homage to *Half Life's* original game-world while transcending it in certain ways.

From 2007 until the end of 2011, Scott completed thirty-nine episodes of *Freeman's Mind*, for a grand total of 4 hours and 53 minutes of footage – close to the equivalent of a full season of an average US television series. These were produced with almost no professional equipment or official financial compensation (Scott did briefly hold a position at Machinima.com, but left to focus on video production). One of the factors which sustained Scott's efforts has been a supportive fan community, which has pitched in with inexpensive computer replacement parts, the construction of a full-featured website, and miscellaneous tasks such as subtitling and sound editing.
While user-generated databases have catalyzed non-commercial forms of digital media production, they are having equally significant effects on the commercial game industry. This is most evident in the professionalization of play-testing, or what the industry prefers to call “quality assurance”. In most other media industries, test audiences are usually unpaid volunteers, or else small samples of consumers designed to be representative of a particular demographic group or market. By contrast, game-testing is a crucial part of commercial videogame production. Most leading videogame franchises release demos or “public beta” versions of their software to select groups of fans just prior to the game's official release. The goal is to remove software bugs which would derail the final release, as well as fine-tune overall game balance. Equally important is the skilled labor of professional testers, who play a highly respected role in game production networks.  

The expansion of beta testing and the professionalization of testers have been aided by the unique structural position of videogames as a commercial industry. On the most pragmatic level, videogames are located halfway between the consumer electronics and the software industries. Like most other complex software projects, videogames are coded and play-tested in smaller, more manageable subcomponents, and are not fully assembled until close to the end of the development cycle. This typically results in a frenzy of last-minute debugging and code rewriting, a.k.a. the notorious “crunch time” when project deadlines must be met.

Unlike most complex software projects, however, mass media audiences will not tolerate the low-level coding errors or bugs endemic to many commercial software releases. Like any consumer electronics appliance, videogame code must be reasonably stable, reliable and secure from its first release to its final iteration. If one of the software industry's favorite mantras is
“release early, release often”, i.e. make the source code available to skilled end-users for debugging as early as possible, then the equivalent saying in the videogame industry is “test early, test often”, i.e. test the game-play with the largest possible audience as early and comprehensively as possible.

1.4 Towards a Theory of Videogame Culture

One of the greatest challenges facing theorists of the videogame culture is grasping all these three constellations described at length above – postcolonial and transnational audiences, the struggle of the digital commons against neoliberalism, and gaming capital versus digital labor – within the same conceptual frame. From a political standpoint, videogames are where the rival agendas of transnational audiences, neoliberal corporations, studio professionals, and digital consumers all confront each other. From an economic standpoint, the videogame industry is where the consumer electronics, computers, software, and telecommunications industries all converge. From a cultural standpoint, videogames are where non-commercial fan production, the digital commons, neoliberal media oligopolies, and the emergent media-systems of the semi-periphery (especially those of the BRIC nations) all coexist.

We will suggest that the test of any theory of videogames is whether it can account for all of these multiple and overlapping political, economic and cultural processes, without crude reductionism or excessive abstraction. We will argue that this test has an important corollary: videogames succeed or fail as aesthetic works to the precise extent that they succeed or fail at transforming the transnational complexity of the neoliberal world-system in which they are
enmeshed into coherent game-worlds and game-play. Success does not necessarily mean the definitive resolution of all social contradictions or even taking a specific political stand, but it does mean some variation of successful cognitive mapping (to borrow Fredric Jameson's term). Great videogames cannot tell us where to go from here, but they can tell us where we are.

It will be our contention that *MGS4* and *FF12* both succeed because they create game-worlds adequate to the complexity of the late neoliberal era, and because they create forms of game-play which narratively rehearse its core contradictions. To see how these game-worlds and game-play works in practice, we must turn to Hideo Kojima's *MGS4*. 
CHAPTER 3

PLANET METAL GEAR

“By close-ups of the daily inventory, by emphasizing the hidden details of familiar props, by researching banal milieus under the brilliant leadership of the lens, film on the one hand expands the insight into the inevitabilities which govern our existence [Dasein]; on the other hand, it assures us of an enormous and undreamt-of field of play! Our bars and main city streets, our offices and furnished rooms, our railway stations and factories seemed to hopelessly enclose us. Then film came and blew up this jail-world with the dynamite of the tenth-of-a-second, so that now, left amidst the widely strewn rubble, we intrepidly undertake adventurous journeys. With close-ups, space expands; with slow-motion, movement does so.”

Walter Benjamin argued long ago that the task of radical filmmakers was to explode the jail-house of monopoly capitalism with the dynamite of the tenth-of-a-second. In 2008, Hideo Kojima and his studio fulfilled Benjamin's mandate, by releasing Metal Gear Solid 4: Guns of the Patriots (hereafter referred to as MGS4).

MGS4 is more than just the capstone of Kojima's Metal Gear Solid franchise, founded in 1998 and still going strong to this day. It marked the moment that videogame culture openly rebelled against Wall Street neoliberalism. To borrow a science fiction metaphor, MGS4 had the cultural effect of disrupting the largest commercial media oligopolies of the neoliberal era with the force of a satellite pulse weapon, while leaving the institutions of the digital commons unscathed.

This is a raging contradiction, considering that the Metal Gear Solid franchise is one of the biggest commercial franchises of them all. The series is owned by Konami, one of the largest entertainment companies of Japan. It has generated lifetime sales of 27.9 million software units between 1998 and 2011, putting it into the ranks of the top fifty best-selling videogame franchises of all time. It is also one of the most transnational franchises – Japanese sales comprise only 20% of its lifetime total, whereas 43% of sales were located in the Americas (this
includes both North and South American markets) and 35% in European and other markets.98

The affinities to the mainstream neoliberal media are also apparent in *MGS4*’s storyline, which borrows heavily from the first-person shooter videogame (the most popular example is the *Call of Duty* franchise, which sold 110 million copies between 2003 and 2011),99 the James Bond series, and the Hollywood superhero action movies. At the beginning of *MGS4*, the player takes on the role of a super-soldier named Solid Snake, and must stop a nefarious plot to take over the world by an arch-villain named Liquid Ocelot. Due to the unusual narrative complexity of *MGS4*, it is worth outlining the main story events of the videogame:
Table 8. Main locations and storyline of the five acts of Metal Gear Solid 4.

<table>
<thead>
<tr>
<th>Stage of MGS4</th>
<th>Location</th>
<th>Main Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act 1</td>
<td>Middle Eastern city</td>
<td>The year is 2014, and private military companies (PMCs) are becoming a dominant force in global geopolitics. Solid Snake's mission is to find and eliminate Liquid Ocelot, the megalomaniac owner of several private military companies (PMCs), who is plotting an insurrection to take over the world. He finds Ocelot, but does not succeed in capturing or killing him.</td>
</tr>
<tr>
<td>Act 2</td>
<td>Countryside and town in Latin America</td>
<td>Snake must find out more about Liquid Ocelot's plan and rescue scientist Naomi Campbell from the clutches of Ocelot's private army, and he succeeds.</td>
</tr>
<tr>
<td>Act 3</td>
<td>City in Eastern Europe</td>
<td>Snake must find the biological remains of Big Boss (a legendary supersoldier from the 1960s) before Liquid Ocelot does. Big Boss is the genetic key to the Patriots' SOP system of control. Snake succeeds in finding the remains, but cannot stop Ocelot from acquiring the remains. At the end of Act 3, Ocelot takes over the SOP system.</td>
</tr>
<tr>
<td>Act 4</td>
<td>Aleutian Islands, Alaska</td>
<td>Snake must track down Metal Gear Rex, a decommissioned military robot on an abandoned US military base in Alaska (Ocelot plans to use Rex's railgun to destroy the Patriots' orbital AI system, plunging the world into chaos). Snake succeeds in finding the robot, but Ocelot has already taken the railgun.</td>
</tr>
<tr>
<td>Act 5</td>
<td>Ocelot's submarine</td>
<td>Snake must board Liquid Ocelot's submarine and put a final stop to Ocelot's plans. Snake succeeds – but there are a series of plot-twists at the end which reveal that Ocelot was not the true antagonist of the story. The true villain was the Patriots' system of global control, which Snake and his friends and allies do finally manage to dismantle.</td>
</tr>
</tbody>
</table>

*MGS4* did more than simply pastiche the videogame shooter, the espionage thriller, and the Hollywood superhero film. Its conclusion forecast the real-world financial implosion of neoliberalism, an event which occurred literally three months after the videogame's official release.

With the benefit of hindsight, this achievement was based on at least two historical conjunctures. The first was the rise of the transnational videogame as an aesthetic form in the late...
1990s, while the second was the proliferation of user-generated content or fan-created digital media in the early 2000s. One of the most consistent themes of Kojima's videogames – and this is where he comes closest to Benjamin – is that the political is not reducible to the technological. Rather, every transformation of the mass media involves complex social and political struggles, which determine which aesthetic practices, communicative technologies and media institutions flourish and which do not. If the personal is the mask of the political, then the digital is the mask of the transnational.

One of the little-known factors which allowed Kojima to grasp this insight was his long-standing participation in the videogame industry. The very first game he worked on for Konami, *Metal Gear* (1987), was a stealth videogame which anticipated many features of his later *Metal Gear Solid* franchise. Whereas many 1980s videogames were so-called shoot-em-ups, in which the player targeted and destroyed onscreen enemies, the goal of *Metal Gear* was to hide from enemies and avoid combat. Yet the key lesson Kojima would take to heart between 1987 and 1998 was that videogames are not simply the products of skilled designers and studios. They emerge out of the transnational interactions of audiences, players and fans.

### 2.1 Transnational Platforms and Videogame Franchises

This transnational hybridity has long been one of the central drivers of videogame culture. Digital curator Henry Lowood has provided an illuminating case study of the mutually reinforcing links between the early 1990s videogame industry, the rise of non-commercial and fan-created digital media, and the nascent art-form of the machinima:
Machinima movies transform gameplay through performance, spectatorship, subversion, modification, and player communities. The ways in which early machinima projects defined the ‘convergence of filmmaking, animation and game development’ that became machinima are instructive (Dellario n.d.2). They certainly tell us something about the impact of improvements in computer graphics and game technology, but the history of machinima is more than a story about the rise of real-time animation techniques since the mid-1990s. Like the cell phone camera craze, we also learn from machinima how the dissemination of accessible tools – even if they are not necessarily easy-to-use – creates opportunities for the emergence of unexpected content in a postmodern environment that places playful experiments and throwaway pieces alongside startling and original instances of creative expression. Machinima reminds us that the nature of computer games as software allows for an almost limitless flexibility of content, the potential of which has yet to be fully explored.100

This hybridity is also the root of the accelerated evolutionary speed of the transnational videogame industry. It took centuries for the print revolution to generate national literary canons, and decades for radio, film and television to construct similar institutions. Likewise, twenty-four years elapsed between the creation of the first two-dimensional videogames by computer hobbyists, Space War (1961), and the appearance of Nintendo's NES (Famicom) home console and Shigeru Miyamoto's signature platformer game, SuperMario (1985) – the hardware device and the game which transformed videogames into a multibillion-dollar industry.101

Yet less than four years separate the popularization of the three-dimensional videogame in the early 1990s, and the arrival of videogame narratives capable of matching the aesthetic complexity of major cinema and television franchises.102 The most prominent of these videogames include Square's role-playing videogame Final Fantasy 7 (1997), Nintendo's adventure epic Legend of Zelda: Ocarina of Time (1998), Valve's science-fiction shooter Half Life (1998), and the inauguration of the MGS franchise, Kojima's first Metal Gear Solid (1998) (hereafter referred to as MGS1, to distinguish it from subsequent iterations of the MGS franchise).
What enabled the creation of these videogames was not just a set of transnational platforms capable of depicting crude, albeit functional, three-dimensional worlds, ranging from low-end personal computers to home consoles such as Sony's Playstation and Nintendo's N64. The other crucial factor was the arrival of the internet, which enabled videogame artists to communicate directly to transnational audiences. This communication is most evident in the personal computer games of the 1990s, because computers were more open platforms than the console systems of the day, and could thus leverage the power of digitally-connected creators (e.g. open source software) and digital audiences (e.g. fan-created media and software modifications).

The classic example of the power of open platforms is Valve's *Half Life* (1998), originally released for Windows-compatible personal computers. Rather than creating the game from scratch, Valve licensed and modified a graphics engine created by Id Software in the mid-1990s. Valve also hired fantasy and science-fiction writer Marc Laidlaw to write the game's script. Laidlaw refunctioned many of the elements of Cold War-era US science fiction, everywhere from the themes of interstellar colonialism and anti-colonial resistance explored in William S. Burroughs' *Nova Express* (1964), to mainstream elements of the Hollywood science-fiction blockbusters of the 1980s and 1990s. As a result, *Half Life* was able to combine the narrative scope of a major Hollywood science fiction film, with a critique of the US Empire and 1990s-style neoliberalism (i.e. what seemed to be an interstellar invasion turns out to be a battle between two competing interstellar colonialisms – one based on Earth, and one on a planet called Xen).

Just as importantly, Valve set a new standard for respectful community relations in the
videogame industry, by releasing software tools to fans and openly blessing non-commercial experimentation and innovation by the fan community. Game scholars Nieborg and Shenja van der Graaf describe Valve's structurally ambivalent role as part commercial gatekeeper, part community facilitator as follows:

Since the mid-1990s, digital technologies have opened up possibilities for decentralization and diversification by enabling consumers to become participants in the production and distribution of media content, rather than being the endpoint of delivery, while companies have aimed to use and leverage some of these unique qualities of networked technologies by linking consumers directly into the production and distribution of media content for product development and loyalty building. A rapidly evolving (yet often subtle) relationship of collaboration and cooperation across firm boundaries can be witnessed, where game developers such as Valve pride themselves in actively articulating the creative endeavours of modders. Such novel migratory practices have an economic and cultural impact by foregrounding the increasing pace of innovation, yielding insight into the trajectories of innovation and commercialization that are a regular occurrence among software developers, modders and gamers.¹⁰³

Fans with programming skills created their own custom modifications or mods – i.e. unique game levels, monsters, visual textures, sounds, and a limited array of in-game events, freely available for download to the fan community. One of these non-commercial mods, created by Minh Le and Jess Cliffe in 1999, became the basis for one of the most popular online multiplayer venues of the early 2000s, the Counter Strike franchise. The fan community began to use the power of Valve's software tools and community resources to create single-player mods equal in narrative sophistication to the original Half Life, e.g. Neil Manke's They Hunger (1999-2001) trilogy.¹⁰⁴

The dynamism of open platforms had a profound influence on the MGS franchise. Kojima's earliest videogames for Konami were programmed on the MSX platform, a personal computer design which enjoyed brief popularity in Japan and certain Western European countries in the 1980s. While these games were a commercial success, the rapid obsolescence of the MSX
platform, combined with the success of US-based developers such as Valve, were an object lesson of the superiority of more open platforms and digital audience engagement over proprietary platforms and exclusively commercial oligopolies.

The success of *MGS1* was based on this insight. When the game was released for Sony's Playstation console in 1998, the Playstation was not as powerful as the personal computers of the day. Kojima compensated for this weakness by recourse to the Playstation's state-of-the-art compact disc (CD) format. CDs could store up to 700MB of data, while Nintendo's rival N64 console employed a cartridge system which limited developers to 256MB of space. Kojima filled two CDs with professional voice-acting and a well-developed script. He also created unique game-play experiences which acknowledged the agency of the gaming audience, in ways no videogame had ever done before.

While *MGS1* did have weaknesses, including an overly complex control system, uneven scriptwriting, and gratuitous plot twists, Kojima deserves credit for breaking free from the most popular espionage narrative of Cold War science fiction, namely the James Bond secret agent. The story of *MGS1* begins as a standard espionage fare, i.e. the hero, a secret agent called Solid Snake, must infiltrate a secret Alaskan military base taken over by terrorists, and defeat the terrorists before they launch a nuclear missile.

However, Snake, is neither a suave womanizer nor a gunslinging cowboy. He relies on stealth and non-violence, and displays a surprising degree of empathy for his opponents. Where most Hollywood espionage thrillers showcase pyrotechnic gunfights and outlandish bodycounts, *MGS1* featured sophisticated dialogues and suspenseful stand-offs.

What noone could have foreseen was the catalytic effect *MGS1* would have on the field
of videogame production. *MGSI* not only broke all the sales records for Kojima's previous games, selling 5.9 million units, it almost single-handedly spawned a new aesthetic form.107 By creatively remixing elements of the Bond blockbuster, the 20th century science fiction thriller, and the Hollywood action blockbuster, Kojima created the genre of the stealth espionage thriller.108

Over the next ten years, Kojima and the designers, programmers and artists at Konami's internal studio systematically expanded the franchise, by leveraging the power of successive technological platforms (the DVD disc format in the case of the Playstation 2, and the Bluray disc format in the case of the Playstation 3). The next iteration of the series, *Metal Gear Solid 2: Sons of Liberty* (2001), was a graphical showpiece for the launch of Sony's Playstation 2, the console which went on to become the best-selling videogame console of the decade. While *MGS2* became a best-seller, selling 6.4 million copies between 2001 and 2011, it remains the weakest entry in the franchise's pantheon, due to an excessively baroque storyline and a lack of character development.109

Kojima remedied this deficiency in *Metal Gear Solid 3: Snake Eater* (2004). This game did two unexpected things. First, it was a prequel to the first *Metal Gear Solid* game. *MGS3* is set in 1964, during the heyday of the Cold War.110 Second, the videogame does not recount the story of Solid Snake, the hero of *MGSI*, but focuses on his literal and figurative predecessor, Big Boss. In Kojima's 1980s *Metal Gear* games for the MSX platform, Big Boss was a standard action villain, i.e. a legendary super-soldier who plotted to take over the world. In the 1990s, Kojima began to rework this story. In the course of *MGSI*, we learn that military researchers created two clones from the DNA of Big Boss: Solid Snake and Liquid Snake, the hero and villain of *MGSI*,

71
respectively.

Kojima goes even further in *MGS3*. Far from being a cardboard villain, Big Boss turns out to be a naïve but honorable US soldier sent on a spy mission into the Soviet Union. Once there, he is caught up in a maelstrom of international intrigue, and comes to realize that the Cold War has become a sham conflict between two equally problematic ruling elites. At the end of *MGS3*, he resigns from the US military, making the painful but necessary choice to reject both systems.

If *MGS3* can be considered an archeological dig into the Cold War prehistory of neoliberalism, then *MGS4* takes the next logical step, by fast-forwarding the franchise to the spectacular financial collapse of neoliberalism's end. To achieve this feat, Kojima took full advantage of the transition from Sony's Playstation 2 to the much more powerful hardware of the Playstation 3. Kojima also took advantage of his past success as a designer, convincing Konami's senior management to devote significant financial resources to *MGS4*'s production. Whereas *MGS1* lists sixty-one individuals on its official credits list, *MGS4* required the contributions of 493 voice actors, game artists and studio personnel.  

Every facet of *MGS4* testifies to a qualitative leap in production values, ranging from improved game-play to expanded cut-scenes (*MGS3* featured 3 hours and 27 minutes of cut-scenes, whereas *MGS4* had nine hours of cut-scenes). Most players will require a minimum of twelve to fifteen hours to complete the single-player campaign for the first time, for a grand total of twenty-one to twenty-four hours of immersion in *MGS4*'s game-world – and this does not include time spent replaying the game.

The single most important change between *MGS4* and previous iterations of the series is
its explicit critique of neoliberalism. David Harvey has pointed out that a key feature of neoliberalism's economic hegemony between the mid-1970s and the mid-2000s was its narrative hegemony – the consistent message, ceaselessly rebroadcast via mainstream news channels, Hollywood films and television series, and countless other mass media forms, that financialized capital creates all wealth, that ordinary workers are petty losers and deserve their fate, and that reckless speculative bubbles are the acme of economic efficiency:

Neoliberalism has, in short, become hegemonic as a mode of discourse. It has pervasive effects on ways of thought to the point where it has become incorporated into the common-sense way many of us interpret, live in, and understand the world.

The process of neoliberalization has, however, entailed much 'creative destruction', not only of prior institutional frameworks and powers (even challenging tradition forms of state sovereignty) but also of divisions of labour, social relations, welfare provisions, technological mixes, ways of life and thought, reproductive activities, attachments to the land and habits of the heart. In so far as neoliberalism values market exchange as 'an ethic in itself, capable of acting as a guide to all human action, and substituting for all previously held ethical beliefs', it emphasizes the significance of contractual relations in the marketplace. It holds that the social good will be maximized by maximizing the reach and frequency of market transactions, and it seeks to bring all human action in to the domain of the market. This requires technologies of information creation and capacities to accumulate, store, transfer, analyse, and use massive databases to guide decisions in the global marketplace.¹¹³

Kojima's *MGS4* openly critiques the hegemony of those market transactions over those massive databases of information, by linking the neocolonial wars of the US Empire to neoliberalism's culture of financialization. This link is already visible in the opening title sequence of *MGS4*. The setting is a science fiction version of the year 2014, and the place is a nameless Middle Eastern battlefield. Snake is disguised as a member of an ethnic militia, and becomes embroiled in the militia's battle against the troops of Praying Mantis, a fictional private military company (PMC):

> Opening shot of a dusty battlefield, somewhere in the Middle East. Bombed-out buildings and corpses line the roads. The sound-track plays a mournful song called 'Love Theme', written
by Nobuko Toda and performed by Jackie Presti, which consists of a violin, accompanying strings and a single soloist. In the distance, a line of trucks appears, ferrying members of a regional militia to battle. The camera shows close shots of militia members, their faces hooded, aboard one particular truck. Solid Snake is disguised as one of the militia.

Snake: speaks as voiceover: “War has changed. It’s no longer about nations, ideologies or ethnicity. It’s an endless series of proxy battles, fought by mercenaries and machines.” Close shot of Solid Snake, disguised as a militia member; lighting a cigarette. Snake continues: “War, and its consumption of human life, has become a well-oiled machine.” Camera shows shots of a militia member on the truck, and shots of the trucks passing through the ruins of a city. Snake continues: “War has changed. ID-tagged soldiers carry ID-tagged weapons, use ID-tagged gear. Nanomachines inside their bodies enhance and regulate their abilities. Genetic control. Information control. Emotion control. Battlefield control. Everything is monitored and kept under control. War has changed.” Truck enters front line, militia members begin to fire at distant PMC soldiers, and to die from incoming PMC fire. Snake continues: “The age of deterrence has become the age of control, all in the name of averting catastrophe from weapons of mass destruction. And he who controls the battlefield, controls history.” Camera follows Snake as he leaps off truck and makes his way through the chaos and confusion of battle. Snake continues: “War has changed. When the battlefield is under total control, war becomes routine.”

Player action: crawl under truck to trigger next cut-scene.14

The unmistakable irony of Snake's soliloquy is that war has not changed in the slightest. As the casualties pile up on the battlefield, warfare remains the horrifying and fratricidal butchery it always was. It is only that the commercial marketing, administration and prosecution of this butchery has become one of the world's biggest businesses.

What makes this sequence so effective is its documentary realism. The camera-view was programmed to mimic the shaky movements of a handheld battlefield camera, software-generated dust and debris realistically obscure our field of view, and the militia members and PMC troops move and fire like real-life soldiers. While nanotechnologies capable of controlling human beings are still science fiction, almost every other aspect of MGS4's game-world is modeled on painstaking research into contemporary military hardware, combat and training.

This realism is never used to glorify neocolonial wars or imperial violence of any kind. In fact, the MGS franchise is one of the staunchest critics of two of the most prolific apologetics for that violence. The first is the fawning news coverage of the US Empire's 21st century wars by the
Anglo-American corporate media, ranging from “embedded” news coverage of the invasions of Afghanistan and Iraq, all the way to the symbolic military adventurism endemic to the Hollywood superhero and action movies. The second is the glorification of the US Empire and its neocolonial wars which remains pervasive in the first-person videogame shooter, especially the *Call of Duty*, *Medal of Honor* and *Battlefield* franchises.

*MGS4* expands this critique of the US Empire into a critique of the neoliberal world-system. In the passage cited above, ID-tags are a straightforward extrapolation of RFID chip technology. In real life, these chips are a key means of tracking subcomponents in supply chains, and enable companies to coordinate transnational networks of production, transportation and distribution. What Snake's voice-over emphasizes, however, is the price tag humanity must pay for this advance in productivity: the immiseration of the service-workers who construct and operate those networks.

The scandal of Snake's commentary is not that war is a business, a truism since the dawn of the capitalist world-system in the 16th century. The scandal is that the economic violence of neoliberalism is every bit as destructive as wartime combat. Unemployment, immiseration, and malnutrition are less newsworthy than armed conflicts, but cost just as many lives. This insight is the secret meaning behind *MGS4*’s subtitle, *Guns of the Patriots*. In the storyline, the Patriots are a mysterious secret cabal, which pulls at the strings of governments and giant corporations alike for reasons Snake and his allies must uncover.

Contrary to what their name suggests, the Patriots have no allegiance to any nation-state. They are the ciphers of stateless, borderless, and rootless capital, as cosmopolitan and ubiquitous as their labyrinthine conspiracies. Just like their real-world counterparts on Wall Street, the
Patriots do not seek power primarily through the nation-state's monopoly on force, but rather through monopolies on communications, the mass media, and digital technology. What this means is that the main protagonists of the franchise – Big Boss, Solid Snake, and their friends and allies – inevitably take on the role of the historical antagonist of neoliberalism: the billions-strong transnational proletariat.

In a nutshell, Kojima transforms the stealth espionage thriller into a parable of transnational class struggle. To appreciate just how radical this step is, it's worth reflecting on one of the canonic late 20th century meditations on the digital media, namely Donna Haraway's thesis of the cyborg. One passage is worth quoting in detail:

Communications technologies and biotechnologies are the crucial tools recrafting our bodies. These tools embody and enforce new social relations for women world-wide. Technologies and scientific discourses can be partially understood as formalizations, i.e., as frozen moments, of the fluid social interactions constituting them, but they should also be viewed as instruments for enforcing meanings. The boundary is permeable between tool and myth, instrument and concept, historical systems of social relations and historical anatomies of possible bodies, including objects of knowledge. Indeed, myth and tool mutually constitute each other.

Furthermore, communications sciences and modern biologies are constructed by a common move – the translation of the world into a problem of coding, a search for a common language in which all resistance to instrumental control disappears and all heterogeneity can be submitted to disassembly, reassembly, investment, and exchange.

In communications sciences, the translation of the world into a problem in coding can be illustrated by looking at cybernetic (feedback-controlled) systems theories applied to telephone technology, computer design, weapons deployment, or data base construction and maintenance. In each case, solution to the key questions rests on a theory of language and control; the key operation is determining the rates, directions, and probabilities of flow of a quantity called information. The world is subdivided by boundaries differentially permeable to information. Information is just that kind of quantifiable element (unit, basis of unity) which allows universal translation, and so unhindered instrumental power (called effective communication). The biggest threat to such power is interruption of communication. Any system breakdown is a function of stress. The fundamentals of this technology can be condensed into the metaphor C31, command-control-communication-intelligence, the military's symbol for its operations theory.

At first glance, this passage cites almost every single science fiction theme raised by the opening
title sequence of *MGS4*. What is missing, however, is the geographic specificity of the communications technology and information flows in question. Put another way, one of the limitations of Haraway's cyborg is that its apparent boundlessness is the flip side of a deep-seated provincialism. The cyborg is based on a spatially and temporally unique constellation of the southern Californian branch of the US military-industrial complex, and the US biotechnology start-ups clustered in the same region.

Where McLuhan argued that the medium was the message, Haraway's argument is that the information is the media: the radio spectrum formalism of the former is the digital nominalism of the latter. Both arguments run aground on the problem of reception. Put bluntly, both assume that the US media-system is the once and future model for all communications systems, and this limits the potential reception of cultural meanings to an exclusively US audience.¹¹⁶

That said, where Haraway comes closest to identifying the radical potential of the 1990s digital media culture is the cyborg's potential destabilization of the racial, sexual and gender hierarchies of the neoliberal-era US Empire. If the cyborg does not move beyond the boundaries of a US-specific micropolitics, it does at least foreshadow an emergent type of media production, one which blurs the boundaries between producers and consumers while generating new types of public space. The figure of the cyborg anticipates, in so many words, the transnational audience of the post-1998 videogame culture.
2.2 Transnational Media Genres

It is striking that the prologue of *MGS4* focuses explicitly on this transnational audience. Whenever the player chooses to begin a completely new play-through of the videogame (i.e. as opposed to continuing a previous game from a save point), a short prologue plays just prior to the opening title shot discussed above. This prologue consists of ten short media clips, each of which runs for thirty seconds. These media clips include five advertisements for fictitious private military companies or PMCs, and five equally chimerical media programs. All of them are scathing satires of their corresponding media or genre.

When players begin their new game, two of these clips – a random PMC ad and a random program – will play on screen. If the player presses the buttons on the Playstation 3 controller while watching these clips, the screen will flip from one ad to another, and from one program to another, as if we are switching television channels.

They were created by a small Los Angeles-based studio called Logan, one of the most highly-regarded media production firms in the world. While there is no public information concerning the true cost of creating these clips, their sophisticated blend of computer animation and live-action actors suggests a production budget of several millions of dollars.

The five PMCs in question are the British-based Praying Mantis, the US-based Raven Sword and Werewolf, the Russian-based Ocelot's Grip, and the French-based Pieuvre Armement (the name translates as “Octopus Weapons”, and also indirectly hints at the English pun on the word “arms”). Interestingly, each PMC ad is tied to an identifiably national media genre or genres. The undersea ballet of “Pieuvre Armement” is a nod towards the Jules Verne-inspired
science fiction adventure, as well as French erotica. “Werewolf” pays homage to the Matrix thrillers and the Hollywood science fiction films. “Praying Mantis” ad pastiches the British science-fiction dystopia (the lineage from Fahrenheit 451 to 28 Days Later). Finally, “Raven Sword” references the US police thriller.

However, “Ocelot's Grip” is an interesting exception. While it refers to a Russian PMC, the referent is not Russia's Soviet-era film or television culture. Rather, it is based on Russia's flourishing contemporary digital media. The stark black-and-white design, slow-motion pans and graceful, windswept physical forms of the female soldiers (played by Bulgarian actress Stella Angelova, and stunt artist Alena Sauko) echo the visual technique of one of Russia's landmark music videos, Serebro's “Дыши” [Breathe] (2008):

Table 9. Screenshots from “Ocelot's Grasp” clip (left) and Serebro's “Breathe” (right).

Whereas “Ocelot's Grip” features two female soldiers in stylized clothing, an unearthly airmobility, and a nameless geopolitical conflict set somewhere in Eurasia, “Breathe” displays three stylized women's dresses, an unearthly airmobility, and a nameless melodramatic conflict set somewhere in Eurasia. This is just the first in a torrent of in-game references to the democratic, post-Soviet Russia of the 21st century – a country which transformed itself in just 79
ten years from a bankrupt wreck in 1998 into a trillion dollar economy by 2008, as well as a major center of transnational media production.\textsuperscript{118}

We will have more to say about the role of Russia and the other industrializing nations of the semi-periphery in the \textit{MGS4} storyline in just a moment, but for now it is worth emphasizing the explicit transnationalism of the five fake television programs. These television programs are mordant satires of transnational television genres. For example, “Celebrity Moralist” is a hilariously vapid talk show starring the live-action versions of David Hayter (the voice of Solid Snake) and Lee Meriwether (the voice of Eva). “Body of Armor” is an exercise program peddling dubious body-building nanotechnologies, like a demented fusion of an exercise show and a home shopping channel. “7\textsuperscript{th} Circle” is a satirical game show hosted by a more than slightly demonic-looking emcee, “Bomb Shelter Buffet” is a stomach-churning satire of a cooking show, while “Ocean of Gossip” is a pastiche of the undersea nature documentary.

Unlike the ads, which target specific national media-systems, the programs are transnational through and through. For example, the narrators of the “Ocean of Gossip” describe the ability of octopi to mimic their surroundings, foreshadowing one of Solid Snake's future antagonists, Laughing Octopus. At the bottom of the viewing screen, a ticker-tape recounts a sensationalistic list of crimes, scandals, and celebrity-oriented political stunts – a fusion of the undersea documentary, the infotainment news outlet, and the business cable channel.

During “Bomb Shelter Buffet”, the chef and presenter are supplemented by floating text-bubbles which describe recipes for culinary delights such as “Siberian pelmeni vulture” and “Fresh poison oak”. In the foreground, a live komodo lizard crawls around the set outfitted with an explosives-filled jackets, while flies buzz and scorpions crawl in the background. The clip
ends with the killing of a live snake on the chopping table – a foreshadowing of the PMCs' stated mission to track down and kill Solid Snake, as well as a reference to the wilderness survival and hunting show genres.

What these opening clips reveal is that *MGS4* is pursuing a truly transnational media strategy. Whereas each of the five PMC ads sets a specific national genre towards its corresponding national media-system, the five programs set a range of in-game referents in motion towards a wider range of transnational media genres. These referents and genres can be mapped out as follows:

**Table 10. Television Programs and Referents.**

<table>
<thead>
<tr>
<th>Clip</th>
<th>In-Game Referent</th>
<th>Media Referent</th>
</tr>
</thead>
<tbody>
<tr>
<td>“7th Circle”</td>
<td>Floating icon of Drebin, correct contest answer was Pieuvre Armement (PMC during Act II)</td>
<td>Game show, celebrity host show</td>
</tr>
<tr>
<td>“Body of Armor”</td>
<td>Live-action appearance by Khary Payton (voice of Drebin)</td>
<td>Exercise program, pharmaceutical advertisement, home shopping channel</td>
</tr>
<tr>
<td>“Bomb Shelter Buffet”</td>
<td>PMC mission to eliminate Solid Snake</td>
<td>Cooking show, wilderness survival show</td>
</tr>
<tr>
<td>“Celebrity Morality”</td>
<td>Live-action appearances by David Hayter (voice of Solid Snake) and Lee Meriwether (voice of Eva)</td>
<td>Talk show, podcast/webcast, film/videogame publicity campaign</td>
</tr>
<tr>
<td>“Ocean of Gossip”</td>
<td>Laughing Octopus (antagonist of Act II)</td>
<td>Nature documentary, infotainment news outlet</td>
</tr>
</tbody>
</table>

This raises the interesting question of how the national media systems and advertising markets satirized by the PMC ads relate to the transnational media and audiences pastiched by the television programs – or put more precisely, how national media-systems relate to
transnational ones. The key mediation here is not, surprising as it sounds, some planetary information technology or digital platform per se. These latter are essentially variants of technological determinism, which reduce complex social and historical processes to technical ones. In reality, the hinge between the national and the transnational is not so much a technological infrastructure, as a geopolitical space. It is that strange new thing, the collectivity of the industrializing nations of the 21st century, or what Immanuel Wallerstein would term the semi-periphery of the multipolar world-system.

The salient feature of this collectivity is that it lives and works in vast urban spaces or mega-cities. These mega-cities range from ten to twenty-five million inhabitants, while hundreds of thousands of new migrants arrive each year. These urban spaces are not just key sites of trade, commerce and mass media production in their respective countries, they also teem with social movements and sophisticated forms of mass political contestation.
Note that urban agglomeration includes adjacent suburbs and exurbs.

<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Mexico City</td>
<td>25.5 million</td>
</tr>
<tr>
<td>India</td>
<td>New Delhi</td>
<td>22.1 million</td>
</tr>
<tr>
<td>Brazil</td>
<td>Sao Paulo</td>
<td>20.3 million</td>
</tr>
<tr>
<td>India</td>
<td>Mumbai</td>
<td>20 million</td>
</tr>
<tr>
<td>China</td>
<td>Shanghai</td>
<td>16.6 million</td>
</tr>
<tr>
<td>India</td>
<td>Kolkata</td>
<td>15.6 million</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Dhaka</td>
<td>14.6 million</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Karachi</td>
<td>13.1 million</td>
</tr>
<tr>
<td>Argentina</td>
<td>Buenos Aires</td>
<td>13.1 million</td>
</tr>
<tr>
<td>China</td>
<td>Beijing</td>
<td>12.4 million</td>
</tr>
<tr>
<td>Brazil</td>
<td>Rio de Janeiro</td>
<td>12.0 million</td>
</tr>
<tr>
<td>Philippines</td>
<td>Manila</td>
<td>11.6 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>Cairo</td>
<td>11 million</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Lagos</td>
<td>10.6 million</td>
</tr>
<tr>
<td>Russia</td>
<td>Moscow</td>
<td>10.6 million</td>
</tr>
</tbody>
</table>

Derek Pardue has provided one of the most illuminating descriptions of one such megacity, namely Brazil's single largest urban center, Sao Paulo. Pardue argues Brazilian hip hop employs a variety of spatial strategies in its struggle against the big business interests which dominate the interests of the residents of the “periferia” (the neighborhoods of Brazil's poor working majority):

São Paulo is a city apart. While the millions of workers who commute by bus or train will never be served by such wonderful feats of architecture, transit ingenuity and aesthetics, a cadre of private contractors, investors and elite Morumbi neighborhood residents (the primary beneficiary of this bridge) accrue value in this dazzling territorial claim. These are typical circuits of capital in the propagation of São Paulo as a modern cityspace, for they operate under the logic of spectacle, speculation and disenfranchisement. Yet, just as it was with “Fura-Fila,” the exorbitant project under Maluf’s protégé, Celso Pitta, São Paulo mayor 1997–2001, the marginalized often
strike back. Less than a week after the technological masterpiece bridge [the Octávio Frias de Oliveira Bridge] was inaugurated, the bright lights had faltered. Due to the theft of over 200 meters of copper wire, the newest mark of progress was flickering in a whisper. In my interpretation of hip hop, I argue that hip hoppers’ occupations offer an alternative to multinational corporate and state models of periferia value. Hip hop is a kind of labor that is always spatial in nature and effect, which works to offset the historical structure of real estate and other capital investment in São Paulo’s urbanization.120

Hideo Kojima adopts much the same strategy as Brazilian hip hop, by locating the internal geography of *MGS4* within the urban spaces of the semi-periphery. *MGS4* is subdivided into five playable acts, each of which is an allegory for a specific geopolitical location. Act 1 is set in a Middle Eastern city, Act 2 takes place in a Latin American town, and Act 3 occurs in an Eastern European city.121 The two seeming exceptions to this rule, namely Acts 4 and 5, are both closely linked to the semi-periphery. Act 4 takes place in an abandoned US military base in Alaska, but the base is populated by surveillance robots manufactured by the Russian-based Ocelot's Grasp PMC, i.e. the semi-peripheral region in question is Eurasia.

Similarly, Act 5 takes place on Liquid Ocelot's submarine, Outer Haven. At first glance, this submarine could be interpreted as an allegorical mixture of Cold War military-industrial technology and transnational media technology. In reality, Outer Haven is the videogame equivalent of the notorious MacGuffin in a Hitchcock suspense thriller, i.e. the false clue meant to divert the audience's attention away from the true story (indeed, we will see in Chapter 3 that Outer Haven is marked by a clear allusion to the Mount Rushmore sequence of Hitchcock's *North by Northwest*). The semi-peripheral space of Act 5 is not geographic in nature, but virtual. It is the digital commons of the semi-periphery, where transnational flows of media, information and culture from the industrializing nations all intersect.

The complex relationship between the digital commons and the media-systems of the
semi-periphery will be described in more detail in Chapter 4, but for now it's worth emphasizing
the profound influence of the semi-periphery on *MGS4*’s character-system. There are six key
conflicts or “boss battles” in the storyline. These are epic battles where Snake must defeat six
powerful antagonists, who are mercenary soldiers with nanotech-enhanced abilities.

These antagonists are Laughing Octopus, Raging Raven, Crying Wolf, Vamp, Screaming
Mantis and Liquid Ocelot. As it turns out, four out of these six bosses are explicitly identified
with semi-peripheral spaces. Raging Raven is a war refugee from Aceh, Indonesia, while
Vamp is from Romania, an Eastern European nation (his name is an ironic reference to Bram
Stoker's *Dracula*). Screaming Mantis is a survivor of a separatist civil war somewhere in Latin
America, and Liquid Ocelot is from Russia.

Two of the bosses are not from the semi-periphery. Laughing Octopus grew up in a
nameless Scandinavian fishing village, a First World space. Conversely, Crying Wolf is the
survivor of an African civil war which wiped out the residents of her village, a peripheral space
in the contemporary world-system.

From a demographic perspective, it is no accident that four out of the six bosses are
identified with the semi-periphery, while one is located in the industrialized metropole and one in
the global periphery – the same allegorical demography found in the six playable characters of
Square Enix's *Final Fantasy 12*. One of the most interesting characters of *MGS4* is Drebin, a
self-described gun launderer (i.e. weapons and equipment vendor) who provides crucial
assistance and information to the hero, Solid Snake. Magnificently voiced by Khary Payton,
Drebin is not, as one might first assume, an African American character, but rather a war refugee
from a battlefield in east Africa.
Since Snake is a former US soldier, the unlikely but genuine friendship which develops between Snake and Drebin has much the same symbolic resonance as the rapport between Balthier and Fran in the game-world of Ivalice in Square Enix's *Final Fantasy 12*. To oversimplify a bit, where Balthier symbolizes the anti-neoliberal movements of the industrialized countries and Fran those of the industrializing nations, Snake signifies the dissidence within the First World military-industrial complex, and Drebin signifies the dissidence within the postcolonial nation-states of the periphery.

To be sure, this friendship is not immediately apparent in the cut-scene which introduces us to Drebin and Drebin's sidekick, a pet monkey named Little Gray:

*Snake enters room and spots an M4 rifle lying on a carpet. Nearby, an incongruous monkey named Little Gray is drinking a can of Narc Cola (a fictional brand). Snake approaches the M4 cautiously, handgun at the ready.*

*Voice of Drebin: “Pretty sweet, eh? Whoa, hold it! Watch where you're pointing that thing.”*

*Enter Drebin wearing jacket and military fatigues, waving a seemingly empty white handkerchief. Snake switches his sights from Little Gray to Drebin.*

*Snake: “Who are you?”*

*Drebin: “Neither enemy, nor friend.” Drebin waves his handkerchief, revealing a hand grenade in his hand.*

*Drebin: “Voila.”*

*Snake keeps his gun pointed at Drebin.*

*Snake: “You're not with the militia, and you're not PMC.”*

*Drebin: “I'm a weapons wholesaler – all shapes, all sizes. But there's no need to worry, 'cause all my shit's been laundered.”*

*Snake: “Laundered?”*

*Drebin covers the grenade with his handkerchief, like a performing magician. When he removes the handkerchief a second later, the grenade has been replaced by a red apple (it has been camouflaged by Drebin's cloaking technology, as described in Table 3's screenshots below). Drebin absent-mindedly almost takes a bite from the apple, but stops himself in time and tosses the apple behind him. Little Gray chases after the apple.*

*Drebin: “You see, I take ID guns like the PMCs use and make some mods. Then you can use 'em without having to match IDs. In other words, I'm a gun launderer. You can call me Drebin.”*
Table 12. The top three photos (in order of appearance from left to right) occur during a cut-scene in Act 1, when Drebin transforms what seems to be a hand grenade into an apple. The bottom three photos (also in order of appearance, from left to right) occur during a cut-scene in Act 2, when Little Gray mischievously steals one of Snake's cigarettes and then tosses him an apple. Shortly thereafter, Drebin arrives, waving the same handkerchief as a token of truce.

The name “Drebin” is a reference to Leslie Nielsen's character Frank Drebin, the star of the Hollywood police-comedy franchise *Naked Gun* (1988-1994). Little Gray is a nod towards one of the classic institutions of Japan's anime culture, the series mascot, as well as a send-up of the late 1980s and 1990s US cultural meme of the goggle-eyed, grey-skinned space alien. However, their respective roles are far more transnational than these national media referents might suggest.

The apple is the first in a blizzard of references to Apple products in *MGS4*, ranging from Otacon's Macintosh computer to Snake's custom iPod. What differentiates this from standard Hollywood product placement strategies is that Kojima's studio does not depend on advertising for its financing, allowing Konami to negotiate the licensing rights with Apple on a more-or-less equal basis.
On a deeper level, however, the replacement of the hand grenade with an apple, the classic symbol of knowledge, suggests that the battlefield in question is not physical in nature, but virtual or informatic. For videogame audiences, Drebin's use of the term “mod” would immediately be understood in terms of one of the key institutions of videogame culture, namely fan-created custom modifications or mods.

Hector Postigo has noted that in the late 1990s, videogame fans began to use open source programs to create non-commercial forms of user-generated content for their favorite personal computer videogame franchises. These fans did not completely rewrite the videogame software in question, but created custom character-designs, in-game tools and objects designed to be freely downloaded by other players. Over time, these modifications or mods became more complex, and certain groups of fans created full-fledged playable sequences, replete with scripted action sequences, custom voice-acting, and complex stories. More recently, mods have become an integral part of videogame culture, to the point that blockbuster franchises such as Sony's *Little Big Planet* are essentially platforms for user-generated content.

Postigo points out that modding culture is far more complex than simply tinkering with existing software programs, and overlaps with many other aspects of non-commercial, fan-based media production:

The work of fan-programmers is part of a broader content pool, such as tutorials, fan-based news coverage, game servers, and other fan-produced activity. This content in total is what adds to the life of a game title. Here the “life of a game” refers not only to how long a game stays on the best-seller lists or is able to maintain its release price but also to the time a game remains a subject of active involvement with the consumer base as when, for example, fans talk about their favorite games on gaming Web sites and magazines, host servers for team play, distribute gaming information, and discuss the latest add-on. The fact that game development companies invest in providing fans with development tools, server space, and level editors attests to their understanding of the power of a fan community in prolonging the life of a game. For third-party companies that host servers, a technologically productive fan base acts as a revenue pool by providing engaging content (in the form of novel user-designed maps, for example) that many gamers can access for team play, thus ensuring consistent advertising dollars.127
The influence of modding and user-generated content is pervasive in *MGS4*. One of the most significant examples is the role of Drebin and Little Gray as in-game shopkeepers. After meeting Drebin, the player can access Drebin's shop at any time in order to unlock items or customize the plentiful variety of equipment players can collect inside the game-world. The shop operates on a virtual currency called “Drebin Points”, which are accumulated by collecting excess equipment and items from the battlefield. More powerful types of equipment cost more DP than weaker ones, the idea being to give players the maximum amount of choice while preserving overall game balance, i.e. preventing players from acquiring overly powerful items too early in the game.

Historically, in-game shops were invented by role-playing videogames as a means of managing player inventories and diversifying game-play. While variations of the in-game shop have spread to other videogame genres, *MGS4* was the first iteration of the *Metal Gear Solid* franchise to feature the shop as a core element of game-play. Kojima was careful to avoid the overly complex inventory systems endemic to many many role-playing games, by streamlining the acquisition and use of DP, i.e. the player-character automatically picks up any items Snake walks over or next to, and excess equipment is automatically converted into DP in the player's account.128

The influence of user-generated content is also evident in the optional music tracks and podcasts which can be downloaded from within the game from Konami's servers, and played on Snake's in-game iPod. The music tracks are for the most part quotations from other *Metal Gear Solid* games, while the podcasts are the digital equivalent of museum audio tours. Narrated by
Ryan Payton, Aki Saito, Ken Imaizumi, Sean Eyestone, and other Kojima Productions staff, these podcasts walk the player through overlooked details and hidden secrets of the game-world.

User-generated content also heavily influenced MGS4’s promotional campaign, and in particular, the release of spectacular trailers. Trailers have long been the videogame industry's equivalent of film previews in cinema halls, or media promotions on television, i.e. advertising for potential customers. What makes videogame trailers more than just another form of commercial advertising, however, is that they are routinely released for free viewing on the internet. While Kojima is not the first media artist to employ the trailer as a story-telling device – Patrick McGoohan released customized trailers for his classic science-fiction television series The Prisoner (1967) as far back as 1966 – the MGS4 trailers did something new, by borrowing extensively from the institution of the fan-made video.129

### 2.3 Transnational Media Institutions

*MGS4* acknowledges the digital commons of fan production and user-generated content in several ways. One of the most important of these is the studio's long-running English-language podcast to fans, called the Kojima Production Report, which remains one of the indispensable archives of contemporary videogame culture. The Report, available as a free MP3 download from the studio's website, features regular updates and announcements from the KojiPro studio, interviews with staff and cast members, and on-air responses to inquiries and fan mail from the *MGS* community.130 While the podcast does perform some of the functions of commercial advertising, it features sophisticated discussions of plot points, in-depth interviews, and
intelligent commentary on the evolution of the videogame industry.

The first edition of the Report was published on February 1, 2006, and continued under the direction of Konami staffer Ryan Payton, who hosted the podcast until May 2008. Over the next few months, the Report was put on hold, as team members were busy producing the in-game audio walk-throughs players can download and listen to inside of the *MGS4* game-world. The Report resumed publication on March 19, 2009 under the direction of Sean Eyestone, and has continued to this day.

Kojima has also shown genuine respect for and deference to the fan community, everywhere from regular appearances at the Tokyo Game Show to San Diego's Comic Con and other venues, to a policy of tacit approval vis-a-vis non-commercial fan production. This production includes everything from a plethora of fan websites,\(^{131}\) to the diffusion of fan art and fan fiction on sites such as DeviantArt.com, where fan contributions based on the *MGS* franchise number in the tens of thousands.\(^ {132}\) There are also a number of *MGS*-themed fan films, e.g. *MGS: Philanthropy*, an hour-long fan-created film based on the franchise.\(^ {133}\) Fans have also produced a wide range of critical analyses of the franchise, the most famous of which is James Clinton Howell's analysis of *MGS2*.\(^ {134}\)

This is not to argue that *MGS* or the videogame industry as a whole is completely advertising-free or somehow exempt from predatory commercialism. For example, since *MGS4* was released as a Playstation 3 exclusive, Sony's videogame division justifiably regarded the launch of *MGS4* as their ace card in their efforts to compete with Nintendo's Wii and Microsoft's Xbox360, and offered a special *MGS4*-themed hardware bundle. Konami also released a wide range of promotional media prior to the release of *MGS4*, including standard television and
internet ads.

The point, rather, is that the presence of non-commercial circuits of reception, distribution and criticism are having significant effects on videogame production. In retrospect, the single most effective aspect of the *MGS4* ad campaign was its use of free media. This was the release of seven extended-length trailers on the internet. These trailers revealed snippets of *MGS4*'s labyrinthine plot, while showcasing some of its most memorable action sequences (the sequences were carefully edited, to avoid plot spoilers).

These trailers generated enormous media interest and fan acclaim. Most of these trailers were screened at leading videogame trade shows, and then immediately released for public viewing on the internet. Interestingly, only one of these trailers explicitly referenced Sony's marketing efforts for the Playstation 3 (the console was launched in 2006), and then only in passing. Six of these trailers were free-standing narratives in their own right, while the seventh consisted of a play-through of a short section of Act 1 of *MGS4*. The trailers are listed below in the order of their appearance:
### Table 13. List of MGS4 Trailers.

<table>
<thead>
<tr>
<th>Year of Trailer and Event</th>
<th>Title</th>
<th>Length (minutes and seconds)</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 E3 Trade Show (US)</td>
<td>Variety Show</td>
<td>4:55</td>
<td>PS2 graphics, game announcement, no in-game footage</td>
</tr>
<tr>
<td>2005 Tokyo Game Show (Japan)</td>
<td>This is No FPS</td>
<td>8:47</td>
<td>Low-resolution version of PS3 graphics, in-game cut-scenes and dialogue from Act 1</td>
</tr>
<tr>
<td>2006 E3 Trade Show (US)</td>
<td>[untitled]</td>
<td>14:51</td>
<td>Low-resolution version of PS3 graphics, MGS4 opening visuals and theme music, in-game cut-scenes and dialogue from Acts 1 and 2</td>
</tr>
<tr>
<td>2007 E3 Trade Show (US)</td>
<td>Liquid Sun</td>
<td>6:05</td>
<td>Full-resolution in-game cut-scenes and dialogue from Act 1 and Act 2</td>
</tr>
<tr>
<td>2007 Konami internal event (Japan)</td>
<td>Metal Gear Solid 20\textsuperscript{th} Year anniversary</td>
<td>15:19</td>
<td>Full-resolution play-through showcasing a section of Act 1, while Kojima provides real-time audio commentary (no in-game cut-scenes or dialogue)</td>
</tr>
<tr>
<td>2007 Games Convention (Germany)</td>
<td>Beauty and the Beast</td>
<td>4:21</td>
<td>Full-resolution in-game cut-scenes and dialogue from Act 1, dialogue from Act 2</td>
</tr>
<tr>
<td>2007 Tokyo Game Show (Japan)</td>
<td>Naomi</td>
<td>5:52</td>
<td>Full-resolution in-game cut-scenes and dialogue from Acts 1, 2, 3 and 4</td>
</tr>
</tbody>
</table>

While the 2007 trailers functioned in a manner similar to music videos or fan dubs, the 2005 and 2006 trailers are more akin to machinima, showcasing potential scenes which were excised or deleted from the final version of the game. It is worth noting that comparatively little material was shown in its final form. Most of the original footage is shown with dialogue extracted from other parts of the game, and edited into a coherent narrative. Also, three of the trailers show work-in-progress rather than final footage, i.e. lower-resolution versions of sequences which eventually became full-resolution. This lower-resolution footage derived from
what the game industry terms “alpha stage” of game development, i.e. when most of the gameplay but not all of the lighting, texture or visual effects are running in the game.

In addition to his role as a symbol of gameplay innovation and fan-based mod culture, Drebin is also linked to number of transnational media institutions. During Act 1, Drebin was linked to three staple features of the digital media, namely the high-end product placement advertisement, the fan-created videogame mod, and the in-game shop. These institutions are located, in turn, in three distinct media infrastructures. These are the space of videogame production (the commercial studio), the space of fan-based production (the digital commons), and finally the space of in-game interactivity (single-player actions plus online multiplayer participation), respectively.

In Act 2, however, a fourth media institution is linked to Drebin. After the player defeats Laughing Octopus, Drebin recounts the tragic personal history of Laughing Octopus via a radio transmission to Snake. In fact, each time the player defeats one of the four members of the all-female B&B (Beauty and the Beast) Corps, consisting of Laughing Octopus, Raging Raven, Crying Wolf, and Screaming Mantis, Drebin will follow with a radio broadcast describing the specific psychological trauma and wartime brutalization each Beauty suffered. Far from being cardboard villains, each B&B member is a horribly damaged victim of war, who survives only by turning themselves into a war machine. As Drebin explains:

*Drebin, Snake and Little Gray are inside Drebin's armored personal carrier.*

*Drebin:* “Ever since you showed up in the Middle East, the B&B Corps has got orders to kill. Their number one priority is to eliminate some guy on sight. A guy named Solid Snake. But from where I'm sitting, Old Snake seems a little more appropriate.”

*Player action: Snake's psyche meter drains, unless player mashes X button.*

*Snake:* frowning: “Old, huh?”

*Drebin:* “Cheer up. That's the bad news.”

*Drebin shows a coin resting on his knuckles. Snake leans in to listen.*
Drebin: speaking while rolling coin from knuckle to knuckle one-handedly: “Word on the street says that beneath those ugly-ass suits, the B&Bs are real babes... drop-dead gorgeous. They also say each one of them's been traumatized by war. Badly.”

Shot of Little Gray asking for coin. Drebin effortlessly rolls the coin from one set of knuckles to his other.

Drebin: “They weren't even soldiers to begin with, you know. More like victims of war.”

Drebin flips coin at Little Gray, who catches it in midair and uses it to obtain soda.

Drebin: “They suffered shell-shock on the battlefield -- post-traumatic. It damaged their minds pretty much beyond repair. So the only way they could cope with the reality of battle was to become war machines themselves. The remnants of their human side are buried deep within. The beast, that's what you see on the outside. War transforms us, Snake, into beasts.”

Snake: mournfully: “War transforms us...”

Drebin: “But deep within that shell, something human survives. A fragile, scarred heart. Without a shell to protect it, it's like the yolk of an egg. Word going around is, their natural, flesh-and-blood bodies can't survive in the open for more than a few minutes. And they've been convinced that by killing Snake, their minds will be cleansed. They think it's gonna free them from all the pain, and all the fury, and all the sorrow. Which makes these babes pretty much obsessed with killing you.”

This scene is laden with several layers of meaning. For starters, egg-yolks are a key narrative symbol in *MGS4*, thanks to Sunny's ongoing struggle to learn to cook eggs sunny-side up. At the beginning of the first four mission briefings, the camera shows close shots of the frying pan, showcasing Sunny's latest culinary effort. There is also the title of the B&B Corps, “Beauty and the Beast,” a nod towards the 1991 Disney film as well as the age-old European folktale of the same name. Last but not least, the coin Drebin flips to Little Gray is US quarter, hinting at the fact that the US has long held the dubious title of the largest producer and vendor of armaments in the world.

More subtly, this scene sets the stage for Drebin's subsequent radio transmissions to Snake. Snake's communication gear (called a codec) has the capacity to transmit live streaming images of other characters while he speaks with them. For example, a live depiction of Otacon, Snake's close friend and a key character in the story, always appear on the right side of the screen when conversing. However, no facial image appears when Drebin transmits to Snake. Instead,
we see Drebin's commercial logo, a stylized six-shooter which befits Drebin's chosen occupation. The only other character whose face is similarly replaced by a symbol is Raiden, another important character in the storyline, whose interface shows a robot constructed from typographical symbols. The following screen captures document the visual interfaces displayed during Snake's radio conversations with Otacon, Drebin and Raiden, respectively:

Table 14. Screenshots of codec (radio) conversations in *MGS4*.

| Conversation with Otacon at the end of Act 4, with a live feed of Otacon's face. Most conversations follow this model. | Conversation with Drebin after defeating Laughing Octopus in Act 2. Drebin's face is never revealed in these conversations. | Conversation with Raiden early in Act 2, showing Raiden's emoticon. |

If the final media institution linked to Drebin is the unlicensed MP3 download or live streaming audio, then the corresponding media infrastructure is the digital radio broadcast. This latter includes everything from the rapid growth of independent FM radio stations throughout the industrializing nations of the world in the late 1990s, to the informal circulation of MP3 music and audio files, all the way to the emergence of digitally-mediated music industries throughout the semi-periphery and true periphery during the first decade of the 21st century.  

What makes this constellation of the high-end product placement ad, the fan-created videogame mod, the in-game shop, and the digital radio broadcast so interesting is that it is tied to a unique mobile space. This space is symbolized by Drebin's eight-wheeled armored personnel
carrier, a near-exact replica of the real-world M1126 Stryker, an armored infantry carrier vehicle first produced in 2002 and manufactured for the US military by the General Dynamics corporation.

However, Drebin does not work for the US military, for the US military-industrial complex, or for any other nation-state. Nor is the media space in question a national broadcasting service or industry. Rather, Drebin is employee number 893 in a worldwide network of underground weapon launderers, a network called simply “the Dreibins”. Drebin's vehicle contains a significant clue as to the true nature of this network: its exterior is printed with phrase “Eye Have You” as well as Drebin's stylized gun-chamber logo. In fact, Drebin's standard farewell to Snake after their conversation is the line “Eye have you”, which he recites with the following gesture: two fingers pointed at his own eyes (emphasizing the pun on “eye” and “I”), the balling of his fist (“have”), and then one finger pointed at Snake (“you”). This suggests the metaphor of weapon laundering is not just a reference to videogame modding, it is also a metaphor for all manner of digital unlicensed or informal media production.

This theme is echoed by the interior of Drebin's vehicle, which is a mobile workshop capable of retrofitting weapons and equipment, as well as collating data and intelligence reports. Last but not least, the exterior of the carrier is outfitted with a special type of stealth camouflage, enabling it to change its color and texture and blend into environments as needed – an allusion to the process of videogame localization, as well as other forms of digital media transcoding and indigenization.

In point of fact, Drebin's carrier has a genuine real-world model, namely the rise of indigenous networks of hip hop culture throughout East Africa. As Mwenda Ntarangwi points
out, these networks were both deeply complicit with neoliberalism, as well as fierce social critics of such:

Following a wave of multiple commercial radio and television stations that came with economic neoliberalism, as opposed to the state-owned and state-controlled ones of the past, the desire and demand to compete for a customer base to draw lucrative advertisement, forced new radio and television stations to diversify their products (Bourgault 1995). Further, access to recording and studio equipment that came within this time period led to the local production of high-quality music that was available for airplay in the now-growing private radio stations. For a fee, a young and upcoming artiste could walk into a recording studio and come out with a high-quality compact disc of his/her debut single that could be played on one of the newly instituted FM radio stations in his/her respective city or country. Add to this the availability of numerous musical tunes on such computer software as Fruit Loops and the possibility of selling one's music through the Internet, and one has a new space for youth to advance themselves through music and produce high-quality, local music. More recently, many artistes have opened their own recording studios as is the case of Mr. Ebbo of Tanzania, who has Motika Records, Mesach Semakula of Uganda, who has Kann Studios, and Kenya's Ukooflani Mau Mau with Andaki Studios.139

Putting all the pieces together, Drebin's carrier is essentially a mobile media lab, the digital update of Russian director Alexander Medvedkin's vision of the film-train, mobile documentary film studios on Soviet railway cars in the late 1920s and early 1930s.140 Just as Medvedkin's mobile studios were subject to the constraints of the Soviet one-party state, so too does Drebin and the Drebin network have its own set of limitations, which we will describe in more detail in Chapter 3.

For now, however, it's worth pointing out that Drebin's ground-based media lab has its aerial counterpart in the Nomad, the UN-chartered military cargo jet which ferries Snake and his companions around the world. Symbolically, the Nomad is not based on a single real-world jet, but is an admixture of the US-produced C-17 Globemaster III plus the Russian Antonov AN-225. A cut-scene in Act 2 shows a close-up of the letters “C-XX” painted on its side, which suggests the craft is a modified C-17. The Nomad also has four engines, similar to the C-17. However, the rear of the Nomad consists of a horizontal wing-tail – a unique feature of the Antonov. The
Nomad is thus a transnational composite of two national aerospace industries:

**Table 15.** The photo on the left is a shot of the US C-17 Globemaster III, the photo in the center is a shot of Russia's Antonov AN-225, while the screenshot on the right depicts *MGS4*’s Nomad.

The main residents of the Nomad are tech-savvy scientist and programmer Otacon (the nickname for Hal Emmerich) and Sunny, an eight-year-old orphan being raised by Otacon following the death of her mother, Olga Gurlukovich (Olga was a Russian mercenary soldier who perished at the end of *MGS2*). Sunny is also a child prodigy, a brilliant programmer more talented than Otacon himself. The interior of the Nomad is a command post, a communications center, and a workshop where Otacon and Sunny create specialized equipment to assist Snake during his missions.

However, the Nomad is more than just a symbolic space of media production. It is also where many of the most crucial scenes of *MGS4* take place. Snake, Otacon, Sunny and various other characters form an impromptu collectivity on board the craft, a collectivity very different from the joint family typical of the Bollywood romance, or the nuclear family endemic to Hollywood melodrama. If there is a social model for this collectivity, it is the sort of egalitarianism, creativity and egalitarian solidarity characteristic of the very best of the independent videogame studios.
This collectivity is linked to a remarkably cosmopolitan and progressive set of identity-politics. One of the most praiseworthy aspects of the *MGS* franchise has been its plethora of strong-willed and intriguing female characters, combined with an inclusive and cosmopolitan attitude towards sexuality. These characters include Meryl and Sniper Wolf in *MGS1*, to Eva and The Boss in *MGS3*. Additionally, no other videogame franchise has so consistently queered so many of its leading characters, or so openly acknowledged same-sex relationships and multiple sexualities in its overall narrative framework. This openness is all the more refreshing considering the repressive heteronormativity, imperialist masculinity, and toxic homophobia which pervades most action and espionage videogame franchises.

That said, it is true that *MGS1*, *MGS2* and *MGS3* did not seriously challenge the patriarchal underpinnings of its genre, in the sense that its female characters, while strong-willed and capable individuals, are portrayed as “just one of the boys” within a game-world defined by feats of martial prowess. This changes fundamentally in *MGS4*, for two reasons. First, there is genuine gender equity in the ranks of the protagonists as well as the antagonists. For example, Meryl is now a tough and capable squad commander, while the elite troops of Liquid Ocelot's private army, the FROGs, consist entirely of female super-soldiers. Second, the roster of characters expands to include children and the elderly. These latter groups were largely absent from the mainstream videogame culture of the 1990s and early 2000s, due to the industry's long-standing focus on the teenage and young adult markets.

In fact, Sunny's growth and development is one of the highlights of the story, and forms a compelling counterpoint to the belated evolution of Snake himself. One of the most touching scenes in *MGS4* occurs when Otacon reveals his inexperience and confusion as Sunny's
guardian:

Otacon: typing on computer: “Right after it all happened, I got a video mail from Naomi. It was sent to my old address.” Shot of Šnake looking for his cigarettes. Sunny comes downstairs with two plates of overcooked eggs, offering one each to Otacon and Snake.

Sunny: stuttering slightly: “Um... here you go.”
Otacon: “Thanks, Sunny. They're delicious.” They accept the plates but do not eat them.
Sunny: “But... you haven't even eaten any.”
Snake: “We grownups have to watch our caloric intake, you know. But thank you.” Snake picks up cigarette.
Snake: “I was looking for this.”
Sunny: impulsively: “You're not watching your nicotine intake!”
Otacon: reproachful: “Sunny!” Sunny storms off in a huff up the stairs.
Otacon: to Snake: “You really hurt her feelings.”
Snake: “Yeah? Why don't you teach her how to cook eggs, then?”
Otacon: “Oh, like I know how to cook!”

Otacon and Snake may be able to discuss globe-spanning political conspiracies at the drop of a hat, but they are comically unprepared for the responsibilities of parenthood.

Conversely, one of the joys of MGS4’s storyline is watching Otacon and Snake grow and mature over time.

What makes this maturation process so poignant is MGS4’s thematic emphasis on mortality. The entire narrative is framed as a desperate race against time, as Snake battles his own accelerated aging. From a genre perspective, MGS4 overcomes one of the most striking weaknesses of mainstream action and espionage thrillers, namely the inability to acknowledge death. The same narratives which showcase the destruction of vast quantities of faceless human beings cannot bring themselves to adequately depict the passing of a single human being.

While Kojima's work has always been critical of war, MGS4 complements this anti-war stance with a rich set of meditations on mortality. Snake is the first elderly character to star in a blockbuster videogame, and five significant characters pass away onscreen at some point in the storyline. One of the most important of these characters is Naomi Campbell, the scientist who...
pioneered the use of nanomachine technology as a weapon of war in *MGS1*. At first glance, Naomi seems to be just the latest in a long line of scientists in the *Metal Gear Solid* franchise who rebel against the misuse of their research for nefarious purposes, ranging from Otacon in *MGS1* to Sokolov in *MGS3*. However, Naomi’s role is far more complex than any of these previous characters.

### 2.4 Diagnosing Neoliberalism

Naomi’s key role in *MGS4* is to catalyze the resistance to Liquid Ocelot’s scheme to take over the nanomachine network used by the PMCs and national armies alike. This network, dubbed “SOP”, is a vast data-processing network built by a transnational corporation called ArmsTech, and administered by a secretive network of artificial intelligences or AIs. While the nanomachines enable PMC soldiers and government operatives to operate at super-human levels of endurance and skill, they are also an instrument of undemocratic coercion and control.

The SOP system has two main narrative functions in *MGS4*. The first and most obvious is to showcase the ever-increasing power of the data, information and media industries over laboring bodies. This is a foundational theme of critics of digital media, most prominently in N. Kathryn Hayles’ *On Being Posthuman*. It is no accident that each of the fake programs shown at the very beginning of *MGS4* showcase a specific application of the SOP system on a group of workers, ranging from control over generic service-workers (the contestants) in “7th Circle” to control over athletes in “Body of Armor”, control over kitchen staffers in “Bomb Shelter Buffet”, control over media-workers in “Celebrity Moralist”, and control over news correspondents in
“Ocean of Gossip”.

The less obvious but equally important function is to enable those laboring bodies to critique neoliberalism. This is far more radical challenge than one might think, and not just because of the formidable formal difficulty of representing the neoliberal world-system in aesthetic terms. There is also the question of what type of class solidarity could possibly exist between such disparate groups of workers, endowed with such different levels of power and privilege. One of Kojima's most ingenious moves here is to reject two of the central tenets of neoliberalism, namely that human beings are perfectly rational consumers and that politics is a set of perfectly rational consumer choices, as fundamentally irrational constructs or narrative wish-fulfillments. Put bluntly, neoliberalism is precisely the blinkered, reactionary fundamentalism which neoliberal apologists so fervently denounce: the local irrationality of the former is the flip side of the global irrationality of the latter.

However, Kojima does not stop at merely diagnosing neoliberalism as a species of financial fundamentalism, namely the belief-system of a numerically tiny but economically powerful class of transnational plutocrats. Instead, *MGS4* turns neoliberalism's utopia – the fantasy of borderless, bodiless, and boundless financial speculation – against itself.

This is why the SOP system is more than just another cautionary tale of a supposedly foolproof advanced technology which runs amok, a.k.a. a digital Frankenweb. Indeed, SOP embodies the neoliberal dream of a universal, seamless, and corporate-dominated data-management system. As such, it is the science fiction extrapolation of the enterprise resource planning (ERP) software which runs the vast internal databases used by transnational corporations. The ERP market is dominated by the German-based transnational firm SAP,
suggesting that the fictional “SOP” is very much a corporate pun.\textsuperscript{149}

This insight into the infrastructures of transnational capitalism enables Kojima to narrate the resistances to neoliberalism in terms of two distinct networks of laboring bodies. One of these networks is located in the realm of individual human subjectivity, while the other is collective in nature. The internal network includes the iteration of human bodies (genetics), the iteration of cultural meanings (memes), and the iteration of personal world-views (ideology). The external network includes digital infrastructures (digital media), transnational commerce (transnational corporations), and the political conflicts of the multipolar world (21\textsuperscript{st} century geopolitics).

Significantly, there are only two characters in \textit{MGS4} who operate in both of these networks, simultaneously. Snake is one of them, which makes sense given the centrality of his life-story to the narrative as a whole. However, the second is not, as one might assume, Snake's friend Otacon, or even Snake's main antagonist, Liquid Ocelot.

Snake's true counter-player turns out to be Naomi. She is both an expert geneticist (the level of the individual), as well as a nanomachine expert (the level of the collectivity). Fittingly, her appearance during Act 2 is marked by two revelations, located in each of these fields. The individual revelation is that Snake's accelerated aging is, to paraphrase an old joke of the software industry, not a bug, but a feature. Snake was one of three super-soldiers cloned from Big Boss, the protagonist of \textit{MGS3}. As a security precaution, the researchers deliberately shortened the clones' natural life-span.\textsuperscript{150}

The collective revelation is that Snake is not just genetically compromised, but also immunologically compromised. After testing samples of his blood, Naomi informs Snake that the
residual FOXDIE virus he was injected with during the events of *MGS1* is beginning to mutate within his body. The original virus was designed to selectively skill a few targeted individuals, but the mutated version threatens to become an artificial plague capable of killing thousands or even millions. More frightening still, he is also carrying a new virus, similar to FOXDIE, but whose true purpose will not be revealed until the very end of the storyline.

The world-ending epidemic is a longstanding trope of science fiction, ranging from Jack London's 1912 *The Scarlet Plague* to the contemporary zombie thriller. Like any apocalyptic narrative, the world-ending epidemic has always been politically ambiguous, and can just as easily be deployed by reactionary politics (e.g. Boris Sagal's *Omega Man* (1971), with its racial subtext of urban centers overrun by communities and immigrants of color) as by the anti-neoconservative satire of Dan O'Bannon's *Return of the Living Dead* (1985).

Fortunately, Kojima takes care to neutralize the potentially reactionary subtexts of this trope by means of the laboring body. This body is more than just an instrument of planned obsolescence, it is also the site of geopolitical contestation. The reason is that Snake's predecessor, Big Boss, turns out to be the central reading key and code of the entire SOP system. To paraphrase Espen Aarseth, Big Boss is the ultimate ergodic hero:

Naomi: “Listen carefully, Snake. This is the most important part. The AI that controls the System employs a highly aggressive, advanced IDS [intrusion detection system]. It uses a special code to inspect all data and commands circulating within the network. Any data that fails to confirm to that code is treated as a foreign object and expunged, like viruses killed by white blood cells. The authentication program this IDS uses is based on a genetic identification program, one I helped develop for FOXDIE. It's set up so that host commands only execute properly if the key matches perfectly. However, if the IDS suspects someone is trying to break into the System, it registers that genetic code on a blacklist. That code is then blocked, and can never again be used to access the System. So, if you're going to use a substitute, you need to find a new genetic access code with each new trial.”

Snake: “So when Liquid accessed the System in the Middle East and South America... It was only a test.”

Otacon: “I can't believe this. Snake and Big Boss don't have the same genetic code?”
Naomi squeezes Otacon's hand.
Naomi: “Strictly speaking, Snake and Liquid aren't the same, either. Which is why FOXDIE only affected Liquid at Shadow Moses, and spared you. Let's put it this way: if Liquid uses Big Boss's genetic code, the original, he'll have the System completely under his control.”

The discourses of genetics and nanomachines converge in Snake's body, at the same moment that SOP's key technical infrastructure, the IDS system, turns out to be the site of potential contestation. This scene rehearses one of the central ironies of the transnational era, namely that so many of the institutions of the digital commons were inadvertently generated by neoliberal capital's relentless drive to commodify the circuits of media production, circulation and consumption.

To put this into simpler terms, if SOP is an allegory of the corporate-dominated, neoliberal-era internet, then Liquid Ocelot is playing the role of the individual speculator or investor, while the Patriots signify the interests of neoliberalism as a whole. Both are battling for control over the planet's data and media, but the victory of either side promises nothing but disaster for the human race.

What is not yet clear, on the other hand, is what Ocelot hopes to gain from his insurrection against the Patriots. Unlike the cardboard super-villains and neo-Orientalist tyrants regularly churned out by the Hollywood blockbusters, he is not linked to a potentially threatening national or neo-national identity. Nor is Ocelot the sort of charismatic leader capable of inspiring a mass following among the PMC soldiers, e.g. Big Boss during the events of *MGS: Peace Walker*.

One of the essential clues here is that the PMCs of *MGS4* play a structurally ambiguous role in the game-world. While the PMCs are headquartered primarily in the industrialized countries (the Russian PMC is the one intriguing exception, about which more hereafter), they
are not loyal to colonial empires, on the model of the East India Trading Company, but to the pursuit of profit. Nor are they the direct administrators of empire, even though they have taken on many of the key functions of national governance, e.g. peacekeeping and civil protection.

This suggests that the PMCs are more than just a metaphor for the rise of real-life mercenary companies during the US Empire's wars of the 1990s and 2000s. They are also an oblique critique of neoliberalism's privatization of the state, i.e. the reduction of public spending on the vast majority of citizens, for the benefit of neoliberal elites. *MGS4's* proxy wars are the health of the neoliberal state. They are the lightly fictionalized version of the intractable economic crises spawned by neoliberalism. They express the economic violence unleashed by the neoliberal era, ranging from the savage income polarization experienced by the industrial countries, to the external debt crisis and brutal structural adjustment policies which immiserated countless industrializing countries from the mid-1970s to the early 2000s, including most of the emerging economies of Latin America and Africa, the former Soviet bloc, South Asia, and Southeast Asia.

Just as neoliberal bailouts almost never resolved crises, but usually generated even worse outcomes, so too do the proxy wars of the PMCs generate nothing but further wars. An offhand comment by Drebin paints this bleak but pragmatic assessment of the situation: “Privatizing the military's made the PMCs big and bloated. And the fatter the PMCs get, the line between civilian and soldier is gonna get real blurry. Sooner or later, the whole damn human race is gonna be green collars. More like, we're all gonna be fighting proxy wars.”154

Yet this realization of humanity's thralldom to neoliberalism is also, paradoxically, a reason to hope. The name of the Russian PMC gives us an important clue: “Ocelot's Grasp”.

107
What makes this so interesting is not simply the reference to Liquid Ocelot, or the fact that it is located in Russia, one of the most powerful developmental states of the 21st century. It is the fact that this firm specializes entirely in unmanned robotic systems, i.e. it avoids the use of the SOP system.

In other words, the SOP system is not the only path humanity might take in the 21st century. The “green-collar” economy need not terminate in the neoliberal despoliation of bodies, it might also be rerouted towards peaceful creativity. If the most heavily capitalized media oligopolies of the First World are the war machine of neoliberalism, then it is also possible for digital audiences and citizens to push back, via non-commercial, user-generated, and publicly-financed media.

Kojima provides us with a hint of what this push-back might look like, in the form of the post-battle interlude which occurs after each battle with the B&B Corps. These interludes are unlike anything else in the history of videogames. After each Beauty is defeated in battle, she will shed her cybernetic exoskeleton and weapons, and then slowly walk towards Snake, unarmed. This walk is an unnerving admixture of the sexualized strut of the fashion catwalk (each Beauty is clad in a form-fitting jumpsuit), and the undead shamble of the zombie. The faces and bodies of the disarmed Beauties were modeled on their real-life templates, four superstar actresses and models who are as transnationally diverse as the characters they represent. The template for Laughing Octopus was Lyndall Jarvis, who was both in South Africa. The template for Raging Raven was Yumi Kikuchi, who was born in the United States but who works primarily as a Japanese actress. The template for Crying Wolf was Mieko Rye, who was born in the US and is of Brazilian ancestry. Finally, the template for Screaming Mantis was
Scarlett Chorvat, who was born in Slovakia.

Although each disarmed Beauty can grapple Snake and potentially kill him if they get too close (they do no violence, but simply hug him, causing his nanomachines to malfunction and his life indicator to slowly decrease), they can be easily outrun or shaken off, and are vulnerable to weapons fire. The player must choose whether to defeat the disarmed Beauty through violence, or through nonlethal means such as tranquilizer darts or flash grenades (the latter choice is rewarded with certain in-game bonuses, making it clear where Kojima's sympathies lie). Alternatively, the player can simply keep a healthy distance from the Beauty, triggering an additional playable sequence we will describe in just a moment.

What makes these post-battle interludes so unsettling is the fact that they are playable sequences, but the normal game environment is subtly altered. On the sound-track, we hear distorted, dream-like screams, cries, shouts and gunshots, as if we have tapped directly into the traumatic memories of that specific Beauty, and are acoustically reliving the violence which drove her mad. The player's visual field alters as well. A small area in the direct vicinity of the Beauty retains some its normal color, while all other areas of the battlefield turn colorless and gray. The combination of the color-wash, the nightmarish sound-track, and the sight of the tormented human being inside what we assumed was a soulless killing machine is spine-chilling.

There is one final twist to these post-battle interludes. If the player does not defeat the disarmed Beauty within three minutes of in-game time, the battlefield is automatically transformed into a dimensionless, dreamlike “white room”. A three-minute timer appears at the top of the screen, and the Beauty's pursuit of Snake continues in this virtual nonspace. The gameplay in the white room is the same as in the post-battle interlude, with the only differences being
that the player cannot use their radio to call up other characters in the game, and that players may use their in-game camera to take a photo of the Beauty (the color-wash effect disappears, while the haunted sound-track continues).

If the player chooses to look through Snake's camera, the Beauty will temporarily pause their pursuit and pose for the camera, employing stances typical of the fashion industry. These poses are the digitized version of studio photo-shoots of the four women who served as templates for the B&B Corps. The white room sequence ends if the player defeats the Beauty, or if the player allows the timer to expire, whereupon the Beauty will expire of her own accord.

Table 16. On the left, screenshot of Screaming Mantis after she sheds her cybernetic exoskeleton in Act 5. Note the slight color-wash just around Mantis. On the right, screenshot of Mantis and Snake in the optional “white room” playable sequence.

This is a powerful critique of the transnational beauty industry, which constantly promises consumers the fulfillment of their most personal emotions and desires, while inscribing the most monstrous forms of violence on human bodies, everywhere from mass-cultural norms of body types to repressive forms of race, gender, sexuality and countless other forms of identity.

This meditation on the violence of consumerism would be incomplete, however, without its antipode, namely the potential resistances to that consumerism. This leads to one of the most
thoughtful moments of *MGS4*, a conversation in Act 3's Mission Briefing which also happens to be a meditation on the prehistory of videogames as a form:

*Scene of Otacon and Naomi aboard the Nomad. Sunny is asleep in front of the computer. Snake is napping on a nearby bunk.*

*Otacon points to the Mark II robot.*

Otacon: “You see this? Sunny helped me build it.”
Naomi: “Really? Sunny helped build this?” She examines the robot with interest.

Otacon: “We built it using top-secret docs and patents dug up from intranets at a bunch of research labs. To tell you the truth, I think she's better at it than I am.”
Naomi: “But she's just a child.”

Otacon: “She cracked the protection on your mail.”
Naomi: “Wow. I assumed it was you...”

*Otacon stands up and gazes at Sunny. Naomi fingers a thumb drive which she carries in her neck-locket.*

Otacon: “Sunny was taken by the Patriots right after she was born. She never even met her parents. She's spent her entire childhood inside the net.”
Naomi: “That's why she has trouble speaking...”

Otacon: “Her home is in the computer. She can only see the outside from the inside. She's always in there, searching for herself. Searching for her family. She's trying to find out who she is... and where she's going.”
Naomi: “Searching for herself... And her family...”

Otacon: “She believes she can find the answers inside a machine hooked up to the world. She spends every day inside the net, exploring. For Sunny, this is home.”

Naomi: *firmly*: “No. It shouldn't be like that.”

Otacon: “What?”

Naomi: “It's time you let her go outside.”

*Snake opens his eyes. Otacon removes his glasses.*

Otacon: “What are you talking about?”

Naomi: “She hasn't even been born yet. She's still in the womb. She needs to live a real life.”

Otacon: “But... Sunny's never shown any interest in leaving the Nomad. Frankly, I'm worried about letting her go out there.”

Naomi: “I have a feeling she'll do just fine.”

Otacon's point is that children need protection from unchecked digital consumerism. Yet Naomi's rejoinder is more compelling still: no media or information technology is an end in itself. It is simply a set of tools, as important as linguistic literacy or formal schooling, which the citizens of the transnational era must learn to access and to master.

The truly shocking revelation of Act 3, however, is that *MGS4'*s center of narrative
gravity has begun to move away from Snake, Otacon, Liquid Ocelot and the other adult male characters, and towards the female characters (Meryl, Rose, Naomi, and Sunny). Instead of simply critiquing the militarized, neoimperial masculinity of the shooter, action and espionage genres, the cut-scene challenges that masculinity on the grounds of the neoliberal-era children's toy culture and media.

There is a rich vein of academic and popular discourse on this subject, ranging from Marsha Kinder's *Playing with Power in Movies, Television, and Video Games* to Juliet Schor's *Born to Buy*. Since videogames have long been one of the most successful spin-offs of the children's toy culture, they have long been structurally complicit with many of the worst aspects of the children's toy and media industries, ably described by Susan Willis:

[In the 1960s and early 1970s] Dress codes were condemned, co-ed sports flourished, fairy tales were rewritten, and toys were liberated. We tend to imagine that our parents and grandparents conformed to strict sex-role modeling practices. And we like to think that the cultural turmoil of the sixties changed everything. The fact is, in mass culture today there is an ever more rigidly defined separation of the sexes based on narrow notions of masculinity and femininity. Walk into any toy store and you will see, recapitulated in the store's aisle arrangement, the strict distinction and separation of the sexes along specific gender lines: Barbies, My Little Ponies, and She-Ras in one aisle; He-Man, the Transformers, and ThunderCats in another. It little matters that many nursery schools now mix the dolls and trucks on their play-area shelves if everyone – children in particular – perceives toys as originating in a boy-versus-girl context. Commodity fetishism erases production and presents the toy story (or TV commercial) as the toy's point of origin. Children have difficulty conceiving of their toys as having been made.

However, this structural complicity contains its own dialectical recoil. Contemporary videogames offer socially conscious artists an unparalleled opportunity to critique the children's toy culture on the latter's own grounds. Indeed, *MGS4* channels much of its critique through Sunny. While Sunny is not a playable character per se, she is linked to the largest number of fan-related tropes of any character in the narrative. These tropes range from fan-created media and
fan-mediated reception, to user-generated data and replayability. In addition to the multiple television screens Sunny uses while programming on the main deck of the Nomad, which refer to Policenauts and other examples of Kojima's earlier work as a videogame artist, the Nomad's kitchen contains a range of other media equipment, including a widescreen television on a shelf, a Sony Playstation 3, and even a Sony Playstation Portable (PSP).

There are also five in-game trophies triggered by player actions, which are displayed within the game-world itself. Snake can collect up to five miniature replicas or dolls of key opponents, if he defeats them using non-lethal means. This causes a doll to appear in the playable space of the game-world. For example, if Snake used non-lethal means to defeat Liquid Ocelot's FROG soldiers near the end of Act 1, a small doll of a FROG appears in the underground garage.\textsuperscript{160}

Similar dolls become available as a reward for the non-lethal defeat of each member of the Beauty and the Beast unit. Once Snake collects each doll, it vanishes from the playable game-world, but reappears on the shelf next to Sunny's widescreen television – a dual reference to the limited or special collector's version of videogames, as well as to the world of fan media and user-generated content.

Fittingly, this shelf is accessed by means of a new form of replayability. At certain points during the five lengthy Mission Briefings which introduce each act, the player gains the ability to switch from the ongoing cut-scene to the perspective of Rex, Otacon's custom-built miniature robot. The player can then steer Rex around the interior of the Nomad. Rex can look around, hop up the stairs to enter the kitchen area, and also gather special items. These include a camera and extra batteries, which Snake can subsequently use during missions. It should be noted that the
actions of the robot do not influence the characters, who move around the Nomad and recite their lines normally.

The camera Rex obtains on the Nomad can be used, in turn, to access a limited form of user-generated content, namely the in-game screenshot. By equipping the camera, Snake can take photographs of the game-world. These photographs are stored as image files on the Playstation 3's hard-disk, and can be exported to a thumb drive or other storage media (the only limitation is that the software will stamp a “MGS4” logo and a Konami copyright icon on the bottom right corner of each photograph).

This transition from Rex's role as an on-board observer to a producer of cultural material is mirrored by Sunny's transition from an outside observer in the first four Mission Briefings to a full-fledged participant in Act 5. This transformation is also visible in one of the most creative examples of replayability in *MGS4*. This is the song Sunny sings during the egg-frying sequences of the first four Mission Briefings. As befitting a child prodigy who is more adept at computer programming than Otacon himself, the song lyrics are a series of mathematically significant numbers or geographic place-names. The tune of the song is a slightly modified version of the canonic *Metal Gear Solid* theme song, and it recurs at three other points in *MGS4*. The first is the nonchalant whistle of the underground resistance member who Snake must shadow in the first half of Act 3.

The second moment occurs when the player finally completes *MGS4*. The congratulations screen shows the player's in-game statistics, play-time, and trophies or awards. Simultaneously, the sound-track plays a thirty-four second orchestral version of Sunny's song, replacing her voice with an epic whistle reminiscent of the Enzio Morricone's sound-tracks in the classic spaghetti
Westerns of the 1960s.

The third moment occurs in the context of *MGS4*’s online multiplayer component, called *Metal Gear Online (MGO)*. After one team defeats another during an online match, the tune can be performed as a sixty-five second orchestral fanfare (players do not sing the song directly, rather their onscreen character sings). In an especially clever touch, the voice of the onscreen character matches their persona – i.e. since players can unlock the in-game character-models of Snake, Liquid Ocelot, and other characters, the onscreen voice matches the character. It would not be an exaggeration to state that Sunny's tune is videogame culture's first fanfare of musical replayability.

There is one other form of replayability which needs to be mentioned here, and that is the replayability of the cut-scenes. During selected moments of *MGS4*’s cut-scenes, an “X” button prompt is displayed at the top right of the screen. Pressing the button is entirely voluntary, and will not affect the outcome of the cut-scene in any way. If the player ignores the prompt, the cut-scene will play normally. If the player does press the button, multiple low-resolution screenshots derived from past *Metal Gear Solid* games will be briefly superimposed on the screen via a partial dissolve (players must keep pressing the “X” button to see all of the images).

These screenshots are accompanied by an eerie, unearthly sound-effect, a combination of ultra-low low bass notes and high-pitched electronic chirps. This is the same sound-effect which the game-world plays during the operation of the SOP system or some other nanomachine technology. After a second or two, the prompt and the screenshots fade away along with the sound-effect, and the cut-scene proceeds as usual. Note that the cut-scene does not come to a full stop, rather the screenshots are located at natural pauses in the dialogue, thus allowing players to
view them without losing the thread of the conversation.

These screenshots transform past episodes of the *MGS* franchise into a digital archive relevant to the cut-scene in question. For example, after the conclusion of the opening title shot and the first playable sequence of *MGS4*, a cut-scene shows a flashback to three days earlier, when Otacon and Colonel Campbell descend in a helicopter to meet Snake at the Arlington National Cemetery in Virginia. During the four minutes and twenty-one seconds of this cut-scene, the “X” prompt is displayed four times. The first prompt occurs when Snake is saluting an unknown gravesite, and the optional screenshots show Big Boss, the original Snake, saluting the grave of the Boss at the end of *MGS3*. The second prompt occurs when Snake mentions FOXDIE, and the screenshots show images of Liquid Snake's death at the end of *MGS1*. The third occurs when Otacon mentions Naomi, and the screenshots show images of Naomi from *MGS1*. The fourth prompt occurs when Otacon states they have discovered the location of Liquid Ocelot. The screenshots show images of Liquid Snake from *MGS1*, as well as some of the classic confrontations of that videogame (including a scene where Snake has been captured).

What this dense network of game-play tropes, iterations of replayability, and franchise lore suggests is that the more history is lived and narrated through digital media, the greater the importance of critiquing and theorizing that media. Indeed, one of the central challenges of digital artists and audiences is to think through the problem of digital history in the largest sense imaginable: as a premier site of transnational contradiction.

Put another way, if Drebin's heavily modded Stryker is an allegory of transnational digital media production, then the Nomad is very much an allegory of videogame production. But whereas Drebin symbolizes the globe-hopping media-workers and Little Gray just as clearly
represents the ubiquitous fan base of the transnational media, the dividing line between videogame studio producers and the transnational audience is not so clear aboard the Nomad.

It is no accident that every character who is physically present on the aircraft is equipped with media technologies which erase the boundary between cultural production and consumption. To list only the most obvious examples, Snake has the SolidEye (a wearable viewing device which looks like an eyepatch, capable of night-vision and long-distance scanning), Otacon has Rex, Naomi has coded video messages, Sunny has a widescreen television, a Playstation 3 and PSP, Colonel Campbell has a live video feed, and Raiden has a microphone in his exoskeleton.

The sheer density of these media references suggests that what is at issue here is not so much the evolution of specific types of media, as the trajectory of the digital media-system as a whole. This is the transition from the oligopolistic broadcast media of the late 20th century to the digital media networks of the 21st century – or put into the context of MGS4, the transition from the story of Solid Snake to the story of Sunny.

To fully grasp what this transition entails, however, we must return to one of the issues left unresolved at the beginning of this chapter, namely the question of how the digital commons relates to the digital media-systems of the semi-periphery. This question can only be answered from a new perspective, namely from the standpoint of the transnational player-audience. To understand this audience, however, we need to look closely at the relationship between the digital commons on the one hand, and the leading economies of the 21st century semi-periphery, namely the BRICs, on the other. This relationship will be explored more fully in our next chapter.
CHAPTER 4

SOLID BRICS, LIQUID COMMONS

“We can't erase the past. Nor can we forgive it. And so the only thing we can do... is end it.” – Naomi Campbell.

If the first half of *MGS4* critiques neoliberalism from the standpoint of the 21st century digital commons, then the second half takes the next logical step, by setting this digital commons in motion towards some of the key categories of the multipolar world. These categories include the politics of digital participation, the emergence of overt forms of anti-neoliberal political mobilization (especially in the largest economies of the semi-periphery), and the writing of post-Cold War or transnational history.

One of the factors which made this qualitative leap possible is Kojima's self-critique of the transnational videogame as a form. This self-critique is the acknowledgement of the clash between profit-driven commerce on the one hand, and non-commercial fan communities on the other. In its guise as a transnational culture-industry, videogames are part and parcel of neoliberal consumerism. Yet in their role as a site of the digital commons, videogames teem with non-commercial institutions, egalitarian distribution systems, and democratic forms of cultural production.

This contradiction is experienced by contemporary videogame artists with especial virulence, due to the increasing inability of advertising-centered distribution models and oligopoly broadcasting monopolies to control digital content distribution and creation, as well as to the rapid diffusion of transnational peer production (open source production, user-generated content, and fan labor) throughout the field of videogame production. Dyer-Witheford and de
Virtual games are exemplary media of Empire. They crystallize in a paradigmatic way its constitution and its conflicts. Just as the eighteenth-century novel was a textual apparatus generating the bourgeois personality required by mercantile colonialism (but also capable of criticizing it), and just as twentieth-century cinema and television were integral to industrial consumerism (yet screened some of its darkest depictions), so virtual games are media constitutive of twenty-first-century global hypercapitalism and, perhaps, also of lines of exodus from it...

...The game industry has pioneered methods of accumulation based on intellectual property rights, cognitive exploitation, cultural hybridization, transcontinentally subcontracted dirty work, and world-marketed commodities. Game making blurs the lines between work and play, production and consumption, voluntary activity and precarious exploitation, in a way that typifies the boundless exercise of biopower. At the same time, games themselves are an expensive consumer commodity that the global poor can access only illicitly, demonstrating the massive inequalities of this regime.  

Of course, illicit usage is still usage. As Joe Karaganis argues in the SSRC’s landmark study *Media Piracy in Emerging Economies* (2010), the transnational audiences of the industrializing nations are consuming information and media through informal, unlicensed or non-commercial channels of file-sharing, copying and distribution. This prodigious expansion of the digital audience is usually narrated in terms of the rapid growth of affordable digital platforms such as cellphones, mobile computers and wifi access-points to the internet, or what might be termed the expansion of the aesthetic forces of videogame production. However, no less important are sweeping changes in what can be called the aesthetic relations of videogame production.

### 3.1 Videogame Studios and the Transnational Division of Labor

Thanks to the influence of the open source software movement, and to the rise of fan-
organized media production and distribution systems, a number of top-tier videogame studios have begun to democratize aspects of their production-systems. Indeed, Kojima's own studio is emblematic of this transformation. In 2005, as part of the pre-production process for *MGS4*, Kojima created a quasi-autonomous studio within Konami called “Kojima Productions”, or KojiPro. This enabled Kojima to work collaboratively with character designer and artist Yoji Shinkawa, game designer and co-director Shuyo Murata, and technical advisor Motosada Mori.166

One of the reasons Kojima and other videogame artists are able to critique neoliberalism is the fact that the democratizing logic of the digital commons is not a rhetorical stance, but a fundamental component of videogame production. This democratization is reflected in Casey O'Donnell's occupational description of the professional videogame designer:

> Every [videogame] designer I met seemed to come from a different background: physics, computer science, media studies, film studies, graphic arts, writing, or journalism just to name a few. More designers were 'self taught' than artists or engineers. Though they seemed to come from every disciplinary background imaginable, the common theme was: designers are gamers more than any other discipline within game development. Designers frequently had skills that seemed to transcend disciplinary boundaries. Designers must possess analytic skills, which allows them to deconstruct games, examine their core elements and mechanics, and determine the underlying rules and structure of a game.167

It is true that designers exercise some of the hierarchical functions of a film director, e.g. overall responsibility for staffing and personnel, scriptwriting, editing, and post-production. They also bear many of the responsibilities of the television producer: marketing, quality assurance and testing, and liaison with the networks of skilled workers who create the various subcomponents of the game.

Yet where videogame designers diverge most sharply from other media professionals,
however, is their structural accountability to the narrative category of replayability. Replayability is determined by the transnational audience, not by advertising revenues or promotional campaigns. The most successful videogame designers, ranging from Nintendo's Shigeru Miyamoto and Naughty Dog's Amy Henning to Sony Santa Monica's Stig Asmussen, succeed not by ruthlessly exploiting their fellow studio-workers and customers. They succeed through a combination of internal egalitarianism and external community-building which has few parallels with any other branch of the commercial mass media. Studios as diverse as Sony Santa Monica, Rockstar Vancouver, and Insomniac North Carolina take pains to treat their fans not as mere customers, but as fellow co-creators. Studio artists and fan communities are in constant contact via community events, podcasts, interviews, listservs, non-commercial trailers, fan sites, and free-to-download demos and betas.

Designer Benson Russell has described how Sony's Naughty Dog studio has partly democratized game-design, by erasing some internal corporate hierarchies within the design process:

For Naughty Dog, it all starts with the story. Instead of creating spaces solely around gameplay and then worrying how the story will fit in, we instead want to take the story into account as early as possible.

We want the gameplay to support the story and help draw the player deeper into the experience. This isn't to say that we don't think of cool set pieces, moments, or locations for encounters first, but we still find a way to incorporate them into the story arc where they make the most sense...

...Once I've gotten something that I feel is working and going in the right direction, I'll start to have the point designer, lead designer, and game director play through it to see what they think. We'll probably start with a few rounds of iteration amongst this group, but eventually we'll start to grab whoever is available in the area.

Our office is arranged in giant open spaces where we keep the different disciplines together. Our desks are arranged in groups of four with half-height walls, so it's really easy to hear and see everybody. At this point I'll literally pop my head up and grab anybody that's close by (which would be fellow designers, mainly) to come over and try the encounter...

...Our fellow coworkers are one of our best resources, so we want to get a variety of opinions involved. We also want to use people that aren't just the 'core' gamers, as we want to get
a good smattering of different skill levels. Some people are going to like head-on conflict and combat, others will prefer stealth and being crafty, and we want to see every approach, and what lies in between.169

While this democratization has limits – as a commercial studio, Naughty Dog is constrained by its success or failure in a competitive marketplace, and the members of the studio are a small subset of the entire gaming public – it does enable certain types of narrative innovation and audience co-production which would not otherwise exist.

*MGS4*’s most salient contribution to this democratization is its expansion of the category of replayability. Previous iterations of the franchise featured complex control schemes, which were both a significant barrier of entry for new players and a recurrent annoyance for long-time fans. By contrast, most of *MGS4* can be completed by using nothing more than the two analog sticks on the Playstation 3 controller, and pressing the occasional context-sensitive button (i.e. an icon will appear onscreen, prompting players to press the triangle, square or circle button). The design team scattered plentiful supplies and recovery items throughout the game-world, and Snake will automatically heal from his injuries if the player remains motionless for a period of time. This allows even the weakest or least-skilled players to complete the game.

The verbose technical explanations and unwieldy in-game tutorials of previous *MGS* games are replaced by in-game tutorials which combine character development with instruction. For example, Otacon walks the player-character through the uses and abilities of the Solid Eye, Snake's portable electronic surveillance system, by means of an in-game sequence. Similarly, Drebin walks us through the Drebin points system and the customization of equipment at his mobile shop by means of a key cut-scene. Players can watch these scenes for their instructional value, or they can enjoy the character interactions and plot development. Above all, players are
given the option to skip the longer cut-scenes, if they so wish.

The game-design also ensures that this increased ease of use does not cause boredom or ennui for more skillful players. Enemy PMC soldiers or hostile militia members work together in teams, employ intelligent tactics, and will take full advantage of player mistakes, especially on higher levels of difficulty.

Most of all, Kojima integrates videogame fan labor into the narrative fabric of *MGS4* in respectful rather than exploitative ways. Many in-game items facilitate the production of fan labor, e.g. the player can download and listen to songs on Snake's in-game iPod, and can also find and acquire Sunny's camera on board the Nomad to take in-game photographs during missions. These photos can be exported onto the hard-drive of the player's Playstation 3, and freely copied by the player.

This strategic integration of fan labor also extends to *MGS4*'s game-play. Most fans would agree that the thrill of all previous *MGS* games was hiding out of sight of opponents. By contrast, the thrill of *MGS4* is hiding within plain sight of opponents, by using Snake's camouflage system to blend into near-photorealistic environments. If the player-character remains motionless next to any texture for more than a couple of seconds, Snake's sneaking suit automatically mimics that texture, enabling Snake to blend into environments. The visual effect is illustrated below in screenshots of game-play footage, taken from two sequences at the beginning of Act 1:
Table 17. On the left, Snake's octocam suit still has its original black color. On the right, the suit automatically transforms to match the tiled pattern of the floor.

Players can collect these surfaces, by manually copying them into a special save file, if they so wish. They can then choose to manually set their suits to the saved camouflage setting, or allow their suit to simply copy whatever material Snake is closest to.

Snake's sneaking suit is more than just an ingenious game-play innovation. It is a reflexive reference to the “skin”, the videogame industry's term for the visual data-set employed to represent a specific character, as well as a nod towards the “grab-and-collect” aesthetics of franchises built on non-commercial user-generated content, such as Sony's Little Big Planet and ModNation.

Another telltale sign of the democratization of game-play is the franchise's full-blown embrace of multiplayer online gaming. Earlier iterations of MGS offered limited multiplayer capability, e.g. MGS2 was single-player only, while a select version of MGS3 had limited multiplayer functionality. By contrast, MGS4 was shipped with a full-featured multiplayer component called Metal Gear Online (hereafter referred to as MGO). MGO is broadly similar to the multiplayer components of leading action franchises such as Call of Duty and Medal of Honor, in the sense that players battle each other online both individually and in teams, earning
points which enable them to customize and enhance their multiplayer characters. Unlike other franchises, however, *MGO* emphasizes stealth tactics, teamwork and strategy over sheer action or onscreen mayhem.

This difference is important, because in-game rules structure the game's content as well as its form. Mia Consalvo has emphasized that videogames, as art-forms built on code, are structurally tied to the politics of code:

> The rules of a videogame are contained within the game itself, in the game code. The game engine contains the rules that state what characters (and thus players) can and cannot do: they can go through certain doors, but not others; they can kill their enemies, but not their friends; and they must engage in certain activities to trigger the advancement of the story and the game. All of these things are structured into the code of the game itself, and thus the game embodies the rules, *is* the rules, that the player must confront.\(^{173}\)

We can extend Consalvo's insight, by noting that these rules apply to more than just the specific game in question. They can also govern franchises, and sometimes entire genres. In this case, Kojima reappropriated a number of game-play features which originated in the field of multiplayer gaming, and transformed them into the backbone of *MGS4*’s single-player campaign.

One of these features is team affiliation. In the single-player campaign of *MGS4*, this takes the form of a faction system. Players can choose to assist the insurgent groups fighting the PMC troops on any particular battlefield, by fighting PMC soldiers or by giving insurgent soldiers food rations. In that case, the rebels will recognize the player as an ally and will not attack Snake. Alternately, players can choose to simply avoid both factions, or to fight both as enemies – the choice is left up to the player. To preserve game-balance, the PMC troops always remain hostile to the player, i.e. only the insurgents can be befriended. What this faction system means in practice is that the PMC soldiers and the insurgents work together as teams, simulating
multiplayer game-play.

This change in replayability puts enormous pressure on the category of game-balance. Kojima's team had to integrate the task of user-education – mastery of the basic controls, the use of the octocamo suit, familiarity with the faction system, and an understanding of equipment upgrades – with the narrative elements of music and sound design, animation, scriptwriting, voice-acting, and overall character development.

The team's ingenious response to this challenge was to do precisely the opposite of what most videogame studios would do – namely, to restrict the interactivity of the game-world in order to ensure overall game balance. Instead, *MGS4* democratizes the category of play-style. It is worth emphasizing that most videogame franchises excel at a specific type of play-style. Most online multiplayer shooter videogames emphasize speed and accuracy, whereas most role-playing videogames emphasize meticulous preparation and real-time strategic execution. In like manner, past iterations of *MGS* focused on stealth and tactical finesse, rather than gunplay or firepower.

*MGS4* broke away from its own tradition, by designing its game-play to accommodate the widest possible range of play styles. Players may choose strategies ranging from total stealth to total action, to shades of anything in between. To make this strategic depth possible, the in-game environments feature a mixture of diverse environments, with linear routes and choke-points (a setting which favors action tactics) side-by-side with warrens of honeycombed pathways or crumbling buildings (a setting which favors stealth tactics). The players can choose both the tactics as well as the terrain they prefer.

While this open-ended design may sound similar to the “sandbox” aesthetic of open
world franchises such as Rockstar's *Grand Theft Auto* and Ubisoft's *Assassin's Creed*, it diverges radically from these latter due to *MGS4*’s attention to environmental detail and its contextual realism. Snake is a super-soldier, but like any other mortal he is vulnerable to weapons fire. Also, Snake is almost always outgunned by masses of PMC troops, which means that the intelligent use of terrain and camouflage is vital to the player's success.

### 3.2 Historicizing Neoliberalism

One of the most significant achievements of *MGS4* is its rewriting of the history of neoliberalism, only from the critical stance of the transnational public, rather than the celebratory stance of Wall Street elites. In Chapter 3, we argued that the shadowy Patriots symbolize the global reach and limitless greed of Wall Street. At the beginning of Act 2, *MGS4* extends this metaphor further, by revealing the motives behind the rise of the Patriots in the 1960s, their rise to global hegemony in the 1970s and 1980s, and finally the emergence of counter-forces to their reign in the 1990s and 2000s. This process of writing the history of neoliberalism begins when Snake and Col. Campbell discuss the motives behind Liquid Ocelot's insurrection against the Patriots:

*A cut-scene shows Snake inching forwards cautiously on the floor of a mountain highland forest, in a nameless Latin American nation embroiled in a civil war. He is communicating to Col. Campbell via a radio transceiver.*

Snake: “Colonel, how deeply are they involved in all of this?”

Campbell: “The Patriots, you mean?”

Snake: “The data we got from Arsenal Gear was a load of crap. Twelve founders who've all been dead for a hundred years – give me a break. We know they exist today. If the purpose of this battlefield control system is to control IDs, it fits in with their plans perfectly.”

Campbell: “Seizing control of the world's ID systems, and then using them to manipulate the economy and information flow, for the Patriots, that's the ultimate prize. You might say the
Patriots are the embodiment of the war economy.”
Snake: “Everything that Solidus feared five years ago, it's all come to pass.”
Campbell: “Now with the media and global opinion under complete control, not even the UN can stand up to them.”
Snake: “Then Liquid's insurrection is against them?”
Campbell: “Exactly. It would seem as though Liquid has taken up Big Boss's cause. An age of persistent, universal warfare. A world where mercenaries are free from domination. In a sense, the Outer Heaven Big Boss envisioned is already a living reality.”
Snake: “You mean the PMCs and their war business.”
Campbell: “Right now, Liquid is a slave to the Patriots, forced to fight their proxy wars for them.”
Snake: “He must be dying to break free of their spell.”
Campbell: “Beneath the surface, a new cold war is brewing between Liquid and the Patriots over who will survive.”
Snake: “And no matter who wins, the world has no future. Until we stop Liquid and destroy the System, we'll never be free.”
Campbell: “Snake, what we call peace is an equilibrium kept in check by the war economy. Destroying the System means wiping out the information society, the end of modern civilization. Like it or not, we may have no choice but to protract the System.”

Far from being the stereotypical arch-villain bent on total destruction, Liquid Ocelot is pursuing an entirely rational goal – he is seeking freedom from a system which enslaves him.

Campbell's explicit naming of this system as slavery is a nod towards the flourishing genre of the transnational neo-slave narrative, represented in literature by Toni Morrison's *Beloved* (1987), in film by Charles Burnett's *Nightjohn* (1996), and in videogames by Sony Santa Monica's *God of War* franchise (2005-2010). That said, Snake's comment about Arsenal Gear point in a rather different direction, namely the events of Kojima's earlier videogame, *Metal Gear Solid 2: Sons of Liberty* (2001).

One of the narrative challenges facing Kojima and his fellow designers was the necessity to reorganize the franchise's sprawling, labyrinthine plot into a coherent story. To its credit, *MGS4* manages to wrap up every single narrative loose end and unresolved plot twist of the first three iterations of the series. It achieves this feat by rewriting the franchise's fictional history into an allegorical history of neoliberalism. This task was so important to the design team that the
studio released a free downloadable application to fans on Sony's Playstation Network in 2008 called the *Metal Gear Solid Database*. The Database provides a canonical version of the franchise's history, with detailed exegeses of the main characters, events, and features of *MGS1*, *MGS2*, *MGS3*, *MGS4* and *MGS: Portable Ops* (to prevent spoilers, entries relating to *MGS4* are inaccessible to users until the player has completed *MGS4* at least once).

In addition to creating a thematically unified franchise history, the team also had to rework two ongoing themes of *MGS* – the discourses of biotechnology (genetic engineering) and nanotechnology. *MGS4* transforms the discourse of biotechnology into a site of struggle between the closed, proprietary communications network of the Patriots, and the open source and peer-to-peer networks epitomized by Otacon and Sunny. In like manner, the discourse of nanotechnology is recoded into a site of struggle between Liquid Ocelot's PMCs, and a wide range of non-official media-systems (Drebin's radio broadcasts, Otacon's video feeds, Snake's conversations, and so forth).

The convergence of these two struggles occurs after Snake infiltrates a Latin American research lab in the middle of Act 2. The most prominent symbol of this convergence is a dense thicket of blue roses which grow outside the lab. These roses are a reference to a real-life example of genetic engineering, the creation of genetically-blue roses in 2004.\(^{175}\) They are one of the most significant symbols of the politics of neoliberal corporeality in the second half of *MGS4*, and are featured prominently during several key moments of the storyline.

As it turns out, Naomi's lab is not just a research facility, it is also a museum of biomedical history. It contains everything from a human-sized anatomy doll to a photograph of Dolly, the sheep cloned by British scientists in 1996.\(^{176}\) However, the single most important
exhibit on display is what can be called the videogame body, or put more precisely, the digital bodies associated with videogame culture. That is, biotechnology stands in for videogame software (the game's internal programming, as well as the digitized forms of fan-created media and user-generated content), while nanotechnology stands in for videogame hardware (platforms such as the BluRay disc format and the Playstation 3 console).

Both digital bodies converge in the theme of transnational history. Naomi explains that when the SOP system was disrupted at the end of Act 1, the mass panic among the soldiers was not triggered by an external command or agent. Rather, it was the unintended result of the SOP system's own internal contradictions. The mass panic was something like the return-of-the-repressed of the neoliberal era, revealing that neoliberalism's utopia of limitless speculative freedom is founded on limitless immiseration and coercion:

Naomi: “But the moment the System stopped, all the pain, and fury, and sorrow, all the trauma and stress, all the hatred, regret, guilt, all the sensations that had been suppressed were unleashed within their hearts. Their memories, unlike their senses, weren't erased. Each enemy soldier they'd killed, each lost comrade, each threat of violence against the innocent, every act of war they'd committed was etched firmly in their hearts. In suppressing the user's mind, the nanomachines exact a heavy burden on his heart. The user's body rejects the nanomachines; this reaction must then be suppressed with drugs. Before the user knows it, his mind is in complete shambles. Snake, remember Frank?”

Snake: “Frank Jaeger... Grey Fox.” Screen shows images of Grey Fox from MGS1.
Naomi: “They twisted his body for their experiments and nullified his broken heart with nanomachines. SOP has taken it even further and applied it to living human beings. The sins of war these soldiers carried inside them returned to assault them in the form of unimaginable shell shock.” Screen subdivides into tiny screenshots from MGS1 and fades into blurry static. Naomi continues: “The meaning and the system may have changed, but the battlefield hasn't. Until that point, war was like a game to them.” Screen shows the cross-media bar interface used by players to access menu items on the Playstation 3. The interface scrolls down a vertical series of icons, showing Kojima's past Metal Gear and Metal Gear Solid videogames.

Naomi: “And then, suddenly, reality came crashing down.” The interface halts on icon of MGS4. Two blank icons beneath MGS4 are labeled “Under Construction”. Fade to black.

If the Nomad symbolizes the space of the videogame studio, and if Sunny's kitchen symbolizes the non-commercial media networks structurally linked to those studios, then Naomi
occupies the structural position of the videogame designer, i.e. the real-life media-workers who construct digital representations of bodies.

One of the perennial conundrums of these digital representations is their structural ambivalence. They can be used as tools of coercion and commodification, but they can also be tools of emancipation and solidarity. *MGS4* acknowledges this contradiction in the form of its boss battles (these are key showdowns with powerful antagonists, a common feature of action-based videogames).

Much of the credit for these boss battles is due to Yoji Shinkawa, the main character designer and artist of the *MGS* franchise. One of the challenges facing Shinkawa was that each boss battle had to be different enough from standard opponents to be memorable, but not so different that players would be forced to adopt a completely different style of game-play.

Shinkawa's solution to this contradiction was to humanize the antagonists of the storyline. Each boss has a unique personality, a unique background story, and a unique set of abilities tied to that story. Additionally, each boss has its own specific visual appearance as well as unique onscreen movements, gestures and animations. In one of KojiPro's English-language podcasts to fans, Konami employees Sean Eyestone and Christine Kogure responded to a fan's question about how Shinkawa managed to design such creative boss battles and boss characters with this vignette of KojiPro's internal production-process:

Sean: “You have to pay attention to the stage, and use the environment to your advantage, pay really close attention to everything, things like that. It's really a process where everybody works together, at the same time, to come up with the final concept. Once the concept is done, then of course we start making it. This will be a prototype, a rough version of the boss battle. It doesn't look good, but it has the gameplay in there. We test that out, and test out the concept and see if it's not as fun as we imagined, then why not, what can we do to make it fun, you know, toss things back and forth. Once we have something that stands up and feels fun, then we go back and go over our original concept again, and say okay, we got something now that's fun,
does it fit in with our story, how does it compare, is there anything we can adjust. If so, we make the adjustments, kind of go back and forth. In the final product, we have something that's fun, that fits in the story, and that everybody hopefully can enjoy.”

Christine: “I see. So we're showing that Mr. Shinkawa first creates a character and after that the concepts are developed. Are there times the character changes to match up with the concept? If there's a special attack, would the drawing [or] illustration change to accommodate that?”

Sean: “The thing is, it's always evolving. Sometimes the original concept may change, so the drawings change with it. Another thing that's kind of interesting about Shinkawa-san is that he doesn't always work only with drawings. He's a very, very talented artist. He works in three dimensions in his head, he has this amazing ability to create things. He actually does a lot of sculptures. Rather than sketching things and handing that off to 3D artists to convert to 3D, he would rather work in 3D himself many times. So he'll actually create sculptures out of clay and guajir and all these things. He has these really nice sculptures where you can see every single detail in 3D. That really helps out the modelers as well, because when 3D artists get the designs it's in 3D, a physical 3D object, so it's a lot easier for them to take reference pictures and create their in-game version off of that. They don't have to imagine the details, because they have it, the physical thing in front of them.”

Christine: “I've seen those sculptures but I wasn't aware that he himself made them, I wasn't aware of that.”

Sean: “If you go into Shinkawa-san's office and look at the sculptures above his desk, most of those he made himself. That's the process, how it goes.”

Every single boss battle in *MGS4* delivers characterization through superlative character-design. Laughing Octopus is a biomechanical octopus with bullet-proof tentacles; Raging Raven, as her name implies, flies through the air on a hoverpak; Crying Wolf runs on four legs like a cybernetic wolf; Vamp has nanotechnological healing abilities eerily reminiscent of a vampire; and Screaming Mantis hovers like an electronic preying mantis, turning the nanotechnological networks of soldiers against themselves. In addition to their animal signifiers, each the four Beauty and the Beast bosses are also linked to a specific emotional condition. Laughing Octopus laughs hysterically, Crying Wolf weeps, Raging Raven rages, and Screaming Mantis screams.

To defeat each boss, players must “read” the corporeality of the boss in question, by listening to dialogue and movement cues. Players must find creative game-play solutions appropriate to each boss, rather than relying on sheer firepower. Equally important is the task of reading the environment of these boss battles, which take place in cluttered spaces or outdoor
areas which offer cover and useful hiding-places.

3.3 Critiquing the Lineages of Empire

What makes these boss battles so compelling is the contrast between the desperate internal trauma of the boss characters, and the running theme of psychological fulfillment and plenitude which those characters lack. As Drebin's radio transmissions reveal, none of the bosses are stereotypical villains. Each is the victim of unimaginable war trauma. Ironically, their overpowering battlefield strength is the flip side of their desperate internal fragility.

The key metric of this plenitude or fulfillment are the emotional bonds of solidarity and community which form between Snake's allies and friends. One of the most striking expressions of these bonds is revealed during Act 3’s Mission Briefing, when Naomi earns Sunny's trust by teaching the latter how to properly cook an egg. Two key symbols are on prominent display during this scene. The egg hints at the theme of biological iteration through natural history, while the blue rose hints at a biotechnological or technologically-modified social history. However, the space where these two symbols converge is not the space of studio production or fan culture. It is the space of plenitude par excellence, namely childhood:

*Naomi and Sunny are in the kitchen of the Nomad.*

Sunny: “This is my Sunny-side-up fortune telling. When it turns out good, it means something good is going to happen.”
Naomi: “So that's why you don't cook them over easy.”
*Sunny sets the GA-KO timer clock to one minute.*
Naomi: “But the secret to good cooking is to keep who's going to eat it in mind.” *She notices the picture of Olga Gurlukovich on the wall:* “Oh... is this your mother?”
Sunny: “Yes.”
Naomi: “She's really beautiful.”
Sunny: “Uh-huh.”
Pause.
Naomi: “That tune you were humming, it's from the periodic table, isn't it?” She thinks for a moment, and continues: “Thorium, protactinium, uranium, neptunium, plutonium, americium…” She stumbles on the next element: “Americium... uh...”
Sunny and Naomi: “Curium!”
Naomi: “Curium.”
Sunny: “Curium.”
Naomi: “That's it. Curium!” They both laugh. Naomi notices Sunny is eyeing the blue rose nestled in the pocket of Naomi's lab coat.
Naomi: indicating rose: “Oh, this? May I?”
Naomi gently turns Sunny towards the mirror and places the rose in Sunny's hair.
Naomi: “There.”
Sunny looks in the mirror, while Naomi smooths the creases in Sunny's hair.
Naomi: “See Sunny? Us girls have to look our best.”
Sunny: unexpectedly: “Her name was Olga.”
Naomi: “Hmm?”
Sunny: “My mother.”

The gift of the blue rose is Naomi's gift of self-reflection to Sunny. This moment is more than just a key moment of Sunny's maturation. It is the moment that Kojima critiques one of the oldest and most fundamental themes of the entire MGS franchise, namely the transmission of lineages of imperial masculinity. In the early 1990s, this masculinity was diagnosed by Susan Jeffords as the “hard bodies” of the militarized imperial masculinity of the leading late 1970s and 1980s Hollywood action franchises. As a rule, these narratives of the dawning neoliberal era attempted to reaffirm the embattled hegemony of the US Empire by means of speculative fantasy-wars (e.g. the Star Wars movies), or neoconservative identity-politics (e.g. the Superman films).178

To its credit, the MGS franchise has always been critical of US imperial masculinity. MGS1 critiqued the lineage of dominant genes (genetic codes), MGS2 critiqued the lineage of dominant memes (mass-cultural tropes), MGS3 critiqued the lineage of political hegemony from the early 20th century Philosophers to the late 20th century Patriots, while MGS4 critiques the
lineage of electronic domination (the Patriots' SOP system literally stands for “Sons of the Patriots”).

What marks *MGS4* as a qualitative leap forwards, however, is that it also constructs a set of four anti-imperial lineages. These lineages are founded on a new kind of transnational solidarity, a unified front founded on the principles of feminism, nonviolence, multiculturalism, sexual diversity, and anti-capitalism. These lineages are both a corrective on the martial militarism of the action videogame and Hollywood superhero genre, as well as Kojima's belated acknowledgement of the limited gender diversity of *MGS* previous iterations.

The first of these four lineages is the one between Naomi and Sunny. Thanks to Naomi's intervention, Sunny finally begins to acknowledge and accept her mother's loss – indeed, the very fact that she kept a photo of her mother in such a prominent place in her otherwise spartan living-quarters suggests unresolved trauma.

Subsequently, Sunny becomes a key player in the storyline, whose precise contribution we will identify somewhat later. For now, it is worth noting that if Naomi symbolizes the ambivalent position of the videogame designer (i.e. she is caught between Liquid Ocelot's scheme and her desire to help Snake and his friends, much as videogame designers are caught between the commercialism of their industry and the non-commercial motivations of fans and players), then Sunny symbolizes the ambivalent position of the digital player-audience (i.e. they need not be passive consumers, but can sometimes become active agents in their own right).

The second lineage of solidarity links Meryl Silverburgh's team to Drebin. Meryl is a returning character from *MGS1* who is also Col. Campbell's daughter. While Meryl was still an inexperienced rookie soldier in *MGS1*, in *MGS4* she has clearly become a resolute and capable
commander. Meryl's team is acting on behalf of the United Nations, and will transmit the lineage of national governance and regulation from her unit, code-named RAT-Patrol-01, to a new kind of transnational collectivity linked with Drebin. For structural reasons relating to the *MGS4* storyline, we will defer identifying the precise nature of this collectivity until somewhat later.

However, the other two lineages of solidarity can be fully described at this time. The third lineage is the bond between Rose, a psychologist who advises Snake via his codec receiver on how to deal with the psychological stress of battle, and Raiden, a cyborg super-soldier who assists Snake at several key points in *MGS4*. As it turns out, Rose and Raiden have a fraught romantic history, which is only resolved at the end of *MGS4* by Raiden's retirement from his profession as a soldier and the successful reconciliation of the pair. The character of Rose is both a corrective on the routine glorification of warfare by shooter videogames, as well as the belated feminist critique of Col. Campbell's role as the authoritative male narrator and symbolic father-figure of *MGS1*.

The fourth and final lineage of solidarity is the one between Eva, a returning character from *MGS3*, and Solid Snake himself. The player first meets Eva in the middle of Act 3. She is the leader of an anti-PMC underground resistance army called Paradise Lost, which managed to steal the biological remains of Big Boss from the Patriots. Since the body of Big Boss is the genetic key Liquid Ocelot needs to take over the SOP system, Snake's mission in Act 3 is to find the remains before Liquid Ocelot's PMCs do.

The specific lineage which Eva transmits to Snake is signaled by Eva's code name within her resistance army, Big Mama. This name is a double pun, and refers to the fact that she was both the surrogate mother of Solid Snake (though not the genetic mother – Snake was a clone of
Big Boss), as well as the ideological mother of her resistance army, whose youthful members Eva refers to fondly as “the children”. However, this motherhood is not grounded in natural history, but on social history. During a lengthy cut-scene, Eva describes the rise of the Patriots to power, and literally rewrites Cold War history into the prehistory of neoliberalism.

Kojima designed Act 3 to be the literal as well as figurative embodiment of this act of historicization. The setting is a nameless, picturesque Eastern European city (modeled on location shots of scenic Prague in the Czech Republic), which has been placed under military curfew by one of Liquid Ocelot's PMCs. The city's night-time fog, which causes droplets to bead realistically against the camera, its exquisite Central European architecture, and its espionage-drenched soundtrack are all direct allusions to the Cold War spy thriller.

This setting is accompanied by a transformation of game-play, which follows in the footsteps of one of the oldest rewritings of the Cold War spy thriller, namely Patrick McGoohan's critique of the Bond blockbuster in *The Prisoner* (1967). Snake's mission is to trail one of the Paradise Lost insurgents back to their hideout, but without revealing himself to the insurgent, and without being discovered by roving PMC patrols. But whereas Acts 1 and 2 took place in active battlefields, which meant that it was possible for players to succeed by using lethal force, the first half of Act 3 requires players to rely completely on nonviolence and stealth. Violent tactics will cause the Paradise Lost member to run away, to disappear, or to be captured by roving PMC patrols.

In the hands of any other director, such a mid-course shift in game-play might result in an aesthetic disaster. However, Kojima cleverly prepares the player for this shift, by gradually transforming the game-play over the course of Act 2. At the beginning of Act 2, Snake must
traverse active battlefields where opposing PMC and rebel troops are engaged in open combat. As Act 2 progresses, however, the importance of combat gradually decreases, while the importance of tracking and stealth gradually increases. At the very end of Act 2, Snake must track Naomi's footsteps on the ground by using his SolidEye nightvision.

In order to ensure that players do not become inured to this emphasis on stealth, Kojima separates the tracking mission at the end of Act 2 with the tracking mission at the beginning of Act 3 with an exhilarating chase sequence (Snake has to use the machine-gun on the roof of Drebin's Stryker to hold off hordes of Gekko robots, while Drebin drives at hair-raising speeds down a mountain highway).

Put another way, Kojima is mobilizing the categories of replayability and play-styles as narrative devices. What this means is that Eva's history of the Patriots is more than just a rewriting of Cold War geopolitics. It is also a rewriting of the history of the videogames and other digital media spawned by Cold War research labs. This rewriting takes on visible form when players finally reach the church which serves as the insurgents' hideout.

In an extended cut-scene inside the church, Eva reveals to Snake that the Patriots were formed by the key participants of Foxhound, an elite US special forces unit sent on a covert Cold War mission inside the Soviet Union during the events of *MGS3*. In the years following that mission, however, the two most important members of Foxhound – Big Boss, the protagonist of *MGS3* and Snake's genetic predecessor, and Zero, the British special forces agent responsible for creating the Foxhound unit, clashed and experienced a falling out. Big Boss sought a world of absolute freedom, whereas Zero sought a world of absolute control:

*Screen shows quasi-expressionistic, black-and-white bas-relief of Zero. Microfilm snapshots of weapons systems, computers, DNA sampling, and other technologies converge on the center of*
After Big Boss left, Zero really lost control. What Zero wanted was an orderly world, one governed by rules. His fortune grew through countless wars, and his words influenced decision-making all the way up to the Oval Office. As the world saw the rise of digital technology – IT, the internet, and genetics – the Patriots’ power grew immense. Their roots spread and took hold throughout the globe.”

Screen shows black-and-white world-map, Zero's face slowly appears at its center. Eva continues: “In time, they began to dictate the fate of entire nations from the shadows. And before we knew it, the Patriots, the proud police of the world, started bringing an entire planet under their control.”

Scene returns to shot of Snake and Eva walking down center isle of church. Eva continues: “Their intentions were fair. But their execution was flawed. Zero developed weapons, amassed armies, used information for extortion – all in order to gain more wealth. He was obsessed with controlling awareness on the inside from the outside. But I cannot imagine that's what The Boss would have wanted. They both misinterpreted her will.” Camera does a slow-motion vertical and horizontal pan, tracking from Eva up to the fresco on the church roof. Eva continues: “And their absolute reverence for her drove them apart. So began the war between Zero and Big Boss.”

Subsequent camera shots are taken from different viewpoints inside the church. Eva continues: “Opposing interpretations, each striving to realize The Boss's will. Everything you see today stems from their cold war. Differences in race, in religion, in ideology.” Slow camera zoom on several paintings on the church wall, modeled on posters created by independent artist Noriyoshi Ohrai for the MGS franchise. Eva continues: “This war they've caused is no different from any other human error in history. It all started with a tiny fork in the path, and grew into a great rift.”

Close-up of the image of the youthful Eva in the past dissolves into a shot of Eva standing in the church in the present. Camera cuts to black-and-white versions of character art and level maps derived from previous episodes of the MGS series as well as from Kojima's Metal Gear games, embellished by a simple animation of flowing stems, wind-swept petals and blossoming flowers. Eva continues: “There was nothing left of The Boss's noble will in their struggle. All that remained was hatred – a passion to destroy one another. Big Boss returned to the US with a plan in mind, and once again assumed command of FOXHOUND. In Outer Heaven, and then Zanzibarland, Big Boss plotted coups d'état against Zero. But you – Solid Snake, his own clone – foiled his efforts both times. Big Boss and Gray Fox – Frank Jaeger – were left near death. Zero recovered their bodies. Frank Jaeger's entire body was reconstructed through surgery, and he was reborn as the Cyborg Ninja. Big Boss, now a vegetable, became a prisoner of Zero even in death. For Zero, more than anyone else, your father was an irreplaceable icon. No, the truth is, for Zero, he was an irreplaceable friend. After Big Boss's betrayal, Zero could no longer believe in something so uncertain as life. He lost his belief in everything – nations, organizations, individuals. Zero was no longer willing to place his organization in the hands of the next generation.” Camera cuts to stylized images of AI network. Eva continues: “Instead, he set up a network of AIs, a decision-making system formed from all the information he had accumulated. He built four AIs – GW, TJ, AL, and TR – as sort of a digital Mount Rushmore, and one core artificial intelligence to unite them – John Doe.”

Snake: “GW? The same GW we destroyed five years ago?”

Eva: “The same. Ever since GW was cut off, JD and the other three AIs have controlled all information on every aspect of global society. Economics, politics, law, morals and culture. The war economy is no exception. In the shadow of the System and its complete control over the world, Big Boss isn't allowed to live or die. He's trapped for eternity in a brain dead prison. To bind himself to his friend – to ensure his rule over the world – Zero transformed Big Boss into an
Kojima weaves three significant mass-cultural references together here. The first is to Mount Rushmore, an allusion to Hitchcock's *North by Northwest* (1959), the action film which created many of the key elements of the late 20th century Hollywood action thriller, ranging from expensive special effects and suspenseful pacing to exotic locales and superstar actors (cf. the classic duo of Cary Grant and Eva Marie Saint). In fact, the unveiling of the Patriots' AI network at the end of *MGS4* is structurally similar to the Mount Rushmore sequence in *North by Northwest*, in the sense that both provide the ultimate outer frame or narrative horizon-line of their respective storylines: the horizong of the US superstate in the case of Hitchcock's film, and that of Wall Street neoliberalism in the case of *MGS4*.

The second reference is to the zombie thriller (Big Boss is “neither living nor dead”), a flourishing staple of numerous national film industries, as well as the transnational videogame culture (e.g. popular franchises such as Valve's *Left 4 Dead*, Capcom's *Resident Evil* and *Dead Rising*, and Konami's *Silent Hill*). One of the characteristic features of the *MGS* franchise is that the special abilities of its main characters often verge on the terrain of the occult thriller or speculative fiction, but always turn out to be explicable in terms of scientific rationality and technology.¹⁸⁰

The third reference is the internal history of the *MGS* franchise itself. Some of the key background visuals displayed during Eva's story-telling sequence are derived from the events of *MGS2* (e.g. the capture of the Patriot AI named GW) and from Kojima's *Metal Gear* games (Outer Heaven was the setting for *Metal Gear* (1987), and Zanzibarland the setting for *Metal Gear 2* (1990)). Similarly, the church paintings are modeled on a famous set of limited-edition

¹⁷⁹
posters especially created for the franchise by graphic artist Noriyoshi Ohrai. The paintings in the left screenshot refer to Ohrai's posters for *MGS2* (left photo, leftmost painting) and *MGS: Twin Snakes* (left photo, rightmost painting), a ported and very slightly revised version of *MGS1* released for Nintendo's Gamecube console in 2004. The paintings in the right screenshot refer to Ohrai's posters for *MGS3* (right photo, leftmost painting) and *MGS: Portable Ops* (right photo, rightmost painting):

**Table 18.** Noriyoshi Ohrai's limited-release *MGS* posters as icons of digital history.

This reflexivity is not simply Kojima's self-critique of the stealth espionage genre. It is also a self-critique of the transnational media. It is important to stress that this self-critique is not limited to a First World audience of fans and players. Rather, it is linked to the rise of fast-growing digital audiences of the industrializing nations, audiences inadvertently spawned by the neoliberal era. Kojima identifies this public as Eva's “children”, the youthful members of her resistance army who are explicitly identified as videogame players:

*Camera plays shows of the young insurgents arming themselves and preparing for battle.*

Eva: “All of these children were orphans. They work in arms factories, and when they grow up, they want to join a PMC. They seek revenge on other companies, PMCs that killed their parents.
and use their earnings to support their younger siblings. There are countless child soldiers like these in the PMCs. Nowadays, anyone with a computer can get combat training. The FPS [first-person shooter] games these children love are distributed for free by these companies. Of course, it's all just virtual training. It's so easy for them to get absorbed by these war games. And before they know it, they're in the PMCs holding real guns. These kids end up fighting in proxy wars that have nothing to do with their own lives. They think it's cool to fight like this. They think that combat is life. They don't need a reason to fight. After all, for them it's only a game.” Eva hands Snake a submachine gun. Eva continues: “Zero is the cause of all this. Defeating Liquid won't change things. Unless we stop the Patriots' System, the cycle will go unbroken.”

During Eva's dialogue, we glimpse the children preparing for battle:

Table 19. Screenshot of four of Eva's children.

What the theme of the children allows Kojima to do is to demolish one of the most reactionary mass-cultural tropes of the neoliberal period, namely the specter of the transnational terrorist organization bent on acquiring weapons of mass destruction. Far from being terrorists or fundamentalists, Eva and her “children” are symbols of a new type of transnational resistance to
neoliberalism. This resistance is rooted in the dramatic expansion of post-secondary education throughout the industrializing nations during the final decade of the neoliberal era:

Table 20. Twenty Largest Population of Tertiary Students in Industrializing World (in millions of students).\textsuperscript{182}

<table>
<thead>
<tr>
<th>Country</th>
<th>1999</th>
<th>2007</th>
<th>Student- population index 2007 (US = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>6.366</td>
<td>25.346</td>
<td>33</td>
</tr>
<tr>
<td>India</td>
<td>n/a</td>
<td>12.853</td>
<td>19</td>
</tr>
<tr>
<td>Russia</td>
<td>n/a</td>
<td>9.370</td>
<td>115</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.457</td>
<td>5.273</td>
<td>48</td>
</tr>
<tr>
<td>Indonesia</td>
<td>n/a</td>
<td>3.755</td>
<td>28</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.838</td>
<td>3.209</td>
<td>113</td>
</tr>
<tr>
<td>Ukraine</td>
<td>1.737</td>
<td>2.819</td>
<td>106</td>
</tr>
<tr>
<td>Iran</td>
<td>1.308</td>
<td>2.809</td>
<td>73</td>
</tr>
<tr>
<td>Egypt</td>
<td>2.447</td>
<td>2.594</td>
<td>79</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.838</td>
<td>2.529</td>
<td>39</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.209</td>
<td>2.484</td>
<td>98</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.465</td>
<td>2.454</td>
<td>55</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.814</td>
<td>2.422</td>
<td>64</td>
</tr>
<tr>
<td>Argentina</td>
<td>1.601</td>
<td>2.202</td>
<td>105</td>
</tr>
<tr>
<td>Poland</td>
<td>1.399</td>
<td>2.147</td>
<td>96</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.810</td>
<td>1.588</td>
<td>31</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.878</td>
<td>1.373</td>
<td>55</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.699</td>
<td>1.392</td>
<td>16</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.709</td>
<td>1.145</td>
<td>13</td>
</tr>
<tr>
<td>Venezuela</td>
<td>n/a</td>
<td>1.381</td>
<td>89</td>
</tr>
<tr>
<td>\textit{Memo item}: all industrialized countries</td>
<td>36.36</td>
<td>44.42</td>
<td>75</td>
</tr>
<tr>
<td>\textit{Memo item}: all industrializing countries</td>
<td>56.18</td>
<td>106.10</td>
<td>34</td>
</tr>
</tbody>
</table>
As of 2007, 70% of all tertiary students in the world were located in the industrializing nations of the world. The pool of students grew especially fast in the BRIC nations, which account for 35% of the planet's population of tertiary students. Indeed, the total student population of the BRICs alone has passed the total student population of the industrialized nations. These tertiary students are the most skilled users and producers of digital media, the heaviest users of social media networks, and the most prolific consumers of pirated and informal media in their respective nations. As such, they form a key constituency of the transnational videogame audience.

3.4 From Anti-Imperial Lineages To Anti-Neoliberal Uprising

Eva's children are therefore the media-savvy youth of the industrializing nations, the same demographic which would rise up en masse throughout the Middle East, just two and a half years after the official release of *MGS4*, in the political earthquake of 2011 Arab Spring. While the events of Act 3 do not directly anticipate the Arab Spring, the spectacular chase sequence which comprises the second half of Act 3 can be considered a watershed in the development of the transnational videogame as a form. This is the first playable action sequence whose compositional sophistication is equal to anything in the playbook of the cinematic action blockbuster.

During the eight-minute chase sequence, the player controls Snake as he rides on the back of Eva's custom-designed Triumph motorcycle through the city streets. While Eva controls the steering, Snake must help a caravan of Paradise Lost members fight off hordes of PMC troops,
giant Gekko robots, and flying drones.

What makes the sequence work is a set of sophisticated design decisions. Firstly, while riding on the motorcycle, motion blur and camera shake create the sensation of a high-speed chase. But when Snake aims at PMC troops or robots with a weapon, the viewscreen removes all traces of motion blur and camera shake and precisely tracks the relative position of the motorcycle, thus enabling the player to aim properly. Secondly, the camera will resynchronize the player's viewpoint to the action during brief loading-screens, which are concealed by means of short cut-scenes. Since these cut-scenes employ the same graphics engine used by the in-game action, the transitions look and feel seamless. No matter which direction the player is looking at prior to the loading-screen, the camera will reset the player's field of vision in the direction of the closest impending threat, enabling Snake to respond to incoming enemy fire as quickly as possible.

One of these resets is illustrated in the screenshots below. The photo on the left shows the standard heads-up display characteristic of game-play, i.e. the semi-transparent indicators in yellow in the four corners of the screen, which denote Snake's health, radar, equipment and weapon. However, Snake is not yet under control of the player. The screenshot on the right occurs two seconds of screen-time later. The camera has automatically pointed to where the motorcycle is headed, and the player now has full aiming and firing control (indicated by the presence of the aiming circle at the exact center of the photo). The combination of situation-appropriate motion blur, camera coordination, and precise aiming control gives players a sense of deep immersion in the chase sequence.\(^{183}\)
Table 21. Screenshots of chase sequence in Act 3 of *MGS4*, immediately before (left photo) and after (right photo) the player resumes control of Snake.

In the second half of the sequence, the game-play shifts slightly. The PMC troops become fewer and fewer, and the main antagonists are now Raging Raven and her army of aerial robot drones. Since these drones fly above the action in the sky, Snake must look up and scan the skies for enemies, instead of focusing on enemies located on the road ahead. The necessity to look vertically as well as horizontally slightly increases the difficulty of the sequence, perfectly matching the increasing narrative tension of the sequence.

The action sequence ends when Eva and Snake escape from the drones but experience a non-fatal crash. The fight subsequently continues in the form of a boss battle between Snake and Raging Raven, played out in the upper tiers of a medieval clock-tower called Echo's Beacon (a reference to a real-life clock tower in the city of Prague, the Czech Republic, the reference model for Act 3). The boss battle thus deepens and refines the sky-centric game-play of the final part of the chase sequence, in the sense that Snake, now on foot, must scan the skies in all directions to track incoming drones and Raven's aerial attacks.

This gradual substitution of robotic enemies for human ones is a theme which *MGS4* will return to in Act 4. For now, however, we must pay close attention to the culmination of Act 3.
This is Ocelot's successful takeover of the SOP system, which embodies the single most prescient aspect of *MGS4* – its prediction of the financial implosion of neoliberalism in the autumn of 2008.

After defeating Raging Raven and listening to Drebin's description of Raven's tragic life, Snake and Eva eventually reach the river. At this point, they are ambushed by Liquid Ocelot, who has captured the body of Big Boss. Adding insult to injury, Naomi is once again in Ocelot's entourage (at this point, it is not clear whether she has voluntarily rejoined him, or was recaptured at gunpoint). In any case, Snake and Eva can only watch helplessly as Ocelot rides his personal gunboat down the river to challenge Meryl, who is waiting to arrest Ocelot with a massive expeditionary force of US soldiers, helicopters, and river vessels.

But when Meryl's soldiers try to open fire on Ocelot, they are in for a deadly surprise. Ocelot has cracked the Patriots' SOP system, and the “guns of the Patriots” referred to by the subtitle of *MGS4* are now under his command. With a wave of his hand, Ocelot causes the helicopters to fall from the sky and the river vessels to stop working. Every single weapon in the arsenal of the expeditionary force is electronically locked down and unable to fire. Drunk with triumph, Ocelot orders his bodyguards to open fire on the soldiers sent to arrest him. In a blood-curdling scene which emphasizes the grim fate awaiting the planet should Ocelot become its supreme ruler, dozens of soldiers are ruthlessly cut down. In the ensuing carnage, Eva perishes and Snake barely escapes with his life. The members of Meryl's RAT-Patrol-01 team miraculously survive, thanks to their advanced body armor, although Meryl almost drowns in the river and is only saved at the last second by Johnny Akiba.

In the aftermath of the disaster, we learn that Liquid Ocelot has triggered a true planetary
crisis. He has locked out the conventional weapons of the entire planet's armed forces. Battlefields fall silent everywhere, as the war-fueled economy of Kojima's fictionalized world of 2014 grinds to a halt.

There are obvious similarities between Ocelot's global lockdown and Wall Street's “Lehman moment”, when the bankruptcy of Lehman Brothers on September 15, 2008 disrupted global markets. Yet the parallels run deeper than one might think. Lehman's demise marked the collapse of the vast and almost completely unregulated “shadow banking system” (a term famously coined by PIMCO financial analyst Paul McCulley in 2007) created over decades by Wall Street neoliberalism. The best single analysis of the size and complexity of this shadow banking system is a study released on July 2010 by staffers at the New York Federal Reserve Bank, called “Report 458. Shadow Banking”.

The two most informative financial charts of the crisis of the shadow banking system are shown below. On the left is a five-year chart of the so-called “TED spread”, a financial indicator which shows the difference between the interest rate for interbank loans, and the interest rate on US Treasury bills. The higher the difference between the two, the less willing banks are to loan to each other, and greater the level of financial distress in the world credit system. Note the brief spikes in the indicator in late 2007 and early 2008, when the global credit system began to unravel, and then the conclusive “heart attack” of late September to early October of 2008. At the time, normal credit activity ceased for three weeks, until central banks around the world pumped trillions of dollars, euros and yen into the system via bailout packages.

The chart on the right is extracted from page 5 of the NYFRB's “Report 458”. It illustrates the astounding growth of the shadow banking system, which overtook the regular
banking system in size as early as 1995, before collapsing in 2008:

Table 22. TED Spread (2007-2011) and Size of Shadow Banking System (1950-2010).

Unregulated markets thus overtook regulated markets, in much the same way that the unregulated PMCs overtook national armies in MGS4. Conversely, there were at least three major “heart attacks” in the global financial system during late 2007 and one more early in 2008, before the conclusive crisis of fall 2008. This mirrors Liquid Ocelot's multiple attempts to take over the SOP system, i.e. he tries and fails at the end of Act 1, tries again but fails during the middle of Act 2, and finally succeeds at the end of Act 3. This also explains one of the subplots of MGS4: Snake's internal nanomachines increasingly malfunction as the storyline progresses, forcing him to use Naomi's nano-suppressor syringe to keep his nanomachines under control.187

Kojima's critique of neoliberalism will begin to make sense if we remember that the key to the SOP system is the genetic code and biometric data of Big Boss, an entity who is neither living nor dead. On one level, this might seem to be an obvious plot hole: it does not seem rational for the Patriots to build a system which has such an obvious and exploitable weakness.

149
Yet from another perspective, the role of Big Boss is a perfect metaphor for the weakness at the heart of the shadow banking system, namely its dependence on the US dollar as world reserve currency.

Put simply, Big Boss is a metaphor for a systemically significant body of capital at the center of the neoliberal world-system, a body which cannot be easily copied or reproduced without disastrous consequences for the system as a whole. This body can be nothing other than the US Treasury bills (so-called “T-bills”) which serve as a key medium of exchange and reserve currency for the world economy. Conversely, Solid Snake's disintegrating body is a literal and figurative metaphor for the mortgage securities bubble. Snake is, after all, the genetic clone of Big Boss, i.e. the biotechnological securitization of Big Boss.

This suggests, in turn, that Big Boss' former friend turned antagonist, Zero, represents the Wall Street traders and investment banks who were the primarily beneficiaries of neoliberalism, but who gradually began to lose control of the system they had set into motion (Zero's eventual fate recalls to mind Keynes' legendary 1936 call for the euthanasia of the rentier class).^188

If this hypothesis is even halfway to the mark, then Solid Snake and his allies represent the transnational solidarities which are resisting neoliberalism. We will suggest what some of those solidarities might be at the end of this chapter, along with the precise function of the Naomi-Sunny and Meryl-Drebin lineages, but for now it is worth emphasizing the key narrative innovation of Act 4.

Act 4 takes place entirely on Shadow Moses Island, the site of a fictional US military base in Alaska's Aleutian Islands which was also the setting of *MGS1*. This base was abandoned after the events of *MGS1*, and is patrolled not by the US military, but by robotic drones under the
control of the Ocelot’s Grasp PMC. However, before players can enter the base, they must step through the portal of videogame history. Players replay one of the opening segments of *MGS1*, which is reproduced exactly as it was first released back in 1998 (i.e. the exact same control system, the same graphics, and the same user interface which was used in the original *MGS1*).

The transcript and screenshots of this moment are reproduced below:

*Camera shows falling on the heliport located at the entrance to Shadow Moses’ underground hangar. Snow is falling. Giant metal shipping containers shield Snake from the view of patrolling guards.*

*Player action: the player must elude guard patrols and security cameras, and sneak into the hangar via an air duct located on a balcony overlooking the heliport. If the player reaches the air duct, or if the player is shot and killed by the guards, Snake wakes up gasping for breath. He has been sleeping in the back of the helicopter which is carrying him to Shadow Moses.*

*Otacon: at the helicopter controls: “Everything all right, Snake?”*

*Snake: sighs: “I was having that dream again.” Through the helicopter window, we glimpse Shadow Moses Island in the midst of a blizzard.*

*Otacon: “We’re here. Shadow Moses.”*

**Table 23.** Screenshot on the left shows in-game footage of the playable heliport sequence *MGS1* which has been spliced into the beginning of *MGS4*’s Act 4. The screenshot on the right shows in-game footage when the player later reaches the same heliport, depicted this time around in *MGS4*’s high-resolution format.

![Screenshot](image)

Note that the *MGS1* sequence has a solely archival function, i.e. there are no penalties or any other consequences for the player if they shot and killed by the guards. Regardless of
whether or not Snake eludes the guards, Snake will wake up from his “dream” none the worse for wear. What the transition highlights is the sheer beauty of *MGS4*’s game-world. The blocky graphics and sprite-based snowflakes of *MGS1* have been replaced by a realistic blizzard, where snow and frost particles brush against the camera lens and the wind roars in our ears. Some of this beauty is conveyed via somatic means, i.e. players disoriented by *MGS1*’s unfamiliar controls experience the return to the comparatively simple and logical *MGS4* controls as a welcome comfort.

This digital refresh acquires a whole new level of meaning once the player passes through a narrow defile, and enters the *MGS4* version of Shadow Moses heliport for the first time. The sound-track plays a section of the closing song of the very first *Metal Gear Solid* game, entitled “The Best Is Yet To Come”. The words are in the Irish language of Gaelic, and the haunting melody, written and composed by Rika Muranaka, is performed by Irish singer Aoife Ní Fhearraigh. This musical reference to Ireland and the recuperation of the Gaelic language is significant, inasmuch as Ireland has been locked in struggle against British colonialism for five hundred years. We will see in just a moment that there is indeed a politics of neocolonial geography at work in Act 4, but it is not necessarily tied to any nation-state within the European Union.

*MGS4* also intersperses a number of short in-game flashbacks on the grounds of the heliport proper. These are short cut-scenes which identify landmarks from *MGS1*, e.g. one such flashback is triggered by the sight of the security camera, whose rusted remains fall apart in front of Snake's eyes. Finally, there are a number of acoustic flashbacks, which are triggered when Snake crosses certain areas of the base, e.g. while crossing the center of the heliport, or crawling
beneath an abandoned truck. These flashbacks replay short, memorable lines of dialogue from *MGS1*, but modify the original sound-track slightly by applying a reverberation-effect, as if they are welling up from some distant past. These acoustic flashbacks will also reward Snake with Drebin Points, if he stops long enough to listen to the dialogue (arguably, this is Kojima's way of rewarding our inner digital historian).

Yet more is at stake here than fan service to the *MGS* fan community, or nostalgia for a vanished era of videogame history. Each of the three boss battles of Act 4 – Snake must defeat Crying Wolf, Vamp, and Liquid Ocelot – refers to an earlier battle in the *MGS* franchise, while significantly altering its original content. For example, Snake's sniper battle against Crying Wolf cites Snake's earlier battle against an opponent named Sniper Wolf in *MGS1*. Sniper Wolf was a former Kurdish guerilla fighter, and her personal tragedy symbolized the tragedy of an abortive or compromised postcolonial nationalism. By contrast, Drebin informs us that Crying Wolf was originally from a war-torn region of Africa, and the only community she is identified with are the Alaskan wolves who appear after the battle and spirit away her body into the blizzard. Instead of a national tragedy, we are left with a transnational puzzle.

Similarly, Snake's battle against Vamp in Act 4 reprises Raiden's battle against Vamp in *MGS2*. But where the *MGS2* battle emphasized Vamp's Romanian heritage, with its allusion to the trope of the vampire, the *MGS4* battle focuses entirely on the transnational technology of Vamp's nanomachines. Likewise with Snake's battle against Ocelot at the end of Act 4, which references both Solid Snake's battles against Revolver Ocelot and Liquid Snake in *MGS1*, as well as Big Boss' fight against the youthful Ocelot in *MGS3*. The Cold War nation-states and national identities of these earlier battles have vanished, replaced by the transnational technologies of the
two giant robots, Metal Gear Rex and Metal Gear Ray.

Upon closer examination, the game-play of Act 4's boss battles does have one common narrative theme, and that is systemic self-contradiction. Crying Wolf has to be defeated by using her own sniping tactics, Vamp's nanotech-boosted healing abilities must be defeated by using Naomi's nano-suppressor, while Ocelot's giant robot, Metal Gear Ray, must be defeated by Snake's own giant Metal Gear Rex robot. The logics of the system increasingly conflict with the system's own logic.

This theme of systemic self-contradiction also begins to blur the line between protagonists and antagonists. This is emphasized in an epic playable sequence comprised of two panels. The player controls Snake inside the left panel, and must destroy the Gekko robots before they self-destruct, while stealing occasional glimpses at Raiden and Vamp battling with knives inside the right panel. Put another way, Snake must stop the system from destroying itself, while Raiden defeats Vamp by turning Vamp's own destructive blades against himself:
After the battle, Naomi reappears and reveals that far from rejoining Ocelot, she was secretly helping Snake and his allies all along. She injects a nano-suppressor into Vamp, allowing him to find the release he has long sought. After Vamp passes away, Naomi discloses Ocelot's plan:

Naomi: “Snake... Liquid's down below us. He's stolen the Patriots' System, slipped out of their sight, and taken their ark.”
Snake: “Ark?”
Naomi: “A warship... unfettered by land... law... country... or network. The only place where they are truly released from the shackles of the Patriots... The place where they can be free. Outer Haven.”
Snake: “Outer Haven...?”
Naomi: “Liquid plans to launch the nuke from that ship. Snake... you have been given life so that you may fulfill your purpose. When all of this is over, you'll have no choice but to accept death. We are given life only so that we can atone for our sins. Your life was created for that very purpose. We all must atone for our own sins. We must not pass them on to the next generation. We must not leave them for the future. That is your true fate... one that even you cannot defy.”

*Suddenly, Naomi injects herself with the same syringe which allowed Vamp to expire.*
Otacon: “Naomi!”
Snake: “What have you done?”
Naomi: her breathing labored: “Vamp and I... we are the same. We're living corpses... our bodies kept barely alive by nanomachines.”
Snake: “Then you...”
Naomi: “Cancer. I shouldn't even be alive right now. The nanomachines have kept it from progressing... but there's nothing more they can do. With the nanomachines gone... time will unfreeze and begin to flow again.”

As Naomi's life ebbs away, Snake and Raiden hurriedly clamber into the cockpit of Metal Gear Rex and escape, dodging waves of self-destructing Gekko robots, while carrying the memory of the misery of human bodies so ravaged and destroyed by nanotechnology that death becomes a blessing.

Before players can catch their breath, however, they experience another bravura action sequence. The player must escape from the hangar by steering the three-story-high metal carapace of Metal Gear Rex through a set of corridors, and using Rex's onboard weapons systems to defeat hordes of heavily-armed Gekko. Heightening the suspense, a timer at the top of the screen begins to count down, informing the player that they have five minutes of play-through time before the entire hangar base self-destructs.

The design team wisely avoided providing any overt tutorials or instructions to the players on how to move or control Rex, which adds to the furious, on-the-fly intensity of the sequence. To ensure that the excitement of the moment does not cause undue frustration, the camera will always point in the direction the player needs to go down the corridor, while Rex's movement and firing controls are identical to the ones the player uses when controlling Snake. At maximum speed, Rex can escape the hangar in about two minutes, which means that the five minute limit is generous enough to allow even the least skilled players to succeed.

Once the player escapes from the hangar, the battle continues in an abandoned dock
facility next to the sea. Snake must use Rex to defeat Liquid Ocelot, who is piloting his own giant robot, a unit called Metal Gear Ray. What follows is a spectacular playable battle between the two Metal Gears, where the excitement of piloting a giant robot is aided by superb game-design (Ray attacks in predictable patterns, and Rex has enough durability and firepower so that even less skilled players will eventually learn how to defeat Ray).

It is only after the battle of the giant robots that Kojima allows the player to pause and reflect on what they have experienced. Given that the central theme of Act 4 is the labor of confronting historical legacies, it cannot be an accident that each battle is tied to the bequeathing of a neocolonial legacy. Crying Wolf wishes to be freed from her nightmarish past (a reference to the past and present resource wars waged on sub-Saharan Africa, from Belgium's 19th century colonial genocide in the Congo to the coltan-fueled wars of contemporary neocolonialism), Vamp wishes to be freed from the curse of endless battle (a reference to the vampire narrative, one of the oldest mass-cultural symbols of capital of them all, as well as to Eastern Europe's own variant of EU-mandated neoliberal austerity), while Naomi wishes to transmit a lesson in geopolitical ethics before she dies (the neocolonial sins of the US Empire must not be inflicted on subsequent generations). This raises the question, however, of what legacy Ocelot might be passing on.

The first clue as to what this legacy might be is revealed in a subsequent cut-scene, when Ocelot escapes from the battered hulk of Metal Gear Ray and flees to the ocean. Suddenly, Ocelot's secret hideout appears – a massive submarine called Outer Haven. Outer Haven was originally designed to be a key hub of the Patriots' system of global control, but was hijacked by Ocelot during the events of MGS2. When the submarine's hull first appears, a close-up of its
conning tower displays four bas-relief sculptures. These represent, from left to right, Solidus Snake (the villain of *MGS2*), Solid Snake (the protagonist of *MGS1* and *MGS4*), Liquid Snake (the villain of *MGS1*), and finally Big Boss (the protagonist of *MGS3*, and the original genetic template for the other three clones). The screenshot on the left is a close-up of the submarine's conning tower, with giant sculptures of the three clones and the original Snake. The screenshot on the right is a panorama showing the same tower on the far right (the sculptures are just barely visible as ridges on the tower), where Snake is in the foreground and Liquid Ocelot is faintly visible in the far distance to his left:

**Table 25.** Cut-scenes of Outer Haven at the end of Act 4.

![Cut-scenes of Outer Haven at the end of Act 4.](image)

This scene is more than just the reflexive citation of Kojima's earlier work and the self-critique of the stealth espionage genre. To borrow Bourdieu's terminology, it is the moment that Kojima's transnational habitus as a game designer, his critique of neoliberalism, and the transnational disposition of the player-audience all converge. The player gazes at the symbolic superstructure of a new motive force of world history, whose visage literally and figuratively stares back at us.

This submarine does not symbolize the might of the US military-industrial complex, whose wreckage we are leaving behind on Shadow Moses. Nor does it represent the
transnational media and communications industries of the 21st century – an interpretation dispelled by Raiden's sudden return (he must use his cybernetic exoskeleton to save Snake from being crushed by the submarine's prow against the dock).

Rather, this sequence acknowledges one of the most significant economic transformations of the contemporary era. This is the rise of the nations of the global semi-periphery to world power status, exemplified by the economic success of the BRICs, whose collective gross domestic product skyrocketed from $2.3 trillion in 1999 to $10.7 trillion in 2010. One of the most telling signs of this transformation is the geographic shift in world machine-tools production between 2001 and 2010. Machine-tools are the machines which produce all other machines, and are one of the best indicators of a nation's economic competitiveness. Here is the data, courtesy Gardner Publications:


<table>
<thead>
<tr>
<th>Region or Country</th>
<th>2001 Production as Percent World</th>
<th>2010 Production as Percent World</th>
<th>2001 Consumption as Percent World</th>
<th>2010 Consumption as Percent World</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRICs (Brazil, Russia, India, China)</td>
<td>8.9%</td>
<td>32.4%</td>
<td>24.0%</td>
<td>53.0%</td>
</tr>
<tr>
<td>Europe (all reporting European countries)</td>
<td>48.7%</td>
<td>31.0%</td>
<td>50.1%</td>
<td>20.1%</td>
</tr>
<tr>
<td>East Asia (Japan, South Korea, Taiwan)</td>
<td>14.0%</td>
<td>30.4%</td>
<td>22.0%</td>
<td>17.1%</td>
</tr>
<tr>
<td>US</td>
<td>7.9%</td>
<td>3.1%</td>
<td>14.9%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

The BRIC nations produced less than a tenth of the world's machine-tools in 2001, but
manufacture one-third of all such tools in 2010, which means their total machine-tools industry is roughly the same size as that of East Asia or the European nations. At the same time, the BRIC nations have become the dominant consumer of machine-tools, consuming half of the world total. Conversely, while the US still produced one-fifteenth and consumed one-eighth of the world's machine-tools in 2001, its share of production and consumption declined to negligible proportions in 2010.191

This suggests that Outer Haven is not an allusion to the multipolar world. Rather, it is this world. It is the transnational setting for the epic clash of neoliberalism and anti-neoliberal resistance movements. It is no accident that Act 5 is marked by one final shift in game-play. Whereas the first four Acts give players comparative freedom to choose between lethal and non-lethal tactics, Act 5 tilts the balance decisively towards nonviolence and stealth. The sheer numbers of enemies and the limited space to maneuver means that completing Act 5 is extremely difficult for players who attempt to destroy or kill everything in their path. However, the same level is surprisingly easy if players rely exclusively on stealth and nonlethal tactics.

There is a similar lesson encoded in Snake's boss battle against the final and most dangerous member of the B&B Corps, Screaming Mantis. Mantis' armor is invulnerable to normal weapons. What makes her so deadly is her capacity to hack into and manipulate other soldiers' nanomachines, essentially turning them into puppets. The player must figure out through trial and error that Mantis' greatest strength – the two handheld dolls she uses to manipulate nanomachines, called the Sorrow doll and the Mantis doll – are also her greatest weaknesses. These dolls are vulnerable to weapons fire, and can be wrested away from Mantis and turned against her. (If players fail to realize this of their own accord after a certain amount of
time, Otacon will radio Snake and give him increasingly open hints). Similar to the boss battles of Act 4, the Mantis battle cites two prior battles in the *MGS* series. The Sorrow doll refers to the Sorrow, a key character Big Boss must face in *MGS3*, while the Mantis doll is a miniature version of Psycho Mantis, a boss Solid Snake confronts in *MGS1*.

However, the Cold War referents of these previous bosses (Psycho Mantis was a member of the US Army special forces, while The Sorrow served in the special forces of the Soviet Union) are explicitly erased. Instead, we are confronted with a battle overflowing with transnational signifiers. A hologram of the planet slowly rotates at the center of the control room, while Mantis' scimitar-wielding cybernetic arms recall the popular iconography of South Asian folk deities such as Durga. One of the most thrilling features of the battle is the extended cut-scene following Screaming Mantis' defeat, when the spirits of Psycho Mantis and The Sorrow momentarily seem to hover above her. In reality, she is simply reliving artificial memories which the PMC nanomachines implanted in her, but the cut-scene does suggest a transnational battlegrounds haunted by Cold War legacies.

After the battle with Mantis, there are two final playable sequences in the game worthy of note. The first is Snake's trek through a microwave-irradiated corridor. This corridor is the only access route to GW, the stolen AI computer at the heart of Outer Haven, which Snake must disable to stop Liquid Ocelot from taking over the world.

What makes this playable sequence so remarkable is the extreme density of the visual narration, combined with the extreme simplicity of the game-play. All the player must do is watch the screen, and press a single button. However, the game-design makes these two tasks extraordinarily compelling.
To begin with, the viewing-screen is divided into an upper and a lower half. The upper half cycles through brief clips, each taken from the perspective of one of Snake's allies. These include shots of Raiden's fight against Ocelot's elite soldiers in a corridor, Meryl and Johnny's battle against the Haven troopers in the control room, Mei Ling's battle to protect her warship, Ocelot's railgun warming up and preparing to launch its warhead, Col. Campbell and Rose watching the action from afar, Otacon controlling the Mark III from his computer, and Sunny incongruously cooking eggs in the kitchen (significantly, she has placed a photo of her and Naomi next to the photo of her mother).

On the lower screen, the player steers Snake through the corridor. All the player must do is move forwards down the corridor, using the left analog stick. This sounds simple, but thanks to the microwaves, Snake can only stumble slowly and painfully ahead, until he is reduced to a crawl. Soon Snake stops, and an onscreen prompt appears, informing the player to press the triangle button on the Playstation 3 controller. Once pressed, Snake will start moving again, but the prompt begins to appear more and more frequently. Eventually, players must button-mash the triangle button unmercifully. As Snake's life indicator starts to drain away, the physical desperation of the player begins to match the on-screen desperation of their character.

Rather than overwhelming our ears with a bombastic action score, the sound-track replays the mournful “Love Theme” from the opening cut-scene of *MGS4*. This heightens the tension, by allowing players to hear Snake's heartbeat race faster and faster. It also allows players to hear the sound of their own button-mashing – a plastic-sounding rattle, which is suddenly infused with more tension than any symphonic score could denote. While the entire microwave corridor sequence runs for only three minutes of screen-time, the spectacular visuals and the task
of button-mashing seem to last for an eternity.

**Table 27.** On left, screenshot of playable splitscreen sequence in microwave room, showing the onscreen triangle button prompt while Raiden battles against Ocelot's soldiers above. On the right, screenshot of Snake close to the exit, barely clinging to life, while Sunny is shown in the kitchen.

After a supreme exertion of will, Snake finally reaches GW's server room. Symbolically, GW's memory-banks are decorated with holograms of white buttercup flowers (a common species called clematis). This is a reference to the field of white flowers at the Arlington National Cemetery in Virginia during Act 1 of *MGS4*, as well as to the final battle at the end of *MGS3*, which also takes place in a field of white flowers. The holograms fade away, as the databanks of *MGS* franchise history converge with the databanks of neoliberalism.

It is at this moment that Kojima springs the first of several surprises on the player. At the beginning of Act 5, Snake and his allies faced an unappetizing choice: either stop Ocelot and thereby permit the Patriots to continue their despotic rule, or else allow Ocelot to create an even more terrible despotism. In the discourse of geopolitics, this is the false choice between propping up neoliberalism's thirty-year credit bubble by using the resources of the governments and central banks of the world, or else fantasizing about the possibility that some post-US hegemon...
might step in to create even more disastrous bubbles (e.g. the notion that China or the European Union could simply replace the hegemonic role of the US).

At the end of Act 5, Kojima rejects both as alternatives as a false binary. What changes everything is the lineage transmitted from Naomi to Sunny. This lineage is nothing less than the transnational solidarity of the digitally-connected workers of the world:

**Otacon: staring at his laptop:** “Wait a minute... The worm is still spreading. And it's not stopping at GW. Is it removing the other clones...? No. Wait. I don't believe this! Naomi...”

**Snake:** “Otacon, what is it?”

**Otacon:** “JD is being erased!”

*Inside the server room, a recorded video of Naomi is projected across several wallscreens. She is standing next to a guardrail on a ship, the sea visible behind her.*

**Naomi:** “Snake... Hal. It's you, isn't it? I hope you're listening. The virus you uploaded is using GW as a conduit to annihilate the entire AI network. It's set to destroy all four AIs along with JD, the core that tied them all together. I've set this video to play back once they're all gone. Sons of the Patriots was only the beginning. The Patriots were planning to use nanomachines to implement the System over the entire population. I had an obligation to stop it. With a little help from Sunny. She helped me... she believed her talents could help you all put GW to rest. What she created was an anti-AI FOXDIE. But this virus's name is FOXALIVE. It's the conceptual opposite of the nanomachines that I created all those years ago. We wished to free the captured foxes, to let them run free in the wild. By the time you hear this, I'm afraid I'll be gone. This is a strange feeling, leaving a message to be delivered after you've died. Hal... If you're listening...”

**Otacon: in tears:** “Naomi...”

**Naomi:** “I'm sorry. Sorry I deceived you. It hurt me more than anything else, lying to you like that. I wanted to apologize to you before... But I never got the chance.”

**Otacon:** “Naomi...”

**Otacon weeps openly.**

**Naomi:** “And yet, in the end... you helped me feel the joy of living. Thank you, Hal. Thank you... Hal.”

**Otacon:** “Naomi...”

**Naomi touches the camera with her hand. Otacon does the same with the screen of his laptop.**

**Naomi:** “Snake... hear me. Our country is an innocent child once more. A new dawn is rising. Now she can build a new destiny for herself. Snake... the time has come.”

**Snake falls to the ground, his nanomachines malfunctioning.**

**Naomi:** “You've earned your rest. The rose petal is about to fall...”

*Inside the Nomad, Sunny watches a petal fall from Naomi's blue rose.*

**Otacon:** “Snake... Snake?! Snake!” *Fade to black.*

Fortunately, Snake is not quite ready to expire, nor does Kojima subscribe to Naomi’s rosy view of a post-imperial US renaissance. The emancipation of the AIs has its science fiction forerunner
in the conclusion of William Gibson's *Neuromancer* (1984), wherein the main characters help two AIs, Wintermute and Neuromancer, to free themselves from their corporate shackles and merge into a single planetary entity. What Gibson could not do, of course, was to depict what concrete organizational, theoretical and cultural forms this prescient allegory of transnational solidarity might take.

Twenty-four years later, *MGS4* fleshed out Gibson's prediction, by moving from the ideal of global solidarity to the transnational reality of the digital commons. Put more concretely, *MGS4* moves from Naomi's ethical imperative (the space of videogame design) to Sunny's coding skills (the space of fan labor and user-generated content). However, these two spaces no longer refer to exclusively First World studio networks or digital audiences. Instead, Kojima sets the categories of videogame design and fan labor in motion towards the category of multipolar geopolitics. This is the secret of the subsequent cut-scene, when Liquid Ocelot reveals a shocking surprise:

---

*MGS4* moves from Naomi's ethical imperative (the space of videogame design) to Sunny's coding skills (the space of fan labor and user-generated content). However, these two spaces no longer refer to exclusively First World studio networks or digital audiences. Instead, Kojima sets the categories of videogame design and fan labor in motion towards the category of multipolar geopolitics. This is the secret of the subsequent cut-scene, when Liquid Ocelot reveals a shocking surprise:

---

*Ocelot is standing on the conning-tower of the submarine, overlooking the aftermath of the battle. Snake is sprawled nearby, trying to recover his strength. Liquid Ocelot: “Rise and shine, Snake. Look. The war is over.” Snake: *gasping for breath*: “Why? You could have stopped us?” Liquid Ocelot: “Stopped you? Why would I want to do that? This is just as I'd hoped things would end. Back before father's time... Before Zero gave birth to the Patriots... The US, China, and the Soviet Union, formed a secret pact.” Camera cuts to black-and-white images showcasing the history of the Philosophers, as well as scenes from *MGS1, MGS2* and *MGS3*. Liquid Ocelot: “The organization they created was called the Philosophers. Through two world wars, it spread its roots and extended its reach. After that, the Philosophers splintered, and factions began to squabble over the fortune they’d amassed. They called it the 'Philosophers’ Legacy'... a massive cache of funds that would later provide the foundation for Zero's Patriots. Zero sought to use his riches to achieve world domination. Our father – Big Boss – sought to free himself from that chokehold. His dream was to create an army of free citizens, one that answered to no government... Outer Heaven. But he failed, because of you. Nine years ago, I tried to free us from the control of our genes. Four years later, our dear brother – Solidus – sought to free us from the control of the Patriots' memes. All of that – all of it – was nothing more than a process of trial and error, the end result of which is Outer Haven. To be free from Sons of the Patriots, the
ultimate form of external control imposed on the Patriots' soldiers.”

Camera returns to Liquid and Snake on top of the conning-tower of submarine.

Liquid Ocelot: “Free from FOXDIE. Free from the System. Free from ID control. Our minds free from their prisons. That is the haven I've yearned for.” Ocelot kneels down and injects two medical syringes into Snake, helping him to recover.

Ocelot: “This is it, brother. Our final moment.”

Far from being an arch-villain bent on destruction, Liquid Ocelot was a member of the resistance all along. Yet before players can fully digest the meaning of this plot twist, Ocelot challenges Snake to one final hand-to-hand duel with no weapons or technology, just the competition of body against body. In an extended cut-scene, the two battle each other to a draw, until the sound-track plays a musical piece called “Old Snake”. Written by Harry Gregson-Williams, the piece is a variation of the signature MGS franchise musical theme.193

What ensues is the very last playable sequence of MGS4. On the simplest level, it is Kojima's way of thanking MGS fans for their years of unfailing support, by giving them one final, over-the-top, MGS-style boss battle drenched with series nostalgia. This battle takes place in four successive stages, which cite songs from the MGS franchise in chronological order. The first song is “Encounter” from MGS1 by Kazuki Muraoka. The second is “Tanker Incident” from MGS2 by Norihiko Hibino. The third is “Snake Eater” from MGS3, voiced by Cynthia Harrell and written by Norihiko Hibino. The fourth and final song is the “Old Snake” theme we heard just prior to the playable sequence.

In terms of game-play, the sequence is a version of the wrestling or fighting videogame, set on top of the submarine's conning-tower. To forestall any confusion with the controls and to allow players to appreciate the series references, the controls are drastically simplified. Snake can move forwards and backwards, dodge, and punch and kick, but he will always face in the direction of Ocelot and cannot use any equipment. Since Ocelot has a predictable attack pattern,
most players will be able to complete the sequence on the normal difficulty setting (weaker players can simply button-mash the R1 attack button to defeat Ocelot).

The remainder of *MGS4* consists of 54 minutes of cut-scenes, which tie up many of the loose ends of the franchise's storyline. The wedding celebration between Johnny Akiba and Meryl, for example, is the conclusion of one of the longest-running comedy routines in videogame history. In every *MGS* game, there is at least one enemy soldier named Akiba, who is a comically incompetent antagonist. In Acts 1 and 2 of *MGS4*, Akiba is portrayed with a touch of comedy, but ultimately proves himself in Acts 4 and 5 to be a competent soldier and a worthy partner for Meryl. We also witness Raiden's reconciliation with his estranged family, as well as his decision to embrace the responsibilities of fatherhood. Finally, we witness an important milestone in Sunny's maturation, as she makes her very first age-appropriate friend – a moment which also manages to allude to the rapid spread of cellphone and mobile media technology throughout the industrializing nations.¹⁹⁴

These final cut-scenes also shed light on the Meryl-Drebin lineage which we mentioned previously. This lineage is revealed when Drebin arrives at the wedding celebration, bearing gifts for the newlyweds. However, Drebin is no longer in the weapons laundering business. In fact, the logo on his vehicle has been changed from “I Have You” to “We Have Yours”. Drebin explains the change:

*Drebin and Otacon are seated at the sidelines of the wedding celebration. Drebin is drinking champagne from a bottle.*

Drebin: “You probably already suspected this, but I'm not actually an employee of AT Security.”
Otacon: “Huh?”
Drebin: “The Patriots raised me to be a gun launderer.”
Otacon: “The Patriots?”
Drebin: “My earliest memories are of the LRA [Lord's Resistance Army of Uganda]. They kidnapped me, forced me to fight. Yup. You're staring at a former child soldier. My parents,
brothers and sisters... all killed in the war. Guess that makes me what you'd call a war orphan. After that, the Patriots picked me up and brought me into the family business. I was Drebin 893. There's a whole lot of pawns like me all over the world. How you suppose I laundered guns like I did? 'Cause they let me. In fact, I was under strict orders to back you guys from the start.”

Otacon: “You what?” He stalks off, upset.

Drebin: slaps him on back: “Hey man, don't take it personal. I wasn't the only one under their orders.” He nods in the direction of the others.

Otacon: “Huh? Meryl and...?”

Drebin: “They probably never realized it themselves, but... Rat Patrol Team 01...” He draws the letters and numbers “RATPT01” on the ground with chalk, then passes a handkerchief over them.

“Voilà!” The letters have been subtly altered: the R is now a P, the P is now an R, the T is now an I, and the 1 is now a T, and the word spells “PATRIOT”.

Otacon: reading: “Patriot!”

Drebin: chuckling: “Played like a violin.”

Otacon: “But... why?”

Drebin: leaning back in his chair: “Obviously, Liquid's plot was a threat to the Patriots. So they planned to have you guys take care of it.”

Otacon: “Didn't turn out quite how they planned, though, did it?”

Drebin: “Yeah, well, I don't think they expected you to crash their System and wipe them out.”

Otacon: “So does that mean you're out of a job now?”

Drebin: grandiose: “Are you kidding? I got the Drebins. All the Drebins in the world are in on it. From now on, we're in business for ourselves. We are pawns no more.”

Otacon: “Easy there.”

Drebin: clearly affected by champagne: “The White House might've lost its taste for unilaterism, started to rebuild. But there's a lot of failed states out there that went bankrupt from their PMC habits, and they owe a shit load of money. Now only question is, who's gonna pick up the tab? I'm sure these new governments will try and keep it under control with PMC corporate reform laws, but it ain't gonna be good enough. They're all sunk up to their eyeballs in the war economy. Might not be a New World Order, but the old order under the war economy's gone for good. I'm guessing the UN is going to be more important than ever, what with multilateralism and all. A certain President said it best back during the Cold War: 'for in the development of this organization rests the only true alternative to war.' [Line delivered by US President Kennedy in a speech to the UN General Assembly on September 25, 1961]. Then again, the UN itself's just an old 20th century relic. And if you think about it, when you look at its history, it ain't that different from the Patriots.”

Otacon: reassured: “That's right, the nanomachines used to keep you sober.”


Emancipated from their role as the weapons launderers of the Patriots' system, all the Drebins around the world have formed their own independent organization. This suggests the lineage being passed on from Meryl's UN-chartered team to the Drebins is that of economic multipolarity. The Drebins are the allegorical equivalent of the state-owned development banks and sovereign wealth funds of the BRICs and other industrializing nations, who have become
significant trading partners and investors in the world economy. This is a development analyzed in some detail by Deborah Brautigam's research on China's economic rapprochement with the postcolonial nations of Africa. Just as Drebin is calculating what governments owe on their PMC contracts, China's state-owned banks calculate the return on their investments in African, Latin American and other Asian nations.¹⁹⁵

After so many last-minute revelations, one could be forgiven for assuming the very last cut-scene of *MGS4* could not possibly be anything other than an anti-climax. Yet Kojima manages to save the best for last. We learn that Big Boss is still alive after all: the body which Eva and her children pretended was Big Boss was really that of Solidus, another clone of Big Boss. In a long conversation with Snake, Big Boss reveals the precise details of how Ocelot, Eva and Naomi fooled the Patriots' system.

More importantly, Big Boss gives Snake the gift of time. The new virus which Naomi detected in Solid Snake's body is simply a newer version of the FOXDIE virus, designed to target Eva, Ocelot, and Big Boss himself, precisely where the older virus targeted Liquid Snake and other characters in *MGS1*. The Patriots engineered this new virus to uproot the older version, since they regarded Solid Snake as an indispensable asset in their struggle against Liquid Ocelot.

What this revelation means is that Eva and Ocelot did not actually die of their wounds, but knowingly permitted the Patriots' virus to end their lives, as expiation for their complicity in helping to create the Patriots (this information also adds replayability to the videogame, inasmuch as players will be motivated to replay earlier scenes and look carefully for the clues as to what was really going on). Of course, Snake's aging process will continue, since this is hard-coded into his genetic code. However, he will not be a biological weapon of mass destruction,
and he will be able to peacefully live out the year or two he has left in the presence of his friends.

After dispatching the moribund Zero, the perfect symbol of a US rentier elite in the throes of terminal imperial decline, Big Boss takes responsibility for his past actions and allows the new FOXDIE virus to end his life, but not before leaving Snake (and by extension, the player) with this profound insight into the contradictory nature of revolutions – one would like to say, the dialectic of revolution itself:

Big Boss: “Know this... Zero and I... Liquid and Solidus... We all fought a long, bloody war for our liberty. We fought to free ourselves from nations. And systems. And norms, and ages. But no matter how hard we tried, the only liberty we found was on the inside, trapped within those limits. The Boss and I may have chosen different paths. But in the end, we were both trapped inside the same cage. Liberty. But you... you have been given freedom. Freedom to be... outside. You are nobody's tool now, no one's toy. You are no longer a prisoner of fate. You are no longer a seed of war. It's time for you to see the outside world with your own eyes. Your body and your soul are your own. Forget about us. Live... for yourself. And find... a new lease on life.” Tries to light cigar; but his unsteady hands drop lighter. To himself: “Boss... you only need one snake. No... the world would be better off without snakes.” Snake picks up lighter and lights Big Boss' cigar. The cigar briefly revives Big Boss. He inhales one last time: “This is good, isn't it?” After a moment, the cigar falls. Big Boss has passed away. Camera cuts to a medium shot of Snake and the body of Big Boss, with a bank of white flowers prominent in the foreground. Fade to black.

As the credits roll, Kojima seals Big Boss' message with one final surprise. This is the slow, mournful horn theme which ushers in the credits. This horn theme does not resolve into the “Old Snake” theme, but turns out to herald Ennio Morricone's classic protest song “Here's To You”, written in 1971 for the film Sacco and Vanzetti. This song honored the memory of Sacco and Vanzetti, political radicals executed in 1927 in what later historians and Massachusetts state authorities acknowledged was an outrageous miscarriage of justice. The original film version, sung by Joan Baez, became one of the iconic songs of progressive movements in the 1970s.

However, MGS4 does not use the original Baez version, but uses a more meditative and monumental variation, performed by Lisbeth Scott and scored by Harry Gregson-Williams.
Given the radical history of the song, and given the structural role of Big Boss in the story as an honest but failed revolutionary against the US Empire, one can argue that the new version is one of the most evocative love letters by a 21st century artist to the 20th century Left ever written.

Freed from the prison-house of neoliberalism, Big Boss is no longer the icon of the financial bodies of Empire. Indeed, his trademark Cuban cigar points in the opposite direction: not towards the financialized or militarized bodies of US Empire, but the social bodies which resisted that Empire. The failed rebellions of Big Boss against Zero symbolize the failed resistance movements to neoliberalism – the long litany of anti-colonial 20th century revolutions, ranging from Indonesia to Egypt, Cuba to Nigeria, and Vietnam to Iran. While these revolutions did achieve some degree of internal economic and cultural democratization, they could not transform agrarian, semi-feudal societies ravaged by centuries of colonial despoliation into industrialized economies overnight. The most common result was the replacement of colonial tyrannies by indigenous forms of political autocracy and economic oligarchy, and eventually into full-fledged neoliberal rule.199

Rather than giving in to despair, MGS4 insists that the first step to reinventing the future is the thorough-going critique of all of the failed revolutions of the past, using all the conceptual tools at our disposal. It is only through the fullest understanding of the past that we can begin to construct a future worthy of human beings. 200

This emphasis on rethinking the past in order to reinvent the future needs one final qualification. MGS4 was able to outflank the limitations of its own genre – the complicity of all espionage and action thrillers with the administration of Empire – by quoting extensively from its own franchise history, and by turning the financial speculations of neoliberalism against
themselves.

However, this strategy is not necessarily transferable to videogame genres which are heavily invested in specific histories or historical narratives. All too many adventure videogames, for example, are marred by what are essentially archeologically-tinged or occult-flavored variants of neocolonial ideology, where cultural artifacts hidden away in the recesses of the industrializing nations are scapegoated for the violence of the neoliberal world-system. Naughty Dog's *Uncharted* series is the fortunate exception to this rule, thanks to the design team's cosmopolitan understanding of the horrendous violence of colonialism.

The legacies of colonialism and empire weigh with special force on the genre whose game-play innovations had the single greatest influence on *MGS4*, namely the fantasy role-playing videogame. This raises the question of how role-playing videogames might effectively critique neoliberalism. The answer to this question is the subject of our next chapter.
“Perspectives must be produced which set the world beside itself, alienated from itself, revealing its cracks and fissures, as needy and distorted as it will one day lay there in the messianic light.”

Since its inception in 1987, Square Enix' *Final Fantasy* franchise has consistently been one of the most successful role-playing videogame series of all time, selling 89.2 million official copies from 1987 to 2011. Yet the release of *Final Fantasy 12* (hereafter referred to as *FF12*) in 2006 was more than just another chapter in this history.

*FF12* transformed nearly every aspect of the role-playing videogame, from voice-acting and cut-scenes to character customization and game-design. *FF12* also critiqued some of the most problematic traditions of the role-playing genre as a form, namely its complicity with Wall Street neoliberalism and First World neocolonialism.

To put this achievement into perspective, it is worth briefly reviewing the history of the *Final Fantasy* franchise. One of its defining features is that each flagship game features a different roster of characters and a different storyline, e.g. the game-world of *Final Fantasy 6* (1994) has no connection to the game-world of *Final Fantasy 7* (1997). Unlike most other media franchises, the series is not defined by a recurrent character or setting, i.e. there is no *Final Fantasy* equivalent of Solid Snake in Hideo Kojima's *Metal Gear Solid* series, nor is there anything like the mythical kingdom of Hyrule in Nintendo's *Legend of Zelda* videogames.

Given the narrative discontinuity between its major iterations, one might ask how the series managed to retain its popularity over such a long period of time. One of the main reasons is that Square's game designers found ways to balance innovation with repetition. Paradoxical as
it may sound, *Final Fantasy* never repeats itself, and yet constantly repeats itself. This repetition includes everything from signature musical fanfares to the names of magic spells, and from fictitious creatures such as chocobos (giant ostrich-like birds) to semi-mythological names such as “Bahamut”.

Repetition is also characteristic of the franchise's game-play. Every *Final Fantasy* game, no matter how innovative, has four essential features. These consist of a turn-based combat system, extensive equipment and skill customization, a quest-based rewards system, and finally open world exploration. The basic formula for this system was invented in 1987 by Square designer Hironobu Sakaguchi, who constructed the very first *Final Fantasy* for Nintendo's NES console.

What Sakaguchi did was to integrate these four features into a seamless, unified whole. Turn-based combat rewarded players with items, skill bonuses and equipment, customization gave players a high degree of tactical flexibility and in-game control, quests gave players a range of specialized challenges appropriate to their skill level, while open worlds created an unparalleled story-telling experience which rendered the game-world both credible and meaningful. No single element of game-play was allowed to overshadow its peers. Rather, each was meant to function in the context of all the others.

Over the next decade, Square would refine this basic formula, using the increased power of later generations of videogame consoles to enhance the level of narrative detail. The next qualitative leap for the franchise occurred in 1991, with the release of *FF4* for Nintendo's Super Famicom console. This game delivered one of the most complex stories of any videogame of its time, displaying approximately 16,000 words of dialogue via on-screen text messages. Gerald
Voorhees has noted that *FF4* was one of the first role-playing videogames to acknowledge the intersection of race, class and ethnicity in its storyline.\(^{205}\)

*FF4* was also noteworthy for its introduction of active time battle-systems, created by Square Enix staffer Hiroyuki Ito. The very first role-playing videogames employed turn-based battle-systems, i.e. the two sides in a battle or confrontation would alternate taking turns, in order to prevent anyone from having an unfair advantage. The main disadvantage of turn-based systems is excessive linearity. The game must pause and wait for players to issue commands to their playable characters, resulting in a rather unrealistic pattern of stop-and-start action.

In active time systems, an onscreen timer counts down between turns, compelling players to issue commands in real time to playable characters. Meanwhile, onscreen opponents act and react in real time as well. While active time systems put additional pressure on players, they also increase the immersive nature of the game-world.

Square reached another milestone in 1997 by releasing *FF7*, the company's first videogame on Sony's original Playstation console. The designers took full advantage of the Playstation's CD storage technology, filling up three discs with a large roster of characters, sophisticated cut-scenes, and a complicated tale of military-industrial conspiracies, corrupt politicians, and greedy corporations who must be defeated by a band of plucky heroes.\(^{206}\) The technical innovations of *Final Fantasy*'s first decade can be mapped out as follows:
Table 28. Game-play Elements and Corresponding Narrative Forms, Final Fantasy 1987-2001.

<table>
<thead>
<tr>
<th>Category</th>
<th>Interactive Media</th>
<th>Player Customization</th>
<th>Player Rewards</th>
<th>Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sound design</strong></td>
<td>Player cues</td>
<td>Character-specific (driven by storyline)</td>
<td>Fanfares</td>
<td>Level-specific themes</td>
</tr>
<tr>
<td><strong>Visual design</strong></td>
<td>Character and monster design (e.g. motion-capture), effects design (e.g. wirework, CGI)</td>
<td>Character-specific (driven by storyline)</td>
<td>Player cues</td>
<td>Level-specific themes</td>
</tr>
<tr>
<td><strong>User interface</strong></td>
<td>Character-specific menus, party system, active time management</td>
<td>Character abilities, players manual, game controls</td>
<td>Character abilities increase, in-game trophies and achievements</td>
<td>Area maps and directional cues</td>
</tr>
<tr>
<td><strong>Scriptwriting</strong></td>
<td>Character-specific dialogue</td>
<td>Character abilities</td>
<td>Character-specific voice-acting, storyline</td>
<td>Character-specific voice-acting, storyline</td>
</tr>
<tr>
<td><strong>Game-world</strong></td>
<td>Loot drops, item and equipment acquisition</td>
<td>Unlockable means of transport (chocobos, boats, airships)</td>
<td>Unlockable areas of world</td>
<td>Optional sidequests</td>
</tr>
</tbody>
</table>

In a phrase, Square answered every expansion of narrative form with an equivalent expansion of narrative content. One of the contributing factors here was the steady improvement in computer storage technology. The arrival of CD technology allowed Square's designers to add cut-scenes in *FF7* in 1997, and the arrival of DVD technology allowed Square to add voice acting to the main story events of *FF10* in 2001.

DVD technology also permitted significant improvements in audio and visual quality. High-definition sound replaced the low-quality sound-tracks of the earliest consoles, while the
capacity to depict realistic human faces and bodies led to the use of motion-capture actors to complement the work of the voice-actors.

Despite the technical limitations of the earliest home videogame consoles, the Final Fantasy series always had top-notch sound and character design, ranging from the iconic acoustic themes composed by Nobuo Uematsu for the very first Final Fantasy to the character designs of Yoshitaka Amano. That said, the steady advance of digital technology meant that Square's designers did not always have to invent everything from scratch. They could also creatively rework materials from their own past games.

The following screenshots illustrate this logic nicely. Below, the screenshot on the left shows a turn-based battle between the player-characters and a giant bomb creature in FF4, while the photo on the right shows a similar battle between the player-characters and a similar giant bomb creature in FF12. In FF4, the characters are little more than cartoon icons, and that the field of battle is a static image, not a true 3D space. By contrast, FF12's characters are far more detailed and are represented in 3D space. They also act in real-time, and are vulnerable to enemy attacks which also occur in real-time.

![Character Design in FF4 and FF12](image)

In addition to an increased sense of realism and overall immersion, there is a significant increase in onscreen visual data. The simple blue screen of *FF4* has been replaced by five sets of onscreen indicators. In the screenshot on the right, the health status and magical power of the characters is visible at the lower right, their local status is indicated by the icons above their heads, the onscreen map at the top right corner shows their location, the combat log at the top left records player and monster actions, while the health of the boss is indicated by the red bar at the top of the screen. Clearly, *FF12* was created during an era when digital audiences are accustomed to reading and interacting with multiple real-time visual windows of information.

### 4.1 The Transnational Audience and Postcolonial History

In addition to its contribution to the field of videogame design, *Final Fantasy* also contributed to the expansion of videogame audiences. While the first six flagship games had a primarily Japanese audience, *Final Fantasy 7* became an international best-seller. Today, the
bulk of Final Fantasy’s official sales occur in non-Japanese markets (primarily the US and the wealthier European countries):

Table 30. Final Fantasy Sales by Flagship Titles, 1994-2011. 207

<table>
<thead>
<tr>
<th>Launch Year(s)</th>
<th>Flagship Title(s)</th>
<th>Total Sales (million units)</th>
<th>Percent Official Sales Outside Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987-1994</td>
<td>Final Fantasy 1, 2, 3, 4, 5 and 6</td>
<td>15.2</td>
<td>20%</td>
</tr>
<tr>
<td>1997</td>
<td>Final Fantasy 7</td>
<td>9.7</td>
<td>66%</td>
</tr>
<tr>
<td>1999</td>
<td>Final Fantasy 8</td>
<td>7.9</td>
<td>54%</td>
</tr>
<tr>
<td>2000</td>
<td>Final Fantasy 9</td>
<td>5.3</td>
<td>48%</td>
</tr>
<tr>
<td>2001</td>
<td>Final Fantasy 10</td>
<td>8</td>
<td>66%</td>
</tr>
<tr>
<td>2002</td>
<td>Final Fantasy 11</td>
<td>1.4</td>
<td>62%</td>
</tr>
<tr>
<td>2003</td>
<td>Final Fantasy 10-2</td>
<td>5.5</td>
<td>59%</td>
</tr>
<tr>
<td>2006</td>
<td>Final Fantasy 12</td>
<td>5.8</td>
<td>60%</td>
</tr>
<tr>
<td>2009</td>
<td>Final Fantasy 13</td>
<td>6.5</td>
<td>61%</td>
</tr>
</tbody>
</table>

Impressive as they are, these numbers understate the true impact of Final Fantasy. The reason is that official sales do not include the unofficial and pirated copies circulating throughout the global semi-periphery. In the past twenty years, the nations of the semi-periphery have produced huge populations of technologically literate students and professionals, and have constructed some of the largest broadband and cellphone networks on the planet. The semi-periphery also contains four of the most dynamic and influential media-systems of the world – those of the BRIC nations (Brazil, Russia, India and China). The media markets of these nations are marked by living memories of the genocidal violence of colonization, as well as painful experiences of the economic violence of neocolonialism. 208

Since the turn of the 21st century, the BRICs have become avid consumers of videogames.

179
However, this does not mean that their videogame markets operate in the same manner as their US, European or Japanese analogues. Since the BRICs have per capita incomes of between one-quarter to one-tenth of First World levels, most of their citizens cannot afford the $40-$70 retail prices of top-tier games typical of industrialized countries, and rely instead on cheaper unofficial copies. As a result, total BRIC videogame sales were roughly $6.2 billion in 2010, about a quarter of the size of the comparable US figure, and roughly 9% of world videogame revenues of roughly $67.3 billion. By the same token, the demographic weight of the BRICs and the rapid proliferation of game-capable cellphones, computers and handheld devices means that the total size of the BRIC gaming audience is roughly equivalent to the total number of BRIC citizens with internet access, or roughly one billion people.

What this has meant is that the various iterations of the Final Fantasy franchise circulate throughout the semi-periphery through informal networks, ranging from pirated copies to file-sharing, social networks, and open source computer emulators capable of running console games. These informal networks are most developed in Russia, for the simple reason that it is the BRIC nation with the best-educated population and the largest number of computer programmers per capita.

For example, Russian fans of Valve's Half Life franchise are creating their own non-commercial, fan-made version of a Half Life-themed TV series called “Freeman's Days”.

While shooting is ongoing, the trailers testify to a high degree of filmmaking skill. Another example is the below screenshot, appended to Ross Scott's machinima Freeman's Mind, Episode 1, obtained from the audience data Youtube makes available to the public. This episode of Freeman's Mind first appeared in 2007, and has acquired a significant number of Russian
One of the true achievements of *FF12* was to acknowledge their transnational audience, by acknowledging the media-systems of the industrializing nations.

To achieve this feat, Square's design team had to confront one of the most enduring contradictions of the role-playing videogame. This is the historical weight of empire on its two leading sources of narrative raw material, namely Anglo-American science fiction, and fantasy and adventure fiction. These genres have always had some of the deepest levels of complicity with the British Empire and its US successor, ranging from the apologetics for British colonialism in Rudyard Kipling's *Jungle Book* to the Hollywood superhero franchises which celebrate the US Empire's neocolonial wars. Yet these same genres were often deeply ambivalent towards imperialism.

This is the structural ambivalence first diagnosed by Edward Said, whose classic critique
of the knowledge-industries spawned by the Orientalisms of the colonial era is worth reviewing here:

Under the general heading of knowledge of the Orient, and within the umbrella of Western hegemony over the Orient during the period from the end of the eighteenth century, there emerged a complex Orient suitable for study in the academy, for display in the museum, for reconstruction in the colonial office, for theoretical illustration in anthropological, biological, linguistic, racial, and historical theses about mankind and the universe, for instances of economic and sociological theories of development, revolution, cultural personality, national or religious character.\(^{212}\)

Where Said rubs the colonial and neocolonial infrastructures of the academy, the museum, and cultural theory against the grain of anti-colonial resistance movements, \textit{FF12} does something similar for the colonial and neocolonial traditions of the fantasy role-playing videogame. These legacies can be traced back to the literary work which remains the single most influential forerunner of the role-playing videogame, namely J.R.R. Tolkien's \textit{Lord of the Rings} trilogy.

There can be no denying that Tolkien's trilogy is suffused with the toxic ideology of British imperial whiteness and eugenic purity, and contains some of the most repellent stereotypes of colonized Asians and Africans imaginable.\(^{213}\) Yet Tolkien's Middle Earth also contains some of the most heartfelt and genuine moments of protest against mindless industrialization, imperial war, and capitalist reification. Indeed, the trilogy concludes with spectacle of the hobbits returning home to carry out their very own version of an anti-colonial national revolution.

The key innovation which enabled videogame designers to translate Tolkien's achievement into digital format was not a work of digital media, but a variant of the mid-20th century board game. This was Gary Gygax' invention of the live-action \textit{Dungeons and Dragons}
role-playing games. Created in the 1970s, *Dungeons and Dragons* employed pen and paper, statistical charts, and dice-rolling in order to depict a fantasy world loosely based on Tolkien's Middle Earth. During each game session, players would state their actions, and then a neutral referee called the dungeon master or DM determined the outcome of those actions, relying on a set of in-game rules. The goal of these actions was symbolic accumulation: defeating monsters, completing quests, and obtaining rare treasures or items.

The task of story-telling was shared between the players and the DM. Each participant role-played their particular character, while the DM provided the background narration and acted out the parts of non-player characters. Unlike Tolkien's tightly organized and self-referential world, *Dungeons and Dragons* was designed to be narratively open, and players and DMs were encouraged to create their own stories.

In the late 1970s, US-based videogame artists began to transform the written rule-set of *Dungeons and Dragons* into digital game-play. Due to the technological limitations of the console systems of the day, most of the leading role-playing videogame franchises of the 1980s and early 1990s were released on expensive personal computers, and catered primarily to the upper-income strata of a primarily US audience. The comparatively more powerful Apple II served as the initial platform for Richard Garriott's *Ultima* (founded in 1980 and still ongoing) as well as Sir-Tech's *Wizardry* (1981-2001). Nintendo's *Legend of Zelda* franchise, which began in 1986, is a partial exception, but the early *Zelda* games had limited storylines and plot development.

It is not surprising that most role-playing videogames of this era did not critique the overt imperialism of Tolkien's trilogy, nor the implicit neocolonialism of the *Dungeons and Dragons*
games. Instead, these videogames copied the neocolonial tropes deployed by the Hollywood
adventure and science-fiction genres. These tropes included the exotic tourist locales of the Bond
thrillers, the Cold War alien invasion, and the Oriental despot (e.g. Flash Gordon's Ming the
Merciless). Matt Barton describes one of the typical products of this moment:

One of the most interesting CPRGs of 1983 is a little-known game named Expedition Amazon,
authored by Williard Phillips and published by Penguin Software (a port for the Commodore 64
followed in 1984). Despite some design flaws, the game deserves note for being one of the few
CPRGs set in modern times. The goal is to send a team of four explorers (medic, field assistant,
radio operator, and guard) on an expedition into ancient Incan ruins. Instead of orcs and dragons,
players struggle against recalcitrant natives, anacondas, and malaria-infected mosquitoes.
Gameplay is similar to that in Epyx's Sword of Fargoal, though with fixed rather than randomized
dungeons. A dose of irreverent humor also pleased critics. An image of Flint University is
depicted as a run-down trailer in a trailer park, with a slow-moving armadillo scuttling past, and
items recovered from battles with Amazons include Pac-Man lunchboxes.  

Beneath the veneer of college hijinks lurks the horrifying reality of biological
neocolonialism, in the form of the patenting of indigenous seeds by transnational corporations,
the US war on drugs which involved the massive use of herbicides and the arming of
paramilitary groups throughout Latin America, and unethical medical testing programs run by
First World biomedical firms on unsuspecting Third World citizens.

This dreadful history may explain why one of the factors which allowed FF12 to liberate
the fantasy role-playing videogame from the jailhouse of US neocolonialism was Square Enix's
location in Japan. This location was critical for two reasons. First, it allowed FF12 to access the
most progressive and transnational traditions of Japanese science fiction. It should be recalled
that Japan's loss of its East Asian colonial empire during WW II and its post-war democratization
meant that Japanese science fiction artists were far more critical of Empire and neoliberalism
than their US or Western European counterparts. The result was an outpouring of science fiction

Second, Square's designers were heavily influenced by the non-commercial networks of Japan’s world-class anime (animation) and manga (comics) cultures. While Japanese anime and manga became lucrative and globally influential industries in the 1970s, neither mass media was dominated by US-style copyright fundamentalism or broadcasting oligopolies. The reason is that both anime and manga were structurally tied to a flourishing array of non-commercial fan networks. These latter include fan-based production networks (independent comics artists), fan-administered distribution networks (the sharing of comics, videotapes, and later file-sharing on the internet), and fan-organized consumption networks (everything from anime viewing clubs, to cosplay conventions where fans dress up and role-play as their favorite characters).  

While these networks were originally limited to Japanese fans, they converged with remarkable speed with the emergent digital fan networks of other fully industrialized nations in the late 1990s. By the 2000s, informal practices of media copying and file-sharing had spread to the urban centers of the largest middle-income nations. As a result, vast new transnational audiences emerged for Japanese television, films and eventually digital media, especially in the BRIC nations.  

One of the incidental factors which gave the *FF12* design team an unusual degree of freedom to reinvent the franchise was its lengthy production cycle, which ran from 2001 until 2006. Most leading videogame franchises operated on twelve-month to eighteen-month development cycles in the 1990s, and shifted to two-year cycles in the 2000s (the only exception
here are sports-themed videogame franchises, which are compelled to annually update their player rosters and statistics in order to keep up with the annual cycle of real-world sports industries). More recently, significant numbers of franchises have begun to move to even longer cycles, e.g. Sony Santa Monica's *God of War 3* took three years to produce, Hideo Kojima's *Metal Gear Solid 4* spent four years in production, while Sony Team Ico has been developing *The Last Guardian* for five years.

*FF12*'s five-year gestation period did more than just permit the designers to refine and polish one of the most complex game-worlds ever created. It also gave them a window into the terminal crisis of neocolonialism. If world news headlines were dominated by the economic crisis of neoliberalism between 2007-2010, those same headlines were dominated from 2001 to 2006 by the legitimation crisis of the US Empire – a polite way of saying, the complete fiasco of the neoconservative project to restore US economic and political hegemony via neocolonial wars in the Middle East and Central Asia.

In fact, the main storyline of *FF12* begins by depicting a neocolonial war. The seven-minute opening cut-scene of the game depicts a powerful entity called the Archadian Empire conquering a small desert kingdom called Dalmasca. Subsequently, the six main playable characters of the storyline – in order of appearance, Ashe, Basch, Vaan, Penelo, Balthier and Fran – end up as the heart of Dalmasca's anti-imperial resistance.

What makes this resistance so interesting is that the scriptwriters took great care to avoid legitimating a reactionary or provincial anti-colonial nationalism – the kind which would either justify the tyrannical rule of postcolonial elites, or else gloss over the horrendous human cost and ambiguous political goals of the Iraqi and Afghani insurgencies. The main task of the resistance
is not constructing a national army, but building a transnational political coalition, by uncovering
the true motivation behind the invasion of Dalmasca. As it turns out, the invasion was just the
opening gambit in a vast geopolitical struggle over supplies of magicite, an extremely rare
crystal which powers the game-world of Ivalice. What hydrocarbons were to the real-life proxy
wars and interventions of the US Empire, magicite is to the empires of Ivalice.

Due to the length and complexity of the storyline, which requires six hours of cut-scenes
and twelve to fifteen hours of game-play for the average player, the main events of the story are
listed below:
Table 32. Major settings, characters and plot events of *FF12*, in chronological order.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Playable character(s) and allies</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nalbina fortress</td>
<td>Rex</td>
<td>Archades invades Dalmasca, knights of Dalmasca (including Rex) attempt to rescue King Raminas but fail.</td>
</tr>
<tr>
<td>Introduction to Rabanastre</td>
<td>Vaan and Penelo</td>
<td>Two years later, Vaan (Reks' younger brother) explores Rabanastre, now occupied by the Archadian Empire. Vaan attempts to sneak into the palace during a banquet, but must flee after accidentally meeting sky-pirates Fran and Balthier</td>
</tr>
<tr>
<td>Escape from Nalbina</td>
<td>Vaan, Fran, Balthier (Basch as ally)</td>
<td>Vaan, Fran and Balthier try to escape through Rabanastre's sewer network, but are captured and sent to Nalbina dungeon by the Empire. Once in Nalbina, they escape with the help of Basch.</td>
</tr>
<tr>
<td>From Rabanastre to Bhujerba</td>
<td>Vaan, Penelo, Basch, Fran, Balthier</td>
<td>Penelo is captured by bounty-hunters, forcing the party to search Bhujerba and the Henne magicite mines. They rescue Penelo. After Basch meets with Marquis Ondore, leader of Bhujerba, the party employs a ruse to rescue Ashe from an Imperial airship.</td>
</tr>
<tr>
<td>King Raithwall's tomb</td>
<td>All six (Vossler as ally)</td>
<td>After rescuing Ashe, the party crosses the Sandsea and enters King Raithwall's tomb, seeking the Dawn Shard. They obtain the Shard, but are betrayed by Vossler, who wants to bargain with the Empire by handing over the Dawn Shard.</td>
</tr>
<tr>
<td>To Jahara</td>
<td>All six</td>
<td>The Dawn Shard unexpectedly explodes, vaporizing Archades' 8th Fleet. Ashe and party escape, and journey to Jahara to learn more of the Shard's power. There they meet Larsa, who convinces them to seek peace negotiations with the Empire.</td>
</tr>
<tr>
<td>From Jahara to Mt. Bur-Omisace</td>
<td>All six (Larsa as ally)</td>
<td>The party journeys to Mt. Bur-Omisace to meet the Gran Kiltias. Once there, they learn Vayne has become Emperor of Archades in a brutal coup, and is launching a war to conquer all of Ivalice.</td>
</tr>
<tr>
<td>To the Stilshrine of Miriam</td>
<td>All six</td>
<td>The party journeys to the Stilshrine of Miriam to obtain one of Raithwall's relics, the Sword of Kings, a weapon which can destroy nethicite. They succeed, and return to Mt. Bur-Omisace to discover that the Gran Kiltias has been assassinated by Judge Bergan, who has been driven mad by the profligate use of artificial nethicite. The party must defeat Bergan.</td>
</tr>
<tr>
<td>Table 32. (cont.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>To Archades</strong></td>
<td>All six (Reddas as ally solely for battle against Dr. Cid)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deciding to track the artificial nethicite back to its source,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the party travels through Salikawood and the Phon Coast in order</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to reach Archades. Once there, they enter Draklor Laboratory and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>accidentally run into Reddas, an ally. Together, the party and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reddas must defeat Dr. Cid.</td>
<td></td>
</tr>
<tr>
<td><strong>From Balfonheim to the Great Crystal</strong></td>
<td>All six</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The party must travel from the pirate city of Balfonheim through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Feywood and to the ancient city of Giruvegan. At the heart of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the city is the Greaty Crystal, where Ashe meets the Occurians,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>powerful beings who give her the Treaty-blade, a weapon which</td>
<td></td>
</tr>
<tr>
<td></td>
<td>can cut nethicite. They command her to seek out the Sun-cryst to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>obtain more nethicite, and use it to destroy the Empire.</td>
<td></td>
</tr>
<tr>
<td><strong>To Pharos</strong></td>
<td>All six (Reddas as ally)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>After returning to Balfonheim, the party travels to the top of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Pharos tower, accompanied by Reddas. Once at the top, Ashe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>decides to destroy the Sun-cryst. Before she can do so, the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>players must defeat Gabranth and Dr. Cid. Afterwards, Reddas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>perishes while single-handedly destroying the Sun-cryst.</td>
<td></td>
</tr>
<tr>
<td><strong>Airship Bahamut</strong></td>
<td>All six (Gabranth and Larsa as allies)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>While the combined Bhujerban-Rozarrian resistance fleet fights</td>
<td></td>
</tr>
<tr>
<td></td>
<td>against an Archadian invasion force in a massive aerial battle,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the party boards the Bahamut and must fight Vayne. During the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>battle, Gabranth switches sides and fights on the side of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>anti-Imperial resistance. He is fatally wounded in the battle,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>but Vayne is defeated and the war comes to an end. Dalmasca is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>free once again.</td>
<td></td>
</tr>
</tbody>
</table>
If *FF12*’s storyline shines a spotlight on the catastrophes of 21st century neocolonialism, then its game-play borrows from a much more hopeful phenomenon, namely the massive multiplayer online (MMO) version of the role-playing videogame. The most prominent example of this latter is Blizzard's World of Warcraft franchise, founded in 1994 and still going strong with an estimated 12 million subscribers. Analysts suggest the worldwide subscriber base of all MMOs combined has mushroomed from roughly 1 million users in 2000 to around 21 million in 2010. Of course, due to the continuous churn in the subscriber base, the total number of players who have ever played an MMO is much higher than these figures.

This history is relevant for two reasons. First, MMOs pioneered the creation of persistent online worlds with deep levels of player customization, story-driven narratives, and significant player interaction – precisely the features which define the role-playing genre. Second, MMOs have comparatively large populations of players from the industrializing nations, especially from South Korea and China. Korean studios such as NCSoft have produced top-notch MMOs throughout the 2000s, while Blizzard first opened *World of Warcraft* to subscribers in mainland China in June 2005.

What this means is that the MMOs have functioned as key laboratories of innovation for the field of role-playing videogames. Taku Murata, general manager of research and development at Square Enix, noted that many of the key designers of *FF12* were influenced by their work on Square's *FF11*, Square's first MMO:

> Since *Final Fantasy X* and *XI* were being developed, the teams that had been working on *Final Fantasy Tactics* [1997] or *Vagrant Story* [2000] came together to create *Final Fantasy XII*, introducing a third *Final Fantasy* console and PC team.

> The individuals on this team [myself included] had previous experience developing action/real-time-based battle systems for games, which creates a connection between the fields and battles. We decided to make use of our prior knowledge and integrate an action/real-time-
based battle system into the *Final Fantasy* franchise, which was a significant challenge. The previous releases of *Final Fantasy* used a random encounter-based battle system.\(^{221}\)

Indeed, almost every single core game-play innovation of *FF12* – real-time battles, open worlds, gambits, chaining, and clan halls – was borrowed from the MMO, though carefully modified and adapted to fit the context of a single-player game. However, the design team of *FF12* did more than just duplicate the core strengths of the MMO. No less importantly, they critiqued the MMO's greatest weakness, namely its dependence on neoliberal identity-politics. Jessica Langer writes eloquently about the intersection of race, geopolitics and First World consumerism in *World of Warcraft*:

I contend that in terms of correspondence with the real world, race in *World of Warcraft* functions thus: trolls correspond directly with black Caribbean folk, particularly but not exclusively Jamaican; tauren represent native North American people (specifically Native American and Canadian First Nations tribes); humans correspond with white British and white American peoples; and dwarves correlate to the Scottish. The other races, both Alliance and Horde, do not correspond so directly to real-world peoples, but they still represent the general familiarity or foreignness of their factions. For instance, certain cues such as hairstyles and body shape suggest that orcs represent colonial depictions of black people in general, and the undead seem to represent a sort of ‘pure’ Otherness centered in Kristevan abjection (which will be discussed at length later). Blood elves, the newest Horde race, seem on the surface to upset the familiar/foreign schema of the factions, but I would argue that they are portrayed largely as analogies to drug addicts, particularly narcotics addicts, a class of people who are marginalized within white Western society rather than locked outside of it. Gnomes, draenei and night elves have similar sliding significations, with the night elves in particular seeming at times to represent a stereotypical East Asianness, with their Japanese *torii* gates and their 'Darnassus Kimchi'.\(^{222}\)

These fantasy-races are a mixture of First World racial identities (located primarily in Japan, US and Western Europe), Anglo-American fantasy and science fiction tropes (J.R.R. Tolkien's elves, dwarves, and orcs), and selected postcolonial diasporas, ranging from indigenous North Americans to the African diasporas of North and South America. To be sure, Blizzard carefully avoided stamping any particular race as deviant or inherently malevolent. *World of Warcraft*
players can choose any race they wish, with no real effect on the quests or game-play – the only difference is that certain non-player characters will react differently to the player.

This does not mean, however, that the game-world transcends race. Rather, *World of Warcraft* depicts a fantasy of racialized equivalence, wherein each race is granted nominal or juridical equality vis-a-vis all the others. This juridical equality has a precise social model. This is the equality of the neoliberal-era professional sports franchise, and it is no accident that role-playing MMOs replicate many of the positive as well as dysfunctional aspects of contemporary sports culture. The price tag this neoliberal logic of fantasy-equivalence must pay is its unwitting facilitation of toxic forms of regression. As Langer observes:

Schwartz, in her study of 'Fantasy, Realism and the Other in Recent Video Games,' writes that she 'experienced the game on a role-playing server and observed that some players would role-play hatred and bigotry in order to make the game more real to them' (2006, 320). In my own playtime on an RP-PvP [role-playing, player-versus-player] server, I have had the same experience and witnessed a similar dynamic many times: players eagerly expand their conflicts with players of the opposing faction from play-fights dictated by game mechanics to emotionally charged in-character battles, using the familiarity/otherness code posited by the game and its lore, often extending beyond the strict boundaries of gameplay and onto Blizzard's official forums or unofficial fan-built websites and chat areas. This practice, while a natural and even encouraged outgrowth of the richness of the virtual game-world, can have serious repercussions: the 'hatred and bigotry' that both I and Schwartz have seen and experienced are directed not only toward players of the opposing faction, but players of an opposing faction that closely represent a real-world marginalized culture. Thus, such speech is far more loaded than it otherwise would have been.223

If the positive aspects of neoliberal equivalence include collective forms of association, ranging from teams (guilds and clans) and scrimmages (death-matches) to various forms of rule-based peer competition (player versus player battles, trophies and other in-game rewards, and personal as well as team leaderboards), then the negatives also include everything from the overt exploitation of players and fan communities by commercial interests, to pernicious forms of self-exploitation by athletes and players.224

192
In both the sports as well as the videogame industries, these forms of self-exploitation generate significant and pervasive secondary contradictions. While professional sports is one of the few avenues of upward class mobility for oppressed communities of color in the US, those same communities use basketballs, baseballs, team uniforms and other equipment produced by low-wage workers located in the industrializing world. Conversely, the rapid expansion of online access in the industrializing nations has generated the phenomenon of “gold farming”, or what Richard Heeks as described as the informal outsourcing of tedious or labor-intensive quests in role-playing videogames to low-wage player workers in industrializing nations, all for the benefit of comparatively privileged players in the fully industrialized countries.225

Gold farmers are just the latest addition to the vast informal service sector which earns a precarious living on transnational flows of trade, investment and tourism between richer and poorer countries. These workers include talent scouts who scour the populations of poorer nations for future star athletes, employees of the tourist industry who cater to visiting First World consumers, and so-called “coyotes” who ferry migrants across national borders. As Lisa Nakamura points out, neoliberalism's utopia of untrammeled speculative freedom turns out, in reality, to be strictly policed by existing hierarchies of cultural and economic capital:

However, while Chinese gold farmers create and deploy avatars, they are unable to accumulate avatarial capital since their jobs consist in selling “level ups” as well as gold and equipment. Thus, the notion that avatars are “manifestations of the self” when applied to gold farmers neatly sums up the problematics of informationalized capitalism. The privilege of avatarial self-possession is, like capital itself, unevenly distributed across geopolitical borders. Though “emotional investment” is an unavoidable side effect of avatar usage, the luxury of either hard or soft capital accumulation is denied player workers in virtual worlds. If late capitalism is characterized by the requirement for subjects to be possessive individuals, to make claims to citizenship based on ownership of property, then player workers are unnatural subjects in that they are unable to “come to own an avatar.”226
FF12 critiques the neoliberal ideology of racialized equivalence, by reading the contradictions of neoliberal-era race, gender and sexuality in a transnational context. Instead of creating neoliberal avatars, the designers fashioned the six playable characters of FF12 into symbols of the multipolar world.

To do this, the designers borrowed from the 20th century science fiction strategy of using the trope of the space alien to signify the identity-politics of race, gender, sexuality and other categories. For example, the game-world of Ivalice is populated not just by diverse nation-states, but a diversity of races as well. Most of these races take on the appearance of a humanoid version of a recognizable animal. The major races include cat-like moogles, lizard-like bangaa, pig-like seeqs, dog-like nu mou, bird-like garif, and rabbit-like viera (ordinary-looking human beings, it should be noted, are referred to simply as “humes”). While each race is marked by phenotypical difference, they are unmarked in terms of economic class, nationality, or linguistic competence. There is no moogle or seeq nation, nor is there one-to-one correspondence between phenotype and citizenship. Nor are these races marked by the Cold War identity-politics typical of many US science fiction narratives (e.g. Star Trek's rewriting of Russians into Klingons and Chinese into Romulans).

This racial egalitarianism is matched by an equally striking gender egalitarianism. Fantasy role-playing videogames have long been marred by the crudest forms of sexism – the short list of stereotypes includes the helpless damsel-princess in distress, and the brash young adolescent wielding a comically outsized sword. By contrast, the game-world of Ivalice is refreshingly free of gender bias. The three main female playable characters (Ashe, Penelo and Fran) are complex, fully-realized individuals, who are just as strong and capable as the male
characters (Basch, Vaan and Balthier). They also receive the same amount of character development and screen-time. Neither gender nor phenotype directly correlate with power or position.

This does not mean, however, that Ivalice is a spuriously colorblind or gender-free world. Rather, FF12 is one of the first videogames to rise to the challenge of representing the transnational intersection of race, ethnicity, gender and sexuality in the 21st century. Two out of the six playable characters – the sky-pirates Balthier and Fran – are overtly marked by phenotype, accent and social status with the Euro-American categories of imperial whiteness and subaltern blackness. Balthier was born and raised by a wealthy scion of Archades, FF12's lightly fictionalized version of the US Empire, and speaks with an upper-class English accent. Fran, for her part, is marked by phenotype as a woman of color, and speaks with an unusual accent derived from her childhood in Eruyt Village, a viera community in Golmore Jungle.

At first glance, this is nothing unusual, given that the trope of the resident racialized alien has a long history in mainstream US science fiction, e.g. the half-human, half-Vulcan Spock in the original Star Trek (1966-1969) television series. But what makes FF12 a cultural landmark is that it breaks free of the limitations of 20th century Euro-American identity-politics. Fran is neither an alien Other, nor a neocolonial exotic. The storyline showcases her culture of origin, i.e. the Golmore viera, with care and respect – the same care and respect given to all the other playable characters.

Most startling of all, Balthier and Fran are an item. FF12 not only shatters the color bar for interracial romance in videogames, it creates the first credible transnational romance in media history. This is because Fran and Balthier are not obedient subjects of their respective societies,
but symbols of the transnational rebellion against such. Both have chosen a life of permanent 
exile as sky-pirates, rejecting the strictures of imperial bureaucracies and village hierarchies 
alone.

What makes this romance work is not just the scriptwriters' rejection of neocolonial 
Orientalism and neoliberal racialization, but also the transnational cosmopolitanism of the 
scriptwriting, which borrows extensively from the toolkit of the 20th century Bollywood 
melodrama. Just as the 1950s Bollywood romances of Bimal Roy and Raj Kapoor portrayed the 
passion of the characters through symbolic sensuality and euphemistic shots rather than overt 
sexuality, the relationship between Fran and Balthier is relayed through skillful dialogue and 
character development.

The final piece of the puzzle is the racial identity of the four other playable characters. It 
would be all too easy to assume Ashe, Basch, Vaan and Penelo are ethnically white. In point of 
fact, they are the racially mixed residents of Dalmasca, a country teeming with Ivalice's version 
of racial diversity (e.g. the adult guardian of Vaan and Penelo, who have lost their parents, is 
Migelo, a bangaa) and ethnic hybridity. While Vaan, Penelo and Ashe were all born in Dalmasca, 
Basch is a naturalized citizen of Dalmasca. Originally, Basch was a refugee from the vanished 
land of Landis, a kingdom colonized by the Archadian Empire long ago, but this does not prevent 
him from serving as a loyal and respected Dalmascan citizen.

In any other mass media, this hybridity would very likely have been constrained by a 
repressive, neoliberal identity-politics, similar to what Angharad Valdivia diagnoses as the global 
Latinidad of US television and film producers seeking to capitalize on Latina/o markets:

The manipulations of sexualized bodies on mediated sites of popular culture offers a way to 
examine how particular scripts of hybridity are mobilized in order to construct normative notions
of the category Latino/a. Looking at a range of sites such as the global circulation of television, girl culture, and celebrity stars also reveals the work of the cultural imaginary in relation to a new Latinidad. The hybridity of everyday life is parallels by the genre blending generated by technological convergence, which has blurred the boundaries between various types of media products and markets. Globalization and media convergence have made it profitable to produce across media platforms by reworking content into multiple formats and marketing to a wide-ranging global audience.\textsuperscript{229}

\textit{FF12} escapes from this neoliberal hybridity by recourse to transnational demography. The United Nation's annual Human Development Report classifies nations in terms of high-income (fully-industrialized), middle-income (partly-industrialized, with significant levels of urbanization), and low-income (just beginning to industrialize) status. In 2010, the high-income and low-income tiers had approximately 1 billion inhabitants respectively. However, the vast majority of people on the planet (about 5 billion) live in the middle-income tier.\textsuperscript{230}

\textit{FF12}'s character-system mirrors this demographic reality. One of the six main playable characters (Balthier) is from a wealthy metropole (Archades), one (Fran) is from a rural periphery (Golmore Jungle), while the remaining four out of six are from Dalmasca (a middle-income nation).

While each of the characters is linked to their respective geopolitical location, they are not limited to such, either. Rather, they travel through the length and breadth of Ivalice, visit its wealthiest cities as well as its poorest villages, and learn to trust and cooperate with each other in the course of the storyline. The result is an allegory of transnational solidarity, where the local anti-neoliberal struggles rooted in each sector of the world-system eventually converge in a united front of the dissidents of the metropole, the semi-periphery, and the true periphery.\textsuperscript{231}
4.2 Videogame Localization as Transnational Aesthetics

One of the most important and often overlooked mechanisms by which the transnational audiences of the semi-periphery began to influence role-playing videogames was localization, a.k.a. the process of translating culturally specific stories, texts and dialogue for the benefit of transnational audiences. In the 1980s and early 1990s, the overwhelming dominance of the Japanese and US markets in the videogame industry meant that localization consisted primarily of translating Japanese into English or vice versa, while triangulating between the respective consumer cultures of the two countries. By the late 1990s, the growth of the videogame market in Europe meant that the standard range of translations expanded to include French, German, Italian and Spanish. Since these nations were heavily industrialized and had long traditions of foreign-language cultural imports and high levels of English-language comprehension, the task of triangulation remained comparatively simple.

By the mid-2000s, however, the demands on localization increased exponentially. First of all, there was an increasing need to access fast-growing emerging markets and the vast new audiences who spoke Mandarin Chinese, the Latin American variants of Spanish, Brazilian Portuguese, Russian, Arabic, Korean and Hindi. Secondly, digitally-connected audiences had begun to download and consume the film, television, and music productions of the industrializing world, especially those of the BRIC nations.\textsuperscript{232}

In a nutshell, the \textit{FF12} design team had to create stories, characters and dialogue which appealed to an increasingly cosmopolitan, media-savvy and transnational audience. Due to its ability to access an increasing number of other mass media, this transnational audience was
allergic to the cruder forms of nationalism, xenophobia or provincialism purveyed by earlier
generations of mass media.

By the same token, this transnational audience is a heterogenous bloc, teeming with its
own complex contradictions. One of the central tensions of the transnational audience is
illustrated by Sangita Gopal and Sujata Moorti's incisive analysis of the global circulation of
Bollywood cinema:

Bollywood cinema partakes in at least three circuits of globalization: metropolitan,
diasporic, and subaltern...

Globalization processes entail overlapping and intersecting circuits. Shifting the gaze
away from the West, we find that in the global South Hindi film music functions outside
commodity logic and articulates an alternative globalism. Bollywood's continued presence in
places such as Latin America, the Caribbean, Southeast Asia, and North Africa must be theorized
differently. Songs arrived here as a part of cultural exchanges facilitated by political alliances like
the Non-Aligned Movement (NAM).

Neocolonialism has not vanished, but takes on a more complex form, moving away from the
tradition model of Northern broadcasts to a captive South, and towards a wide range of
potentially neocolonial and potentially egalitarian South-South interactions.

One could argue that Gopal and Moorti's vision of an alternative globalism has been at
least partly realized by *FF12*'s extraordinary voice-acting. While the Japanese voice-actors do an
admirable job, there are grounds to consider the English-language sound-track as the definitive
performance of the videogame. This is because *FF12*'s English voice director, Alexander O.
Smith, deployed English as a transnational language.

Smith deserves credit for assembling an all-star cast of voice actors, and orchestrating
some of the finest performances of their careers. For starters, Kari Wahlgren endows Ashe with
an unusual admixture of tenacity and humanity. As the leader of Dalmasca's anti-colonial
resistance, Ashe must make tough decisions, but refuses to let the resistance degenerate into opportunism or nihilistic violence. For his part, Keith Ferguson voices the character of Basch with a mixture of mourning for the past and steadfast hope in the future. Bobby Edner as Vaan and Cat Taber as Penelo deliver top-notch performances of their own, showcasing their respective characters' youthful exuberance as well as their maturation later in the story.

Yet the two brightest stars in *FF12*'s voice-acting firmament are unquestionably Gideon Emery's voicing of Balthier and Nicole Fantl's voicing of Fran. Emery, who was born in South Africa and has extensive experience in the British theater, delivers a faultless English accent which leavens Balthier's upper class hauteur with the swashbuckling flair of the Hollywood pirate movies. For her part, Nicole Fantl delivers a superlative performance, voicing Fran's lines with depth, panache, and layers of what can only be called postcolonial irony. Indeed, one of the most exquisite narrative pleasures of *FF12* is listening to Balthier and Fran lob artful double-entendres and triple-entendres at each other, lines which often go far over the heads of Vaan and Penelo.

Many fans assumed that Fran's mysterious accent was based on an obscure European language. In reality, the viera in *FF12* speak in a completely fictitious accent, specifically created by Smith for the game-world of Ivalice. Numerous science fiction and fantasy productions have created their own unique languages, everywhere from Tolkien's Elvish to *Star Trek*'s Klingon, but *FF12* is one of the first videogames to deploy the linguistic resources of global English to construct a transnational narrative.235

The true power of this voice-acting strategy first becomes apparent when Vaan accidentally runs into Balthier and Fran deep inside a Dalmascan palace. Vaan's neutral US
accent forms the neutral bridge between Balthier’s British accent and Fran’s viera accent:

Vaan begins rifling through the baubles of the treasure-room. In his haste, he accidentally triggers a secret mechanism, causing a nearby goddess statue to come to life. The face of the goddess opens to reveal a strange glowing crystal. Vaan grabs the crystal. Voice-acting continues.
Voice of Balthier: “Quite a performance.”  
Balthier appears in the doorway.  
Vaan: “Who are you?”  
Balthier: the epitome of suave: “I play the leading man, who else?”
Enter Fran.  
Balthier: “Fran, the magicite.”  
Fran: hand on hips: “Now then. I’ll take that.”  
Vaan: puts crystal behind his back: “No you won’t. I found it. It’s mine.”  
Balthier: “And then when I take it from you, it’ll be mine.”  
They stare at Vaan, but make no move to take the crystal by force. Suddenly we hear a distant clamor and a nearby door opens slightly. Balthier and Fran look at each other.
Balthier: archly: “Exit stage right.”  Shot of statue closing its mouth.  
Fran: “The gods do not smile on us.”
Balthier: shrugs: “I like it better that way.”

Balthier’s witty repartee is not just the perfect foil for Vaan’s youthful brashness, it also subtly satirizes some classic RPG stereotypes (“I play the leading man”). Nor is it an accident that the crystal is taken from a statue which just happens to be an artful blend of South Asian and Buddhist statuary – the first in a prolific series of South Asian cultural references, whose ulterior significance will be revealed in just a moment. Three screenshots of the above cut-scene are displayed below, in the order of their appearance:
These accents and visual styles do not simply connote local cultural differences within the game-world. They are a means of accessing real-world postcolonial history within the context of FF12’s fictional game-world. For example, Fran's accent is shared by all other viera, while Balthier's British accent is shared by all the other denizens of the Archadian Empire, from Emperor Gramis down to the Imperial foot-soldiers patrolling occupied Dalmasca. Similarly, the inhabitants of Dalmasca speak in the standard diction of the US mass media.

What this choice of accents does is to pull the rug from beneath the neoconservative War on Terror retailed by the Project for a New American Century and US neoconservativism – the thesis that US military intervention was necessary to defeat radical Islamists or Islamofascists. Of course, the War on Terror would founder thanks to both its internal ideological incoherence (the dominant logic of Middle Eastern and Eurasian politics is postcolonial nationalism, not religious extremism) as well as the catastrophic failure of the occupations of Iraq and Afghanistan. That said, FF12 was completed in 2006, a moment when the neocon project was in crisis but not yet in fatal disrepute.

By showing that Dalmascans speak like ordinary US citizens, the voice-acting inverts the antipodes of the benevolent civilizing Empire and the barbarian-to-be-civilized. The player
literally steps into the shoes of the Iraqi insurgents, at the same moment that the project of Empire is relocated from the corridors of Washington, DC to the halls of the Imperial Senate in Archades. The key narrative hinge of this inversion is not a geopolitical trope, but the deployment of a fourth variant of global English which has a latent geopolitical significance.

The geopolitical conflicts of Ivalice involve three competing superpowers – the realms of Archades, Rozarria, and Bhujerba. Archades clearly represents Anglo-America, thanks to the British accents of its citizens and the fact that its capital city is a lightly fictionalized version of New York City (replete with stylized skyscrapers, brownstones and arcades, and extremes of wealth and poverty). While Rozarria remains off-screen for most of the story, it is the major geopolitical and military competitor of Archades. One of its leaders, al-Cid Margrace, speaks with a heavy Spanish accent, suggesting a parallel to the European Union (note that the EU only became a truly continental body when it expanded by ten members in 2004).

Bhujerba is a prosperous city-state which maintains a policy of neutrality vis-a-vis its neighbors. While it is a lesser military power than Archades or Rozarria, it can more than hold its own as a commercial power. The reason is that it is a major producer of magicite, the crystal which powers the world of Ivalice. In today's geopolitical context, it would be all too easy to assume that Bhujerba is a symbol of a rising China or perhaps the industrialized East Asia countries, regions which are commercially successful but wield less geopolitical influence than the US or EU.

Yet this is precisely the reading which FF12 rejects. Bhujerba's true geopolitical model – and the model for the fourth version of global English – is not revealed until the moment when the player travels to the city-state of Bhujerba for the first time. Bhujerba's inhabitants employ
terms borrowed from the historic South Asian language of Sanskrit. For example, the inhabitants use the word “bhadra”, roughly equivalent to “Mr.” or “M’am”, and borrowed from the Sanskrit honorific “bhadra”, meaning “blessed, auspicious, prosperous”. This South Asian connection is confirmed by the voice-acting of Bhujerba's leader, Marquis Halim Ondore. Ondore, voiced by veteran actor Tom Lane, recites his lines in an unmistakably South Asian accent.

The use of South Asian English and Sanskrit was brilliant, an aesthetic master-stroke possible only in the context of 21st century videogame culture. The reason is that any attempt at modeling Bhujerba's language on a contemporary South Asian vernacular language would have generated fatal contradictions, simply because South Asia is the domicile of thousands of languages, none of which is dominant (the most widespread is Hindi, spoken by perhaps one-third of India's population). By linking Ondore and Bhujerba to an emergent geopolitical space which has the economic heft of the global semi-periphery, but which is culturally marked by South Asia, FF12 grounded its critique of neoliberalism in a broader critique of the postcolonial state.

This critique allows FF12 to critique the violence of postcolonial nationalism – the long and sorry history of post-independence wars between industrializing nations, as well as the internalized violence of postcolonial states such as India (everything from Hindu fundamentalist extremism to the violent dispossession of peasants and adivasi communities by neoliberal elites), Indonesia (the genocidal state violence unleashed during the period of the dictatorship, as well as continuing violence in Aceh and other locations) and Sri Lanka (decades of postcolonial ethnic conflict).

In retrospect, one of FF12's most ingenious moves here was to avoid the temptation of
locating Fran in Bhujerba's geopolitical space, or put bluntly, of casting Fran as the Bollywood starlet. Radhika Parameswaran provides this analysis of the neoliberal ideology literally and figuratively embodied in Bollywood star Aishawarya Rai:

Although imperceptible on the surface, Rai's sterile technocelebrity whiteness in the multinational advertisement is sutured simultaneously to the bright postcolonial green, white, and orange colors (the colors of the Indian flag) of her ethnonational loyalties, her indisputably Indian essence. The supermodel's alliance with her national citizenship emerge from her success not merely as a famed transnational celebrity figure but also a global but also as a global Indian whose beauty has conquered both domestic and foreign territories. Such cultural compositions of aseptic, imperial technopreficient whiteness alloyed with seemingly resistant postcolonial nonwhiteness index the reimagining of an Indian transnational modernity that has radiated from sites within and outside India in the midst of sweeping economic reforms.²³⁸

What this technocelebrity whiteness excludes, of course, is the hundreds of millions of India's rural farmers who are locked in struggle against South Asian business elites bent on expropriating their lands. We will see somewhat later how FF12 narrates the political conflicts of the agrarian periphery, but for now it is worth emphasizing that Bhujerba is neither a symbol of East Asia nor of South Asia.

Instead, it is the prescient symbol of the dense networks of multilateral institutions created by the industrializing nations over the past several decades. The most prominent of these are the Middle Eastern nations of the Arab League (founded in 1945), the Southeast Asian countries grouped in ASEAN (founded in 1967), the Central Asian countries of the SCO (founded in 2001), the members of the African Union (founded in 2002), the Latin American nations of UNASUR (founded in 2008), and the five nations of the BRICS (Brazil, Russia, India, China and South Africa, founded in 2008).

This multipolar reading is confirmed by Ondore's structural role as FF12's main voice-over narrator. At various points in the story, Ondore reads aloud passages from his memoirs,
summarizing recent events (the text appears onscreen during the reading). Ondore is thus *FF12*'s literal as well as figurative voice of postcolonial history.239

4.3 Videogames as Transnational Multimedia

One of the most paradoxical effects of the digital media is its tendency to selectively expand analog and pre-digital modes of aesthetic production. This is especially pronounced in the industrializing countries, where a combination digital technologies and informal cultural networks have facilitated the emergence of vast new reading, listening and viewing publics.

One of the key metrics of this transformation is the remarkable quantity and variety of narrative material associated with *FF12*. The videogame packs 3.8 gigabytes of files and data on a single disc, or about three-quarters of the total space available on the average DVD.240 This data includes six hours and twenty minutes of top-quality cut-scenes, replete with professional voice-acting, background music and sound-effects. In terms of length and thematic complexity, these cut-scenes could hold their own against a single season of any nationally-broadcast television series in the world's largest media markets.

There are also dozens of in-game locations, hundreds of character-models, scores of environmental textures and weather effects, and thousands of in-game items. Finally, there are extensive text files, meant to be read through as background information about the world of Ivalice. In addition to the main storyline, these text files include extensive incidental dialogues triggered by interacting with the inhabitants of Ivalice. These dialogues are not delivered by voice-actors, but are printed out at the bottom of the screen in three lines of text. Non-player
characters who can converse with the player are marked in the game-world with small icons floating above their heads, though the choice of whether to converse with these characters is left up to the player.

One of the most sublime pleasures of *FF12* is visiting cities and towns in order to play through these dialogues, which are frequently witty, often illuminating, and always apropos to the local situation and culture in question. Credit is due here to the main scriptwriters of *FF12*, Daisuke Watanabe and Miwa Shoda, a gendered-balanced team whose dialogue manages to combine documentary realism with effective characterization.\(^\text{241}\)

These conversations are also synchronized with the main storyline. Normally, each character repeats the same dialogue after being prompted by the player. However, after key turning-points in the story, most characters will be given new dialogue appropriate to the changed situation. Of course, if the player does not talk to every single non-player character, it is possible to miss certain conversations by simply progressing through the game, something which provides the game with considerable replay value.

These incidental dialogues are also crucial to the side-quests, a set of optional adventures which are not necessary to complete the main storyline, but which reward more committed players with powerful items, a higher degree of challenge, and fresh insights into the world of Ivalice. *FF12*'s texts can be classified as follows:
Table 34. Scale of text production in FF12.

<table>
<thead>
<tr>
<th>In-Game Literary Text</th>
<th>Size (rounded to the nearest thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bestiary</td>
<td>49,000 words</td>
</tr>
<tr>
<td>Loot description</td>
<td>4,000 words</td>
</tr>
<tr>
<td>Main story voice-acting (optional subtitles) and incidental dialogue (subtitles only)</td>
<td>118,000 words</td>
</tr>
<tr>
<td>Optional side-quests</td>
<td>45,000 words</td>
</tr>
<tr>
<td>Total</td>
<td>216,000 words</td>
</tr>
</tbody>
</table>

The total in-game text is the size of four novels, significantly larger than any previous iteration of the franchise. For the sake of comparison, the main scripts for FF3, FF4 and FF5 averaged about 12,000 words each, the script for FF7 is approximately 80,000 words, FF8 had roughly 25,000 words, FF9 had 65,000 words, while FF10 had 40,000 words.

One of the challenges of handling such an enormous amount of text was the necessity to coordinate characterization with scene and setting. Interestingly, many of the incidental dialogues and side-quests recycle one of the oldest forms of digital culture of them all, namely the text-based decision tree. Decision trees were most prominent in the late 1970s and early 1980s, when graphical interfaces were still being invented and most computers ran on the text-based commands described by Turkle's classic *The Second Self* (1984). Typically, decision trees present the end-user with a text description of some sort, followed by a binary choice which lead to subsequent text descriptions and choices.

Will Crowther's and Don Woods' text-based *Adventure* (1976) videogame, one of the classic forerunners of today's role-playing videogames, took the concept of the decision tree and refashioned it into game-play. Essentially, they replaced the linear tree with multilinear or
iterative commands, thereby giving players the opportunity to navigate inside an all-text game-world.\textsuperscript{243} \textit{FF12} employs the decision tree mostly as a means of accessing certain side-quests, and secondarily as a means of characterization (e.g. when the player responds to questions from a non-player character, the response can alter the outcome of some minor conversations and side-quests).\textsuperscript{244}

In addition to its textual sophistication, \textit{FF12} also features some of the most sophisticated character art ever designed for a role-playing game. Credit is due here to longtime Square designer Yoshitaka Amano, who endowed the playable characters with great expressivity while side-stepping many of the technical limitations of the Playstation 2 as a platform. Below, the screenshot on the left depicts the original texture scans of Balthier and some of his characteristic weapons, which are rendered in real-time during game-play by the Playstation 2. The screenshot on the right is a high-resolution cut-scene which occurs after the player exits the Stilshrine of Miriam halfway through the game, and the three characters depicted therein are, from left to right, Ashe, Vaan and Fran:
Table 35. Selected character art in *FF12* by Yoshitaka Amano.

Part of the variation in the playable characters' appearance and costumes is due to the requirements of game-play. Since up to three playable characters can appear onscreen at any given time, players must be able to quickly figure out who is who. This is why each character has a unique color and costume, e.g. Ashe wears a signature white robe, Balthier wears a speckled dress shirt, Basch wears bright red armor, Fran wears black armor, Penelo wears a tan-and-grey bodysuit, while Vaan wears an open metal chestpiece. Adding to the effect, each character moves onscreen using slightly different animations which correspond to their basic personality. Ashe moves in a determined fashion, whereas Balthier is languid, Basch is forceful, Fran is resilient, Penelo is graceful, and Vaan is impetuous.

What is perhaps most interesting is Amano's treatment of gender. Videogame character-art has a long and inglorious history of gender stereotypes, a.k.a. a plethora of anorexic, scantily-clad females, along with males with biceps the size of tree-trunks. Amano negates this dismal state of affairs by explicitly metrosexualizing his male characters, and desexualizing the females. This metrosexualization ranges from Balthier's stylish cuffs and shirt to Vaan's open chestpiece,
all the way to the bright red squares of Basch's chest-piece. Meanwhile, Penelo wears a unisex jumpsuit, while Ashe's miniskirt is almost completely desexualized thanks to her dignified robe and extensive leggings.

The only female character who seems to be overtly sexualized is Fran, simply because the openness of her upper body armor and her viera ears suggest the visual stereotype of the Playboy bunny. This is a danger the FF12 design team was quite conscious of, and it is no accident that Fran's character is the furthest from the Playboy bunny imaginable. Fran is not just the oldest and most mature of the playable characters, she is well-informed about the legends and lore of Ivalice. While her body armor is somewhat revealing, she is never overtly sexualized or cast in demeaning situations. Most of all, her relationship with Balthier is characterized by absolute equality and mutual trust.

The two other forms of transnational media production which should be mentioned here are FF12's architectural styles, and its sound-design. In various interviews, the design team has noted they were inspired by real-world regions and locations. Square Enix staffer Isamu Kamikokuryou describes how the designers found their inspiration in the real world regions and architecture of the Mediterranean, Turkey, India and New York City:

Kamikokuryou: These days, user demands and expectations for our games are very high. It's true that we still have do things such as, for instance, going to Turkey as we did for this project. The reason we went there is so we can see what's really out there. But if we just took that and made the game we wouldn't be able to satisfy everyone. So, we're still keeping true to creating something that's original and a fantasy world while referring to something that exits. We try to take something out of what exists and create our own original work.
Q: Are there any other influences outside of Turkey?
Kamikokuryou: Outside of Turkey, Matsuno mentioned the entire Mediterranean region yesterday. Outside of that, maybe a little bit of India. Also parts of New York, actually -- the art deco areas and the regions of New York.246
These locations are not simply backdrops, but are fleshed out with costumes, insignia, and all the other accoutrements of living, breathing communities. Indeed, the settlements and habitations of Ivalice are depicted with an extraordinary level of realism. Even the smallest nomadic village will have a shopkeeper or two, plus a range of individuals who pass on news as well as the occasional apocryphal legend, while the larger cities may contain hundreds of potential conversations, dozens of potential side-quests, and sophisticated mass transit systems (including air-taxis and teleporter stations). While Ivalice is full of unspoiled natural regions, these usually contain visible traces of past settlements or archeological ruins.

This attention to detail is also present in FF12's sound-design, a field which tends to be overlooked in much videogame criticism. One of the internal challenges facing the FF12 design team was the departure of longtime Square composer Nobuo Uematsu from the company in 2004. As a result, FF12's sound-track was composed primarily by independent musician Hitoshi Sakimoto, with additional contributions by Masaharu Iwata and Hayato Matsuo. The choice of Sakimoto was auspicious for two reasons. First off, Sakimoto was a former Square employee who had previously composed the sound-track for FF Tactics (1997), one of the games which served as a narrative precursor to Ivalice. This meant Sakimoto was already well-versed in the mythology and lore of the game-world, and also understood the specific requirements of a Final Fantasy title.

Second, in 2002 Sakimoto left Square to form his own highly successful videogame music and sound company, Basiscape. As an independent designer, Sakimoto had the freedom to rework many of the sonic cliches of role-playing videogames, including long-standing features of the Final Fantasy franchise (e.g. its signature opening theme and fanfare) which needed
Milena Droumeva has pointed out that videogame audio design has the complicated task of fulfilling three requirements at once, or what she calls fidelity, verisimilitude, and ecology. Fidelity refers to the acoustic requirements of basic storytelling, i.e. cut-scenes and plot events. Verisimilitude refers to the interactive cues which are part of the in-game experience, ranging from the sounds of player actions (e.g. footsteps, spell-effects or character movement) to the actions of opponents, and from the operation of in-game tools or items to weather and environmental effects. The ecology refers to ambient sound-tracks, which imbue specific locations in the game-world with narrative meaning. These sound-tracks must coexist with storytelling and with interactive cues. Droumeva emphasizes that all three concepts should be seen as part of a functional whole:

The notions of fidelity, verisimilitude, and ecology are a particular choice too, yet the concept and drive towards realism is one that I see as not only one aspect of game design and game culture but a more symbolic movement intersecting many media genres and technologies. Rather than simply a design requirement, it is an ideology of contemporary mediated expressions. Examples span from immersive cinematic soundscapes for the big screen and surround sound aesthetics taking the viewer into a powerful suspension of disbelief, to complete virtual reality, ambient intelligent environments, and computer-augmented physical spaces which have become the norm for contemporary museums and art galleries.248

Ambient sound is especially important for role-playing videogames, due to the fact that their narrative appeal relies so heavily on the narrative experience of travel and exploration. The larger and more complicated game-worlds have become, the easier it is for players to lose their way or to fail to find their mission objective.249

To forestall such difficulties, FF12 provides a range of visual and acoustic mapping strategies for players. Each specific region in Ivalice has its own ambient sound-track, informing
players instantly as to whether they are journeying through the sand-covered desert of the Estersand, or the similar-looking wastes of the Westersand. Locational and directional cues are also relayed through voice-acting, and less commonly through the text-based dialogues of non-player characters.

The omnipresent and continuous nature of ambient sound presents videogame composers with a challenge. Most players will spend far more time listening to ambient sounds than to voice-dialogue or cut-scenes, which means ambient sound must be catchy enough to be readily identifiable, but complex enough to avoid becoming annoying or stale. There are also thorny issues of cultural location and reception to consider. Naïve listeners could easily jump to the conclusion that FF12’s sound-track is a narrowly Euro-American combination of 19th century European tonality and 20th century Hollywood film music.

This is not the case, but underlines one of the challenges facing videogame composers. The lower production cost of music has allowed musical tastes to remain far more localized and marked by regional identities than the more expensive field of cinema, e.g. the sound-tracks of Bollywood films and Chinese costume dramas are produced and consumed as specifically Indian or Chinese. This complicates the incorporation of their respective musical vocabularies into videogames. Such materials would signify real-world geography or locality, in ways which would detract from rather than enhance FF12’s transnational game-world.

The sound design team's response to this challenge was to transform FF12's acoustic palette into a transnational soundscape as vast and complex as the game-world itself. The official sound-track for the videogame contains 4 hours, 50 minutes and 24 seconds of material, distributed on four CDs. The ambient sound-track never grows dull or repetitive, thanks to the
skilled interweaving of cinematic cut-scenes and player cues into each playable location of the game-world. Close listening reveals that brief samples of ambient sound-tracks are often used as ornamental effects or mood-setting devices in selected cut-scenes, especially key transition shots. The cut-scenes also mimic various player cues, including the sounds of combat, spell-effects, and weather conditions.

For their part, the ambient tracks borrow a page from the narrative toolkit of the cut-scenes, by showcasing dynamic musical themes which evoke the range of emotions players are likely to feel while traveling through specific regions. For example, the pastoral reaches of the Salikawood are narrated with a set of soulful strings and horns, which meander from the breezy, picaresque idyll to the brooding gloom of Tolkien's Fangorn Forest. By contrast, the ambient sound-track of the Draklor laboratories in Archades moves between harshly metronomic strings and massed, staccato horns, suggesting a properly mechanical alternation between tense waiting and heroic action.

Below are the most prominent ambient sound-tracks, along with the expressive effect they evoke. Note that the names of the sound-tracks and disc locations are derived from the track listings on the CD release of Final Fantasy 12 OST (Original Sound Track). The locations are listed in the order players would most likely encounter them during a normal play-through, from first to last. Finally, the original composer is listed for each track.
Table 36. Selected locations, ambient sound-tracks and composers of *FF12*.

<table>
<thead>
<tr>
<th>In-Game Location</th>
<th>Name of Ambient Sound-track</th>
<th>Expressive Effect</th>
<th>Original Composer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archades</td>
<td>“Theme of The Empire” (Disc 2, Track 11)</td>
<td>A swelling, properly imperial horn theme, punctuated by ornamental chimes, a high-hat and harpsichords</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Rabanastre</td>
<td>“The Royal City of Rabanastre/City Ward Upper Stratum” (Disc 1, Track 9)</td>
<td>A light-hearted theme using warm strings and horns, combining nobilitarian grace with plebian ease</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Estersand</td>
<td>“The Dalmasca Eastersand” [Sic] (Disc 1, Track 13)</td>
<td>Surging, heroic string and horn theme, denoting adventure and excitement</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Bhujerba</td>
<td>“Skycity of Bhujerba” (Disc 2, Track 17)</td>
<td>A carefree flute theme falls and rises, befitting Bhujerba's status as a city built on floating magicite, backed by occasional strings and a warm and upbeat tone</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Paramina Rift</td>
<td>“Seeking Power” (Disc 3, Track 4)</td>
<td>A slow-paced theme paced by mournful horns, matching the epic scenery of snowstorms, icy mountains and glaciers</td>
<td>Hayato Matsuo</td>
</tr>
<tr>
<td>Ozmone Plains</td>
<td>“Ozmone Plain” (Disc 3, Track 7)</td>
<td>A bright and bracing theme, matching the open fields teeming with hostile wildlife</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Jahara</td>
<td>“Jahara, Land of the Garif” (Disc 3, Track 6)</td>
<td>A slow, solemn horn and drum theme, matching the stolid yet tenacious nature of the Garif herders</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Golmore Jungle</td>
<td>“The Golmore Jungle” (Disc 3, Track 8)</td>
<td>A tense, monotonous horn theme complements unpredictable chimes, flutes, and plucked strings, suggesting the cries of strange birds and unseen creatures</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Eruyt Village</td>
<td>“Eruyt Village” (Disc 3, Track 9)</td>
<td>A mournful, elegiac harp combined with a flute melody, suggesting a pastoralism unchanged over aeons of time</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Salikawood</td>
<td>“The Salikawood” (Disc 3, Track 18)</td>
<td>A soft, muted chorus combined with a light drum theme, soft horns, and a meandering piano theme, suggesting sun-dappled woodlands</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Location</td>
<td>Track Information</td>
<td>Description</td>
<td>Composer</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Phon Coast</td>
<td>“The Phon Coast” (Disc 3, Track 19)</td>
<td>A bright and energetic theme, corresponding to the scenic palm trees and beaches of a tourist resort</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Sochen Cave Palace</td>
<td>“The Sochen Cave Palace” (Disc 3, Track 21)</td>
<td>A high-pitched chorus complements a sorrowful tune in a minor key, evoking the dread and awe of Sochen's underground caverns</td>
<td>Masaharu Iwata</td>
</tr>
<tr>
<td>Nabudis</td>
<td>“The Forgotten Capital” (Disc 4, Track 7)</td>
<td>A ghostly and gloomy tune employs high-pitched strings in a minor key, creating the effect of loss and haunting</td>
<td>Hayato Matsuo</td>
</tr>
<tr>
<td>Feywood</td>
<td>“Feywood” (Disc 4, Track 8)</td>
<td>An eerie group of electronically distorted tones, underscored with touches of high-hat, chimes, and bells, suggests magic and mystery; an insistent string theme is offset by a mysterious rising chorus, as if evoking the shades of ghostly spirits in the distance.</td>
<td>Masaharu Iwata</td>
</tr>
<tr>
<td>Balfonheim</td>
<td>“The Port of Balfonheim” (Disc 4, Track 3)</td>
<td>A warm and reassuring string theme traces out an opening triad, underscoring the city's identity as a haven of sky-pirates and free folk</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Cerobi Steppe</td>
<td>“Cerobi Steppe” (Disc 4, Track 1)</td>
<td>An opening flute broadens into a combination of chimes and high strings</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Great Crystal</td>
<td>“To the Place of the Gods” (Disc 4, Track 11)</td>
<td>A wandering tune, alien and alluring, gradually unfolds into a majestic horn sequence befitting the grandeur of the scene, before returning to its wandering origins</td>
<td>Hitoshi Sakimoto</td>
</tr>
<tr>
<td>Pharos Lighthouse</td>
<td>“To the Peak” (Disc 4, Track 13)</td>
<td>The staccato blare of horns evokes tension and danger, while falling strings mimic the pillar of spray erupting in the center of the lighthouse</td>
<td>Hitoshi Sakimoto</td>
</tr>
</tbody>
</table>
It is worth noting that three of the most interesting ambient sound-tracks are not linked to a specific location, but to specific game-events. These include “Esper Battle” (Disc 3, Track 2), “Esper” (Disc 4, Track 2), and “Boss Battle” (Disc 1, Track 5), all created by Sakimoto. As their names suggest, the first two play as ambient tracks while encountering powerful magical creatures called espers, while the third is played during boss battles against key enemies. Though they differ slightly, all three tracks generate narrative tension through insistent string and horn themes, percussive march rhythms, and unearthly vocal choruses.

Whatever their other differences, all of these ambient themes share one feature in common, and that is sonic transparency. While each theme must highlight its specific region or situation, it must take care not to drown out or obscure the sounds of player actions, player opponents or in-game events. As a result, ambient sound-tracks can sound oddly “hollow” when played outside of their context in the game-world, simply because they are not meant to be free-standing works, but function within a larger acoustic field. This is the acoustic version of the semi-translucent appearance of FF12’s onscreen mini-map, which keeps players informed about their general location. This map is displayed in the upper right-hand side of the screen, and is translucent in order to avoid distracting the player from the environment.

4.4 From Postcolonial Brotherhood To Transnational Sisterhood

The astounding range of visual, acoustic, textual, cinematic and other media forms cited and mobilized by FF12 raises the question of how those forms relate to history, or put more broadly, how the digital intersects with the historical. Like any media, the digital media has the
power to conceal history or to restrict modes of historical narration. Yet it has also reduced many of the barriers involved in preserving and narrating history, by cheapening the production of archiving and documentation, and plebianizing access to historical records via online archives and search engines.

This contradiction is especially virulent in the realm of the fantasy role-playing videogame, due to the latter's structural reliance on story-telling. Potentially, each location in an imaginary game-world, each creature, and each in-game item could have its own history. Of course, the marketplace puts limits on this potential: if J.R.R. Tolkien had decades to construct and refine Middle Earth's cultures, languages and political intrigues, videogame studios must create complex game-worlds in five years or less.

Like most role-playing videogames, *FF12* teems with homegrown mythology. Unlike most role-playing videogames, the storyline salts this mythology with the critical awareness of postcolonial history. Paradoxically, this is most evident in its surprisingly humane and thoughtful treatment of the Archadian Empire. While the Empire's political elites are responsible for an aggressive colonial war on Dalmasca, they are by no means cardboard villains. As a society, Archades has noble ideals of the rule of law and justice for all Imperial citizens, and the main antagonist of *FF12*, Vayne Solidor, genuinely wants a better future for Ivalice.

The tragedy of Vayne – and of the Archadian Empire as a whole – is that it falls prey to the one enemy there can be no external defense against: oneself. Vayne and many of the other elite members of the Archadian government are members of the Judges, an elite praetorian guard loyal to the Emperor and sworn to uphold law and order. The latent contradiction here between service to the Empire and service to the public forms the heart of the conflict between Vayne
Solidor and his younger brother, Larsa Ferrinas Solidor. Vayne favors unrestricted imperial rule, while Larsa is a partisan of constitutional authority. During the second half of FF12, Archades' constitutional order is overthrown by Vayne and his fellow Judges under the pretext of the threat of an impending Rozarrian invasion, forcing Larsa to covertly aid Dalmasca's anti-Imperial resistance.

Put another way, the political intrigues of Archades are not limited to the politics of empire, they also symbolize the politics of postcolonial nation-state formation. The Judges are an intriguing admixture of an imperial and postcolonial brotherhood, a.k.a. the administrative functionaries of the US national security state and the modernization-minded military elites and one-party states which dominated the vast majority of the postcolonial and industrializing nations during most of the 20th century. This narrative ambiguity allows FF12 to set the struggle against the external aggressions of colonialism in motion towards the struggles against internalized, homegrown variations of colonial domination – the convergence of anti-colonial mobilizations with internal democracy movements.254

Yet for all of the ways in which FF12 borrows from postcolonial politics, it also diverges from the latter in one crucial respect. This is FF12’s refusal to legitimate the hegemonic identity-politics of postcolonial nationalism, a.k.a. the rule of a masculinized hierarchy or a postcolonial brotherhood.

It is striking to note just how pervasive and influential the trope of the postcolonial brotherhood is within the mass media of the industrializing world, particularly those of the BRIC nations. In India, the most common form of this trope is the Bollywood romance or joint family melodrama, wherein the political contradictions of the subcontinent are symbolically reenacted.
in terms of kinship conflicts, and ultimately resolved by the concluding happy marriage and the re legitimation of the joint family.\textsuperscript{255}

In China, the symbolic brothers-in-arms of the “heroic bloodshed” or \textit{wuxia} films of John Woo, and the costume epics of Zhang Yimou, perform a similar function.\textsuperscript{256} Russia's contemporary media has its own version of this theme, namely the post-Soviet reconfiguration of gender and national identity staged by Sergei Lukyanenko's bestselling \textit{Night Watch} novels (1998-2008), as well as the blockbuster films loosely based on those novels (\textit{Night Watch} (2004) and \textit{Day Watch} (2006)) by Timur Bekmambetov).\textsuperscript{257}

In Brazil, this trope is relayed by the crisis of what Beatrice Jaguaribe terms the “samba narrative” of a fictitious racial equality and the eruption of open conflict between neoliberal elites and dispossessed urban communities, something on prominent display in Fernando Meirelles' film \textit{City of God} (2002) and \textit{City of Men} (2003-2004) television series:

Cast as both the locus of the 'national imagined community' and as a 'fearful stain' on the landscape of modernity, the favelas were often metaphorized as an emblem of Brazil's uneven modernization. Celebratory versions of the favela as a samba community composing carnival lyrics coexist with images of armed adolescents shooting police forces during drug raids. Since the 1980s the increase in social violence produced by the globalized drug trade and the flow of media images, consumer goods, and new cultural identities produced a crisis of representation of the 'national imagined community'. Indeed, the overwhelming presence of the media centred foremost on television, and the circulation of globalized consumer goods, lifestyles and political agendas have transformed expectations and cultural identities. Such transformations are keenly felt in the invention of youth cultures, where the formerly national samba has lost much of its influence to funk and hip-hop in the favelas of Rio de Janeiro and Sao Paulo.

Images and narratives of a globalized favela emerge as the former national portraits of Brazil become increasingly fragmented. The fraying of previous narratives and images of national identity has also brought to the limelight new cultural icons shaped by the media and popular culture. In the wake of these changes, contemporary literary and cinematographic productions are attempting to come to terms with new portraits of Brazil that focus on marginalized characters, favelas, drug cultures and the imaginaries of consumption.\textsuperscript{258}

By contrast, \textit{FF12}'s storyline is littered with broken or failed postcolonial brotherhoods. All three
pairs of biographical brothers in *FF12* – Vaan and Reks, Basch and Gabranth, and Vayne and Larsa – find their relationship tragically ruptured by geopolitical conflict. Conversely, the single most prominent postcolonial brotherhood in the world of Ivalice, namely the Judges, turns out to be its own worst enemy. We will argue that instead of trying to reconstruct an idealized postcolonial brotherhood, *FF12* drives towards the latter's negation: towards the space of a transnational sisterhood.

There are two narrative innovations which made this step possible. The first is *FF12*’s self-critique of its own narrative genre. It is striking that the first third of *FF12*’s storyline cites – and then annuls – nearly every significant role-playing videogame cliché ever invented. There is the royal wedding (Ashe's wedding to Rasler), there is the loss of the kingdom (the Archadian invasion of Dalmasca), there is the tale of heroic capture and escape (the playable characters are caught and escape), and finally there is the quest to restore the kingdom by obtaining a magical bequest (Ashe's quest for a powerful relic called the Dawn Shard).

But where role-playing franchises such as Nintendo's *Legend of Zelda* videogames repeat these themes uncritically, *FF12* refunctions each quotation into its opposite. *FF12*’s story does not conclude with the happy ending of the royal marriage, but disrupts the marriage-plot from the very beginning, by showing Rasler's death during the Archadian invasion. The Archadian invasion is not the result of malevolent spirits or a demonic curse, but a colonial war to control Ivalice's energy resources. The party's capture and escape are not the result of derring-do, but turn out to be part of an elaborate set of ruses crafted by the Archadian Empire in order to obtain the Dawn Shard. Finally, the Dawn Shard is not a potential instrument of liberation, but the harbinger of terrifying destruction.
The second innovation which enables the possibility of transnational sisterhood is an economic critique of neoliberalism. While the Dawn Shard turns out to be an especially powerful form of nethicite, its true importance lies elsewhere. Nethicite collects Mist, the naturally-occurring, inchoate energy which powers the ships and machines of Ivalice. This Mist is stored up and concentrated in nethicite over countless aeons, very much the way that the sunlight stored up over millions of years in organic debris turned into the world's hydrocarbon reserves.

However, the Mist is not simply a natural phenomenon. One of its most intriguing side-effects is that viera are unusually sensitive to its overuse – they experience intense physical discomfort when large amounts of Mist are released in their vicinity (however, they are unaffected by normal levels of Mist). Indeed, we are given several hints that the Mist is not just a natural category, but a social one as well. For instance, the Mist aids in the use of magic, though it does not create any particular magical effects per se.\textsuperscript{259} The Mist is also faintly visible in areas where it is densest, suggesting that its power has something to do with images and visual production, a theme we will expand upon in Chapter 6.\textsuperscript{260}

For now, it is worth emphasizing that the appearance of the Dawn Shard marks a turning-point in \textit{FF12} and indeed in videogame history. This is the moment when the role-playing videogame moves beyond one of its greatest narrative precursors in mid-20\textsuperscript{th} century fantasy fiction. This precursor is Tolkien's Ring of Power, that double-barreled allegory of insatiable imperial power and untrammeled industrial capital. Just as the Ring grants absolute power, and thereby corrupts anyone who wields it absolutely, so too does the absolute power of Ivalice's nethicite corrupt all those who wield it.

However, the specific agency of this corruption is not the category of theological
temptation, which Tolkien employed as a means of avoiding the issue of Britain's responsibility for the horrifying violence its empire inflicted on the colonized peoples of Africa, Asia and the Americas.\textsuperscript{261} For \textit{FF12}, the category in question is not the temptation, but rather the neoliberal-era political choice.

It is worth remembering that the single most politically effective argument for neoliberalism was not necessarily blind faith in the optimality of the free market – indeed, a veritable tidal wave of Wall Street executives were so enamored of the virtues of big government that they became top US financial regulatory officials during the 1990s and 2000s.\textsuperscript{262} Rather, the most powerful weapon of neoliberalism was market populism. This was the notion that freedom meant absolute, unfettered consumer choice. Shopping will make you free, and consumer choice – backed, to be sure, by one of the biggest credit bubbles in human history – was supposedly the highest aspiration of humanity.

Unlike Tolkien's Ring, \textit{FF12}'s Mist is not a theological symbol but a social one. It symbolizes the collective power of human beings to transform themselves, as well as their world. The entire episode of the Dawn Shard is thus a case study how the ideology of consumer choice, pushed to its limit, recoils into its opposite: into plutocratic tyranny. This recoil begins with Ashe's choice to seek out the Dawn Shard as a purely military means to defeat Archades. In the end, however, her decision turns out to be precisely what the arch-militarists of Ivalice – Vayne Solidor and his extremist faction of Judges – wished for all along.

The same logic is at work in Vossler's choice to betray Ashe and hand the Dawn Shard over to Judge Ghis (in exchange, the Empire was supposed to grant Ashe the status of titular ruler of Dalmasca, though at the price of subalternity to Archades). At first glance, Vossler's logic
seems impeccable. Though a stalwart leader of the anti-colonial resistance, he knows that a purely military campaign against the Empire is suicidal. Yet instead of choosing a more nuanced or creative form of resistance, he chooses to trade power for power, thereby falling prey to the very unfreedom he sought to resist.

The same is true for the third political choice, namely Judge Ghis' spur-of-the-moment decision to test the Dawn Shard in the engine-room of the Leviathan, the flagship of the Archadian 8th Fleet. This is not because he entertains any serious doubts as to the Shard's authenticity, but because he wished to ascertain just how powerful it was, in order to use it in his own bid to become the next Emperor (most likely, he was planning to turn the Shard over to Emperor Gramis rather than to Vayne). 263

This test unwittingly triggers an uncontrollable chain reaction in the Dawn Shard, generating a vast cloud of Mist which disrupts the ship's engines and eventually explodes. The Leviathan is annihilated instantly, while the rest of the 8th Fleet is ripped apart within seconds. During the commotion, Ashe and the other party members manage to escape their guards and flee the explosion on a small skiff.

Four days after the catastrophe, the reckoning comes due for the price humanity has paid for neoliberalism's freedom of choice. This reckoning is not settled in the present, however, but in the past:

*Ashe is dreaming that she is standing on a wooden pier, high above a ruined landscape, enveloped in magical fog (later in the game, this setting is revealed to be the entrance to the Nabreus Deadlands, the blasted wasteland around the ruins of Nabudis). Suddenly, the ghost of Rasler appears between two carven stone pillars. In the dream, the ghost gives her the Dawn Shard. Ashe takes the stone and cradles it in her hands. Rasler vanishes. Suddenly, Ashe hears footsteps. In the distance, Vaan steps into view. Scene cuts to Ashe, now wide awake, looking at the marriage ring on her finger. Evidently she was recalling her previous night's dream of the Deadlands and pondering its meaning. Voice-
acting continues.
Basch: “So it was the Dawn Shard that brought down the Imperial Fleet.”
Balthier: “You know your stuff.”
Basch: “Destructive power of such force – I’ve seen it once before. Lady Ashe, you know of what I speak.”
Ashe: “Nabudis.”
Basch: “The capital of Old Nabradia – Lord Rasler’s fatherland. At the time of the invasion, a division of Imperials entered the city – there was a mighty explosion. Friend and foe died alike. Something was there – one of the Dynast-King’s relics. The Midlight Shard was in Nabradia.”
Balthier: “More nethicite. Well, no wonder they invaded.”
Ashe: picks up the Dawn Shard: “That ridiculous war, the trap at the treaty-signing – all this because Vayne wanted power. He must not be allowed to claim the nethicite. The Empire must never hold it.”
Balthier: “Oh? They already do. The Dusk Shard, most likely the Midlight Shard, too. Besides, can’t they manufact nethicite now?”
Ashe: stands up: “Very well, then the path set before us is clear. We’ll use the Dawn Shard to fight them! Dalmasca does not forget kindness nor ill deed done. With sword in hand she aids her allies. Sword in hand, she lays to rest her foes. This nethicite I hold must be my sword. I will avenge those who have died. And the Empire will know remorse.”
Brief pause.
Vaan: “You even know how to use it?”
Ashe: “I —” She falls silent.
Fran: “The garif may know. The garif people live by the old ways. Magicite lore is a part of their culture. They may hear it. The cry of the nethicite’s power. Whispers of the stone’s menace.”
Ashe: “Dangerous though it be, what we need now is power. Should we declare Dalmasca free without the means to defend our claim, the Empire would crush us. You must take me to meet with the garif.”

Table 37. The screenshot on the left shows the thermonuclear-strength explosion which destroys the Archadian 8th Fleet, revealing the true power of the nethicite. The screenshot at center shows Ashe gazing at the ruins of Nabudis. The screenshot on the right shows Ashe gazing upon Rasler’s ghost.

This scene brings three themes together. First, Ashe's dream connects the catastrophic destruction of Nabudis with the equally catastrophic acquisition of the Dawn Shard. Second, the power of nethicite runs like a red thread through the imperial wars and history of Ivalice. Third,
Fran steps into the role of the party's resident historian.

The theme of humanity's technological or magically-induced self-destruction has been a recurrent feature of fantasy and science fiction narratives, and is on prominent display in every flagship *Final Fantasy* title ever made. But what makes this scene truly new is its insistence that the theme of the apocalypse be read in the context of colonial history. The secrets of nethicite are held not by the sages of Archades or Rozarria, but in the folklore of the garif, a culture of nomadic herders.

The scandal of Nabudis, in short, is not just that the colonial past is still present. It is that the colonized peoples, their knowledges, histories and communities, are still present as well. It is no accident that the main settlement of the garif, a village called Jahara, is the first community which is neither a loosely-organized village like the Nomad Village or Bank Village in the Estersand, nor a semi-industrialized city-state like Rabanastre or Bhujerba. While lacking the wealth or power of its neighbors, Jahara has lost none of its organizational unity and cultural coherence. This suggests that Jahara is *FF12*’s version of a Fourth World culture or society, which dwells in the periphery of Ivalice's world-system.

This immediately raises the question of whether any transnational work of media, no matter how well intentioned, can accurately represent the cultures of the global periphery – or to paraphrase Gayatri Spivak's famous question, of whether the subaltern plays videogames (the short answer: the vast majority of citizens in the periphery do not, but rural elites are starting to purchase game-capable cellphones).264

One of the hidden dangers of *FF12*’s otherwise laudable commitment to adopting the narrative perspective of the semi-periphery is that the mass media of semi-peripheral nations can
be as violent, predatory and imperialist vis-a-vis their own rural peripheries as any external colonial regime. It would be all too easy to reduce the garif to mere native informants, and to treat Jahara as a site of neocolonial heritage tourism.\textsuperscript{265}

To forestall this danger, the design team made a number of interesting game-play decisions. First, the player's entrance into Jahara triggers a series of all-text conversations with the garif guarding the village, and requires the personal intervention of a sympathetic garif leader. This emphasis on requesting permission to visit the community not only humanizes the garif, it is also a hint to the player that they must engage in as many conversations as possible with the residents in order to succeed with their quest, i.e. they must step into their ethnographic shoes and do some impromptu fieldwork.

These dialogues showcase the depth and complexity of garif culture. The villagers are a mix of well-traveled citizens and provincials, similar to any other community in Ivalice. They sit on colorful rugs, similar to the ones visible in other parts of Ivalice, and one area even shows two garif playing a board game.

Second, the designers carefully eliminated any identifiable geographic or stereotypically national referent for the garif. While the village's generic open-air wooden structures, carven pillars, and ramshackle fences suggest a limited level of industrialization, the garif shopkeeper has a full range of the latest goods and items, and some of the garif are personally acquainted with other non-player characters in the world of Ivalice. Even the drum-and-horn theme of Jahara's ambient sound-track shies away from the possibility of an acoustic Orientalism, by suggesting a culture which has its own sense of dignity and coherence.

Third, Jahara marks a significant mutation of \textit{FF12}'s game-play, best described as the
emergence of the transnational side-quest. Most of the optional side-quests available in FF12 take the form of hunts for specific creatures called “marks”. The player must agree to each hunt with a client, i.e. a non-player character in the game-world. After defeating the mark, the player must return to the original client in order to receive full payment (usually a mixture of treasure and valuable items). However, it would be inaccurate to assume that these hunts are variations of the colonial safari or neocolonial natural resource extraction.

The Jahara side-quests mark the moment when the hunts begin to turn from itineraries of accumulation into ciphers of collective mobilization. This is ingeniously relayed by the text-based dialogues which take place during and after each quest. For example, the side-quests “The Defense of Ozmone Plain” and “The Mine Flayer” give the player the chance to exercise their skills in ecosystem management and mine safety, respectively. The side-quest “The Dead Ought Sleep Forever” involves the defeat of a mark who is revealed to be a cipher for Jahara's own past.\footnote{266} The most difficult Jahara side-quest, “Paying for the Past,” is a tale of harrowing sacrifice and redemption involving two brothers, one of which turns out to be War-Chief Supinelu, the garif who was crucial to giving the player permission to enter the village in the first place.\footnote{267}

All three strategies converge in the cut-scene where Ashe greets the leader of the garif. Instead of offering her the prospect of unlimited power, the Great-Chief delivers a postcolonial history-lesson:

Great-Chief holds up nethicite stone to the light of a flickering open-pit fire. Ashe and the party are gathered in the open-air tent of the Great-Chief. Voice-acting resumes.
Great-Chief: “This nethicite – you have used it.”
Ashe: “It was not I who used it. Indeed I had hoped you could show me how. Thus I’ve come.”
Great-Chief: “Hmm... you do not know the workings of the stone. Then we are no different.”
Ashe: “What?”
Images of the past appear in background, while Great-chief speaks. We see faint images of the Garif of antiquity, and then an image of King Raithwall himself, holding a shard of nethicite in
one hand and a sword in the other.
Great-Chief: “In ages past, the Gods made a gift of nethicite to my people. But the manner of its use eluded us. Displeased by our failure, the gods took back their stones. They chose instead to give them to a hume king. Called the Dynast-King, he used the nethicite’s power to bring peace to a troubled time. It is a curious thing. Though the blood of King Raithwall flow through your veins, you cannot wield nethicite.”
Ashe: “Cannot wield it? So then, am I to understand you can’t tell me how to use the stone?”
Great-Chief: “Though it shame me so to admit. Here before me stands a descendant of the Dynast-King himself and I can accord her no help at all. Still, even if you knew how to use the nethicite, you would find it of small avail.”
The Great-Chief hands back the Dawn Shard to Ashe.
Great-Chief: “The Mist collected in the stone over ages past is lost, and with it the stone’s power. It will be your posterity who wield the stone in ages yet to come.”
Ashe sighs. Vaan looks on silently behind her.
Garif Great-Chief: “This stone is devoid of power. Empty, yet full of thirst. A terrible longing to drink the world dry.” Camera shifts to first-person perspective of someone walking towards the Great-Chief’s dwelling. “The power of men, and of magic. Of good, and of evil. It is often those who desire nethicite whom the nethicite itself desires.”

Table 38. Screenshot on left shows Ashe asking Garif Great-chief for help. Screenshot at center shows Great-chief holding the lifeless Dawn Shard, now drained of power. Screenshot at right shows Garif camp.

The magnificence of this passage is due in large part to Michael Chinyamurindi, the Great-Chief's voice-actor. Chinyamurindi is an experienced performer who has worked in Hollywood and on US television in a number of roles, most typically as English-speaking West African immigrants or West African citizens. His vocal delivery, resonant and dignified, signifies the presence of a fifth variety of global English in FF12’s matrix of languages, namely African English. This is a reference to the English-speaking communities of former Anglophone colonies such as Liberia, Ghana, Nigeria, Kenya and South Africa, as well as a nod towards postcolonial
Anglophone writers such as Nigeria's Chinua Achebe and Wole Soyinka.

The true significance of this moment is that it is the postcolonial historians and intellectuals of the periphery who inform us of the dangers of the nethicite. It is not the Mist per se which is benevolent or malign, so they tell us, but rather its excessive and undemocratic concentration. In essence, the Mist functions much like Sergei Lukyanenko's Twilight, a set of supernatural dimensions connected to our own, which operate on an economistic model of energy input and output. That is to say, it is a symbol of the congealed cultural labor or symbolic surplus of the transnational world-system, a surplus not necessarily visible or accessible to laypersons, but which pervades every social relation within that system.

Equipped with this insight, FF12's storyline begins to forge a new concept of transnational solidarity out of that surplus – a concept freed of the shackles of any postcolonial nationalism, national empire, or postcolonial brotherhood. Our first glimpse of this solidarity occurs when the player crosses from Jahara into the Golmore Jungle, and finds their path blocked by a magic barrier. The barrier was created by the viera of Eruyt Village, a place Fran is well acquainted with:


Vaan: “What is it?”
Fran: “The jungle denies us our passage.”
Ashe: “What have we done?”
Fran: “We? No. I.”
She walks away. Balthier joins her.
Vaan: *in background:* “What’s that mean? How’re we supposed to get through that?”
Balthier: “Making an appearance?”
Fran: “I am.”
Balthier: “I thought you’d left for good.”
Fran: “Our choices are few.” *They continue walking.*
Vaan: *in background:* “Fran? Balthier!”
Fran: *stops and turns to Balthier:* “This is as much for you as it is me.”
Balthier: “Oh?”
Fran: *turns searching gaze on him:* “You are ill at ease. The nethicite troubles you.”
Archly: “You’ve let your eyes betray your heart.”
Balthier: *with unconvincing bravado:* “Right.”
Fran begins *casting a magic spell with hand-gestures.*
Vaan: “What are you doing?”
Fran: “Soon you will learn.”
A magical grassy path through the jungle appears, leading the way to Eruyt village.
Vaan: “Whoa!”
Fran: “We go to seek aid of the viera who dwell ahead.”
Penelo: “I bet they’ll be glad to see you... after so long.”
Uncomfortable pause.
Fran: *downcast:* “I am unwelcome. An unsought guest in their Wood.”

This scene disrupts two of the most reactionary cultural tropes used to stereotype the periphery, one drawn from the annals of colonial anthropology and the other from the neoliberal-era Hollywood action film. The first trope is that of the native informant or indigenous collaborator, whose racial or cultural Otherness is mobilized in order to reaffirm the essential benevolence of the empire in question (the long history from Rousseau's noble savage to James Cameron's Navi). The second trope is the token sidekick or second-in-command of color, whose racial or cultural otherness is mobilized to reaffirm the essential benevolence of the identity-politics of the US Empire (e.g. Riggs and Murtaugh in the *Lethal Weapon* franchise (1987-1998), or Neo and Morpheus in the *Matrix* franchise (1999-2003)).

However, Fran is not opening the path to the periphery for some colonial trading company. Nor does she play second fiddle to Balthier, but displays her maturity and self-confidence by showing she recognizes and understands his unspoken doubts about the nethicite. Fran's decision to enable the representatives of Ivalice's anti-imperial resistance movements to parlay with the periphery is made solely on the basis of equality between the two groups. Put another way, Fran symbolizes the possibility of a bridge between the realm of Third World or postcolonial feminism – the province of South Asian artists such as Ismat Chughtai and

232
Mahasweta Devi – and First World women-of-color feminism. This suggests that Fran's comment, “Soon you will learn”, needs to be understood in the most literal sense imaginable. Education and democratic dialogue, not imperial firepower and colonial dogma, are what truly opens the pathway to the periphery.

This theme is reconfirmed by Eruyt's incidental dialogues and side-quests, which are among the most interesting in the game. One of the savviest moves the FF12 design team made here was to avoid the false alternatives of prematurely celebrating or denouncing Eruyt's pastoral, kinship-based society. While the viera are wary of visitors and highly protective of their own culture, they are as diverse as any other community of Ivalice. Some reject all outside contact as a mortal threat to their way of life, while others are less enamored of rural autarky, and are genuinely curious about the wider world of Ivalice. What the dialogues suggest is that village autarky is not, contrary to the Orientalist fantasies of well-fed, highly educated and wealthy First World tourists, a utopian alternative to industrialized cosmopolitanism. The villagers do not always agree with each other, quarrel over political power and family responsibilities, and harbor the same contradictions as the residents of any other community of Ivalice.

These themes are recapitulated in a subsequent cut-scene, triggered when the player enters the village and, following Fran's advice, tries to find someone called Mjrn:

*Crowd of viera surround party (everyone is there except Fran). Voice-acting continues.*
Vaan: “Hey, Mjrn lives here, doesn’t she? We’re here to see her.”
*No response from viera.*
Jote: “You will leave at once. It is not allowed for humes to walk on these grounds.”
Vaan: *firmly:* “We’ll go as soon as we’ve seen Mjrn.”
Jote: “If you can find her.”
Vaan: *more determined than ever:* “We’re not leaving until you let us see her.” *Jote snorts contemptuously and looks away.*
Vaan: “Fine then. We’ll look for her ourselves.”
Jote: “Ah!”

233
Camera shows Fran rejoin party.
Fran: “I’ve heard the voice of the Wood. She says Mjrn is not in the village. Jote, where has she gone?”
Jote: “Why do you ask? The Wood tells us where she has gone. Or... can you not hear her?”
Fran is silent.
Jote: “You cannot. Your ears are dull from hearing their harsh speech, I think. Viera who have abandoned the Wood are viera no longer. Mjrn, too, has left her embrace.”
Balthier: “And you forsake them in turn?”
Jote: “It is the will of the village. Viera must live always with the Wood. So is the Green Word, and so is our law.”
Vaan: “We’ll let you worry about keeping your laws. Just do us a favor and stay out of our way. We’ll find her ourselves.”
Jote stares nonplussed for a moment at Vaan. Then she closes her eyes and casts a spell to listen to the whisper of the Wood. The sound-track surges for a moment, as leaves fly in the air, kicked up by the summoning of magical energy. Jote relaxes, and the sound-track recedes. She reopens her eyes.
Jote: “Our sister has left the Wood and gone west. She wanders warrens among men who hide themselves in clothes of cold iron. Thus to me has the Wood spoken.”
Jote turns to leave.
Fran: “The viera may begin as part of the Wood, but the Wood is not the only end we may choose.”
Jote: “The same words I heard fifty years ago.” Exit Jote.

Table 39. On the left, screenshot of entrance to Eruyt Village. At center, screenshot of Jote. On the right, screenshot of the two sisters, still at odds.

Jote's comment about “our sister” is not a metaphor. In fact, Fran, Jote and Mjrn are three biological sisters who grew up together in Eruyt. Fran, the middle sister, rebelled against the laws of the village and left to seek a life of adventure. The eldest, Jote, remained in the village and eventually became its leader. Mjrn, the youngest, still lives in the village but has not yet decided her path.

However, this family relationship is not the same thing as the transnational sisterhood
mentioned previously. What Jote has revealed, in coded form, is that Mjrn has disappeared into the Henne Mines, where Archadian researchers are searching for veins of nethicite. When the party explores the mines, they discover a powerful creature has wiped out these researchers and taken control of Mjrn's mind.

After defeating the creature's bodyguard – a dragon called Tiamat – they briefly glimpse a strange, ghostly spirit-being. This is our first glimpse of a race of creatures called the occuria, whose true motivations and narrative purpose will be revealed at a later stage of the storyline. The occurian is using a nethicite crystal to control Mjrn, and when the crystal shatters, the occurian is forced to retreat, allowing the party to rescue Mjrn.269

This rescue is not just a tale of individual liberation, however. It is also a salutary allegory of the Fourth World social movements of rural Africa, Asia, and South America. One of the most consistent features of the neoliberal era has been the dramatic upsurge of new types of rural solidarity movements throughout the global periphery.

Unlike previous rural mass movements, which fought against colonial administrations or neocolonial occupations, the new social movements struggle against the indigenous comprador elites of postcolonial and industrializing nations. For much of the neoliberal era, these elites have worked hand in glove with First World corporations to privatize national energy, timber, water and other natural resources on the cheap. These movements range from the struggles of the Ogoni and other peoples of the delta river regions of Nigeria against oil-driven ecological despoliation and brutal military rule in the 1990s, to the mass uprisings against water privatization schemes in Bolivia in the 2000s, all the way to the struggles of hundreds of millions of adivasis and farmers against illegal land-grabs and ecologically catastrophic mining and
timber concessions taking place in rural India today.²⁷⁰

Arguably, Mjrn's rescue is one of the most astute representations of transnational anti-neoliberal activism in videogame history. If the exploitation of the mine by Archades symbolizes the scramble for natural resources, then the capture of Mjrn symbolizes the coercion applied to indigenous communities, while the dragon Tiamat represents the repressive state machinery of postcolonial states under the control of comprador or neoliberal elites. Somewhat further afield, the occurian creature which controlled Tiamat could be read as a metaphor for the “Washington consensus” of the IMF and World Bank, organizations which pushed industrializing nations to adopt disastrous policies of structural adjustment and privatization on themselves, including the accelerated corporate exploitation of natural resources.

This raises the question of what role the occurians play vis-a-vis the Archadian Empire, and whether the diverse anti-neoliberal and anti-neocolonial resistance movements of Ivalice can form a unified transnational front. To answer that question, the second half of FF12 will move from the issue of postcolonial history to the issue of postcolonial politics. This postcolonial politics will be the subject of the next chapter.
In the previous chapter, we saw how *FF12* identified the alliance of neoliberal institutions with postcolonial elites. This sequence is followed by the emergence of a potential counterweight to that alliance. By rescuing Mjrn, the party receives permission from Eruyt Village to pass through Golmore, thereby opening the literal and figurative path to the possibility of transnational solidarity.

That possibility is realized when the representatives of the semi-periphery (the Dalmascans Ashe, Basch, Vaan and Penelo), the periphery (Fran), and the metropole (the Archadians Larsa and Balthier, and the Rozarrian al-Cid Margrace) of Ivalice finally meet at Mt. Bur-Omisace, and begin to act as a unified front.

The individual who literally and figuratively blesses *FF12*'s transnational resistance is not the representative of a nation-state or a political body, but one of the leading religious leaders of Ivalice, the Gran Kiltias Anastasis. The order of the Kiltias preaches nonviolence, political neutrality and inter-ethnic harmony, and spends most of its time running the equivalent of a UN protection camp for the refugees of Ivalice's wars on the grounds of Mt. Bur-Omisace. This commitment to nonviolence is not founded on naivete, but on hard-headed geopolitical realism. Anastasis understands better than anyone else the disastrous implications of the death of the Archadian Emperor Gramis and Vayne's seizure of absolute power, and advises Ashe to search the Stilshrine of Miriam for another legacy of Raithwall. This legacy is a relic called the Sword of Kings, a weapon with the capacity to destroy nethicite.

It is no accident that *FF12* chooses this moment to forestall two of the most reactionary
narrative tropes of the fantasy role-playing videogame, namely the drama of imperial succession, and the drama of elite political intrigue or nobilitarian factionalism.

The first trope is foreclosed by the death of Emperor Gramis, who allows himself to perish as part of a ruse orchestrated by Vayne to seize absolute control of Archades. The second is foreclosed by the subsequent assassination of Gran Kiltias Anastasis by Judge Bergan.273 This was an act meant to eliminate a potential center of rival political authority to Archades, but it has geopolitical consequences which Vayne and his co-conspirators do not expect.

By canceling out these options, FF12 opens up a far more interesting narrative possibility. This is the possibility of open struggle between neoliberal and postcolonial elites on the one hand, and anti-neoliberal social movements (organized primarily via the digital commons) and anti-colonial institutions (organized primarily via the developmental states of the semi-periphery) on the other.

One of the thinkers whose work is most useful to understand this struggle is M. Jacqui Alexander, whose Pedagogies of Crossing is a profound meditation on how the categories of race, gender, sexuality and historical memory interact both within and between the postcolonial spaces of the Caribbean, and communities of color located in Canada.

Alexander points out that there is a powerful link between the centuries-old history of market-driven empires, and the decades-old history of the neoliberal mass media (including videogames). This mediation is mass tourism. Alexander cites the case of the postcolonial Bahamas:

Heteropatriarchal recolonization operates through the consolidation of certain psychic economies and racialized hierarchies as well as within various material and ideologies processes initiated by the state, both inside and beyond the law. These actions can be understood as border policing; in this instance, the unequal incorporation of the Bahamas into an international political economy on
Tourism is both a key pillar of the neoliberal service economy, as well as one of the most characteristic expressions of neoliberal consumerism. Over the past few decades, tourism and its affiliated networks of transportation, hospitality, entertainment and recreation have become massive industries in nearly every country on the planet. Like any other market expansion, this process is marked by deep contradictions. Global tourism is an engine of egregious exploitation and ecological despoliation, and yet it also provides many industrializing nations with a key source of foreign exchange earnings. Tourism can generate Orientalist stereotypes which justify neocolonial wars, and yet it can also generate cosmopolitanism and cross-cultural exchange, by enabling hundreds of millions of people to cross national borders each year. Alexander's point is that we must think through the categories of race, gender and other forms of identity-politics in the context of these massive flows of capital, people and labor.

All of this is directly relevant to role-playing videogames, because they have long served as the digitized versions of theme parks and tourist resorts. Indeed, they routinely reproduce many of the same neoliberal ideologies and neocolonial Orientalisms typical of these latter. What makes FF12 a landmark production is that it is the first blockbuster role-playing videogame to openly critique neoliberal tourism, in both its digital and non-digital guises.

To understand why, it is worth reexamining Pierre Bourdieu's concept of the field and habitus, a.k.a. the transnational object and subject. In the case of Final Fantasy 12, the field in question is the console gaming market of the 2000s, which was dominated by sales of Sony's Playstation 2, while the habitus is comprised of Square Enix' studio artists and the transnational audience. Just as the claims of each producer, distributor and consumer contests (and is contested
by) the claims of all others, so too does each institutional practice of the habitus mediate (and is mediated by) all other practices.

While videogames do not automatically abolish social hierarchies or forms of political, social and economic domination, the structural complexity of their form means that digital artists and transnational audiences can sometimes grasp transnational contradictions in productive ways. Prime among these contradictions is the struggle between transnational gaming capital and gaming labor which continually plays out between studio artists, videogame fans, hardware manufacturers, franchise publishers, media regulators and digital publics. In Bourdieu's words:

> In fact, through the economic and social conditions which they presuppose, the different ways of relating to realities and fictions, of believing in fictions and the realities they simulate, with more or less distance and detachment, are very closely linked to the different possible positions in social space and, consequently, bound up with the systems of dispositions (habitus) characteristic of the different classes and class fractions. Taste classifies, and it classifies the classifier.

Applying this insight to *FF12*, we noted previously that the six playable characters symbolize the demographic reality of today's transnational audience, by showcasing four characters from Ivalice's version of the semi-periphery, one character from its metropole, and one from its periphery. On closer examination, however, all six characters are tied to what Bourdieu would term anti-neoliberal dispositions.

Balthier's rebellion against Archadian imperialism, and Fran's rejection of village autarky, are the flip side of their personal commitments to a world without borders or empires. Both are sky-pirates, members of a shadowy, utopian community of sky-pirates whose reach is as planetary as the transnational audience itself. Similarly, Ashe and Basch have both endured the painful loss of their respective homelands, but base their hopes for a renewed Dalmasca on the
basis of a peaceful, multipolar Ivalice – the disposition of the developmental states located in the semi-peripheries, locked in struggle against their own postcolonial oligarchies or comprador elites. Vaan and Penelo both suffer from the trauma of imperial war and occupation, but find renewed purpose and healing in the transnational solidarity of those struggling against that occupation – the disposition of the anti-neoliberal social movements, informal networks, and civic organizations of the semi-periphery.

There is a similar logic of dispositions at work in FF12's location design. We have noted previously that each village, town and city of Ivalice is a unique blend of architectural styles from the Middle East, Eurasia, the Mediterranean, European, and East Asia. It also borrows from the imaginary landscapes of 20th century science fiction, in the form of the post-apocalyptic narratives referenced by the Necrohol of Nabudis, or the space stations and alien technologies referenced by Giruvegan. Yet none of these locations function in the game-world as tourist sites. They are living, breathing communities fleshed out with incidental dialogue, location-specific visual, sound and musical design, and collectable lore and mythology.

The narrative logic of multipolarity is also evident in FF12's side-quests. Side-quests, a staple feature of role-playing videogames, are optional side missions which are not necessary to complete the main storyline, but which offer unique in-game rewards for players. As such, they are the cornerstone of replayability for role-playing videogames. FF12's forty-seven optional side-quests are well-written and engaging narratives in their own right, which shed additional light on Ivalice's history. These side-quests range from ten-minute excursions for specific items, to hours-long battles of attrition against ultra-powerful opponents.

Significantly, many of the later and more complex side-quests refer explicitly to the
conflicts of the multipolar era. One of the best examples of this is the King Bomb side-quest. The players must defeat an especially powerful bomb-creature guarding a bridge in the Salikawood, in order to reach the underground ruins of Nabudis. Given that Nabudis was destroyed by the Archadian Empire's use of nethicite, it would be easy to assume that Nabudis is a symbol of the atomic bombings of Japan during WW II. However, *FF12* rewrites this potentially national trope into a transnational one, by setting the atomic trauma narrative in motion towards the violence of postcolonial history.

The defeat of the King Bomb has its closest real-world equivalent in the ongoing labor of mine-clearing and bomb-defusing in rural Laos, Vietnam and Cambodia, where decades of US bombing left behind large amounts of unexploded ordinance. Once the player crosses the bridge and reaches the entrance of Nabudis, the following cut-scene takes place:

*Shot of the entrance to Nabudis, its ruins covered by strange vegetation. The air seethes with an eerie, magical Mist. Shot of party gathered just inside the entrance, debating whether to go further.*

Basch: “This is all that remains of Nabudis. Two years ago it was destroyed utterly by a mysterious force. The work of the Midlight Shard.”

Vaan: “This? In just two years? How?”

Basch: “As the Dawn Shard brought down the Leviathan and her fleet, a fell mist spilled forth. It is like the same thing happened here. The nethicite’s mist has corrupted the life of this place. It is a necrohol overrun with beasts. We tread here on a fool’s errand. We had best turn back.”

Arguably, Nabudis and its outlying regions are *FF12*’s version of the post-apocalyptic wasteland endemic to science fiction narratives. Basch's misgivings are a hint to the player that the enemies teeming inside Nabudis and its adjoining environs (especially the Nableus Deadlands, a blasted outdoor area covered with thick mist) are extremely difficult opponents, requiring players to have characters with high level rankings, or to be skillful tacticians.

The difficulty level is also conveyed by clever visual design. The halls of Nabudis are
depicted at a slightly tilted camera angle. The effect is eerie and unsettling, the videogame equivalent of the visual techniques of horror films, e.g. the use of claustrophobic shot angles, distorted perspectives, and rapid cuts to shock or disorient viewers. That said, Nabudis and its environs also contain many rare monster types, useful items, and additional side-quests, making it well worth the trouble of further exploration.

5.1 Replayability And Narratives of Equal Exchange

One of the most important game-play innovations of FF12 is its active time battle-system. To understand the importance of this system, it is worth clarifying the structural role of combat sequences in role-playing videogames. While they are portrayed as the clash of swords and magic spells, these sequences have nothing to do with medieval belief-systems or pre-industrial warfare. Rather, they are stylized dramas of training and accumulation. From a game-play perspective, the combat sequence is a fusion of the athletic sports match and the strategy-based or managerial simulation. The point is not simply to defeat an opponent or group of opponents, but to successfully manage a group of players while accumulating useful skills and items, via participation-based experience-points and rewards acquired from opponents.

Just like the sports matches they are modeled on, combat sequences in FF12 follow strict rules. Three out of the six total playable characters can be active in the field at any given time, while the others are held in reserve. While players can choose to activate just one or two characters, it is rarely practical to use less than three. These three playable characters can be switched into and out of action at any given time, although this power is limited in order to
preserve game balance, i.e. the switching process takes a small but discernible amount of time.

Active characters can revive and assist inactive or offscreen characters as well as active ones, but they can also assist inactive characters located in the reserve team. The result is fast and furious teamwork, as characters who are incapacitated or defeated in battle are switched out for fresh replacements, resuscitated and healed, and then switched back in.

The number three was not chosen at random, but reflects the tripartite division of in-game player activity which has become standard across many videogame genres:

Table 40. Some of the most common forms of player activity across role-playing, shooter, action-adventure and platformer genres:

<table>
<thead>
<tr>
<th>In-game Function</th>
<th>Real-world Referent</th>
<th>Role-playing Videogame</th>
<th>Shooter Videogame</th>
<th>Action-adventure or Platformer Videogame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combat specialist</td>
<td>National (conscript) army, police, or state authority</td>
<td>Fighter or fighting ability</td>
<td>Soldier</td>
<td>Combat item or modifier</td>
</tr>
<tr>
<td>Health specialist</td>
<td>Health, education and social sector services</td>
<td>Healer (cleric, priest) or healing ability</td>
<td>Medic</td>
<td>Healing item or modifier</td>
</tr>
<tr>
<td>Technology specialist</td>
<td>Universities and scientific infrastructure</td>
<td>Mage (wizard, magic-user) or magic ability</td>
<td>Engineer</td>
<td>Equipment item or modifier</td>
</tr>
</tbody>
</table>

As a rule, the single most efficient deployment of playable characters in *FF12* is to have one character serve as the main attacker or defender, one to provide ranged attacks or support spells, and one to maintain the party's health and morale. Of course, since each playable character has a wide range of abilities, players have a great deal of flexibility to create their own unique deployments.
FF12's active time system differs in two important ways from those of previous iterations of the franchise. First, fixed character classes are abolished. The various skills and abilities of these classes continue to exist, but players can assign whatever skills they wish to the playable character of their choosing. Second, the player command menu and interface is reorganized into the gambit system. Gambits are lists of automated player actions, similar to play-calling in contemporary sports culture. While each innovation is relatively straightforward, the combination of the two signifies a profound qualitative transformation of role-playing videogame design.

The abolition of fixed classes is significant because classes were always one of the most egregious legacies of imperialism in the field of role-playing videogames. Gerald Voorhees was the first to note the importance of FF12's abolition of classes, noting that this equalized the potential skills of the six playable characters:

The most recent iteration, Final Fantasy XII (Matsuno, 2006) abandons the principle of character classes altogether. Characters are leveled up through a 'license board,' and every ability, including the capacity to equip various weapons and armor and the ability to learn magic, summon and special attacks, is learned through the license board. Even though characters begin with some different licenses, none of the characters are located very far from each other on the license board, which means that there is virtually no disincentive to changing which weapon a person uses or whether they learn magic or gain physical attack power when they level up. Additionally, because physical and mental attributes and abilities (as well as all other skills) are interspersed across the board, late in the course of the game each character inevitably acquires the capabilities of others. Even the effects of the unequal distribution of the characters' initial attribute scores is reduced to the point that, at higher levels, they become negligible. While the representations and stories articulated to characters in Final Fantasy XII are not interchangeable, from the perspective of ludic protocols and the play practices they engender, each character is in fact the self-same.

What separates this self-sameness from neoliberalism's spurious assertion that everyone is equal under the free market is that the abilities formerly monopolized by specific classes are now democratized via the category of replayability.
Replayability in *FF12* is governed by three types of symbolic accumulation, each of which regulates the abilities of playable characters in some way. They include the accumulation of license points, the accumulation of experience points, and the accumulation of gil (the standard monetary unit of Ivalice). License points are earned by all available playable characters after defeating opponents in battle, while experience points are earned only by actively-deployed characters. Put another way, all playable characters receive license points, but only active ones receive experience points, which is also an incentive to distribute the burden of combat fairly by regularly switching characters in and out of deployment. Finally, gil are acquired by selling items and equipment obtained from defeated opponents, as well as opening treasure chests and completing side-quests.

Each of these forms of accumulation is tied to an underlying infrastructure of tools, a.k.a. the equipment, items and skills players need to complete the game. For example, license points are used to upgrade playable character abilities on a license board, which determines which skills can be used by which characters. Experience points automatically upgrade playable character attributes, while gil are used to purchase in-game equipment, items and spells from shops and vendors.

What ties together these infrastructures and forms of accumulation is an economy of equal informatic exchange. At its best, this means the equal exchange of player labor – the amount of time players spend playing and replaying the game – for the aesthetic labor of the designers. The goal is not market accumulation through the exploitation of player labor, but the democratization of playable character skills and the dissemination of narrative content among as many players as possible.
To see how this democratization works in practice, consider the license board. Each playable character in *FF12* has a license board which determines which skills and equipment that character can use (e.g. the ability to use a certain weapon, or to cast a certain spell). Each playable character's board is a grid of square tiles, separated into an upper and lower tier. There are 157 tiles in the upper tier and 143 in the lower tier, for a total of 300 tiles. All playable characters begin the game with a small number of open (i.e. previously acquired) tiles. However, they can only unlock new tiles which are immediately horizontally or vertically adjacent to acquired squares (diagonal access is not permitted). As a rule, the more powerful the tile's ability or skill, the greater its distance from each playable character's starting tiles, and the higher the cost of purchasing intervening tiles.

Below on the left is a screenshot of the license board as it appears in-game, while the chart on the right was created by a fan and posted online to show the underlying skills and abilities of each tile:

**Table 41.** On the left, in-game screenshot of a section of the *FF12* license board. On the right, fan-created diagram of the entire *FF12* license board.
The license board is identical for all six playable characters, which means that each character has precisely the same potential for development. However, this does not mean that it makes sense to create six characters with identical abilities. The cost in player effort involved in obtaining license points means that it is more efficient to build up a well-rounded team with appropriate cross-specializations, rather than creating one or two ultra-powerful characters or trying to give everyone exactly the same abilities. In essence, players play the role of the general manager in the professional sports industries, in the sense that they are in charge of the long-term skill development and professional qualifications of each playable character.

The end of fixed character classes and the adoption of the license board also transformed one of the franchise's signature institutions, namely “limit breaks”. Limit breaks are desperation attacks which give players a chance of survival when they are in dire straits or close to defeat. They first appeared in Final Fantasy 7 (1997), and variations of them exist in all subsequent iterations of the franchise. FF12's own version of the limit break are character-specific magical attacks called “quickenings”.

One of the chronic dangers of limit breaks is that skilled players may find ingenious ways to use them to outwit active time systems, thereby disrupting overall game balance. This is a phenomenon described by Mia Consalvo's Cheating as the continuous struggle between code-savvy players and fans on the one hand, and commercial enterprises seeking to preserve the profit margins of their cultural products on the other.282 The most common form of such cheating is the exploit, wherein players discover an unintentional deficiency in the videogame's underlying code which gives players an advantage in game-play, and then post this discovery
online for the benefit of fellow players.

*FF12* forestalled this possibility by restricting the strength of quickenings. For starters, quickenings are available only by unlocking tiles scattered at the very edge of each playable character's license board, making them difficult to reach. In addition, each character can only access a maximum of three quickening tiles. Finally, quickening attacks drain large amounts of magical energy from playable characters, which means they are generally not worth using except in dire emergencies.²⁸³ Predictably, this design decision provoked both positive and negative reactions from fans, especially those old enough to have fond memories of the previous iterations of the franchise.²⁸⁴

Democratization is also the key issue in *FF12*'s second major game-play innovation, the gambit system. Gambits are a list of conditional instructions assigned to each playable character, which are performed when certain conditions are met. Each gambit is comparable to what computer programmers term “if-then” statements. For example, if a certain kind of enemy is within range, any active playable character can be instructed to attack that enemy. Alternately, if a fellow playable character is badly wounded, characters can be instructed to use a healing item or spell on the wounded character (gambits can also be used on oneself).

The single greatest contribution of gambits is the elimination of player tedium. Players no longer need to access the same menu-based commands over and over again, but can set up gambits to perform tasks automatically. This frees players from having to micromanage every last playable character action, allowing them to focus on overall strategy.

Playable characters begin with one available instruction slot, but can upgrade to a maximum of eleven, and these slots are always triggered in sequence, i.e. the first gambit is
executed, then the second, the third, etc. After running through the entire list, each playable character will go back to their first instruction again. The player can easily change the order of the gambits, to ensure that priority tasks are carried out before less urgent ones.

While gambits have similarities to low-level computer programming, the true inspiration for the gambit system was not programming per se but the sports industry. Square Enix staffer Hiroyuki Ito acknowledged in an interview that he modeled gambits on the practice of play-calling by professional sports coaches:

Question: What did you draw on for inspiration?
Hiroyuki Ito: The ATB [active time battle] system is a little different, but I wanted the foundation of monster actions from games such as Final Fantasy 4 and 5 and player actions to resemble aspects of the NFL [National Football League]. In the NFL each play is carefully planned with players acting based on the most likely outcome of a given situation. Gambits are a similar concept – you have an idea of what will happen and what the result will be and the fun lies in refining the desired result. If you see how this works in the NFL, I think it becomes more and more interesting. The NFL wouldn't draw an audience the size it does if the underlying game mechanics weren't interesting. That underlying mechanic was an invaluable point of reference.285

That is, where sports coaches deliver signals to players on the field, FF12 allows players to create gambits on a special menu screen. What makes gambits so powerful, on the other hand, is their combination of flexibility and simplicity. Gambits can be used on any playable character, non-playable allies and opponents in the field, and can use almost every playable character ability or item. At the same time, they are easy to set up and reconfigure.

The aesthetic pleasure involved in creating, testing and refining gambits is broadly comparable to the pleasures of user-generated content creation and other types of digital fan labor. In this respect, the gambit system anticipated the creative tools of Sony's Little Big Planet franchise (while it is not possible to share user-generated content within FF12, players routinely post their favorite gambits on fan sites and as online video footage).286
It should be stressed that while gambits are enormously useful, their use is not mandatory. Players can continue to issue commands directly to their playable characters via a traditional menu-based system, if they so desire. The designers made an explicit decision to respect the diversity of their transnational audience, by giving players the maximum freedom to choose the playing-style they want.

The influence of the transnational audience is also visible in FF12’s tutorial system. Gambits are not immediately accessible to players at the beginning of the game, because they require some degree of proficiency with the game's active time battle system and with the operation of the license board. To forestall needless confusion, FF12 divided its tutorial levels into three sections. The first tutorial occurs during the first fifteen minutes of the game, and teaches movement controls and basic combat mechanics. The second occurs about an hour into the game, and introduces the license board. Gambits are not introduced until roughly two hours into the videogame, i.e. until the player has thoroughly mastered the basic mechanics of the game.

5.2 Lineages of Anti-Imperial Resistance

We have previously argued that the game-world of Ivalice rehearses one of the central geopolitical tensions of the final period of neoliberalism, namely the conflict between a unipolar world dominated by Wall Street and the US Empire, and its multipolar successor. One of the most interesting features of FF12 is its nuanced critique of the US neoconservativism which dominated US foreign policy from 2000 to 2008. Neoconservative ideologists openly argued that
the US ought to maintain its hegemony over the world-system, by using the twin levers of increased military spending and control over Central Asia's hydrocarbon reserves.\textsuperscript{288} To be sure, the neocons were clever enough to camouflage their vision of empire in the garb of a revitalized US exceptionalism.

Yet \textit{FF12} critiques US neoconservativism not at its weakest point – its irrational, paranoid Islamophobia and its disastrous invasion of Iraq – but precisely where it is strongest. This is its consensus with neoliberalism on the issue of US unipolarity. Despite local differences over tactics and strategy, both neoconservativism and neoliberalism shared a common belief in the benevolence and permanence of US hegemony over the world-system. This hegemony was not merely economic in nature, but had its cultural expression in the form of late 20\textsuperscript{th} century US consumerism, which both ideologies regarded as the acme of human freedom.\textsuperscript{289} To be sure, the signal irony of this consumerism was that it was built on a series of increasingly self-destructive financial bubbles, ranging from the regional savings and loan bubble of the 1980s, the stock and dotcom bubbles of the 1990s, and finally the housing and securitization bubbles of the 2000s.\textsuperscript{290}

Yet rather than blaming US citizens for the system which systematically exploited and duped them, \textit{FF12} argues that some actively critiqued and resisted neoliberalism. For example, US musicians played a critical role in creating and popularizing the transnational musical form known as hip hop, and US fans have a long track record of resisting the corporate greed of the neoliberal music recording industry.\textsuperscript{291} In like manner, US digital professionals, fan communities, and concerned citizens were instrumental in helping to create many elements of the open source software movement in the 1980s, and the institutions of the digital commons thereafter.

\textit{FF12} channels these resistances in the form of Balthier's personal involvement with the
Archadian Empire, and his decision to become a sky-pirate:

Player action: enter the Hunters Camp section of the Phon Coast. Vaan and Penelo rush off to the surf, laughing and chatting. Basch and Fran pause by a palm tree. Ashe walks towards surf, and almost trips. Balthier lends her a hand, and she collects herself.

Balthier: “Why the capital?”
Ashe: “The nethicite. I must destroy it.”
Balthier: “Are you sure? You don’t want it for yourself? Use its power to restore Dalmasca—something like that? The best intentions invite the worst kind of trouble.”
Ashe: quizzical: “Lusting for ever greater power, blinded by the nethicite. Is that how you see me?”
Balthier: reflective: “That does sound like someone I know.” He walks towards surf. “He was obsessed with nethicite. It was all he cared about. He’d babble nonsense, blind to aught but the stone’s power. He’d talk about some ‘Eynah,’ or was it ‘Venat’? No matter. Everything he did, he did to get closer to the nethicite, to understand it. He made airships, weapons... he even made me a judge.”
Ashe: shocked: “You were a... a judge!?”
Balthier: “Part of a past I’d rather forget. It didn’t last long. I ran. I left the judges... and him. Cidolfus Demen Bunansa. Draklor Laboratory’s very own Doctor Cid. That’s when he lost his heart to nethicite, lost himself. And I suppose that’s when I lost my father.”
Ashe sighs.
Balthier: turns to Ashe: “Don’t follow in his footsteps.” Pause. Balthier turns back to sea and continues: “I ran away. I couldn’t stand seeing him like that, a slave to the stone. So I ran. Free at last. Funny I went for the Dusk Shard. How could I have known that it was nethicite? And then, of course, I met you. All that running, and I got nowhere. It’s time to end this – cut my ties to the past.”
Ashe: “It’s hard to leave the past behind. I know.”
Flashback to the moment before she and Rasler were wedded. Rasler is on a high parapet, overlooking Dalmasca. Enter Ashe.
Rasler: “A marriage of convenience. A symbol of the alliance between Nabraria and Dalmasca. This is how they see our match.”
Ashe: “They do, do they?”
Rasler: “These roles we play. I must admit I find it... wearying.”
Ashe: puts her hand on his: “I will play mine.”
Rasler: “I would have no other.”
End flashback.
Balthier: “The choice is yours to make. But don't give your heart to a stone. You're too strong for that, Princess.”
Ashe: “I... I pray you're right, Balthier.”
Table 42. Screenshot on left shows Archadian airships patrolling the Phon Coast. Screenshot on right shows Balthier's revelation to Ashe.

What gives this passage such resonance is not just its critique of empire, but the implicit convergence of two lineages of anti-imperial resistance. The first and most obvious lineage is that of late 20th century and early 21st century transnational science fiction. Science fiction writers such as William Gibson, videogame franchises such as Hideo Kojima's *Metal Gear Solid*, and television series such as Satoshi Kon's *Paranoia Agent* (2004) have critiqued the violence of neoliberal consumerism as well as the neocolonial violence of the US Empire's military interventions.292

This lineage is nicely symbolized by Balthier's theft and repurposing of the Strahl, an experimental airship created at Draklor Laboratory, one of the Archadian Empire's leading weapons design facilities.293 This technological lineage is mirrored by Balthier's familial lineage. As Dr. Cid's son, he was being groomed for a top position within the Archadian elite, but he chose a life of freedom over fealty to the Empire.

The second and less obvious anti-imperial lineage is mediated not through the politics of imperial technology, but the politics of neocolonial location. This is the richly evocative setting of the Phon Coast. Located on the outskirts of Archades, the Phon Coast is Ivalice's version of
the tropical tourist resort. In addition to sand, surf, peddlers and a campgrounds, the Coast also contains an optional Hunt Club run by three bangaa named Atak, Blok and Stok, who provide rare magical weapons and other useful items in exchange for rare creatures vanquished by the player.

The contradiction here is that the leading sites of global tourism are also some of the oldest contact zones of colonialism. Today, cross-border tourism is one of the biggest industries of the neoliberal era, generating $919 billion of annual revenues and international tourist arrivals of 940 million people by 2010. Yet the regions of the Caribbean and Southeast Asia which are premier tourist sites have long histories of colonial violence and anti-colonial resistance. These histories ranging from piracy and marronage (the practice of slaves escaping from plantations to form settlements outside the control of the colonial authorities, e.g. the Brazilian quilombos) in the 18th century, to the slave uprisings and abolitionist campaigns in the 19th century, all the way to 20th century anti-colonial revolutions. This is the place to quote Derek Walcott's classic indictment of tourism as neocolonialism:

But in our tourist brochures the Caribbean is a blue pool into which the republic dangles the extended foot of Florida as inflated rubber islands bob and drinks with umbrellas float towards her on a raft. This is how the islands from the shame of necessity sell themselves; this is the seasonal erosion of their identity, that high-pitched repetition of the same images of service that cannot distinguish one island from the other, with a future of polluted marinas, land deals negotiated by ministers, and all of this conducted to the music of Happy Hour and the rictus of a smile. What is the earthly paradise for our visitors? Two weeks without rain and a mahogany tan, and, at sunset, local troubadours in straw hats and floral shirts beating "Yellow Bird" and "Banana Boat Song" to death. There is a territory wider than this – wider than the limits made by the map of an island – which is the illimitable sea and what it remembers.

All of the Antilles, every island, is an effort of memory; every mind, every racial biography culminating in amnesia and fog. Pieces of sunlight through the fog and sudden rainbows, arcs-en-ciel. That is the effort, the labour of the Antillean imagination, rebuilding its gods from bamboo frames, phrase by phrase.

Decimation from the Aruac downwards is the blasted root of Antillean history, and the benign blight that is tourism can infect all of those island nations, not gradually, but with imperceptible speed, until each rock is whitened by the guano of white-winged hotels, the arc and
descent of progress. 296

There are two moments in FF12 which reprise Walcott's critique. When players first reach the Phon Coast, the camera slowly rotates screen right, while military airships from the Archadian Empire patrol the skies overhead, a jab at the naked collusion of tourism and empire. 297 The second and more subtle moment is the brief flashback of Rasler, which plays near the end of Balthier's conversation with Ashe transcribed above. Whereas FF12's opening sequence disrupted the role-playing videogame trope of the nobilitarian marriage-plot, this moment dispels the lingering heteronormativity of the marriage-plot. Ashe is left to reflect on the paradox that it was precisely another system of domination – the Archadian Empire – which inadvertently freed her from a constricting web of familial obligations, and that the individual choice which upholds a repressive social norm is really no choice at all.

This moment has significant consequences for the conclusion of FF12. One of the limitations of Walcott's critique is the category of gender, i.e. the fact that his vision of a compromised postcolonial nationalism is primarily masculine in nature, and is not connected to the labor of the female service-workers employed by the tourist industry, who might potentially organize themselves into unions. 298 By contrast, FF12 casts Ashe as the elective rather than nobilitarian leader of the resistance, touching base with Alexander's vision of an emancipatory transnational feminism.

Conversely, the “slavery of the stone” Balthier denounces is not metaphorical. The baleful spell of the nethicite, which is driving Ivalice towards catastrophic wars, symbolizes the violence of early extractive colonialism or primary commodity exploitation, namely the coercive labor-systems which extracted human beings, precious metals, sugar, tobacco, indigo, tea, jute
and much else besides for the benefit of globe-spanning colonial empires and local comprador elites.

Surprisingly, \textit{FF12} foregrounds the violence of these labor-systems where we least expect it, namely their effects on the ordinary citizens of Archades. Our introduction to the Empire's capital city is not its elite arcades, but the squalid slums of its outskirts, the involuntary residence of “The mighty who have fallen and the fallen who would be mighty”, as Balthier quips archly.

The player-characters' entrance to Archades is marked by one of the most ingenious uses of game-design in contemporary videogame history. Instead of accessing a cut-scene or engaging in combat, the player must first complete a number of side-quests by talking to individuals on the streets of Archades (i.e. the player presses the “X” button and a conversation ensues). Certain of these individuals recount their personal, professional, or social difficulties to the player, who must subsequently relay their message to a specific respondent who can help the first individual. For example, one Archadian bemoans the lack of culinary innovation in Archades, while the correct respondent, located somewhere further in the crowd, has just invented a new dish. When the correct match is arranged, the player will be rewarded with a “chop” for their efforts, a non-commercial symbol of public service in Archades (the word “chop” is borrowed from the Chinese term for an official seal or stamp of some kind).

A minimum of nine pairs of messages and respondents must be correctly matched up, after which the player can trade in nine chops for a special “pine chop” which unlocks the taxi ride to the Draklor laboratory. Each story and response gives us another insight into the complexity of Archadian society. Far from being monsters, Archadians turn out to be artists, scientists, traders, grocers, entertainers, and craft-persons, to name just a few of their roles.
Just as clearly, there is a yawning divide between their professed belief in justice and the rule of law, and the tyrannical rule of Archades' military elites. The contradictions extend to Archades' architecture, which is a mixture of gaudy imperial spectacle and gritty plebian urbanism:

Table 43. Screenshot of the Archadian version of the Twin Towers (the seat of Imperial power) on left. Screenshot of capital city of Archades, modeled on New York City brownstones, on right.

In retrospect, the Archadian fetch quests are highly suggestive of one of the most significant aspects of contemporary digital media culture, namely the proliferation of social networking sites. These sites are a contradictory admixture of commercial and non-commercial modes of social interaction and community participation. Given that 
\textit{FF12} was published in 2006, just prior to the boom in social networking sites in the industrializing nations, it makes sense that this technology would be located exclusively in Ivalice's version of a First World city.\textsuperscript{301}

That said, the single most important imperial technology 
\textit{FF12} highlights is the symbolic version of the US military-industrial complex, in the form of Draklor Laboratories. After infiltrating Draklor, players have an unexpected encounter with one of the most important figures in the game. This is a sky-pirate named Reddas, a character superbly voiced by Phil LaMarr, who is most famous for his role as the English-language voice of Vamp in Kojima's \textit{Metal Gear Solid}.
By accident, Reddas was engaged in raiding the laboratory at the same time the players decided to enter. The player subsequently joins forces with Reddas in a boss battle against Dr. Cid. If the player is successful, Dr. Cid will be forced to flee, but just before his exit he reveals to Ashe that he intends to visit the source of the nethicite's power, somewhere in the legendary vanished city of Giruvegan.

Following this sequence, the camera cuts to a scene in the city of Balfonheim. Far from being some petty thief, Reddas is the highly-respected leader of Balfonheim, an independent city founded and operated by sky-pirates. Balfonheim is one of the most remarkable narrative achievements of FF12. It is in many ways the freest and most open society in all Ivalice, and the determinate negation of Archades, the rule-bound metropole of Empire – egalitarian where the latter is nobilitarian, flexible where the latter is rigid, and mobile where the latter is rooted. Most of all, Balfonheim's economy is based on trade and shipping, rather than war and imperial conquest.302

Reddas reveals he had been sent by Ondore to infiltrate Draklor and either damage or destroy the Empire's capacity to produce artificial nethicite. Acting on Dr. Cid's clue, the party decides to seek out Giruvegan before Dr. Cid arrives there:

Basch: “It’s just what Vayne wants. He lures the Rozarrians and the Resistance to the field, then crushes both with the nethicite!”
Balthier: “I think not. Cid has the stone. We grab it and smash it to pieces with the Sword of Kings. Vayne will be left holding nary a thing. Time is short. We follow Cid. He’s heading towards Giruvegan.”
Ashe: reflective: “Giruvegan.”
Fran: “It is told of in a song of my people. ‘On the farthest shores of the river of time... shrouded deep in the roiling Mist, the holy land sleeps: Giruvegan. Who knows the paths? The way to its doors?’”
Reddas: “Then you seek the Jagd Difohr. Deep within the jungle of Golmore, there is a corner of
the Feywood where a Mist-storm surges and seethes.”
Vaan: “Then that’s it. Let’s go!”
Penelo: “Right.”
Exit Vaan, dragging along Penelo. Exit Fran and Basch.
Balthier: “Not coming, Reddas? Forget your precious nethicite already?”
Reddas: “Cid’s words rang hollow to me. I will follow another course.”
Balthier: “Ah, another lead then, is it? You’re well informed.”
Reddas: “I could well say the same to you, pirate.”
They exchange knowing glances. Vaan returns to doorway.
Vaan: to Balthier: “Hurry it up, or we’ll leave without you.”
Reddas: “Ah, Vaan! I’ve had some of my men check on this Feywood. Best ask what they’ve found.”
Vaan: “OK! Thanks for the help, Reddas.”
Exit Vaan.
Reddas: laughing: “Fly first, ask questions later. Your apprentice is more pirate than you.”
Balthier: irritably: “I don’t have an apprentice.”
Exit Balthier.
Reddas: “Princess Ashe! I would hear your heart. If Dr. Cid has spoke the truth, you may well be rewarded with more nethicite in Giruvegan. Tell me: do you still desire the stone?”
Ashe: hesitant: “I desire its power. I want... yet I also fear. I must protect Dalmasca. I can’t afford to fear anything.”
Reddas: “Do not forget Nabudis. That is my only counsel for you.”

The knowing glances Reddas and Balthier exchange are no accident, but are due to the fact that each knows the other to be a high-ranking renegade of the Archadian Empire. Much later in the storyline, we learn that Reddas was a high-ranking Archadian officer named Judge Zecht, who was in charge of the invasion of Nabudis. Horrified by his own country's use of nethicite to annihilate an entire city, he resigned his judgeship, fled Archades, and took on the identity of a sky-pirate.

5.3 The Sky-pirate as Transnational Audience

Yet the city of Balfonheim is more than just a symbol of anti-imperial mobilization. It marks the moment when one of the core themes of FF12, namely the trope of the sky-pirate,
acquires its most radical political content. In retrospect, *FF12*'s storyline subtly hinted at this development all along. Originally, Vaan perceives sky-pirates as nothing more than economic free agents, but comes to realize that sky-piracy is a political (i.e. anti-imperial) vocation. Similarly, Balthier and Fran's apparently pecuniary motives at the beginning of the game turn out to be a convenient cover for their anti-imperial political activities.

This suggests the theme of the sky-pirate is more than just the reappropriation of the Hollywood pirate movie. It is also the recuperation of what the mainstream neoliberal media denounces as piracy, but which is better understood as the informal or unlicensed copying, distribution and consumption of media content. Nowhere are these informal practices more prevalent than the digital publics of the industrializing nations. Ravi Sundaram argues that the sheer scale and scope of media piracy in these nations have fundamentally altered the field of transnational media:

> Populations now participate as producers, consumers, and proliferators of media, a mobile set of practices that disrupts all major twentieth-century cultural references: the media industry, the system of regulation, and even radical counterculture, which placed itself outside of the commercial realm.

> Media piracy is a fundamental component of this changed scenario. As more and more media circulates outside old regulatory and control systems, media corporations have designated a good part of that traffic as piracy, or as violating intellectual property law. These practices range from young people sharing music through P2P networks; to websites sharing PDFs of academic books; to small media companies making versions of material once in copyright; to commercial pirates in Asia, Africa, and Latin America; to artist interpretations of cultural material – the list is endless.\(^{303}\)

> While the sky-pirates of Balfonheim are the locus of these practices within *FF12*, there is one other location which is tied to the theme of unlicensed or informal media. Following Dr. Cid's cue, players must make their way to Giruvegan by crossing a magic-filled, ice-cold forest called the Feywood. As its name implies, the Feywood is suffused with colossal amounts of Mist,
and inhabited by a range of deadly creatures. The density of the Mist is so great that it forms a phantasmagorical fog, blurring long-distance vision and disrupting the player's in-game radar screen.

Fog and mist have long been used by videogame designers as a means of creating narrative tension, most notably in survival-horror franchises such as Konami's *Silent Hill*. Yet the Feywood's Mist denotes a specifically mediatic and reflexive visuality, in the sense that its fog is not mere magical mist, but consists of a melange of blurred, indistinct forms of on-screen objects. The below screenshot on the left shows Ashe clearly at the center of the screen. However, note how Ashe's on-screen “doubles” appear on the same screen, faintly visible in the upper right, near the rectangular blank radar screen, and at center. These “doubles” will move and act independently of Ashe, almost as if we are watching clips of our own past video footage.

The screenshot on the right shows the function of the magical glyphs. They must be examined in order to reveal the correct path, which is signaled by an illusionary vista of lush greenery or forest. The illusion is a directional clue, i.e. the player must walk in a straight line towards the illusionary mangrove forest, which disappears, in order to find the next glyph and eventually open the door to Giruvegan.
Nor is it an accident that many of the monster types in the Feywood forest are creatures associated with illusion, e.g. the mu, rabbit-like creatures with the magical attack ability to cast “confuse” on player-characters (this spell causes playable characters to attack their own allies, instead of enemies), or the mirror-knights, giant bird-like creatures with the ability to reflect magical spells back at their casters. There is also a boss battle against a creature called Rafflesia, which inflicts a range of status ailments on the player-characters and saps their magical energies.

This theme of the continuous reproduction of media images, whose realities lie and whose illusions tell the truth, is no accident. We will suggest that this is a reference to the informal institutions and practices of the digital publics of the industrializing nations. Brian Larkin has written eloquently on this process in the context of the rise of Nigeria's video industry or “Nollywood”:

This new industry has pioneered new film genres and generated an entirely novel mode of reproduction and distribution that uses the capital, equipment, personnel, and distribution networks of pirate media. These Nigerian videos are a legitimate media form that could not exist without the infrastructure created by its illegitimate double, pirate media.

In recent years, then, there has been a wholesale shift in which many entrepreneurs
previously involved in the distribution of pirate material have switched to the reproduction and dissemination of legal media. The mass importation of foreign music and films brought about the capital and professional expertise that facilitated the rise of a local film industry. This wandering over the lines that separate the legal from the nonlegal has been a common experience for urban Africans, who have been progressively disembedded from the infrastructures linking them to the official world economy and instead have poured energy into developing informal networks – equally global – that facilitate traffic in economic and cultural goods outside the established institutions of world trade (Simone 2000, 2001; Bayart, Ellis, and Hibou 1999; Mbembe 2001).

In addition to generating new economic networks, piracy, like all infrastructural modes, has distinct material qualities that influence the media that travel under its regime of reproduction. Piracy imposes particular conditions on the recording, transmission, and retrieval of data. Constant copying erodes data storage, degrading image and sound, overwhelming the signal of media content with the noise produced by the means of reproduction. Pirate videos are marked by blurred images and distorted sound, creating a material screen that filters audiences’ engagement with media technologies and their senses of time, speed, space, and contemporaneity. In this way, piracy creates an aesthetic, a set of formal qualities that generates a particular sensorial experience of media marked by poor transmission, interference, and noise.

304

The journey through Feywood can be considered FF12's allegorical crossing into the realm of pirate or informal media, a zone which exists as the blurred, indistinct double of the official media. What needs to be emphasized here is that such informal or pirate media zones are not simply modes of transmission and access. If these networks create some degree of digital and cultural loss, they also open up the possibility of generating new types of audiences and media content.

This is the signal lesson of postcolonial media scholars Ratnakar Tripathy and Jitendra Verna, who have documented the explosion of Bhojpuri music and cinema culture within the vast “Hindi belt” of northern India during the past fifteen years (i.e. during India's post-1992 turn towards neoliberalism). While the Hindi belt is poorer and less industrialized than many southern, western and eastern Indian states, its hundreds of millions of citizens have responded by creating a thriving film industry and a flourishing music industry, a.k.a. the Indian version of Nollywood.
Bhojpuri/Maithil/Magahi [dialects of Hindi] music industry is at least ten times the size of the Bhojpuri cinema industry. Unrelated to Bhojpuri cinema, based in Delhi and with outreaches in small-town Bihar and Uttar Pradesh, this music industry has been growing since the cassette era of 1980s and right through the CD/VCD boom in the late-1990s...

But the more dramatic finding concerned the scales of the live show industry with the CD technology as its core. Spread over small and big towns and the remotest of villages, the 'ephemeral' concert business turned out to be at least ten times bigger than the CD industry according to informed estimates. The survey revealed that given the very nature of the digital technology, music industry – unlike the centralised movie industry – comes in different scales ranging between gigantic musical behemoths based in Delhi to shop-based production hub in a small town. It is indeed possible to construct a musical calendar for a small town listing events on a daily basis and calculate the huge cumulative earnings made by what we call a 'trickle economy' that adds up to impressive annual turnovers...

The returns from the CDs may be modest except for major hits, but the constant churn of the live show industry keeps the cycle going. The survey was compelled to conclude that groaning under the piracy menace, the big music companies are no longer the chief investors in the CD industry even if they continue to be the main beneficiaries. It is the artists/producers with steady earnings from live shows who make the backbone of the industry. The returns from the CDs may be modest except for major hits, but the constant churn of the live show industry keeps the cycle going. The survey was compelled to conclude that groaning under the piracy menace, the big music companies are no longer the chief investors in the CD industry even if they continue to be the main beneficiaries. It is the artists/producers with steady earnings from live shows who make the backbone of the industry. 305

Tripathy and Verma conclude that this music industry has developed a significant cultural infrastructure, employing “directors for VCDs, actors, arrangers, editors, sound recordists, equipment owners, choreographers and even dancers”. The contradiction here is that while this informal media infrastructure has certain affinities with India's larger-scale, more commercialized media systems, it is also in structural competition with the latter. In that sense, the Mist relates to the Feywood very much as Bhojpuri-language media relates to Bollywood's Hindi-language blockbuster film.

Conversely, the themes of postcolonial history and historicity have their most elaborate development in the sequences involving Giruvegan. When the player first enters Giruvegan, Ashe recites a line from Dalmascan lore which describes the city thus: “On the farthest shores of the river of time, shrouded deep in the roiling Mist.” The theme of temporality is reiterated by the names of the magical gates of Giruvegan which the player must pass through. These gates are named after a variety of Greek words which denote functions of time or temporality. 308
Surprising as it sounds, this temporality is not grounded in the discourse of symbolic or cultural time, but in that of economics or labor-time. That is, Giruvegan is governed not by the logic of occult or fantasy fiction, but by the technological and economic logic of science fiction. The city consists of a set of underground catwalks and service installations, constructed around a central energy-source, a vast Great Crystal. In all likelihood, this crystal is the super-sized version of the nethicite crystals which power Ivalice:

*The party gazes, awe-struck, at the glowing core of the Great Crystal.*

Penelo: “I’ve never seen this much Mist. Are you all right?”
Fran: “I am fine. Thank you.”
Ashe: “Is that nethicite?”
Fran: “I wonder.”
Ashe: “With that much nethicite in one’s grasp...”
Fran: “You could destroy all of Ivalice... if you wished it.” She gazes sternly at Ashe. Ashe looks away.

The key difference between this citation of the science fiction genre and *FF12*’s earlier citation, namely the destruction of Nabudis, is that Giruvegan has no obvious national signifier. If Nabudis could be read as the traumatic memory of Hiroshima and Nagasaki, no such national reading is possible with Giruvegan. It is the site of an explicitly transnational power.

The true measure of this power is revealed when the party reaches the heart of the Great Crystal, and Ashe meets the representatives of a race of beings who call themselves the Occuria. The Occurians are wraith-like creatures of pure energy who are either immortal, or else have life-spans inconceivably lengthier than all other denizens of Ivalice. They offer Ashe the prospect of nearly unlimited quantities of nethicite. However, this power comes with a price tag. Ashe is tasked with using the nethicite to destroy Venat, the rogue or exiled Occurian who has been aiding Dr. Cid and Vayne, as well as the Archadian Empire:
Occurian 1: “Ashelia B’nargin Dalmasca. We see your heart desires power, and power most holy shall we grant. Seek you the Sun-cryst, slumb’ring star. In tower on distant shore it dreams. The mother of all nethicite, the source of its unending power. The Dynast-King, his fallow shards, coarse trinkets cut from Sun-cryst’s light.”
Ashe: “Such power exists?”
Occurian 1: “In times that are long passed away, we thought to save this Ivalice and chose Raithwall, the Dynast-King. He took the sword and cut the Cryst. Three shards he took from its gilt grasp, and so became the Dynast-King. His words and deeds run through your veins.”
Ashe: “That’s why I was given it – the Sword of Kings.”
Occurian 1: “The treaty held with kings of old is but a mem’ry, cold and still. With you we now shall treat anew, to cut a run for hist’ry’s flow.”
Treaty-Blade appears.
Occurian 1: “Now take this sword, this Treaty-Blade. Occurian seal, mark of your worth. Cut deep the Cryst and seize your shards. Wield Dynast-King’s power! Destroy Venat!”
Ashe: “But Venat... Venat is an Occurian. A being like you.”
Occurian: harshly: “Venat is a heretic!”
Gust of Mist radiates from Occurian 1. Four other Occurians materialize near statues. “The nethicite is ours to give, to chosen bearer or to none.”
One single statue remains unoccupied – the absent throne of Venat. “The heretic trespassed and set the rose of knowledge in man’s hand. With imitations they profane, it is anathema to us.”
Occurian 2: “We give you now the stone and task. Administer judgment: destroy them all!”
Ashe: “Judgment?”
Rasler’s ghost appears, behind him is Occurian 1.
Ashe: “Destroy them all? The Empire?”
Occuria: “The Humes ever skew hist’ry’s weave. With haste they move through too-short lives. Driven to err by base desires, t’ward waste and wasting on they run. Undying, we Occuria light the path for wayward sons of man. Oft did we pass judgment on them so that Ivalice might endure. Eternal, we are hist’ry’s stewards, to set the course and keep it true. The chosen is our hand, our fist, to let live some and crush the rest. Princess, you have been chosen. Take revenge against those who stole your kingdom. Fulfill your role as savior.”
Rasler’s ghost puts hand on Treaty-Sword. Ashe prepares to follow suit.
Occurian 1: “Attain to your birthright!”
Ashe grasps sword. Fade-out.
The Occurians and Venat thus occupy the structural position of the transnational plutocratic elites of the neoliberal era, a.k.a. Wall Street (this is very similar to the structural role played by the Patriots in Hideo Kojima's *Metal Gear Solid 4*). Of course, this revelation means that our protagonists are caught between two dreadful alternatives. Either they allow Venat and the Archadian Empire to destroy the resistance and install themselves as the new rulers of Ivalice, or else they aid the Occurians and destroy the upstarts along with the Archadian Empire. Either course will unleash apocalyptic levels of blood-letting.

We will see that just as Hideo Kojima confounded our expectations at the conclusion of *MGS4, FF12* will perform a similar feat of narrative prestidigitation at its finale. For now, however, it is worth emphasizing that the long-standing tensions between the autocratic behavior of Archades' imperial elites, and the meritocratic ideals of its ordinary citizens (read: the ideals of US democracy) now begin to generate forms of open political contestation. This is signaled by a lengthy cut-scene, where Larsa remonstrates at length against Vayne's march towards open
One of the most remarkable aspects of the scene is its even-handed depiction of Vayne, Dr. Cid and Venat. None of them is a stereotypical villain. Vayne began with the noble ideal of public service, Cid with the ideal of scientific research, and Venat with the ideal of rejecting the hegemony of the Occurians. However, these ideals have slowly but inexorably degenerated over time into their opposite, i.e. into the legitimation of new forms of domination, due to a fatal conflation of ends with means. Vayne carries the ineradicable guilt of being forced to put two of his younger brothers to death, after they conspired to overthrow the late Emperor Gramis, a guilt which continues to eat away at him. In his own clumsy way, Vayne is genuinely trying to protect Larsa from inheriting the fratricidal sins of the Solidor family.

For his part, Dr. Cid knows full well that his megalomania drove his son away from him, and ended up annihilating an entire city. He rationalizes these catastrophes by pinning the blame on the Occurians and their scheme to control Ivalice through access to nethicite. Such sacrifices are a small price to pay, so he would argue, for the chance that the peoples of Ivalice will once again control their own destiny. Venat chimes in with this critique, arguing that the Occurians have no right to control the history of Ivalice as they do. Of course, the means the three co-conspirators have chosen is contradictory even on its own narrow terms: it would replace one system of imperial domination, riven with internal violence, with yet another.

5.4 One Neoliberalism, Many Resistances

The seemingly insoluble task facing our protagonists is to find a means to resist all of the
imperialisms of Ivalice simultaneously, ranging from the Occurian variant all the way to the more subtle imperialism of the Rozarrian Empire, which has allied itself with Bhujerba and with the Dalmassan resistance for purely short-term, tactical reasons. The location where this task will be accomplished is not inside an industrialized metropole, a city of the semi-periphery, or a village in the periphery of Ivalice, but a site equidistant from all these things.

This site is the Pharos tower at the Ridorana cataract, located far off in the Naldoan Sea, at the literal and figurative edge of the player's world-map. The cataract is essentially a giant hole in the ocean floor, which draws in the surrounding ocean water via a vast whirlpool, creating an enormous circular waterfall (the water at the bottom of the cataract recirculates back into the ocean, through some unknown mechanism). The cataract is both a quotation of the modernist symbol of the whirlpool, a metaphor of the dizzying energies unleashed by the capitalist world-market immortalized by Charles Baudelaire, as well as the reappropriation of the science fiction trope of the interstellar gateway or portal to another dimension.

The Pharos tower is not located at bottom of the cataract, but rather on an island at sea level, located at the cataract's edge. Rather than leading to an alternate universe, Pharos is the gateway to Ivalice's own past:

_311_ The cataract is essentially a giant hole in the ocean floor, which draws in the surrounding ocean water via a vast whirlpool, creating an enormous circular waterfall (the water at the bottom of the cataract recirculates back into the ocean, through some unknown mechanism). The cataract is both a quotation of the modernist symbol of the whirlpool, a metaphor of the dizzying energies unleashed by the capitalist world-market immortalized by Charles Baudelaire, as well as the reappropriation of the science fiction trope of the interstellar gateway or portal to another dimension.

_312_ The Pharos tower is not located at bottom of the cataract, but rather on an island at sea level, located at the cataract's edge. Rather than leading to an alternate universe, Pharos is the gateway to Ivalice's own past:

_313_ The Pharos tower is not located at bottom of the cataract, but rather on an island at sea level, located at the cataract's edge. Rather than leading to an alternate universe, Pharos is the gateway to Ivalice's own past:

Party stands before gate of Pharos tower. Ashe inhales sharply. Vaan notices an inscription.
Vaan: “Hey, Fran. Something’s written on the wall.”
Fran: “Engraved by someone, it seems. Hmm. It’s quite old. ‘Lo, seeker in days unborn. god-blade bearer. Know you: this tower challenges the sky. Ware the watcher; the ward of the Three waits, soul-hungry, unsated. He without power, want it not. He with power, trust it not. He with sight, heed it not. Rend illusion, cut the true path. In blood, Raithwall.’”
Ashe: “The Dynast-King?”
Fran: _cutting_ : “Does it startle you? The Dynast-King took his sword from the Occuria. It was here he claimed the nethicite. He must have known he was not the last the Occuria would choose. He left this for you. Rend illusion, cut the true path. Words of much mystery. Yet his blood runs in your veins. Perhaps it whispers to you the truth?”
Ashe approaches gate, and the gate springs open by itself.
Table 46. The screenshot on the left shows the Pharos tower at center, overlooking the Ridorana cataract. The screenshot on the right shows the interior of Pharos tower, where a column of water is pushed upwards through some unknown means.

In many ways, Pharos is the architectural inversion of the classic role-playing genre of the dungeon-crawler, in the sense that the player is not descending into the depths, but must climb the stairs from the first floor to the topmost or 99th floor (some flights are skipped due to teleport crystals or elevators, so the total number of floors players must traverse is only 64). This thematic inversion is reiterated by the tower's central core, which contains a waterfall which flows magically upwards instead of downwards. Players must gather certain magical items, solve certain puzzles and defeat various opponents, including five separate bosses.

One of the most interesting features of the tower is the explicitly political message broadcast by ornately carven pillars located throughout the structure. When examined, these reveal a series of arrogant comments, belittling the peoples of Ivalice and deifying the supreme might of the Occurians. Conversely, the final waystone puzzle contains a media-specific message. At first glance, there are a number of other waystones visible, but these are all false gateways, which return the player to an earlier point of the map. The player must carefully search
the topmost floors to discover a false wall, which can be broken through in order to find the true waystone.

This waystone is completely transparent, and refracts the scenery around it in a clever feat of recursive programming (i.e. smaller versions of the player-characters can be seen in its depths). This is a classic symbol of the power of the mass media, whose predecessors include J.R.R. Tolkien’s Palantir and the crystal ball handed to Patrick McGoohan's No. 6 during the final episode of *The Prisoner* (1967). Whereas Fran opened the pathway to the periphery on the way to Eruyt, by invoking the democratization of education, and whereas Balthier opened the pathway to the metropole on the way to Archades, by invoking the history of colonialism, here Ashe opens the pathway to the semi-periphery, through a symbolic act of media critique. This critique leads to one of the most stupendous action sequences of *FF12*. Note that the screenshots below take place prior to the events of the transcript.

Table 47. The screenshot on the left shows the final waystone, which is a transparent globe. The screenshot on the right shows Ashe approaching the Sun-cryst, which radiates magical energy.

![Image of the final waystone](image1.png)

![Image of Ashe approaching the Sun-cryst](image2.png)

*Ashe approaches the Sun-Cryst.*
Ashe: “King Raithwall stood here. With this sword he cut the Sun-Cryst and took its power in his hand.”
Vaan: “But you’re going to use the sword to destroy the Sun-Cryst, aren’t you, Ashe.”
Ashe: *groans:* “Don’t interrupt me, Vaan.”
Ashe concentrates and the Treaty-Sword begins to glow. The sky darkens. Spectacular quantities of Mist collect around the tower. The Sun-Cryst is now clearly visible as a single glowing crystal. Storm-clouds rage outside. Suddenly, the ghost of Rasler appears. This time he is visible to all.

Basch: “Lord Rasler!?”

Ashe: to Rasler: “You want revenge. You would have me use the stone?”

Rasler nods, holds out hand towards Ashe.

Ashe: “You would have me destroy the Empire? Is this my duty? Is this what you want? I cannot.”

Voice of Gabranth: “Why do you hesitate? Take what is yours. The Cryst is a blade, it was meant for you. Wield it! Avenge your father!”

Enter Gabranth.

Gabranth: “Yes, it was I who wore Basch’s face – who cut down the life of Dalmasca. Lady Ashe! Your father’s murderer is here!”

Ashe: angrily: “You!?”

Vaan: equally angry: “And Reks!”

Gabranth: “I slew your king. I slew your country. Do these deeds not demand vengeance?”

Ashe drops the Sword of Kings and readies Treaty-Sword.

Gabranth: “Yes. Good! Find your wrath! Take up your sword! Fight, and serve those who died before you!”

Gabranth strikes, but he is blocked by Reddas’ twin blades.

Reddas: “A Judge Magister there was. Two years past, he took in his hand the Midlight Shard stolen from Nibradia and used it not knowing what he did, and Nabudis was blown away. Cid ordered this of him to learn the nethicite’s true power. That man swore never to let such terrible power be used again. He forsook his Judicer’s plate, and his name.”

Gabranth: “Judge Zecht!”

Reddas: “It’s been too long, Gabranth. Reach out your hand, Lady Ashe. But remember, that which you must grasp is something beyond revenge, something greater than despair. Something beyond our reach. Try as we might, Gabranth, history’s chains bind us too tightly.”

They clash a second time, Gabranth knocks Reddas back.

Gabranth: “No, we cannot escape the past.” He points at Reddas: “This man is living proof.” To Ashe: “What is your past, daughter of Dalmasca? Did you not swear revenge? Do the dead not demand it?”

Brief pause. Ashe gazes at Rasler’s ghost, who nods. The Sun-Cryst pulsates in the background.

Vaan picks up his sword, preparing to fight. Ashe gazes at Vaan, then back at Rasler, whose arms are akimbo, in welcoming.

Ashe: “Rasler. My prince. Our time was short. Yet I know this: you were not the kind to take base revenge!”

Suddenly she cleaves through Rasler’s ghost, which vanishes.

Ashe: “The Rasler I knew is gone.”

The Occurian which had been generating Rasler’s image all along speaks.

Occurian: “You are our saint, Ashelia B’nargin. You must use the nethicite. You must be the one to straighten history’s weave!”

Ashe strikes again. Rasler’s ghost disappears completely.

Ashe: “I am no false saint for you to use!”

Vaan: “Ashe...”

Ashe: “In all Dalmasca’s long history, not once did we rely on the Dusk Shard. Our people resolved never to use it, though their need might be dire. That was the Dalmasca I wanted back.”

She drops the Treaty-Sword.

Ashe: “To use the stone now would be to betray that. I will destroy the Sun-Cryst! I will discard
the stone!”
Gabranth: “You claim no need of power? What of your broken kingdom’s shame? The dead demand justice!”
Ashe: “Even with power, we cannot change what has passed. What is done, is done.”
Ashe drops the lifeless Dawn Shard on the ground. It rolls near Gabranth.

By striking down Rasler's illusionary ghost – the “body double” of the nethicite, as it were, which corresponds to the illusionary financial bodies created by the successive Wall Street bubbles (S&L loans in the 1980s, dotcom stocks in the 1990s, securitized mortgages in the 2000s) – Ashe does not simply reject the rule of the Occurians. She renounces the principle of renunciation itself. If the world of Ivalice is to have a future, it must be a world without sacrifice.

Ashe's clemency enrages Gabranth, since it inadvertently strikes at the core contradiction of his entire life – his inability to save his homeland of Landis, and the humiliation of seeing the decades of impeccably loyal service he delivered to Archades scorned and devalued by Vayne. The thought that his own sacrifices might have been meaningless, especially compared with the choices of his brother, Basch, is unbearable.

What follows is a spectacular two-part boss battle, in which the player must first drive Gabranth from the field of battle, and then defeat an overconfident Dr. Cid, who has clearly allowed the power of the nethicite to go to his head. After the battle, Dr. Cid goes so far as to allow his body to dissipate into Mist, rather than acknowledge defeat. Before Balthier or the party can properly react to Dr. Cid's passing, however, they must deal with the Sun-Cryst. The crystal has been reacting to the presence of Ashe's Treaty-Blade by gorging itself on Mist, and now threatens to explode. It is at this point that Reddas springs into action. If he cannot change the past, then he can at least change the future. In one of the most emotionally charged sequences
of *FF12*, Reddas destroys the Sun-Cryst, saving the playable characters at the cost of his own life.\(^\text{315}\)

Reddas' sacrifice was not in vain. In a final revelation, we learn what Vayne, Dr. Cid and Venat had been planning all along. The conspirators never intended to acquire the Occurians' nethicite, but were after a much bigger prize. They created artificial nethicite in order to harvest the immense quantities of Mist which the Sun-Cryst had gathered over the centuries. In retrospect, this was why they had allowed Ashe to escape her imperial captors the first time around (her second escape, triggered by the explosion of the Dawn Shard, was accidental), to infiltrate Draklor, and to journey to Giruvegan, in an elaborate cat-and-mouse game worthy of Kojima's *Metal Gear Solid 4*.

What the conspirators failed to consider, of course, was the possibility that Ashe might act on the basis of transnational solidarity, rather than imperial self-aggrandizement. Her unexpected decision to destroy the Sun-Cryst is what drove Dr. Cid to intervene in the battle and stop her by force, at the cost of his life. Despite Dr. Cid's defeat, the plan to harvest the Mist succeeded to a certain extent. Vayne and Venat were able to use the energy gathered before the destruction of the Sun-Cryst to power the Bahamut, a monstrous sky-fortress far more powerful than any other battleship in the world of Ivalice.

The final mission of the player is thus to disable the Bahamut before it destroys the combined Resistance fleets of Bhujerba and Rozarria. In a spectacular battle in the skies above Dalmasca, we witness the airships of the Resistance fight bravely against Archades' forces, despite being outgunned by the Bahamut's superior firepower. Taking advantage of the aerial melee, Fran and Balthier dextrously pilot the Strahl through cordons of enemy fighters and
manage to dock on the Bahamut's outer hull. Once inside the sky-fortress, the player has a brief encounter with Gabranth, who is now in disgrace and has been reduced to a common soldier of the Empire. Gabranth offers a token battle, but after the player fights him to a draw, Gabranth puts aside his trademark dual swords, either too wounded or too exhausted to stop them. After leaving Gabranth at the elevator, the final showdown with Vayne takes place in the heart of the Bahamut:

Party discovers Vayne and Larsa are arguing. Vayne turns to confront them.

Vayne: “I bid you welcome to my sky fortress, the Bahamut. I must apologize for my delay in welcoming you aboard my ship. Permit me to ask... who are you? An angel of vengeance? Or perchance a saint of salvation?”

Ashe: “I am simply myself. No more and no less. And I want only to be free.”

Vayne: “Such a woman is not fit to bear the burden of rule. Weep for Dalmasca, for she is lost. Observe well, Larsa. Watch and mark you the suffering of one who must rule, yet lacks the power.”

Larsa: “No.” He draws his sword: “No, brother. I will not. Though I lack your power, I will still persist.”

Vayne: “Hmm. Bold words, child.”

Gabranth reaches railing, at some distance from the impending battle:

Gabranth: “Lord... Larsa...”

Ashe's reply suggests the radical egalitarianism of the anti-neoliberal social movements, which have dispensed with authoritarian leaders and coercive hierarchies. This is a movement which democratically persuades, rather than autocratically commands. The full power of this persuasion is revealed when Vayne chooses to deploy open violence against the resistance. Instead bringing to bear the full might of the Empire, Vayne must contend with a united transnational front of Larsa, the six playable characters who represent the length and breadth of Ivalice, and most unexpected of all, Gabranth himself. The former Judge Magister decides to reclaim his honor and fight for the one member of the Solidor family who embodied in word and deed the most democratic traditions of Archades: namely, Larsa.316

276
The people of Archades finally begin to turn against their own Empire, in a moment which anticipates the Occupy Wall Street protests which would erupt across the US in 2011. Fittingly, in the subsequent battle it is none other than Gabranth who mortally wounds Vayne, at the price of being mortally wounded in turn. Just as Dr. Cid chose to dissolve into Mist rather than acknowledge defeat, so too does Vayne abandon his bodily form and dissolve into a monstrous, Mist-enabled fusion with Venat, forming a hideous creature which the player must subsequently defeat in the very last playable sequence of the game. After defeating Vayne's final form, *FF12* reaches its conclusion:

*Cut to Ondore, conducting battle from the Garland.*
Resistance Pilot: “Sir, it’s the Strahl. She’s left Bahamut. She’s moving away!”
Ondore: “The Strahl. They made it! At last, the Bahamut has fallen! The final test is upon us. The judges shall rule us no more. Main cannon on the Alexander!”
Voice of Gabranth: “This is Judge Magister Gabranth. All quarters cease fire, I repeat, all units of the Archadian army, hold your fire.”

*Cut to Basch, who is using the Strahl's voice-box to masquerade as Gabranth.*
Basch: “The battle is over! As of this moment, we have signed a cease-fire with Ashelia B’nargin Dalmasca, Her Royal Majesty.” *He passes microphone to Larsa.*
Larsa: “Attention. This is Larsa Ferrinas Solidor. My brother Vayne has died with honor in battle. The Imperial Fleet is now under my command.”
Resistance Pilot: “Sir! Your orders, sir?” Ondore hesitates, suspecting a ruse, uncertain of whether to believe this turn of events.
Ash: *takes microphone:* “This is Ashelia Dalmasca.”
Ondore: “The lady Ashe! Thank the gods you live!” *Audible cheers from Garland’s crew.*
Ash: “I confirm what Judge Magister Gabranth and Larsa Solidor have said here. Please stand down your attack. The war is over. Ivalice looks to the horizon. A new day has dawned. We are free.” *Overcome with emotion, Ashe sobs involuntarily. Battle ceases, skies clear of aircraft.*
Penelo: “Look Vaan, the Bahamut!”
*The Bahamut begins to fall from the sky.*
Resistance Pilot: “A message from the Alexander!”
Ondore: “Take it.”
Resistance Pilot: “Sir.”
Voice of Zargabaath on radio: “This is Judge Zargabaath, captain of the Alexander, flagship of the 12th Dalmacian Fleet of the Archadian Army. I address all ships in Rabanastre’s airspace. The Bahamut must not be allowed to fall on the city of Rabanastre. We are preparing to ram her. Do not interfere!”
Ondore: *aghast:* “Madness!”
Zargabaath on radio: “Should she fall, the paling will not hold, and all Rabanastre will be obliterated. All ships, concentrate your fire on the Alexander’s remains once Bahamut is clear of...
the city.”

Party members watch the flight of the Alexander in horror.

Balthier: *his voice crackling on the radio*: “Hasty, aren’t they. I think it’s a little early to be throwing away our lives just yet.”

Vaan: “Balthier? Wait, Balthier, where are you?”

*Balthier and Fran are inside the Bahamut, working furiously while the sky-fortress falls apart.*

Balthier: “Ah, Vaan! Sounds like you made it out okay! The Strahl’s a fine airship, eh?”

Ondore: “What does he think he’s doing? Balthier!”

Balthier: “Marquis! Stop that fool judge on the Alexander for me, would you? Just getting somewhere with these glossair rings. Almost done. Don’t want him ramming me before I fix them, do we?” Debris falls, nearly hitting him.

*Ashe: anxious*: “Balthier! Do you understand exactly what it is you’re doing?”

Balthier: “Princess! No need to worry. I hope you haven’t forgotten my role in this little story. I’m the leading man. You know what they say about the leading man? He never... dies.” He inserts power-rod into a key node and Bahamut powers up. Sky-fortress begins to move away from Rabanastre.

Balthier: “Let’s fly! Fran, power to the glossair rings. Fran?”

Fran has been knocked unconscious by debris.

Balthier: *steps over to her*: “Do I have to do everything around here?”

Ashe: “Listen to me, Balthier. Get out of Bahamut immediately. Please, Balthier, you mustn’t die. Please, Balthier. Come back.” *Balthier goes to pick up Fran.*

Fran: *half-conscious, with impeccable irony*: “I’d say you’re in more of a... supporting role.”

*Passes out.*

Balthier: *with equally impeccable irony*: “Fran, please.” To Vaan: “Vaan, the Strahl’s in your hands! You’d better take care of her, you hear? If there’s one scratch on her when I get back...”

Vaan: “Roger that. We’ll be waiting for you.”

Ashe: “Balthier...”

*Shot of Strahl circling the Bahamut. The sky-fortress slowly comes to rest at some distance from Rabanastre. Fade-out.*

**Table 48.** The screenshot on the left shows the Strahl, in the lower right foreground, dodging its way through the aerial battlefield, the vast superstructure of the Bahamut visible in the distance (screen left). The screenshot on the right shows the carcass of the Bahamut a year after the battle.
This is both a satisfying and credible conclusion, as well as artfully-disguised fan service to the *FF12* fan community (considering that Balthier and Fran's banter all but steals the show for most the story, it is only fitting that they pull off one final feat of heroism). The deeper political message here, however, is the necessity to think seriously about the peaceful disposal of obsolete imperial superstructures – a theme which has only gained in urgency and relevance since *FF12*’s release in 2006.

The very last cut-scene gives us some hints as to what this might entail. While Marquis Ondore provided the voice-over narration for the opening of *FF12*, the denouement features Penelo's voice-over narrative, hinting at the plebianization of the category of historical narration. A final scene shows Vaan piloting an airship of his own, which could suggest anything from the spread of transnational fan communities, to the mobile media and videogame cultures of the post-2006 era.\(^{318}\)

While the post-imperial Ivalice remains a narrative fiction, it is also the promissory note on a multipolar world emancipated from the political shackles of empire, as well as the economic ones of neoliberalism. Sky-pirates and citizens of the world, unite – you have nothing but a thirty-year debt bubble to lose, and a world to win!
CHAPTER 7
CONCLUSION

No analysis of MGS4 and FF12 would be complete without some final thoughts on their long-term influence on videogame culture. While both games transformed the espionage thriller and the role-playing genres in productive ways, their commercial and critical success anticipated two other trends. These trends are the democratization of game design, and the rise of the videogame commons. The result is that transnational audiences have become powerful counter-players to the videogame industry and its commercial oligopolies.

One of the most interesting examples of the democratization of game design is the rapid proliferation of Kojima's nonviolent and stealth tactics in other franchises. Naughty Dog's adventure thrillers Uncharted 2 (2009) and Uncharted 3 (2011) integrate stealth tactics into their core game-play, while superhero franchises such as Rocksteady's Batman: Arkham Asylum (2009) and Batman: Arkham City (2011) feature non-violence as a core element of game-play and a guiding narrative principle (Batman disables, but never kills, his opponents).

In like manner, FF12's critique of neocolonial tourism paved the way for the postcolonial rewriting of the Greek mythology epic in Sony Santa Monica's God of War 2 (2007), God of War: Ghost of Sparta (2010) and God of War 3 (2010). The fictional hero of the God of War franchise, Kratos, is a mortal who rebels against the gods of Olympus, in what is essentially a rewriting of the neo-slave uprising into a parable of anti-neoliberal resistance.

For their part, the institutions of the videogame commons – fan production, fan communities, and fan-centered networks of criticism and interpretation – have all grown dramatically since 2008. While this growth has been most spectacular in the fast-growing digital
media cultures of the BRIC nations, it is by no means restricted to these specific nations, either. At first, much of this growth occurred in close proximity to the videogame industry, e.g. Sony's *LittleBigPlanet* franchise combined commercial content with freely available user-generated content, or what amounts to a commons inside a corporate monopoly.

More recently, the videogame commons has begun to develop in more autonomous ways. *Minecraft*, an open world or “sandbox” construction videogame created by independent videogame artist Markus Persson and a small studio, is an example of a commercial space enclosed by a larger digital commons of fans and players. While non-commercial versions of *Minecraft* are readily available, fans voluntarily purchase the commercial version as a way of enabling Persson and his team to refine and expand the franchise. At the same time, fan sites provide sophisticated editing tools, custom modifications, and other game accessories free of charge to the player community.\(^{319}\)

The videogame commons is also beginning to deliver forms of videogame journalism and critique which are superior in quality and accuracy to those delivered by advertising-dependent commercial sites such as IGN.com, which is owned by Rupert Murdoch's News Corp. One of the watershed moments of this trend is the recent *Mass Effect 3* imbroglio. *Mass Effect 3* was an above-average science fiction role-playing videogame all but ruined by an atrociously bad ending – bad not in the sense of a tragic outcome, but in the sense that that it violated the core narrative principles of the franchise: meaningful player choices, complex character interactions, and heroism in the face of impossible odds. What made the debacle especially galling for fans was that the game initially received extremely high scores from commercial review sites, simply because many reviewers had not taken the ten to twelve hours required to play the videogame...
until the very end.

As a result, tens of thousands of the franchise's core fans organized an online “Retake Mass Effect” web-campaign against the publisher of the videogame, Electronic Arts, which also happens to be the single largest commercial game publisher in the industry today. Fans wrote sophisticated analyses of what had gone wrong with the ending, posted videos explaining their position, voted down user feedback ratings of the videogame on sites such as Amazon.com, and succeeded in garnering significant media attention and widespread sympathy from the larger videogame audience. Eventually, the campaign forced EA to placate fans with free additional downloadable content and other minor concessions.\textsuperscript{320} More importantly, protestors moved from reaction to action, by creating and circulating their own forms of non-commercial content, some of which is of the highest quality.\textsuperscript{321}

In addition to anticipating the explosion of fan communities and non-commercial media, \textit{MGS4} and \textit{FF12} also foreshadowed one of the key geopolitical shifts of the dawning post-neoliberal era. This is the arrival of multipolar media platforms. This is most evident in terms of the rapid post-2008 expansion of mobile media platforms equipped with internet access. Thanks to rapid technological development and the economic success of numerous industrializing nations, mobile platforms are becoming the single most ubiquitous transnational media infrastructure of them all. What this means is that mobile gaming (a.k.a. the sum total of tablet, handheld, and cellphone gaming) has the potential to displace console gaming as the fulcrum of the videogame industry.

At the very least, the mobile boom will spur the proliferation of world-class videogame studios and digital audiences in the largest nations of the semi-periphery. It is also likely to spur
new types of transnational fan production with significant links to the largest informal media networks of the industrializing nations, ranging from Nigeria's Nollywood to India's Bollywood, and from Bhojpuri cinema and music to Brazilian technobrega. It is important to stress that these informal networks are not anachronisms or holdovers of the pre-digital era, but operate through the most up-to-date transnational media technologies available, e.g. Bollywood studios already profit as much or more from licensed ringtones as from profits on ticket sales. In the future, these informal networks and transnational audiences will play a key role in creating and distributing content for mobile gaming platforms.

Perhaps the greatest contribution of *MGS4* and *FF12* to videogame culture, however, is inspirational. To paraphrase Marx's famous comment on the Paris Commune, these games do not depict multipolarity as some utopian ideal, but embody the world they wish to realize. Both games feature characters who embody some of the most hopeful aspects of the multipolar world (e.g. the digital commons, progressive fan communities, and transnational social movements). They borrow respectfully from numerous postcolonial nations and their respective media-cultures, while critiquing neocolonialism. They disrupt and negate the stereotypes of nationality, race, sexuality or gender which afflict their respective genres. Most of all, they forthrightly critique neoliberalism from the standpoint of some future realm of transnational citizenship and democratic solidarity – that is to say, from the standpoint of a literate, urbanized, and media-savvy transnational audience. They are models, in short, of a transnational media which does not exploit its audience, but fulfills its social responsibilities to the latter.

Indeed, the emergence of this transnational audience presents a qualitative challenge to existing media scholarship and to all existing theories of transnational communication. There is
an urgent need for more comprehensive studies of these audiences, of the institutional forms and practices of their informal media networks, and of their participation within the digital commons. Just as today's transnational circuits of digital media production and distribution have grown far beyond the capacity of First World neoliberal oligopolies to control them, so too have the circuits of reception, interpretation and critique expanded to the point that transnational audiences can – and do – push back against even the largest national culture-industries and regulatory agencies.

Yet contemporary videogames are more than just a field of struggle between transnational capitalism on the one hand, and digital communities, citizens and laborers on the other. Their ability to connect a potentially unlimited audience, and to give that audience the interactive tools to organize themselves, gives them unique significance as a cultural form. This is their ability to transform speculative play into real-time digital performances.

These performances are not isolated acts of individual expression, but embody the collective labor-process of digital or transnational capitalism in which each and every one of us is enmeshed. Acknowledging, thinking through and critiquing those performances is the necessary first step in reclaiming our digital labor as our own. At the furthest edge of those performances, videogames allow us to break loose from the planetary prison-house of neoliberalism, and to glimpse the possibility, no matter how faint or transient, of transforming the world-system of capital into a world of free human beings.
REFERENCES


285


British Board of Film Classification. Web: http://www.bbfc.co.uk.


289


Gevorkyan, N.; Timakova, N. and Kolesnikov, A. First Person: An Astonishingly
Countries for the Virtual Economies of Online Games.” *Manchester Institute for Development Policy and Management*. Web:
http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/


Howell, J.C. “A Formal Analysis of Metal Gear Solid 2.” Web:


International Telecommunications Union. “ITU estimates two billion people online by


MMOData.net. Web: http://www.mmodata.net.


Pardue, Derek. (2009). “Making Territorial Claims: Brazilian hip Hop and Socio-


Prins, N. *It Takes A Pillage: An Epic Tale of Power, Deceit, and Untold Trillions*. 


Reuters. “China 2010 census puts population at 1.3 billion, half in urban areas.” April 28,


York: W.W. Norton & Co., 2010.


Development Program, 2010.


Accessed October 10, 2011.


VGChartz.com.


Wallerstein, I. *The Modern World-System II: Mercantilism and the*


1. Adorno's original comment in *Versuch über Wagner* [In Search of Wagner]: “It is worth making the effort to consider the heaps of dross, junk and garbage upon which the works of significant artists appear to be based, and to which the latter owe something of their habitus, while nonetheless barely escaping the former. For Schubert, it is the card-sharp at the inn, for Chopin, it is the shadowy and ill-defined type who haunts the 'salon', for Schumann it is the chromolithograph [color-print] and for Brahms, it is the music professor: their productive force maintains itself in the tightest proximity to parody, and their greatness in the small remove by which they keep themselves from their models, from which their collective energies accrue, as it were.” [“Es lohnt den Versuch, die Haufen von Abfall, Schrott und Unrat zu betrachten, auf denen die Werke bedeutender Künstler sich zu erheben scheinen, und denen sie, knapp Entrinnende, etwas von ihrem Habitus doch verdanken. Zu Schubert gehört der Wirtshausspieler, zu Chopin der schwer dingfest zu machende Typus der 'Salon', zu Schumann der Öldruck, zu Brahms der Musikprofessor: in der dichtesten Nachbarschaft der Parodie hat ihre Produktivkraft sich behauptet, und ihre Grösse in dem kleinen Abstand, den sie von jenen Modellen halten, aus denen ihnen zugleich kollektive Energien zuwachsen.” (This is my own translation.) Theodor W. Adorno. *Gesammelte Schriften Band 13: Die musikalischen Monographien*. Frankfurt am Main: Suhrkamp Verlag, 1971 (26).


11. Stiglitz describes the Washington Consensus which dominated IMF policy-making as follows: “The institutions [the IMF and World Bank] are dominated not just by the wealthiest industrial countries but by commercial and financial interests in these countries, and the policies of the institutions naturally reflect this...

...The problems also arise from who speaks for the country. At the IMF, it is the finance ministers and central bank governors... The finance ministers and central bank governors typically are closely tied to the financial community; they come from financial firms, and after their period of government service, that is where they return. Robert Rubin, the treasury secretary during much of the period described in this book, came from the largest investment bank, Goldman Sachs, and returned to the firm, Citigroup, that controlled the largest commercial bank, Citibank. The number-two person at the IMF during this period, Stan Fischer, went straight from the IMF to Citigroup. These individuals naturally see the world through the eyes of the financial community.” Joseph Stiglitz. *Globalization and its Discontents*. New York: W.W. Norton, 2002 (14).


16. It should be emphasized that Dyer-Witheford and de Peuter are referring to the digital incarnations of film, music and other more traditional culture-industries, which are deeply antagonistic to the transnational corporations which control those industries. This is an ingenious move, because the digital media are often praised (or excoriated) as an entirely new and separate sphere of cultural production and consumption. Dyer-Witheford and de Peuter point out that this alleged separation is the
discourse of US exceptionalism (a.k.a. US Empire) writ digital, and they provide a useful critique of
the deployment of this digital exceptionalism in videogame franchises such as World of Warcraft and
America's Army. Nick Dyer-Witheford and Greig de Peuter. Games of Empire: Global Capitalism and

17. For a more detailed analysis of Grand Theft Auto's critique of neoliberal consumerism and US
Empire.” In: The Meaning and Culture of Grand Theft Auto. Edited by Nate Garrelts. McFarland:

name=grand+theft&keyword=&console=&region=All&developer=&publisher=&genre=&boxart=Bot

name=god+of+war&keyword=&console=&region=All&developer=&publisher=&genre=&boxart=Bot
h&results=50&order=Popularity. Accessed January 10, 2012. For further materials on the neo-slave
narrative as a form, see: Ashraf Rudy. Neo-slave Narratives: Studies in the Social Logic of a Literary
Toni Morrison's Beloved (1987), Canadian writer Dionne Brand's At the Full and Change of the Moon
(1999), and Haitian writer Evelyve Trouillot's Rosalie l'Infâme [Rosalie The Infamous] (2003)).

20. This is based on data drawn from the World Bank's World Development Indicator dataset. World


23. Since no single statistical agency tracks the world videogame industry, these figures are compiled
from public press releases by analyst firms Media Control GfK, NPD, Enterbrain, Newzoo,
PriceWaterhouseCooper, Strategy Analytics, and FICCI-KPMG, industry trade groups MPAA (US),
SARFT (China), IFPI and Eiren (Japan), and the Russian Association of Developers and Publishers
of Game Industry and Interactive Technologies, and organizations including Korea's Ministry of Culture,
Sports, and Tourism (MCST), the Korea Creative Content Agency, (KOCCA), and by the European
Audiovisual Observatory (EU). For data for India's game market, see: “Market Study On Animation
and Gaming Industry in India For Italian Trade Commission”. Tata Strategic Management Group. Web:
http://www.ice.gov.it/paesi/asia/india/upload/182/Animation%20and%20Gaming%20Industry%20in
from Sergey Orlovsky, head of Nival Interactive, the largest Russian-based developer of MMOs, who
estimated Russia's game industry at $530 million in 2008 ($450 million offline and $80 million online).
See: IGN. “RPG Vault Focus: Russia.” May 21, 2008. Web:
association of the Brazilian game industry, has estimated Brazil's official 2008 sales at $90 million.
However, the true total is higher, since the vast majority of consumers dodge high taxes on imported consoles and games by recourse to the informal economy. The size of Brazil's market is probably roughly comparable to the size of the Russian market, due to the marked similarities between the two countries (both countries are heavily urbanized, have similar levels of per capita income, and similar levels of cellphone ownership and online access). Last but not least, the overall total of $67.4 billion in 2010 sales dovetails with the estimates of long-time media industry analyst firm DFC Intelligence, which estimated 2010 revenues at $66 billion. DFC Intelligence. Web: http://www.dfcint.com/wp/?p=312. Accessed January 10, 2012.


28. Low income countries and regions are defined as below $1000 in annual per capita GDP, middle income as $1000 to $24,999, and high income as $25,000 or higher. Note that gross enrollments for primary school are not listed, because the figures are 100% or above for all three regions. This data is derived from the International Monetary Fund and from the World Bank's World Development Indicator dataset. Web: http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2011. Accessed January 20, 2012.


30. While each industrializing nation found their own unique formula for economic success, there are some revealing elements they all have in common. All successful emerging economies have effective national governance (Russia rebuilt its state capacity from the ground up, after the debacle of the 1990s); they all tightly regulated finance capital (most of India's banks are state-owned, and so are the largest Russian and Chinese banks, while Brazil's government owns a major developmental bank); the state owned stakes in leading companies (one-third of listed Russian stocks are owned by the state, while China owns the four biggest Chinese banks and many key industries); and the state invested heavily in science, research, and digital technology.


32. This is data from the European Audiovisual Observatory's Focus 2010 World Film Market Trends, as well as the national film agencies of Iran (DEFC) and Bangladesh (BFDC). The Hong Kong films
are included in China's total, due to the fact that after Hong Kong's return to mainland rule in 1997, the industry became tightly integrated with mainland Chinese broadcasting companies, markets and audiences. However, it should be noted that films produced in Hong Kong account for only 10% of China's total. Web: http://www.obs.coe.int/oea_publ/market/focus.html. Accessed August 3, 2010.


34. “All big-10 countries by the early 2000s had substantial domestic media industries that typically involved more radio and TV households, more daily newspaper sales, and more movie production than in the smaller western European countries.” Jeremy Tunstall, The Media Were American. London: Oxford University Press, 2007 (127).


36. Ibid. (35).

37. Sherman So and J. Christopher Westland describe the early days of Baidu as follows: “The whole music industry was ready to come down hard on any Chinese search engine that attempted to do what the infamous Napster had done in America. Despite being wildly popular, the online music file sharing service had been shut down in 2001 by the legal might of the Recording Industry Association of America, which had no qualms about playing rough – it even prosecuted students who were downloading music files in their dorms.

   But this was China and the laws were different. 'We debated about MP3. There were many gray areas,' said Foo, a Baidu board member at the time. But the directors also knew that, risky as the move was, Google, their chief competitor, would not dare match it. Google at that time was the dominant search engine in China. 'Baidu’s popularity only began to surge in 2003–04. Before that, most people in China used Google, as there were few other choices of search engine,' said Jacky Huang, China Internet Research Manager of IDC. Baidu launched MP3 search in 2002-03. Predictably, it was a magnet for young users. At the time of Baidu’s IPO in 2005, the company said that MP3 search was generating as much as 22 percent of its traffic, although some venture capitalists maintain the real figure was nearer 50 percent in the early days.” Sherman So and J. Christopher Westland. Red Wired: China’s Internet Revolution. London: Marshall Cavendish, 2010 (47).

38. An argument can be made that the reason the BRIC nations were able to achieve these things was due to their construction of powerful developmental states (as in the case of China and Russia) or developmental-friendly state institutions (as in the case of India and Brazil). For a concise summary of the sociological literature of the developmental state, see: Bagchi, Amiya Kumar. (2000). “The Past and the Future of the Developmental State.” Journal of World-Systems Research 6:2 (398-442).

39. “China has injected enormous sums of money into Internet infrastructure construction. From 1997 to 2009 a total of 4.3 trillion yuan was invested in this regard, building a nationwide optical communication network with a total length of 8.267 million km. Of that, 840,000 km was long-distance optical cables. By the end of 2009 Chinese basic telecommunications companies had 136 million broadband Internet access ports, and international outlet bandwidth was 866,367 Gbps, with seven land-submarine cables and 20 land cables, that had a combined capacity exceeding 1,600 Gb. That


42. This is data from Internet World Stats, which compiles the official data released by the statistical agencies of each national government. Web: http://www.internetworldstats.com/. Accessed January 20, 2012.


51. This list was compiled from independent website GameDevMap.com and then cross-checked with individual company searches, i.e. any company with an inactive or inaccessible website was excluded from the list. Web: http://gamedevmap.com/. Accessed November 25, 2010.


56. While the DFC Intelligence report is proprietary, its findings have been summarized by James Brightman, a reporter for Eurogamer, as follows:

   ‘Video games have reached beyond adolescent males into a mainstream entertainment medium that touches every segment of the population,’ said DFC analyst Michael Goodman, lead researcher for the [DFC] report. ‘Despite this, advertisers continue to under utilize video games as an advertising vehicle. This is slowly changing as more games go online.’

   Goodman continued, ‘Consumers are inundated with advertising, and marketers’ messages are lost in the clutter. Video games, with their high degree of immersion and interactivity, are a natural solution for building brand awareness and influencing purchase decisions.’

   DFC added that it's not really in-game advertising that's expected to drive growth, but around-game advertising. Advergames are gaining steam as well. By 2016, advergames and around-game advertising are expected to account for about 78% of total game advertising revenue, DFC said.


57. Williams and Yee were key contributors of one of the most prominent research consortia


62. One of the watershed moments of this process was Sony's high-profile release of a game trailer for Killzone 2 in 2006. Initially, the footage was hailed as an example of the extraordinary power of the Playstation 3 console being released later that year. However, videogame fans quickly discovered that the trailer was a CGI version of what the final footage was supposed to look like, i.e. it was a simulation, not actual game-play. Gamers cried foul, forcing Sony and the studio responsible for creating Killzone, Guerilla Games, into damage control. To Guerilla's credit, when another version of the Killzone 2 trailer was released in 2008, it employed genuine in-game footage which looked as good as or slightly better than the 2006 CGI version. For an account of the controversy and access to the trailers, see: Conselmo, Chad. (2008). “SCEE PlayStation Day: Killzone 2 trailer finally showing real in-game footage?”. Destructoid.com. May 8, 2008. Web: http://www.destructoid.com/scee-playstation-day-killzone-2-trailer-finally-showing-real-in-game-footage—85181.phtml. Accessed December 20, 2010.

64. An argument can be made that the digital commons represents the drastic expansion of the local and national institutions of the commons (rights-based citizenship, democratically-accountable governance, etc.) to a transnational or planetary level. For a scintillating formulation of the emergence of the commons in the context of the early capitalist world-system, see: Peter Linebaugh. *The Magna Carta Manifesto: Liberties and Commons for All*. Berkeley: University of California Press, 2008.

65. In a presentation for the 2009 Game Developers' Conference, two of the lead programmers for *God of War 3*, Jim Tilander and Vassili Filippov, emphasized the importance of a library of software called SDK library EDGE. The acronym “SDK” stands for “software development kit”, and refers to the software tools which are used to build other, more specialized tools. The EDGE library is a body of optimized code created by the joint efforts of Sony's worldwide studio network, in order to facilitate videogame production for the entire studio network. Web: www.tilander.org/aurora/comp/gdc2009_Tilander_Filippov_SPU.pdf. Accessed September 15, 2010 (34-35).


English-speaking world on the contemporary Russian hip hop scene, which has produced significant numbers of world-class artists (the short list includes groups such as Caste, Ligalize and Center, male rappers such as Seryoga, Guf, Viktor AK, and Ptah, and female rappers Lisa Small, Exceela, and Hydroponka).


75. Ibid. 54.


78. Gee argues that the pedagogical moment of videogames is an indispensable alternative for rethinking modern educational systems, and in particular, critiquing the neoliberal-era trend of converting US public schools into punitive, polarizing and class-biased test-mills: “Because video games (which are often long, complex, and difficult) are simulations of experience and new worlds, and thus not unlike a favored form of human thinking, and because their makers would go broke if no one could learn to play them, they constitute an area where we have lots to learn about learning. Better yet, they are a domain where young people of all races and classes readily learn specialist varieties of language and ways of thinking without alienation.” James Paul Gee. *Situated Language and Learning: A Critique of Traditional Schooling*. Routledge: New York, 2004 (4).


83. Until recently, many videogame professionals did not have the same workplace protections as those


86. This is based on sales data from VGChartz. Web: http://www.vgchartz.com/yearly.php. Accessed November 8, 2010. Note that two out of the three apparent exceptions to this rule – God of War 3, Final Fantasy 13, and Mass Effect 3 – borrow extensively from various aspects of multiplayer gameplay. Both Final Fantasy 13 and Mass Effect 3 allow the player to control a team of in-game characters, duplicating a key aspect of multiplayer gaming.


88. This user-centered moderation system also includes user-generated ratings. After playing through each fan-created level, players must rate the level in question (one star is the least favorable, five stars is the most favorable) and can also tag the level with an optional descriptor (“cute”, “puzzler”, “springy”, etc.). These ratings and tags are compiled by the server, and displayed next to each fan-made level, serving as a guide for other fans.

89. Section 13 of the end-user license agreement explicitly states: “SCEA does not claim ownership of any User Generated Content that you submit or make available as part of the game, and SCEA expressly disclaims any and all liability in connection with any User Generated Content.” End-User License Agreement, Media Molecule. LittleBigPlanet (2008).


91. Banks, John and Humphreys, Sal. (2008). “The Labour of User Co-Creators: Emergent Social Network Markets?” Convergence:14 (402). It is worth noting that the proliferation of user-generated content within commercial networks has added weight and urgency to long-standing calls to rewrite the copyright laws in ways which benefit ordinary citizens. Legal expert Steven Jamar has this to say:
The purpose of the Copyright Act is not to protect business models that become outmoded; it is to protect the societal interest in the creation and distribution of works.

I propose revising the Copyright Act and interpreting it along the following lines:

1. Noncommercial social network users should be allowed to lawfully post links to and post portions of copyrighted works without permission.

2. A broad right to create and disseminate derivative works online for noncommercial purposes should be provided.

3. A right to create derivative works for commercial purposes should be given where even substantial portions of the original work are used, provided that
   (a) the new work is original;
   (b) the new work is (i) transformative or (ii) constitutes parody, satire, or commentary; and
   (c) the new work does not directly compete with the source work.


94. This total is based on the video files stored on Scott's website and on Youtube. Web: http://www.accursedfarms.com/movies/fm/. Accessed April 20, 2011.

95. One of the signs of the rising professional status of testing is Sony's launch of *The Tester*, an episodic reality show based on videogame testing and broadcast on Sony's Playstation Network beginning in 2010.

96. This is true not just of videogame software but of videogame hardware as well. This is why Microsoft, a highly successful software firm with enormous cash resources and talented programmers, has never seriously challenged the dominance of Sony and Nintendo in the console videogame market. Both Sony and Nintendo are consumer electronics firms, and understood the necessity to design their consoles to be just like any other home appliance – i.e. reliable, unobtrusive, and interoperable with a wide range of third-party games and peripheral devices. Microsoft's Xbox360 console was notoriously prone to complete breakdown during its first two years on the market, it did not allow consumers to easily upgrade its hard-drive, and it required expensive, Microsoft-only peripherals. In short, Microsoft designed the system as if it were a desktop computer, instead of a home appliance. Consumers responded by choosing non-Microsoft consoles. From January 2006 to November 2010, Microsoft's consoles comprised only 22% of the console world market by units sold, while Sony garnered 40% and Nintendo 38%. Web: http://www.vgchartz.com/hwtable.php?cons[]=Wii&cons[]=PS3&cons[]=X360&cons[]=XB&cons[]=PS2&reg[]=Total&start=38732&end=40496. Accessed November 15, 2010.

97. This is my own translation. Walter Benjamin. *The Work of Art in the Epoch of Mechanical


101. “In the video-game market, where shooting and mass destruction were the norm, the first 'Super Mario Bros.' game created a revolution in 1985 by introducing elements not often associated with computer terminals and controllers: wit and humor. Mario, the main character, made an unlikely hero – a plumber who can wisely choose to avoid enemies as well as to confront them. In this whimsical world, bright green and red mushrooms make Mario grow taller and more powerful. There are bomb-throwing mice, waltzing cacti, and turtles who can use their shells as missiles. Surprises that give players more time and extra lives lurk in the most unlikely places. Children, who loved the characters and became ensnared in the maze of the game, which was replete with Pavlovian rewards and punishments and carefully programmed increases in challenge, were captivated.” David Sheff. Game Over: How Nintendo Conquered the World. NY: Random House, 1993 (1-2).

102. Note that “three-dimensional” in this context refers to the two-dimensional simulation of three-dimensional spaces, as opposed to the stereoscopic or true 3D television sets and media devices which began to be mass-produced in 2010.


105. One of the reasons Sony displaced Nintendo as the leading videogame console manufacturer of the late 1990s and early 2000s was that Sony understood the power of open formats as a competitive weapon better than its rival. Since the CD format was non-proprietary, prices dropped dramatically, whereas Nintendo's proprietary cartridge system proved to be more costly. Unsurprisingly, game developers flocked to Sony's CD format in droves. Similarly, Sony's Playstation 2 was both a
videogame console and a standalone DVD player, a fact which helped to ensure the success of the DVD format. In 2005, Microsoft made the same mistake as Nintendo, by failing to include Bluray as a standard disc format on their Xbox360 console (by contrast, every Sony Playstation 3 comes with Bluray by default). The Bluray format can store a minimum of 25GB, five times more than standard DVDs, and can potentially store up to 500GB of data (one hundred times as large as a DVD). Thanks to these and other mistakes, Microsoft's share of videogame console sales declined from about 33% of the world market in 2005 to about 20% in 2009.

106. This is the genesis of the videogame's most famous battle, when the hero, Solid Snake (controlled by the player), must defeat a villain named Psycho Mantis. During the battle, Mantis uses his psychic powers to disrupt the player's handheld controller. That is, Snake literally stops responding to the player's controller, a deeply frustrating and unsettling experience for the player. To regain control over Snake, the player must physically unplug the controller from one port on the Playstation and plug it into the other port. Fortunately, the game provides cues and in-game hints to encourage players to take this step. Kojima is deliberately disrupting the “reality” of the game, by emphasizing the physical infrastructure of console gaming – the videogame equivalent of “breaking the fourth wall” in theater.


108. In addition to opening the door for other leading stealth-based franchises such as Ubisoft's Splinter Cell and Assassin's Creed, the success of MGS4 also encouraged the spread of stealth-based game-play in other videogame genres. For example, Naughty Dog's Uncharted 2 (2009) borrowed heavily from the stealth and non-violent aspects of MGS4, as did Rocksteady Studios' Batman: Arkham Asylum (2009) and Batman: Arkham City (2011).

109. This is data compiled from VGChartz.com. Web: http://gamrreview.vgchartz.com/browse.php?name=metal+gear+solid&keyword=&console=&region=All&developer=&publisher=&genre=&boxart=Both&results=50&order=Total+Sales. Accessed December 20, 2011. One of the internal contradictions of MGS2 is that the personality and backstory of the main character, Raiden, was insufficiently developed.

110. It is no accident that MGS3 takes place in 1964, the same year which saw the publication of William S. Burroughs' visionary science fiction novel Nova Express. Big Boss is very much the belated realization of Burroughs’ pilot K9, a soldier in a cybernetic resistance movement battling the interstellar colonialism of the Nova Mob. See: William S. Burroughs. Nova Express. New York: Grove Press, 1964.


112. According to the British Board of Film Classification, MGS4 contained 545 minutes and 47 seconds of footage (i.e. slightly over nine hours). Web: http://www.bbfc.co.uk/BDM247468. Accessed April 27, 2011. The same source describes MGS3 as containing 207 minutes and 35 seconds of footage.


114. This cut-scene occurs after the television programs and before the Act 1: Ground Zero map. All subsequent quotations of in-game action and cut-scenes will list the appropriate act number as well as the specific map where the cut-scene takes place (or the two maps adjoining the cut-scene, if the cut-scene happens to occur in between two separate maps). The names of the maps are drawn directly from the videogame, and are listed onscreen while saving the game. The full list of acts and level maps are listed below. Note that in addition to the playable five acts, there are also two non-playable epilogues, “Naked Sin” and “Naked Son”, which consist entirely of cut-scenes which wrap up the remaining loose threads of the storyline.

Act 1: Liquid Sun
Ground Zero
Red Zone NW Sector
Red Zone
Militia Safe House
Urban Ruins
Downtown
Advent Palace
Advent Palace Escape
Crescent Meridian
Millennium Park

Act 2: Solid Sun
Cove Valley Village
Power Station
Confinement Facility
Vista Mansion
Research Lab
Mountain Trail
Stryker Escape
Marketplace

Act 3: Third Sun
Midtown South Sector
Midtown Central Sector
Midtown Northwest Sector
Midtown Northeast Sector
Midtown North Sector
Motorcycle Chase
Echo's Beacon

Act 4: Twin Suns
Heliport (MGS1)
Snowfield and Heliport
Tank Hangar and Canyon
Nuclear Warhead Storage Building
Snowfield and Communications Towers
Blast Furnace and Casting Facility
Underground Base and Supply Tunnel
Escape from the Underground Base

Act 5: Old Sun
Ship's Bow
Command Center
Screaming Mantis
Missile Hangar
Ship Exterior
Liquid
Liquid Ocelot
Ocelot

Epilogue: Naked Sin
Debriefing: Naked Son


117. Note that Serebro's music video was released in May 2008, while *MGS4* was released in June of the same year. This is an excellent example of how two groups of artists, located in very different parts of the world (Serebro is based in Moscow, while Logan is based in Los Angeles), nevertheless invented a strikingly similar design aesthetic to represent the Eurasian semi-periphery. Serebro. “Дыши” [Breathe]. *Opium Rose*, 2009. Web: http://www.youtube.com/watch?v=G9bZVka7Yzs. Accessed April 20, 2010. It is also worth noting that in the music video, the three female singers who comprise Serebro first appear in a desolate Central Asian desert, and are later shown walking through a modern metropolis. This nicely symbolizes Russia's transformation from an impoverished semi-periphery to the economic dynamo of Eurasia. Finally, the music video is significant for its gender ideology. There is no masculine lead or dominating male presence in the video, and the song's refrain emphasize the individual freedom of the women to make whatever romantic associations with whoever they wish: “We are dancing under water / Breathe with me / Maybe someday we will meet again”.

118. While an adequate history of the Russian developmental state has yet to be written, some of its
general features can be described. In essence, Putin's government saved Russia from complete collapse by nationalizing the energy-rents and mineral-rents the Yeltsin regime had sold off in the mid-1990s to the oligarchs, Russia's comprador business elites. The state then used these resources to reconstruct the economy via national champions such as Gazprom, a national innovation strategy (investments in education as well as Rosnano's nanotechnology holdings), and a European-style welfare state (the so-called national projects). The key personnel which enabled this transformation was the reinvention of Russia's Soviet-era “siloviki” or state security personnel into a state managerial class. Vladimir Putin is a prototypical example of this transformation: he was a hard-working, pragmatic and efficient KGB operative, who would have remained a low-level official in the foreign intelligence service if the USSR had not collapsed. After resigning from the KGB in 1991, Putin leveraged his East German commercial contacts and world-class analytical skills into St. Petersburg city governance, the reorganization of the FSB (Russia's equivalent of the American FBI), and finally prime minister and President of Russia. The election of Dmitri Medvedev to the Russian Presidency in 2008 is entirely consistent with the next stage of Russia's developmental state. This is the transformation of Russia's petro-developmental state into a high-technology and welfare state, via a sophisticated array of state-led economic initiatives, state-owned banks and national champions, and state-organized welfare programs. For the best single text on the specific personal and social constellation which drove Putin's rise to the Presidency, see: Nataliya Gevorkyan, Natalya Timakova, and Andrei Kolesnikov. First Person: An Astonishingly Frank Self-portrait by Russia's President Vladimir Putin. Translated by Catherine A. Fitzpatrick. New York: Public Affairs, 2000. For the best diagnosis of the failure of neoliberalism in 1990s Russia, see: Paul Khlebnikov. Godfather of the Kremlin: Boris Berezovsky and the Looting of Russia. New York: Harcourt, 2000.


121. To ensure the authenticity of each section of the game-world, the design team traveled extensively abroad for authentic location shots of each region. Act 1 was based on location shots of Morocco, Act 2 was based on location shots of Peru, and Act 3 was based on location shots of the city of Prague, in the Czech Republic.

122. It is worth noting that this geographical diversity was a conscious decision taken by Yoji Shinkawa, the longtime character designer for the MGS franchise. In the words of the Kojima Productions website: “Confronting Snake throughout his final battle is a new group of boss characters, the Beauty and the Beast Corps. Auditions were held through modeling agencies around the world to select four women to serve as the characters' real-life models. Heading up the casting process was character designer Yoji Shinkawa. After careful consideration, Lyndall Jarvis was chosen as the Nordic Beauty, Scarlett Chorvat as the Latin Beauty, Yumi Kikuchi as the Asian beauty, and Mieko Rye as the African Beauty. Prominent models and actresses active throughout the world, these lovely ladies now constitute a global ensemble of death and destruction.” Kojima Productions Website. Web: http://www.konami.jp/mgs4/us/top.html. Accessed December 5, 2009.

123. Kojima borrowed this strategy from Square Enix's role-playing videogame Final Fantasy 12. One of the greatest achievements of Square's design team was to create a transnational character-system
which literally and figuratively embodied the 21st century semi-periphery. *FF12* features six playable main characters. One of these characters comes from the First World space of Archades, a fictionalized version of the US Empire, and another comes from Golmore Jungle, a fictionalized version of South Asia's rural periphery. The remaining four characters are residents of Dalmasca, a semi-peripheral state occupied by Archades in a brutal colonial war. The quest of the main characters to uncover the truth behind the Archadian invasion ends up creating one of the most magnificent allegories of 21st century geopolitics of our time. Kojima adopted a similar strategy when creating the boss battles or *MGS4*, i.e. four of these bosses are from semi-peripheral spaces, one is from an industrialized country, and one from the global periphery.

124. This cut-scene occurs between Act 1: Militia Safehouse and Act 1: Urban Ruins.


126. This rough equality between Kojima's studio and leading digital companies is also characteristic of Kojima's relationship with Sony. During missions, Snake can use a virtual Playstation 3 Dualshock controller to pilot Rex, Otacon's hand-built robots. These robots are equipped with mobile cameras, and the screen shifts to the perspective of the robot (we can literally zoom in to see the Dualshock controller in Snake's hands). These robots are not just effective surveillance devices, they can also deliver a powerful electric shock which can non-lethally subdue enemy soldiers. In later mission briefings, it is possible to glimpse Sony's Playstation Portable handheld console and a Playstation 3 console in the kitchen area of the Nomad.


128. The superb menu design of the shop is complemented by top-notch sound design. Each time Snake collects more DP on the battlefield, a subtle electronic chime resounds in the background. This informs the player they have earned DP, and avoids distracting the player from ongoing game-play. On the menu-screen proper, when the player unlocks or acquires a new item, Little Gray provides a congratulatory chirp, the playful acoustic equivalent of “checking off” something on a shopping list.

129. The rapid expansion of broadband connections and open source video editing tools in the mid-2000s transformed fan-made videos from an expensive and specialized hobby into a democratic and plebian pastime. While the number of ways sound and image clips can be mixed is theoretically limitless, in practice most fan videos tend to follow a limited number of thematic patterns. Three of the most common are fan-made music videos, fan dubs, and machinima. Fan-made music videos reorganize multiple clips derived from a specific film, television or videogame franchise around a single sound-track. Fan dubs employ original footage, while replacing the original sound or dialogue with customized sound-tracks. Machinima are fan-made videos which employ a range of videogame design and editing programs (graphics engines and scripting tools) to create footage from scratch.


132. DeviantArt.com was founded in 2000, and has become one of the largest online galleries of fan art in existence, with at least 14 million members. Business Insider reporter Matt Rosoff points to data suggesting that DeviantArt is currently one of the top twenty social networking sites.
A tag search for the terms “Metal Gear” on DeviantArt's public portal yields more than fifty-thousand hits. While search tags are inherently imperfect, the sheer volume of MGS-themed material is significantly larger than other videogame franchises (e.g. “Call of Duty” yields only twenty-eight thousand hits, while “Grand Theft Auto” and “GTA” yield fifteen-thousand hits). Web: www.deviantart.com. Accessed August 15, 2011.

133. This film was created by a group of independent filmmakers called Hive Division. Web: http://www.mgs-philanthropy.net/. Accessed October 10, 2011.

134. James Clinton Howell argued that MGS2 is essentially the narrative mirror-image of MGS1, i.e. it is the story of a secret agent who is systematically manipulated and deceived by almost everyone around him, and must learn to free himself from their control. However, the enemy was no longer just the military-industrial complex, but a mysterious global cabal known only as the Patriots. James Clinton Howell, “A Formal Analysis of Metal Gear Solid 2”, accessed March 6, 2010, http://www.deltaheadtranslation.com/MGS2/DOTM18.htm.

135. The final thirty seconds of the almost nine-minute 2005 Tokyo Game Show trailer quotes from footage of Sony's marketing efforts for the launch of the Playstation 3 in 2006. Kojima a playful skit between Snake and Otacon which commented on the multi-processor technology inside the Playstation 3. The skit is performed in Japanese by the Japanese-language voice actors, but was given the following English subtitles:

Otacon: “It's a revolutionary high-speed multi-core architecture chip. It can be used for a variety of operations, not just military.” Screen displays footage from a trailer used to advertise Killzone 2, showing a battle on a bridge.
Snake: “Is it really necessary to bring it to the battlefield?”
Otacon: “You're looking at the key to winning the console war.”
Snake: “With this Metal Gear?”
Otacon: “Yeah, let me show you what it can do...”
Screen shows title in English: METAL GEAR UP TO “PLAYSTATION 3” PLATFORM!
During Otacon's next line, a screen wipe removes the word “METAL” from the title, the rest of the words remain onscreen.
Otacon: “Hey Snake, what do you think about the new operation?”
Screen shows a low-resolution video feed of Otacon.
Otacon: “It'll be worth the wait!”

136. This cut-scene occurs between Act 2: Power Station and Act 2: Confinement Facility.

137. The number and composition of the yolks is a subtle allusion to the subtitles of each act. Two eggshells yield one intact and one broken yolk in the frying pan during Act 1: Liquid Sun, i.e. one is liquid. There are two eggshells and two broken yolks in Act 2: Solid Sun, i.e. the result is a solid mass of scrambled eggs. There are three intact yolks in Act 3: Third Sun, when two eggs magically yield three yolks, a hint at a plot twist involving the discovery of Solidus, a third clone of Big Boss. In Act 4: Twin Suns, a single egg once again yields two intact yolks, which wobble slightly before magically recombining into a single yolk (Snake and Liquid are identical twins, after all). While there is no egg-frying sequence during the mission briefing of Act 5: Old Sun, we glimpse Sunny making three intact egg-yolks during a critical playable sequence when Snake is in mortal danger. Due to its structural importance to the storyline, we will analyze this playable sequence more closely in Chapter 3.


140. This fascinating and little-known episode of Russian film history is given this insightful analysis by Emma Widdis: “The film-train productions represented communities to themselves [italics in original], granting the local space the symbolic weight of representation. Cinema, after all, was still a relatively new medium, a 'magic mirror', and one that carried a certain mysterious glamor. To see oneself captured within this magic mirror must have been both exciting and disturbing, a process of defamiliarisation that would enable a new kind of awareness of both self and community. For Medvedkin, this process was primarily agitational in purpose, a kind of interpellation [sic], through which the politically unconscious man or woman would be transformed into a Soviet citizen, inscribed into the new symbolic order via the camera.

A deep-rooted belief in the ideological weight of participation [sic] underlay the philosophy of the film-train. Collaboration was a key feature of its work, part of the overall project of team building that underpinned Medvedkin's vision. Members of the local community were involved in the production of the films in various ways – helping to make intertitles etc. As the techniques and processes developed over the first year of operation, we can see ever more clearly the grandeur of Medvedkin's self-appointed mission: not just to remedy day-to-day problems, but to use cinema to create categories of citizenship. Just as the 'little people' (in Medvedkin's words, the 'invisible heroes')
had a role to play in the creation of socialism, so the local community was summoned to fulfill goals for the national good.” Emma Widdis. *Alexander Medvedkin*. London: Tauris, 2005 (30).

141. The name “Otacon” is a neologism constructed out of “otaku”, the Japanese term for a comics geek or fan.

142. There are three structural factors which have contributed to this internal egalitarianism of videogame production. First, many studio programmers have close ties with and a close affinity for the open source software movement, which provides them with many of their key tools. Second, videogame artists have close links to the institutions of user-generated content, i.e. non-commercial fan art, fan-created mods, and fan media of all kinds. Third, videogames are an inherently interactive media, which gives enormous amounts of structural power to videogame players (i.e. they have a far greater capacity to ratify or repudiate specific iterations of videogames than most other media consumers).

143. Bisexual, lesbian and gay characters in the series include Vamp (*MGS2* and *MGS4*), The Boss (*MGS3*), Scott Dolph (*MGS2*), Volgin (*MGS3*), Raikov (*MGS3*) and Dr. Strangelove (*MGS:PW*). In addition, the main lead male characters are heavily queered, and are unmarked by overt forms of heteronormativity.

144. This limitation is contextualized by Dyer-Witheford and Noon as the ambivalent pleasure of symbolically reenacting the privileges of imperial masculinity, while also critiquing the violence of such: “But what distinguishes *Metal Gear* from other action games is the way it articulates and amplifies the schizophrenias within warrior masculinity – the tensions between deadly craft and automated battlefield, between soldierly autonomy and the lying systems in whose service it is activated; and also, in its reflexive address of gaming practice, between the pleasure of virtual war play, and the horror of the system in which such play is implicated.” Noon, Derek and Dyer-Witheford, Nick. “Chapter 5. Sneaking Mission: Late Imperial America and *Metal Gear Solid*.” In: *Utopic Dreams and Apocalyptic Fantasies: Critical Approaches to Researching Video Game Play*. Edited by J. Talmadge Wright, David G. Embrick, and András Lukács. New York: Lexington Books, 2010 (92).

145. This cut-scene occurs during Act 3: Mission Briefing.

146. This is explained during the mission briefing of Act 2:

*Otacon and Snake watch a video recording sent by Naomi on one of the Nomad's computers.*

Naomi: “Snake, I'll make this quick. I'm in South America. I've been captured and forced to do research. It's Liquid. Liquid's goal is to seize control of SOP. The Sons of the Patriots system that controls the soldiers. To do that, he needs to analyze the nanomachines' structure and find out how they communicate with one another. The nanomachines currently in use by militaries and PMCs are third generation. But their design is derived from that of the first generation. And the basic technology is still the same.”

Snake: “First generation?”

Naomi: “I was the one who created the first generation, a nanomachine colony, part of which was FOXDIE. Nine years ago, at Shadow Moses, I injected it into your body, Snake. The technology used in FOXDIE was incorporated – inherited, really – by SOP. That's why Liquid has me helping him hijack the system. Because I know how FOXDIE works.” *Crashing sounds can be heard in the background.*

*Naomi continues*: “Please, you must rescue me. Liquid's found a loophole he can use to get in to the System. Preparations for his insurrection are nearly complete. There's no time to waste. Snake, hurry!”
The video image freezes abruptly.

147. There are intriguing parallels between the role of Naomi in *MGS4* and the character of Marquis Ondore in *Final Fantasy 12*. Both are the organizational linchpins of the resistance movements of their respective game-worlds. The difference is that Naomi is located at the nexus of the micropolitical resistances to neoliberalism, whereas Ondore is the vector of *FF12*'s geopolitical critique. The digital commons of the former is the multipolar world of the latter. Note that Ondore's precise narrative function is described in greater detail in Chapter 5.


149. This use of astute English-language puns is a characteristic feature of Kojima's work. Another example is the character of Sokolov in *MGS3*. In Kojima's game-world, Sokolov is a Soviet nuclear weapons scientist who turns against the military-industrial complex of both the USSR and the US. However, Sokolov's name is an allusion to the legendary real-life Soviet scientist and dissident Andrei Sakharov. Sakharov was one of the scientists responsible for the creation of the USSR's hydrogen bomb, but later became a staunch proponent of democracy and a critic of the Soviet one-party state. Due to his refusal to keep silent, Sakharov was put under house arrest until the advent of the Gorbachev administration. Sakharov became one of the most beloved and respected icons of the Russian democracy movement, and lived long enough to see the end of the Soviet one-party state.

150. It is worth noting that Kojima is using this trope very differently from its closest mass cultural models, namely the theme of accelerated aging in Ridley Scott's *Blade Runner* (1982). One of the major subtexts of Scott's film is the allegorical depiction of a US industrial base in severe structural crisis: its workers (the replicants, fleeing their blue-collar jobs) are increasingly disposable, its middle class (Deckard) is in an increasingly tenuous economic position, its innovation apparatus (the scientist Sebastian) is deteriorating, while its billionaire ownership class (Tyrell) has locked itself in pharaonic towers, busying itself solely with baroque speculations. By contrast, the storyline of *MGS4* is transnational in scale, scope and setting.

151. This cut-scene occurs during Act 3: Mission Briefing.

152. The following cut-scene occurs at the end of Act 3: Mission Briefing:

Snake: “The Patriots are trying to protect their power, their own interests, by controlling the digital flow of information.”
Campbell: “Now with the media and global opinion under complete control, not even the UN can stand up to them.”
Snake: “Then Liquid's insurrection is against them?”
Campbell: “Exactly. It would seem as though Liquid has taken up Big Boss's cause. An age of persistent, universal warfare. A world where mercenaries are free from domination. In a sense, the Outer Heaven Big Boss envisioned is already a living reality.”
Snake: “You mean the PMCs and their war business.”
Campbell: “Right now, Liquid is a slave to the Patriots, forced to fight their proxy wars for them.”
Snake: “He must be dying to break free of their spell.”
Campbell: “Beneath the surface, a new cold war is brewing between Liquid and the Patriots over who will survive.”
Snake: “And no matter who wins, the world has no future. Until we stop Liquid and destroy the System, we’ll never be free.”
Campbell: “Snake, what we call peace is an equilibrium kept in check by the war economy. Destroying the System means wiping out the information society, the end of modern civilization. Like it or not, we may have no choice but to protract the System.”

153. One of the preconditions for the success of the James Bond blockbusters was not simply the positive national stereotype of the cosmopolitan British secret agent, but its equally strategic (and implicitly transnational) choice of a demonized nationalism. The classic villains of the franchise at its peak – Ernst von Blofeldt or Auric Goldfinger – had recognizably German accents, but employed East Asian underlings, a fairly transparent rewriting of the Axis powers of WW II. This enabled the franchise to avoid the two most pressing dangers facing the espionage thriller as a form, namely the Scylla of unnecessarily demonizing the Soviet Union and the Charybdis of overly extolling the United States. That said, the formal emergence of the transnational media in the late 1960s and the corresponding necessity to market Hollywood's wares to every country on the planet (including the former Axis powers themselves) slowly rendered this strategy obsolete. It is no accident that the leading action and superhero film franchises of the 1990s and 2000s almost completely efface all overt markers of national identity in their villains.

154. This cut-scene occurs between Act 1: Militia Safehouse and Act 1: Urban Ruins.

155. There is one addition wrinkle to this sequence. If the player equips their in-game iPod and plays a sound-track titled “Oishii Two-han Seikatsu” [literally, “Good Mail-order Life”], the disarmed Beauty will perform an eerie involuntary dance for as long as the song plays (this sound-track is not an optional download, but is available to all players). The lyrics of this song, created by J-pop band Two Han Princess (in real life, Kikuko Inoue and Yumi Kikuchi), are more than slightly ironic. An MGS fan provided this online English translation of the Japanese song: “Mail-order shopping (wow) / Relaxing in my room, I get this gorgeous feeling (yeah) / This exciting item (oh, my) / would decorate my wonderful life/ Did the latest item come out?/ Something fashionable locked up in my mind/ Let's begin by brewing some rose-hip tea and putting on some music/ Checking the red circle / the newest product everyone's talking about this month/ your wish came true! / It's a beautiful doll!/ Even though there were nights when I was disappointed and crying my eyes out / I'm not going to look back. / This fantastic thing, I select it / within my grasp, I'll surely be the Mail Order Queen/ Mail order shopping (wow) / with nowhere to go, I get this bargain mood / 1000 points, 1000 points / I can save points if I buy it now / within this catalog / it contains your future dreams / these amazing glasses, 'can I see with these on?' / are these really that effective? / They activate by sprinkling water on it / anytime, anywhere, it's very simple / I can go back in time / I'm 17 years old (hey) / even though there were nights when I was disappointed and burnt myself / I'm not going to look back / This dreamy thing, I select it / within my grasp, I'll surely by the Two-Han Princess/ Mail order shopping (wow) / I'm certain that I probably won't lose / here we have thousands of sensors (finally, it arrived) / I'll definitely find a use for this someday / Mail order shopping (wow) / I'll be lucky if this covers the extra bonus / splashing on some JABCLEAN / it'll clear off if you use it properly / Mail order shopping / Mail order shopping / Mail order shopping / I can't stop myself, this is shopping heaven / with these pink heart-shaped goggles / I can see through your heart with them on (wow) / Mail order shopping (wow)/ relaxing in this room, I get this gorgeous feeling / this exciting item would decorate my wonderful life”. Web: http://www.youtube.com/watch?v=5ngOluHZCiE. Accessed January 20, 2012. Note that the moment the player turns off this song or puts the camera away, the Beauty will resume her pursuit
of Snake.

156. This cut-scene occurs during Act 3: Mission Briefing.


160. The garage is located between Act 1: Advent Palace Escape and Act 1: Crescent Meridian. The garage becomes accessible after a short cut-scene, when a few remaining FROG soldiers unsuccessfully attempt to ambush Snake and the Rat Patrol unit.

161. During Act 1's Mission Briefing, Sunny recites the digits 789259036001133053054882046652 in sing-song manner. These are values from the 380th to the 409th decimal place of pi. During Act 2's Mission Briefing, Sunny recites the digits 112358132134558914423337761098715979584. This is a reference to the first seventeen out of the eighteen smallest Fibonacci numbers, whose exact sequence is 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597 and 2584. Note that at the very end of the scene, Sunny mistakenly states “9584” instead of the correct number “2584”, which is not a typographical error in the script, but a sign that she is still a child, and occasionally makes childish mistakes. During Act 3's Mission Briefing, Sunny recites elements from the periodic table: argon, boron, silicon, neon, erbium – which she mispronounces as “ebrium” – fermium, plutonium, chlorine, fluorine, gallium, xenon, thallium, and strontium. 185141068 During Act 4's Mission Briefing, Sunny recites the names of the following Tokyo railway stations on the Myoken Line (operated by Nose Electric Railway in the Honshu region of Japan): Kawanishi-Noseguchi, Kinunobebashi, Takiyama, Uguisunomori, Tsuzumigataki, Tada, Hirano, Ichinotorii, Uneno, Yamashita, Sasabe, Kofudai, Tokiwadai and Myokenguchi. This is also a backhanded reference to a moment in MGS2, when an AI construct which pretends to be Colonel Campbell begins to break down, and recites nonsensical or bizarre phrases – one of which is this list of railway stations.


163. One example of this self-consciousness is the ingenious double pun contained in the subtitles of MGS4's five acts, which read, in order of their appearance: Liquid Sun, Solid Sun, Third Sun, Twin Suns, and finally Old Sun. The obvious pun is the homonym “sun” versus “son”, since Snake, Liquid and Solidus are all clones (the genetic sons) of Big Boss. However, the key character of the second half of the story is not Snake or any of the other male characters, but rather Sunny – the belated self-critique of the martial masculinity of the MGS franchise.


168. While there are some parallels between this egalitarianism and the collective ethos displayed by professional sports athletes and certain groups of skilled culture-workers in the mass media (e.g. superstar musicians, actors or entertainers), there are also significant differences. This is due to the formidable technical challenge of software coding, the necessity to integrate a variety of digital media within videogames, and the narrative requirements of replayability, all of which make a comparatively egalitarian division of labor a structural necessity for the field of videogame production. Incidentally, this is also one of the reasons that most traditional movie and television companies have had almost no success in the videogame industry. The interactive division of Disney is the poster child of this failure. Despite decades of effort, the division has never managed to become a serious competitor in the videogame market. During 2009 and 2010, the division lost a total of half a billion dollars on stagnant revenues. The reason is that the fixed corporate hierarchies, dependence on advertising, ideology of copyright fundamentalism, and oligopolistic division of labor which enabled Disney to thrive for decades in the broadcast media are antithetical to successful videogame production.


170. Since 2007, numerous videogames have begun to offer the option of in-game video recording of in-game events, for players who wish to highlight or record their in-game achievements. Bungie's Halo 3 (2007) was the first leading console franchise to offer recording tools to players, while Media Molecule's Little Big Planet (2008) extended this principle even further, by offering level-design tools to audiences and encouraging non-commercial production within the confines of the LittleBigPlanet server.

171. It should be noted that MGS4 displays its environments at 1080P, the highest standard screen resolution on today's widescreen televisions. This is a significant technical achievement, because most videogames are produced at what the industry calls “720P” resolution – a screen which is 1280 pixels wide and 720 pixels tall, for a total display of 921,600 pixels. By contrast, 1080P screens are filled with 1,920 pixels wide and 1,080 pixels tall, a display of 2,073,600 pixels. This means the rendering software has to process three times as much data to render a 1080P image, as compared to a 720P image. One of the price tags MGS4 had to pay for its exquisite visuals was a lengthy loading time at the beginning of each Act, of anywhere between half a minute to three minutes. By way of compensation, the loading times within each act are mercifully brief, taking no more than five to seven seconds.
172. MGO was available to customers from June 2008 until June 2012, when the service will be shut down due to the high cost of maintaining dedicated online servers.


178. Jeffords points out that these hard bodies were deeply paradoxical, especially in science fiction films, where the sheer destructiveness of cyborg super-soldiers (James Cameron's 1984 *The Terminator* is the classic example) inadvertently revealed deep anxieties about the comparative decline of the US vis-a-vis its more efficient East Asian and European competitors: “The intimate connection between the hard body and its mechanistic dark side is not simply a means to construct an anticommunist narrative but the means for constructing, in a Hegelian sense, a story of the nation as well. Reagan's pro-technology militarism – one of the three consistent features of his political agenda (along with tax cuts and decreasing government bureaucracy) – was justified exclusively in terms of a 'missile gap' that presumably existed between the Soviet Union and the United States. It is why Reagan's demonization of the Soviet Union as an 'evil empire' was not merely a revived form of an antiquated McCarthyism but a necessary component of his efforts to restructure a post-Carter America. But just as the American hard body needed the external negative body of the Soviet Union against which to define itself, it would require a domestic version in order to transcribe itself at home.” In less polite language, the expansion of imperial predation abroad went hand in hand with the expansion of repressive immiseration at home. Susan Jeffords. *Hard Bodies: Hollywood Masculinity in the Reagan Era*. New Brunswick, NJ: Rutgers UP, 1994 (106).

179. This cut-scene takes place between the Act 3: Third Sun. Midtown North Sector and Act 3: Third Sun. Motorcycle Chase levels.

180. There is one other interesting quotation of the zombie thriller in *MGS4*, and that is the disruption of the PMC's nanomachine networks at the end of Act 2. During the sequence, Snake must fend off waves of PMC soldiers who shamble about, slack-jawed and glassy-eyed, due to the malfunctioning of their nanomachines.


183. In the field of action-adventure games, the Eastern European city chase opened the door for the spectacular train sequence of Naughty Dog's *Uncharted 2* (2009), where protagonist Nathan Drake must battle against mercenaries on a moving train. Previous videogame simulations of moving trains depicted a static foreground against a backdrop of moving images. *Uncharted 2* was the first videogame to incorporate realistic physics and physical effects: when e.g. if the train veers left, Drake's body and field of vision lean to the right, and vice versa. The immersive effect on game-play is electrifying, and transforms a videogame cliché into a compelling narrative experience.

184. While the nameless city of Act 3 is based on Prague's architecture, the clock tower of Echo's Beacon looks nothing like Prague's real-life clock tower. The real tower is a structure called the Orloj, located on the southern wall of Old Town City Hall in the Old Town Square. The reason is that game-design was a more important priority than historical fidelity, i.e. Echo's Beacon has windows, wide parapets, and columns which provide useful cover for Snake.


186. The acronym “TED” is a fusion of “T-Bill” (meaning US Treasury bills, the technical term for US Federal government debt) and “ED”, the ticker symbol for Eurodollar futures (Eurodollars are dollars held in European banks, which serve as a key source of liquidity for companies and financial firms). Web: http://www.bloomberg.com/apps/quote?ticker=.TEDSP:IND. Accessed November 6, 2011.

187. Naomi describes the use of the nano-suppressor to Snake during Act 3 as follow:

   Naomi: “It contains the same substance the soldiers' nanomachines secrete inside their bodies. It's a drug that inhibits the nanomachines' ability to regulate the senses. The nanomachines inside the body malfunction when the System interferes with them. It triggers a reaction in the body, which is why you're having the seizures. Give yourself a shot whenever they get bad. It's potent, so use it sparingly, unless you want to end up an invalid. It may restore your Psyche for a short while. But use it too often and the amount restored will start to decrease.”

188. The original comment by Keynes is contained in Chapter 24 of his *General Theory*, written in 1936: “Now, though this state of affairs would be quite compatible with some measure of individualism, yet it would mean the euthanasia of the rentier, and, consequently, the euthanasia of the

189. The Gaelic original and the English translation are as follows:

(Gaelic)

An cuimhin leat an gra cra croi an ghra
Nil anois ach ceol na h-oiche taim siorai i ngra
Leannain le smal
Leannain le smal
Lig leis agus beidh leat
Lig leis agus beidh gra

Culmhne leat an t-am
Nuair a bhi tu sasta
An culmhne leat an t-am
Nuair a bhi tu ag gaire
Ta an saol iontach
ma chreideann tu ann
Tug aghaidh ar an saol is sonas siorai inar measc

Ceard a tharla do na laethanta sin
Ceard a tharla do na h-oicheanta sin
An culmhin leat an t-am
Nuair a bhi tu faol bhron
An cuimhin leat an t-am
Go siorai sileadh na ndeor an ormsa no orainne a bhi an locht

Ag mothu caiite s'ar fan
Cen fath an t-achrann is sileadh na ndeor
Ta ailleacht sa saol
Ma chuardaionn tu e
Ta gliondar sa saol cuardaimis e

(English)

Do you remember the time when little things made you happy
Do you remember the time when simple things made you smile
Life can be wonderful if you let it be
Life can be simple if you try

What happened to those days?
What happened to those nights?
Do you remember the time when little things made you so sad
Do you remember the time when simple things made you cry

Is it just me, or is it just us
Feeling lost in this world?
Why do we have to hurt each other?
Why do we have to shed tears?
Life can be beautiful if you try
Life can be joyful if we try
Tell me I am not alone
Tell me we are not alone in this world fighting against the wind
Do you remember the time when simple things made you happy
Do you remember the time when simple things made you laugh

You know life can be simple
You know life is simple
Because the best thing in life is yet to come
Because the best is yet to come

190. All data is from Gardner Publications. Web:
http://www.gardnerweb.com/consump/2003/produce.html,

191. The growth of the BRIC machine-tool industries is one of the clearest expressions of a far-reaching political and economic transformation. After enduring decades of painful neoliberal immiseration and stagnation during the 1980s and 1990s, many of the largest economies of the industrializing world rejected neoliberal orthodoxy during the 2000s. They re-regulated the financial sector, reinvested in education and in local welfare states, and used the power of the state to construct a globally competitive industrial base. On the whole, these policies were successful. Between 2000 and 2010, the twenty largest economies of the industrializing world – comprising 3.86 billion citizens, or 55% of the world's population – tripled their total economic output, while accumulating $4.4 trillion in foreign exchange reserves and sovereign wealth funds. The sheer size of these reserves and accumulated wealth meant that a large number of postcolonial and industrializing economies could openly defy the neoliberal policy prescriptions of the IMF, the governments of the US and the EU, and the neoliberal banking systems of the fully industrialized nations. The largest industrializing economies had enough funds to not only finance their own growth, they increasingly began to assist their industrializing peers (e.g. Angola vis-a-vis China, or Ukraine vis-a-vis Russia) with terms of financing which were far more equitable than the financing available from First World banks or the IMF.

192. Otacon makes the case even clearer:

_Camera shows the aftermath of the battle. Soldiers are helping former Haven-troopers into life rafts._
Otacon: “Sunny's program destroyed JD's brain, but left the brain stem intact. She analyzed Naomi's black box and separated the Patriots' control system from the vital lifelines of society. Water. Air. Electricity. Food. Medicine, communication, transportation. She cut off the Patriots' control while preserving modern civilization. Maybe it was her way of avenging Olga... her mother. _Shot of interior of helicopter. Snake is resting, his eyes closed. Otacon sits across from him, looking out to the sea._
Otacon: “Or maybe she wanted to shape the future into her own ideal image. Or... maybe... it was just one big defragmentation.” _Camera pan of the reflection of the sun in the ocean. Otacon continues._
“FOXALIVE... the AI is truly a living thing. The Patriots' reign has crumbled away. And still, our civilization... a civilization that has thrived on war since the dawn of time... lives on. I wonder if we did the right thing. Naomi... What did we lose? What did we save?”

193. This song, entitled “Old Snake” and composed by Harry Gregson-Williams, employs a guitar and horns, giving the music the nostalgic feel of one of Ennio Morricone's scores for Sergio Leone's famous spaghetti Westerns. There is a fascinating story behind the MGS theme song, which testifies both to the power of transnational digital audiences as well as to Hideo Kojima's genuine love and respect for his fans. It was long assumed that the MGS theme, titled “Metal Gear Solid Main Theme”, was written by Tappy Iwase in 1998. However, some Russian MGS fans made the belated discovery in the mid-2000s that Iwase's theme closely follows a 1974 composition by a prominent Soviet-era Russian film composer named Georgy Vasilevich Sviridov, called “Winter Road”. In an additional irony, the film in question was based on Russian national poet Alexander Pushkin's poem “Метель” [“Blizzard”]. The Russian word means blizzard, but it sounds similar to the English word “metal”. The most likely explanation is that the borrowing was unintentional, i.e. Iwase probably heard the theme at some point on a vinyl record, read the sheet-music, or else subconsciously associated the Russian word “Метель” with “Metal Gear”, and thus created a theme derived from Sviridov's score. As a gesture of respect to Sviridov's heirs and to the Russian fan community, Kojima decided to almost completely avoid using the MGS theme in MGS4. The one exception to this rule, namely its quotation just before Snake's final battle with Ocelot, is actually a gesture of respect to Sviridov. Ocelot was born in Russia as a Soviet citizen, and shortly before he expires, he will shed the persona of Liquid Snake he used to fool the Patriots, allowing the Ocelot of MGS3 to briefly reappear. Read allegorically, this is the “reappearance” of Sviridov's text at the finale of MGS4. Note that the video where the Russian fans informed Kojima about the potential plagiarism can be seen online with English subtitles. It shows Kojima's matter-of-fact response and genuine curiosity about the origins of the theme. Web: http://www.youtube.com/watch?v=9k7DrIWrclI. Accessed November 10, 2011.

194. After Drebin's conversation with Otacon at the wedding of Meryl and Johnny, the following conversation takes place between Otacon and Sunny:

Sunny: “Hey, Uncle Hal, can I give him the Mark III?”
Otacon: “Huh?”
Sunny: “He's kinda... a new friend!” She points to a local boy who lives near the military base, who is using a controller to play with the Mark III. “He lives near here. We can't understand each other's language, but we're having fun. He's my very first outside friend.”
Otacon: “Really? That's great. Sunny... It's OK if you want to live outside now. It's your life. There are other havens out there.” Sunny is silent for a time.
Sunny: “The sun looks so pretty.”
Otacon: “Sunny...”
Sunny: “I like it outside. Uncle Hal, when is Snake coming back?”
Otacon: “Snake... is sick. So he went on a trip to help him get better.”
Sunny: “We're not going with him?”
Otacon: “No. He needs to be alone.”
Sunny: “I wonder if I'll ever see him again.”
Otacon: trying not to weep: “Snake... had a hard life. He needs some time to rest.”
Sunny: “Are you... crying, Uncle Hal?”
Otacon: “No... I'm not crying.” He puts on a happy face for Sunny, and they laugh together. Sunny grabs
195. Brautigam argues that far from imposing a Sinocentric model of neocolonialism on African nations, China is pursuing long-term infrastructure and extractive projects which are providing significant benefits to African nations, thanks to their structure as cooperative ventures which are not tied to IMF structural adjustment packages or to the vagaries of domestic Chinese politics (i.e. post-Maoist China has pursued a foreign policy of economic pragmatism and strict political non-interference in host countries). See: Deborah Brautigam. *The Dragon's Gift: The Real Story of China in Africa*. Oxford: Oxford UP, 2009. Note that Brautigam also hosts an excellent and informative blog on Chinese-African economic cooperation, called “China in Africa: The Real Story”. Web: http://www.chinaafricarealstory.com/. Accessed October 20, 2011.

196. The official website for the Supreme Judicial Court of the State of Massachusetts website states: “On August 23, 1977, the 50th anniversary of the executions of Sacco and Vanzetti, Massachusetts Governor Michael S. Dukakis issued a proclamation declaring the date Nicola Sacco and Bartolomeo Vanzetti Memorial Day. After his review of the case persuaded him that Sacco and Vanzetti had not received a fair trial, Governor Dukakis called upon all ‘to reflect upon these tragic events, and draw from their historic lessons the resolve to prevent the forces of intolerance, fear, and hatred from ever again uniting to overcome the rationality, wisdom, and fairness to which our legal system aspires.’ Governor Dukakis issued this proclamation in English and Italian.” Web: http://www.mass.gov/courts/sjc/sacco-vanzetti-3.html. Accessed November 10, 2011.


199. This reading is confirmed by *MGS: Peace Walker*, a title Kojima released for the Sony PSP in 2010. *MGS:PW* describes the adventures of Big Boss during the early 1970s, when he tries to construct his own post-national mercenary army, but begins to discover that the means he has chosen – warfare – fatally contradict his goal of a liberated world. *MGS:PW* also has a significant political subtext, in that it portrays the Nicaraguan revolutionaries fighting the Somoza dictatorship as heroes, and is scathingly critical of the US and the USSR for intervening in Central America solely to expand their respective empires.

200. After the credits roll, the following spoken dialogue occurs offscreen, underlining the importance of passing on the lessons of history:

> Sound of birds chirping. Screen is dark except for black-and-white logo of MGS4.  
> Otacon: referring to cigarettes: “Snake, wait up! You forgot these...”  
> Snake: “No thanks. I'm quitting.”  
> Otacon: shocked: “Snake?!’  
> Snake: “These things will kill you.” Brief pause.  
> Otacon: “Where will you go? Our fight is finished. There's nothing left for us to do.”  
> Snake: “No. There's one thing I still have to do. I have to see this age off... see what the future brings.”  
> Otacon: “Sounds good to me. I'll go with you.”  
> Snake: “Otacon, I'm gonna be dead soon. You don't have to come.”
Otacon: “You said it yourself, Snake. There’s nothing inside you can pass on to the next generation. No genes, no memes... you’re man-made. You’re a beast.”

Snake: “I know. A blue rose. There won’t be any happy Beauty and the Beast ending for me. What little time I have left will be spent living as a beast. A shadow of the inside... of the old age.”

Otacon: “Exactly. That’s why you need me. As a witness.”

Snake: “A witness?”

Otacon: “Yeah. Someone on the outside to bear witness to your final days. Someone to pass on your story. Not that I’m the only witness. But I’ll remember everything you were, and stick with you to the end.”

Snake: “Otacon...”

Otacon: “Besides, you wouldn’t let me suffer Sunny’s eggs alone, would you?”

MGS4 logo returns to its normal red-and-white color, then disappears.

Pause. Camera cuts to overhead view of Sunny’s frying pan, cooking three eggs sunny-side up.

Sunny: “Come quick! They’re ready! They look... yummy. Sort of like the sun... it’s rising again.”


203. This judicious use of repetition also extends to the spin-off games built on the series’ flagship titles. For example, Square’s solidly-constructed Kingdom of Hearts videogame series, a successful joint venture with Disney, features some of the classic characters from prior Final Fantasy games, as well as a number of classic Disney characters.

204. It’s worth noting that Sakaguchi built on the success of the paper-based role-playing games popularized by Gary Gygax’ Dungeons and Dragons franchise. Gygax’s key innovation was to drastically simplify the overly complex statistical systems used in previous role-playing games, replacing these with a simple yet effective system of dice-based randomization and level upgrades.

205. “Rydia, the summoner – which is both a character class and an ethnic distinction – is physically weak but controls powerful magic. Undaunted by the genocide of her people, Rydia and Cecil embark on a quest to stop Baron from conquering the world. Their journey takes them to the various human nations threatened by Baron, where they meet culturally and ethnically distinct people who join their quest: Yang, a monk class character, and Edge, a ninja, are represented visually and through the game’s narrative in ways that blur the distinction between ethnic and class differences. For instance, the martial arts are a tradition practiced exclusively by the warrior monks of the nation of Fabul. Yang, furthermore, is darker than any other character and depicted with a distinct queue hairstyle. Ninjitsu, on the other hand, is the secret art of the people of Eblan. This ethnicization of character class, deployed through the game’s narrative and visual discourses, encourages players to conflate one for the other as they experience and enact the game.” Voorhees, Gerald. (2009). “The Character of Difference: Procedurality, Rhetoric, and Roleplaying Games.” Game Studies 9:2. Web: http://gamestudies.org/0902/articles/voorhees. Accessed April 3, 2011.


208. All the major media industries have experienced astonishing growth rates in the BRIC nations over the past ten years, whether measured by hours of programming, feature films produced, or advertising sales. According to the national statistical agencies of the BRICs, 2010 box office ticket sales in the group reached $5.2 billion, or 16% of world cinema revenues – a threefold increase from 1999, when BRIC sales amounted to less than 5% of world revenues. Vanita Kohli-Khandekar has cited a recent Media Asia study estimating that 2008 television advertising expenditure reached $7.9 billion in China, $7.3 billion in Brazil, $5.6 billion in Russia, and $2.1 billion in India, for a total of $22.9 billion. This is already one-third the size of 2008 US television advertising expenditure, which Zenith Optimedia has estimated at $57.4 billion. See: Vanita Kohli-Khandekar. The Indian Media Business. New Delhi: Sage, 2010 (66).

209. These figures are compiled from public press releases by analyst firms Media Control GfK, NPD, Enterbrain, Newzoo, PriceWaterhouseCooper, Strategy Analytics, and FICCI-KPMG, industry trade groups MPAA (US), SARFT (China), IFPI and Eiren (Japan), and the Russian Association of Developers and Publishers of Game Industry and Interactive Technologies, and organizations including Korea's Ministry of Culture, Sports, and Tourism (MCST), the Korea Creative Content Agency, (KOCCA), and by the European Audiovisual Observatory (EU). Data on China's market from Niko Partners and from Dean Takahashi. See: Dean Takahashi. “China online games market to hit $9.2B in revenues by 2014.” VentureBeat, March 31, 2010. Web: http://games.venturebeat.com/2010/03/31/china-online-games-market-to-hit-9-2b-in-revenues-by-2014/. For data on India's game market, see: “Market Study On Animation and Gaming Industry in India For Italian Trade Commission”. Tata Strategic Management Group. Web: http://www.ice.gov.it/paesi/asia/india/upload/182/Animation%20and%20Gaming%20Industry%20in%20India_%20English%20Version.pdf. Accessed August 10, 2010. Data on Russia's gaming market is from Sergey Orlovsky, head of Nival Interactive, the largest Russian-based developer of MMOs, who estimated Russia's game industry at $530 million in 2008 ($450 million offline and $80 million online). See: IGN. “RPG Vault Focus: Russia.” May 21, 2008. Web: http://rpgvault.ign.com/articles/875/875540p1.html. Accessed August 10, 2010. Abragames, the trade association of the Brazilian game industry, has estimated Brazil's official 2008 sales at $90 million. Web: http://www.abragames.org/docs/Abragames-Pesquisa2008.pdf. Accessed November 25, 2010. However, the true figure is likely to be higher, since the vast majority of consumers dodge high taxes on imported consoles and games by recourse to the informal economy. Brazil's total market is probably comparable to the Russian market, due to the marked similarities between the two countries (both countries are heavily urbanized, have roughly similar levels of per capita income, and similar levels of cellphone ownership and online access).


213. Dimitra Fimi has noted that interwar British ideologies of race were foundational features of Tolkien's universe: “In fact, Tolkien's tripartite division of the fair-skinned 'races' of Men in Middle-earth who are invariably on the good side and his grouping of the black peoples in one category which is hostile *ab initio* [Latin: from the outset], represents popular attitudes to race in Britain during the period before World War II... From the 1930s quite elaborate 'racial' divisions and characteristics were slowly attached to the Men of Middle-earth in the First Age. The emergence of the story of Númenor and the subsequent writing of the Lord of the Rings marked the first conception and development of a new 'racial' category – the Númenoreans.” Dimitra Fimi. *Tolkien, Race and Cultural History*. New York: Macmillan, 2009 (146-147).


216. The power of these networks is evident in the work of leading Japanese anime directors such as Hayao Miyazaki and Satoshi Kon, whose films and television series deliver scathing critiques of Japanese consumerism as well as Wall Street neoliberalism. For a more detailed analysis of the historical constellation which generated Japan's anime culture, see Chapters 6 and 7 of my own text on late 20th century television: *The World is Watching*. Southern Illinois University Press: Carbondale, IL, 2003. See also: Dennis Redmond. “Anime and East Asian Culture: Neon Genesis Evangelion.” *The Quarterly Review of Film and Video* 24:2, 2007 (183-188).


218. This is company data collated by an independent fansite, MMOData.net (located at http://www.mmodata.net). Since the companies which produce MMOs have varying methodologies for counting subscribers, these numbers should be taken as a broad approximations rather than absolute facts. Accessed February 20, 2011.

219. While the precise geographic location of subscribers is a closely guarded trade secret, a Lazard Capital Markets study estimated that 27% of *World of Warcraft's* subscriber base is located in North


222. One of the interesting omissions in Langer's analysis is the category of the undead. This racial category omits the obvious parallel of a US financial services industry literally and figuratively addicted to cheap credit – everything from the millions of professionals employed to create and sell speculative mortgages, stocks, bonds, and other financial instruments, to the Wall Street banks who securitized those instruments (i.e. created secondary speculations backed by the original speculations, which is just as crazy as it sounds) during the 35-year credit bubble of Wall Street neoliberalism. See: Langer, Jessica. “Chapter 4. The Familiar and the Foreign: Playing (Post)Colonialism in World of Warcraft.” In: *Digital Culture, Play, and Identity: A World of Warcraft® Reader*. Hilde G. Corneliussen and Jill Walker Rettberg, editors. Cambridge, MA: MIT Press, 2008 (89).

223. Ibid. (92-93).


227. The classic example is the complex mixture of national, racial, and Cold War typologies in the original US television series *Star Trek* (1967). These ranged from the positive typologies of the crew of the USS Enterprise, with Spock as one of the first sympathetic resident aliens on the mainstream US media, to the the negative ones of the Klingons (a combination of the Black Panthers and Soviet Russians, i.e. exaggerated facial hair and swarthy skins) and Romulans (a cross between Maoist-era Chinese and North Koreans). For additional insight into the structural importance of race in the Star Trek franchise, see: David Leonard Bernardi. *Star Trek and History: Race-ing Toward a White Future*. New Brunswick, NJ: Rutgers UP, 1999. Also see: Kwan, Allen. (2007). “Seeking New Civilizations: Race Normativity in the Star Trek Franchise.” *Bulletin of Science, Technology & Society* 27:1 (59-70).
228. Note that in addition to these seven major races, there are four others which appear in the storyline: the baknamy, the urutan-yensa, the helgas, and the occuria. Three of these are found only in a specific location in Ivalice. The baknamy are found only in Nabudis and the Nabreus Deadlands, the urutan-yensa in the Sandsea, and the occuria in Giruvegan. Two helgas are glimpsed briefly in Ondore's entourage, where they serve as advisors. The other helgas is Gran Kiltias Anastasis. Anastasis is a major character, but his race plays no role in the storyline.


231. FF12 did not invent this strategy out of whole cloth, but created its own variation in the specific field of the role-playing videogame. It is no accident that the greatest videogames of the post-1998 did something similar in their respective genres. Remedy's Max Payne (2001) transnationalized the third-person shooter genre, Rockstar's Grand Theft Auto 3 (2004) did the same for the “open world” or sandbox genre. Somewhat further afield, Fumito Ueda's Shadow of the Colossus (2005) and Sony Santa Monica's God of War 3 (2010) transnationalized the action-adventure genre, while Hideo Kojima's Metal Gear Solid 4 (2008) performed the same feat in the stealth espionage genre.

232. One of the key signposts of this process was the creation of world-class media works by BRIC artists which were as successful and celebrated within their home countries as they were in transnational media markets. For China, one can point to the action film spectaculars of Hong Kong directors such as John Woo (e.g. Red Cliff (2008)), as well as the breath-taking 2008 Olympic ceremonies orchestrated by celebrated Fifth Generation film director Yimou Zhang. For Russia, it was the emergence of science fiction blockbusters such as Timur Bekmambetov's Night Watch (2004). For Brazil, it was the gritty favela realism of Roberto Meirelles' film City of God (2001) and the superb television series City of Men (2002-2003), both of which were well-received abroad. For India, one can point to Bollywood historical dramas such as Ashutosh Gowariker's Lagaan (2001) and melodramas such as Sanjay Bhansali's Black (2005).


234. This is not to diminish in any way the work of Fran’s Japanese-language voice actress, Rica Fukami, who delivers a superb performance. Fukami's vocal pitch is noticeably deeper than Nicole Fant's, and works because it forms such a striking contrast to the high-pitched female voices endemic to Japanese anime and videogame culture. This strategy would not make sense in an English-language context, for the simple reason that husky female voices have been an accepted part of the US mainstream media since the days of stars such as Katherine Hepburn.
235. Note that J.R.R. Tolkien was a noted linguistics professors and polyglot, and therefore eminently qualified to invent imaginary languages. The Klingon language was invented by linguist Marc Okrand, who created it on commission for the Star Trek franchise. It should be noted that many features of Klingon culture were created in a long-term dialogue with Star Trek's vibrant and creative fan community. Among other things, this fan input was crucial to the decision to showcase a sympathetic Klingon character, Worf (played by Michael Dorn) on Star Trek: The Next Generation (1987-1994) television series. Marc Okrand. The Klingon Dictionary. New York: Pocket Books 1985.

236. There is a real-life model for al-Cid Margrace, namely prominent Spanish diplomat Javier Solana. Solana was the able and energetic foreign policy representative of the European Union from 1999 until 2009, and became famous for his refusal to legitimate the US invasion of Iraq in 2003.

237. Other Bhujerban terms copied directly from Sanskrit include "amba" (mother), "hanta" (great), "kah" (who), "kastam" (alas), "madhu" (alcohol), “murkha” (fool), "parijanah" (guide), "raksas" (monster), "sainikah" (soldier), and "svagatam" (welcome).


239. It is worth pointing out that the closest South Asian equivalent of Lane's performance, namely Amitabh Bachchan's role as the magisterial voice-over of Ashutosh Gowarikar's Bollywood hit Lagaan [The Tax] (2001), is limited to the confines of a specific nation-state, i.e. the affirmation of India's postcolonial nationalism. Gowarikar's cricket epic showcases the resistance of a local village in northern India to British colonialism in the 1890s. Bachchan recites his lines in Hindi, which remains the language of the leading Bollywood blockbusters with the highest production values. However, only a third of all Indians speak Hindi, and only a fifth of India's total annual film production is in Hindi. In numerous postcolonial nations, the language of the former colonist is used as a neutral language, precisely because it does not necessarily favor one indigenous ethnic or linguistic group over others. English remains an official state language in Nigeria and India, much as French remains an official language in Senegal and Portuguese an official language in Angola.

240. This size estimate is based on emulator versions of FF12, designed to run on a personal computer which emulates the original Playstation 2 hardware via a non-commercial emulator program called PCSX2. Note that the PCSX2 emulator is not officially sanctioned by Sony, but is maintained and upgraded by fans. Web: http://pcsx2.net/. Accessed April 5, 2011. Web: http://thepiratebay.org/torrent/5231581/%5BP%2%5D_%5BNTSC%5D_Final_Fantasy_XII. Accessed April 5, 2011.


244. There are grounds to consider that decision trees are an archaic relic of the earliest phase of role-playing videogames, the equivalent of multiple endings in novels or trick endings in films. The real problem with decision trees is not that they give players too much control over the narrative, but that they devalue the narrative in question. This contradiction is most glaring in simulation franchises as EA's *The Sims*, where players can assume the role of virtuous democrat or murderous tyrant, without changing the overall direction of the game. Any narrative which cannot tell the difference between unfreedom and freedom is necessarily an artifact of unfreedom. The difference between the two conditions is qualitative, not quantitative. As a result, videogames which rely on decision trees end up regressing back to the empty formalism of one of its historic predecessors, the 20th century board-game. More recently, videogame designers have attempted to compensate for this dilemma through the use of decision tree scoreboards – the so-called “karma” systems of Bethesda's *Fallout 3* (2008) and Bioware's *Mass Effect 2* (2010). These systems average up the record of all player choices over time – typically, “good” versus “bad”, or in the case of *Mass Effect 2*, “paragon” versus “renegade”. This creates a behavioral scale which enables the player to earn certain karma-specific bonuses. The problem with these schemes is that in order to preserve overall game-balance, the rewards of karma systems must be balanced: every “good” power has to be matched by an “evil” power. This ends up reproducing the original contradiction all over again.

245. An interview with Amano in February 2006 gives a revealing clue as to the motivation behind Fran's character-design:

   1UP: HERO, as I recall from your gallery showing in New York, looked like a dark knight on the back of a panther. Does the basic premise remain the same?
   Amano: It's exactly what you remember, it's a dark knight riding on a cybernetic, black panther, while carrying a spear.
   1UP: Why did you choose a panther as his companion? What does this bring to the story?
   Amano: First of all, I like the surface qualities of metal, but that's a little boring, so by creating something that's a combination of a living animal and a robot, it's like this thing is living. Like an animal wearing a shield or armor. Creating human muscles out of metal is really sexy, which I find appealing, so I like to create things like that.

What is significant here is that Amano links the panther, a trope of Orientalized or Third World blackness since Rilke's famous poem, to a First World form of blackness, namely the urban dark knight, a.k.a. Batman. One could argue that the *FF12* cut-scene which introduces us to Balthier and Fran – we see the pirate duo fly into Dalmasca's royal palace on a hovercraft – is a rewriting of the Batman narrative, shorn of the hierarchy of this latter (i.e. Batman's dominance over Robin). At the end of the *FF12* cut-scene, Balthier raises his gun and arches an eyebrow. This may be a subtle nod towards one of the most powerful postcolonial rewritings of the panther of them all: the photos of the US Black Panthers with guns at the ready, one of the iconic images of the 1960s uprisings. James Mielke. “A Day in the Life of Yoshitaka Amano.” July 20, 2006. 1Up.com, Ziff Davis Media. Web: http://www.1up.com/do/feature?cId=3152237. Accessed January 30, 2009.

Valter Alves and Licínio Roque make a convincing case that videogame sound-design should be understood not as an adjunct or supplement to graphics or game-play, but as a critical arena of game design, as important as cut-scenes, user interfaces, and replayability: “The nature of the interaction, as perceived by the user, should be extended in order to genuinely integrate sound as an instrument for action in the environment. This is perhaps the most neglected use of sound in computer games. Sound, if used, is predominantly relegated to complement the visual rendering. It serves as output, which is good but just half the idea. In fact, acting through sound makes perfect sense in a system with a bidirectional interface. There is no reason for sound driven actions not to deserve the same kind of appreciation as running, jumping, grabbing, or shooting. Allowing the player to perform through sound, either as a consequence of some contextualized and meaningful action or by explicitly deploying some sonic event, has the potential to greatly extend the value of the experience. Moreover, it significantly enlarges the space of possibilities in terms of design of the gameplay. Reasons for the under-exploitation of this kind of approach may be that this is something that could hardly be borrowed from music or cinema – the chief contributors for sound design practices in computer games (Deutsch, 2003) – and that it is also commonly neglected in computer application interfaces.” Valter Alves and Licínio Roque. “Chapter 17. Guidelines for Sound Design in Computer Games.” In: Game Sound Technology and Player Interaction: Concepts and Developments. Edited by Mark Grimshaw. Hershey, PA: IGI Global, 2011 (369).


It is no accident that the Grand Theft Auto sandbox adventure games compensate for the possibility of spatial confusion by giving the player the ability to choose from a wide variety of top-notch popular music hits on the car radio. Players will still routinely get lost and take wrong turns, but the quality sound-track makes the experience enjoyable rather than frustrating.

There are intriguing parallels between Sakimoto's achievement and the work of South Asian film composer A.R. Rahman. Rahman wrote the top-notch sound-tracks for Mani Ratnam's Dil Se (1998), Ashutosh Gowariker's Lagaan (2001), and Danny Boyle's Slumdog Millionaire (2008), which pastiche European classic music, US pop music, and South Asia's own voluminous classical, folk and commercial music traditions. Rahman's sound-tracks selectively integrate a range of local materials into transnational musical forms, and thus do not signify India's national location or represent the contradictions of its national identity in the same way as the sound-tracks and songs of Ritwik Ghatak's Reason, Argument, Story (1974) or G.P. Sippy's Sholay (1975).

For example, the sound-track “A Moment's Rest” (Disc 3, Track 22) is employed as a background theme in the night-time cut-scene between Vaan and Ashe which directly follows the party's first meeting with the Garif Great-Chief. The mournful tone of the track, which combines mourning and a lingering sense of resolve, perfectly complements the conversation between the two, as they discuss their respective losses in the war (Vaan lost his brother, Ashe lost her husband) and find the determination to continue on their quest. This track is later the ambient sound for Old Archades, the slum on the outskirts of the capital city of Archades. Similarly, the background music which briefly plays during a cut-scene when the party meets Marquis Ondore for the first time and Basch states his
desire to rescue Amalia (i.e. Ashe) from captivity is an extract from “The Feywood” (Disc 4, Track 8), the ambient sound-track of the Feywood.

252. In terms of their fusion of on-screen action, scenery and player cues, these ambient sound-tracks have structural similarities to transnational hip hop (e.g. world-class Russian rappers such as Seryoga and Ligalize, or Brazilian rap artists such as Marcelo D2 and MV Bill), which is closely tied to fan communities, fan media (both music and video), and fan-mediated clothing, tagging (graffiti art) and fashion innovations. In certain respects, the logic of videogame sound-design comes closer to the logic of the informal musical cultures of the semi-periphery than to that of a heavily commercialized, copyright-obsessed First World music industry.

253. One of the most typical examples is an early conversation with Ashe, where she explains the significance of the Tomb of Raithwall:

Ashe: “Long ago, the Gods granted their favor to King Raithwall... who would oversee the subjugation of a territory spanning from Ordalia to Valendia. Here he forged the Galtean Alliance.” Camera flashes back to an image of Raithwall. “Though he is called the Dynast-King, upon establishing the Alliance, he showed compassion for his people, and disdain for needless war. A philosophy passed on to his successors. One that would bring peace and prosperity for hundreds of years to follow. It was during this time of peace that the city-states of Archadia and Rozarria, each members of Raithwall’s Alliance, took root and flourished. Raithwall left three relics signifying descent from the Dynast-King. Of these, the Midlight Shard was given to what would become House Nabradia, and the Dusk Shard to my ancestors, the Founders of Dalmasca. The last of these relics was the Dawn Shard.” Camera returns to Ashe. “It remained hidden here, known only to those of Royal Blood.”

254. This is a contradiction visible in the media cultures of the industrializing nations, in the form of a profound cultural ambivalence vis-a-vis the former colonial or quasi-imperial authorities. In the case of the BRIC nations, this is the ambivalence of India vis-a-vis Britain, Brazil vis-a-vis Portugal, China vis-a-vis imperial Japan, and Russia vis-a-vis the Soviet Union. These relationships are comprised of moments of extreme hostility, as well as equally fervent admiration of the technical and organizational accomplishments of the former rulers.


258. “Cast as both the locus of the 'national imagined community' and as a 'fearful stain' on the landscape of modernity, the favelas were often metaphorized as an emblem of Brazil's uneven modernization. Celebratory versions of the favela as a samba community composing carnival lyrics coexist with images of armed adolescents shooting police forces during drug raids. Since the 1980s the increase in social violence produced by the globalized drug trade and the flow of media images, consumer goods, and new cultural identities produced a crisis of representation of the 'national imagined community'. Indeed, the overwhelming presence of the media centred foremost on television, and the circulation of globalized consumer goods, lifestyles and political agendas have transformed expectations and cultural identities. Such transformations are keenly felt in the invention of youth cultures, where the formerly national samba has lost much of its influence to funk and hip-hop in the favelas of Rio de Janeiro and Sao Paulo.

Images and narratives of a globalized favela emerge as the former national portraits of Brazil become increasingly fragmented. The fraying of previous narratives and images of national identity has also brought to the limelight new cultural icons shaped by the media and popular culture. In the wake of these changes, contemporary literary and cinematographic productions are attempting to come to terms with new portraits of Brazil that focus on marginalized characters, favelas, drug cultures and the imaginaries of consumption.” Jaguaribe, Beatrice (2004). “Favelas and the Aesthetics of Realism: Representations in Film and Literature.” Journal of Latin American Cultural Studies, 13:3 (327-328).

259. Here is the conversation between Penelo and Fran, shortly before Ashe acquires of the Dawn Shard:

*Shot of carven staircases running along the walls of a vast underground temple. A mysterious magical Mist slightly distorts our field of vision.*

Penelo: “Fog? Underground?”
Fran: “Not fog – Mist.”
Penelo: “You can see the Mist? With your eyes?”
Fran: “Where it is thick enough, you may. The nether runs deep in this place.”
Penelo: “So, is the Mist dangerous?”
Fran: “Yes, but it is also an aid. A dense Mist allows the working of powerful magicks.”
Penelo: “I’ll keep that in mind. Can’t count on Vaan to keep track of these things, that’s for sure.”

260. Note that this power to conjure images has a close connection to the recurrent appearance of Rasler's ghost in the vicinity of the Dawn Shard. This is a theme explored more fully in Chapter 6.

261. Put bluntly, Tolkien projected all of the tyrannical aspects of the British Empire onto Mordor, and all of the positive achievements of British democracy onto Gondor. Note that Tolkien's deeply reactionary identity-politics work the same way: the orcs are symbols of colonial blackness (read: the enslaved, the enserfed, and the indentured), and the elves are symbols of imperial whiteness (read: settler colonists). That said, the conclusion of Tolkien's trilogy does acknowledge the legitimacy of the anti-colonial resistance movements.

262. Journalist Matt Taibbi has written the greatest single summary of the revolving door between the scions of Wall Street and the US Treasury and other Federal regulatory agencies. See: Matt Taibbi.

350
263. Shortly before the Dawn Shard explodes, this scene occurs:

Female scientist: “Sixty-eight hundred, sixty-nine hundred, seven thousand! This must be Deifacted Nethicite! The count still climbs!”
Ghis: “Ah, we’ve found it at last: true deifacted nethicite. The power of the Dynast-King in my hands. Hmh. Blood alone does not an Emperor make, Vayne.”
Suddenly an alarm goes off.
Female scientist: “What is this? Something’s wrong!”

264. To forestall a number of misunderstandings: Spivak's answer in the mid-1980s was an emphatic no. Her point was that the privileged, urban elites who created the school of “subaltern theory” were not the masses of impoverished rural villagers whose histories those elites were attempting to write. The exceptional example of someone born in the rural periphery who, through hard work and a scholarship, was able to become an elite intellectual, is just that – an exception to the dismal rule that hundreds of millions of India's rural citizens, both then and now, continue to experience crushing levels of economic immiseration and political disenfranchisement. The field of videogame studies should pay close heed to Spivak's warning. While there are indeed small groups of people in the global periphery who are capable of participating in videogame culture, mostly by means of cellphones, access to the digital and interactive media is available mostly to the citizens of semi-periphery, not the true periphery. Gayatri Spivak. “Can the Subaltern Speak?”. In: Marxism and the Interpretation of Culture. Edited by Nelson, Cary and Grossberg, Lawrence. Urbana: University of Illinois Press, 1988.


266. After the player defeats the mark, High-chief Zayalu explains in this incidental text-dialogue:

High-chief Zayalu: “So you have killed Ixtab? I thank you, and I have for you a story. In truth, Ixtab was nothing other than the spirits of all garif who lost their lives in the Henne Mines, twisted into evil. Normally, the warriors of our village would deal with such a threat. However, even though it be evil... it was still kin. Yet, how surprised I was to see you, who are known to us, come to our aid. Perhaps this was the wish of our ancestors, now fulfilled.”

267. The incidental dialogue reads:

War-Chief Supinelu: “I thank you for fighting by my side. Were you not there, I would no have been able to fight my sworn enemy with such confidence. Allow me to tell you a tale. I... was still but a warrior of the village. My brother, Kadalu, was War-chief in those days. He was a great warrior, commanding the respect of all. Yet, secretly, I believed I was his better in battle. Thinking to show the strength of my sword-arm to the entire village, I ventured into Zertinian Caverns alone to slay the dreaded Catoblepas. Yet, I was unable to withstand its attacks. It was my brother who saved me that day. Though he bore grave injury in the fight. His leg beyond healing, my brother threw down his sword that day. He had to. The one to receive the title of War-chief in his place... was I. It was a punishment, you
I see, or so I thought at the time. I threw my spirits into bettering myself as a warrior. Daily I swung my sword, in preparation for the day when I would defeat the Catoblepas. Only then, I thought, would I be forgiven. Yet, now I know I was mistaken. I believed I was fighting for my brother, for his honor. Yet all along I fought only for myself. It was only as I challenged the beast today, with you at my side, that I realized these things. I thank you again.”

268. Lukyanenko emphasizes the liminal nature of the Twilight by using the Russian word “сумрак”, which can be translated as “twilight” or “dusk”. The term does not necessarily imply a morbid or downcast state, but suggests an indeterminable state of flux between two diametrically opposed conditions.

269. The scene takes place as follows:

*Player action: enter Tiamat's lair and defeat the dragon Tiamat. After the battle, Mjrn appears. She is tottering, holding a nethicite stone in her hand. She drops the stone, which shatters. A ghostly being, who was controlling her through the stone, briefly materializes behind her and then vanishes. Mjrn collapses to the floor. Voice-acting continues.*

Vaan: “That thing inside her. What was it?”

*Fran cradles Mjrn in her arms.*

Mjrn: “Is it you?”

**Fran nods, Mjrn passes out.**

Later, Mjrn recalls what happened.

Mjrn: “When the hume soldiers came to the Wood, the village took small heed of them. So long as the Wood Herself is safe from harm, the viera give little care to goings on beyond her. But in me, an uneasiness stirred. I had to discover why they had come.”

Balthier: “So you came here hoping to find something out, and got yourself caught.”

Mjrn nods.

Balthier: “You’re as foolhardy as your sister.”

Mjrn: “They took me then, and set close beside me a stone. They said its Mist would be drawn into me, that the viera well suited this end. I saw the light coming from the stone, and then –”

Fran: “We have seen this. On Leviathan, the Mist released from the Dawn Shard drove me, too, into such a rage. She was taken not by the Dawn Shard.”

Larsa: “Manufacted nethicite.”


271. Anastasis is also marked by racial difference, in the sense that he is a member of a race called the helgas, humanoid beings with over-sized, elfin ears and limited telepathic powers. A previous cut-scene
in Bhujerba, when Judge Ghis was speaking with Marquis Ondore, shows two other members of this race serving as counselors to Ondore. However, this race is not developed any further by the FF12 storyline.

272. The scene takes place as follows:

Anastasis opens his eyes and speaks using his normal voice.

Anastasis: “To wield power against power. Truly the words of a hume-child.”

Ashe: *with resolve*: “I am descended from the Dynast-King himself.”

Anastasis: “Indeed. Then you have but one choice. Seek you the other power Raithwall left.”

Ashe: “Does such a thing exist?”

Anastasis: “Journey across the Paramina Rift to the Stilshrine of Miriam. There rests the gift he entrusted to the Gran Kiltias of his time. Seek it out. The Sword of Kings can cut through nethicite. Why he would entrust the power to destroy nethicite, the instrument of his greatness, to another and not to his own progeny, I cannot say. Awaken Ashelia B’Nargin and take up your sword, or your dream will remain but a dream.”

273. Anastasis is cut down by Judge Bergan, who has been driven mad with artificial nethicite:

*Player action: enter Hall of Lights. The following cut-scene plays. Voice-acting resumes.*

*Shot of hall strewn with debris of recent battle. Bergan stands next to the throne of the Gran Kiltias.*

Bergan: “Ah, our vagrant princess. Swift has your lust for revenge led you to the Sword of Kings.”

*Party gasps, as they see the body of the Gran Kiltias sprawled on the ground.*

Bergan: “You will surrender it to me. Too late, and to their sorrow do those who misplaced their trust in gods learn their fate.”

*As Bergan approaches, a ghostly creature, similar to the one we glimpsed behind Mjrn, materializes behind him.*

Vaan: “There it is again.”

*A multicolored Mist flows around Bergan.*

Balthier: “Fran, I don’t like the look of that.”

Fran: “This Mist – he holds a stone! It controls him as it did Mjrn!”

Bergan: *chuckling*: “No. No, the power of manufacted nethicite is the power of man! A weapon forged by his wisdom, who would challenge the gods themselves! A fitting blade for a true Dynast-King. Raithwall did but pretend the title, a cur begging nethicite scraps from his master’s table. Hark! Ivalice hails her true Dynast-King, Vayne Solidor! He shall defy the will of the gods, and see the reins of history back in the hands of man! His time is nigh! The new Ivalice holds no place for the name Dalmasca. The stain of Raithwall’s blood shall be washed clean from history’s weave!”

*Player action: defeat Bergan and three other judges. Once Bergan falls, Balthier examines Bergan’s body, and then turns away in disgust.*

Balthier: “He set his very bones about with manufacted nethicite.” *To Penelo:* “The Gran Kiltias?”

Penelo shakes her head sadly, indicating he is dead.


275. “As an internationally traded service, inbound tourism has become one of the world’s major trade categories. The overall export income generated by inbound tourism, including passenger transport, exceeded US$1 trillion in 2010, or close to US$3 billion a day. Tourism exports account for as much as 30% of the world’s exports of commercial services and 6% of overall exports of goods and services.


277. It is worth emphasizing that role-playing videogames did not invent this strategy, but borrowed it from the heroic bloodshed or wuxia films of Hong Kong. These films routinely showcased protracted sparring sequences and the slow, painful accumulation of martial arts skills, e.g. Jackie Chan as the ne'er-do-well student who is toughened into fighting shape by his teacher in Yuen Woo-Ping's *Snake in the Eagle's Shadow* (1978). Many of the editing innovations of the Hong Kong films – rapid cutting, the matching of camera movement to body movement, and the use of multiple camera angles – are meant to obviate the repetitive tedium of real-life martial arts training while showcasing the beauty of its aesthetic end-result, in much the same way that role-playing videogames obviate the tedium of upgrading playable characters through side-quests and narratively complex game-worlds. Where role-playing videogames differ from cinema, of course, is that gamers must perform certain in-game actions in order to progress further, something which puts a premium on democratic game-design (transnational audiences have wide variations of player skills).

278. Historically, combat sequences emerged in role-playing videogames as a means of diversifying game-play away from two of its most important predecessors, the text adventure and the puzzle adventure. The very first text adventures for computer systems, e.g. Will Crowther and Don Woods' *Adventure* (1976), were governed by decision trees which required players to choose the correct option or a sequence of correct options in order to progress through the game. This could frustrate players, since it was not always obvious what the correct path was. By contrast, puzzle-based adventures such as Robin and Rand Miller's *Myst* (1993) required players to decipher non-verbal visual cues, puzzles and riddles. This created its own frustrations, because the methods used to solve one puzzle could not necessarily be applied to other puzzles. In the end, text adventures and puzzle games did not evolve very far beyond their status as niche art-forms which appealed to a narrow audience. Later role-playing videogames succeeded in appealing to a mass audience by hybridizing and democratizing both forms. Game designers replaced the binary decision-tree with the menu-based command interface, allowing players to choose between multiple strategies and routes to success. They also transformed the puzzle-cue into the contextual hint or the situation-specific cue, e.g. a fire-based magical creature might be located conveniently close to a pool of water, strongly hinting to players that it has a weakness to water-based attacks.

279. The prehistory of fixed classes can be traced back all the way to J.R.R. Tolkien's British-imperial typologies of race, gender and nobilitarian hierarchy, i.e. the spectrum of fantasy-races between aristocratic elvish whiteness and vulgar orcish blackness. The *Dungeons and Dragons* live-action role-playing games faithfully translated those imperial typologies into game-play. For example, elvish, dwarvish, orcish and halfling player-characters could only increase their powers to a certain extent (i.e. the color bar of colonial-era segregation), whereas human player-characters (i.e. white settler-colonialists) had no such limitations. Subsequent decades of role-playing videogames, ranging from the
earliest iterations of Final Fantasy to MMOs such as World of Warcraft, employed variations of these typologies, albeit with the most explicit aspects of this racial and colonial edited out.


281. The upper tier contains nine quickening tiles, nine esper tiles (three are acquired during the course of the main storyline, while six are optional or obtained through side-quests), twenty-four technicks (non-magical skills which mimic the effects of magic), twenty-one magic item tiles, and thirty-seven magic spell tiles, for a total of 157. The lower tier contains nine quickening tiles, four esper tiles (two mandatory and two optional), forty-six weapons tiles, forty-four armor tiles, for a total of 143.


283. As a point of clarification, each playable character equipped with a quickening tile can “chain” their attacks together and increase its effectiveness, by means of a rhythm-based minigame. In the minigame, icons for each playable character with a tile appear onscreen, and players must press the corresponding button before a countdown timer runs out. With each button-press, the timer runs down faster and faster, encouraging players to choose quickly. Now and then, an icon will appear allowing a character to recharge their magical energy, allowing the player to extend the quickening chain. The problem with this is that rhythm-based game-play is a jarring divergence from the strategic nature of the active time battle system, adding an additional incentive to avoid using quickenings. It is worth noting that Final Fantasy 13 (2009) solved this problem, by integrating limit breaks as a standard feature of its active time battle system. More powerful enemies can only be defeated during brief windows of opportunity, triggered by inflicting enough regular damage within a certain amount of time. This system is managed via an evolved version of gambits, which FF13 calls “paradigms”. Paradigms are a set of gambits carried out by an entire team of playable characters, rather than by a specific playable character. The result combines the pleasure of setting and using gambits, while greatly reducing the managerial headache of managing dozens of individual gambits.

284. For an example of the subtlety and sophistication of fan critique, see the following online discussion on Gamespot, one of the main mainstream media outlets which covers videogame news. While no overall consensus emerges, the fans raise many subtle points concerning game design and balance: Gamespot. Final Fantasy XII Forum. Topic: “Is it just me or are quickenings underpowered?” Web: http://www.gamespot.com/ps2/rpg/finalfantasy12/show_msgs.php?pid=459841&topic_id=m-1-60451898. Accessed October 4, 2011.


286. For example, a fan posted the following two video clips on Youtube, running for 9:53 and 9:52 of screen-time respectively, which illustrate how a specialized set of gambits can be used to defeat Yiazmat, one of the optional side-quests in the game and unquestionably the single most difficult opponent in the videogame: Jamdown2008. FFXII Gambits Only Challenge: Auto Yiazmat Part 1 of 2. Web: http://www.youtube.com/watch?v=RGKwY84tvQY. Accessed August 20, 2011.

287. Tutorials are training sessions, artfully camouflaged as sections of the game-world. They are meant to teach a broad range of players how to operate effectively within a specific game-world, without breaking the player's sense of narrative immersion in that world.


289. The main differences between US neoconservativism and US neoliberalism were tactical rather than strategic in nature. Neoconservatives argued that direct military interventions would spread US consumerism throughout the world, while neoliberals preferred to maintain US hegemony through comprador regimes and financial proxies. This consonance is most evident in the financial deregulation which enabled Wall Street to embark upon one catastrophic bubble after another.

290. The main financial expression of this borrowing are the massive current account deficits which the US began to run up during the 1980s. In normal circumstances, a current account surplus means a country has enough savings to export capital abroad, while a current account deficit means that country must borrow from other countries. For most of the 20th century, the US was a net creditor to the world-system. However, neoliberalism transformed the US from the world's biggest creditor into the world's biggest debtor. According to Federal Reserve data, by 2010 the US economy had a net international investment position of minus 42% of GDP, i.e. it owed its creditors 42% more than it was owed. Web: http://www.federalreserve.gov/releases/z1/current/annuals/a2005-2010.pdf. Accessed August 20, 2011.

291. During the early 1980s, neoliberal economic policies began to destroy the US industrial base and drive down real wages for most US citizens. At the same time, the neoliberal mass media glorified new forms of elite consumption via cable TV and video, and US markets were flooded with imported electronics from low-wage Pacific Rim sweatshops. As a result, the least wealthy strata of US society – immigrant communities and communities of color – experienced the equivalent of an IMF structural adjustment austerity program. The social consequences were the rise of the criminal and underground economy, and a boom in repressive policing and incarceration. However, the crisis also drove young people in these communities to create the foundations of hip hop culture. Due to the high price of musical instruments and a lack of access to formal musical training (thanks to budget cutbacks, public schools began to eliminate music and arts programs during this era), they turned to the only available means of musical production: used records and portable electronic turntables. See: Tricia Rose. *Black Noise: Rap Music and Black Culture in Contemporary America*. Middletown, CT: Wesleyan University Press, 1994.
292. This lineage includes films such as *The Day The Earth Stood Still* (1951) and *Forbidden Planet* (1954), William Gibson's *Neuromancer* (1984), as well as the numerous productions of the *Star Trek* franchise.

293. “Strahl” is the German word for “ray” or “beam”. The use of Central European signifiers has a long and interesting history in Japanese anime and science fiction. The most famous recent example is Hideaki Anno’s celebrated television series, *Neon Genesis Evangelion* (1995). One of the main characters of the series, Asuka Soryu Langley, is half-German. The name of the scientific organization charged with protecting humanity from attacks by alien creatures is NERV, a reference to the German word “nerv” or nerve, and Central Europe is also a crucial source of robotic technology.

294. The UNWTO estimates that the entire tourism industry, including local and regional forms of tourism within national borders, accounted for 5% of world economic activity in 2010. Note that annual international tourist arrivals increased from 277 million in 1980 (6% of the world population) to 435 million in 1990 (8% of the world population), 675 million in 2000 (11% of the world population), and finally to 940 million in 2010 (14% of the world population). United Nations World Tourism Organization. “UNWTO Annual Tourism Highlights 2011 Edition.” Web: http://www.e-unwto.org/content/u27062/.


297. Balthier even provides this pithy sign-post:

> Shot of a squadron of seven small Imperial skiffs skimming over the scenic ocean of the Phon Coast. Voice acting resumes.

> Balthier: “It would seem we made the right choice. If we’d taken the easy way and come by airship, one of those patrols would no doubt have been quick to roll out the red carpet. We’re on the Empire’s doorstep now, so we shouldn’t have to worry quite so much, but that’s no excuse to get sloppy. It is still a long road to the capital.”


299. There are twenty-eight potential pairs in all, or 56 messages and respondents, but the player need only complete nine of these to continue the game. However, if at least 27 out of these 28 pairs are completed, the player can obtain a special “sandalwood chop”, which grants the player access to Highgarden Terrace. The Terrace grants a scenic view of Archades' downtown, and accessing this location is also required for completing a few side-quests.
300. One of the most clever of these fetch quests takes place with a historian. The dialogue runs as follows:

Audience: “I was born of Empire, raised by Empire, and within her walls did I grow old. Yet, this city was not always grand, nor the Empire always prosperous. Youths today, they know only of her glory, and nothing of her history. How little they think on the sacrifices of the past. It... troubles me.” **Player action:** select “Commit this tale to memory” or “Do nothing”. If player selects the former, status message: Memorized! A History of Empire.

**Player action:** talk to perceptive man.

Perceptive man: “We live in an Empire, but ’twas not always so. How did it come to be? Military might? Wise rule? No, it must take more than these things. How can we hope to carry Empire's glory into the future if we know not her past? Yet our Akademies teach us little of her true history.”

**Player action:** select “Relate the tale of” or “Do nothing”. If player selects the former, man says: “What's that? You've an acquaintance who knows much of history? How long I've souight for this! Thank you, good sir, thank you! Please accept this chop... for the glory of the Empire!” Status message: You obtain a pinewood chop!

If player talks with historian again, he says: “I don't suppose all youths are ignorant wastrels. And the young Lord Larsa shows much potential... I believe I see... a light in our Empire's future.” If player talks with perceptive man again, he says: “I want to learn history's truth, not just what I'm told. It's important to know, whence we come to know where we go. But there's so much to learn...”

301. It is worth noting that there are certain internal structures of *FF12* which do anticipate the functionality of social networking sites. The most obvious example is Clan Centurio, which is *FF12's* in-game equivalent of the online gaming clan, club or guild. While contacting the guild is optional, players are rewarded for finding and interacting with the guild, through additional quests and valuable rewards from Montblanc, the leader of Centurio. Some of these rewards are given for completing sidequests, while others are awarded for completing main story missions. Although talking to Montblanc is not required to complete any main story mission, these in-game bonuses make it worthwhile for players to stop in and collect rewards. In essence, the guild rewards players for interacting in the game-world, in much the same way that social networking sites reward user interactivity and participation.

Significantly, Centurio is located in the city of Rabanastre, i.e. a semi-peripheral space within Ivalice. There is a similar in-game anticipation of the online institution of achievements and trophies, symbolic awards given to players for noteworthy actions within a specific game-world. The *FF12* version of trophies is accessed via an optional menu screen called the Pirates' Den, which showcases a set of virtual “chibis” or miniaturized version of various in-game characters (both playable and non-playable). These chibis are awarded for specific accomplishments by the player, e.g. walking 100,000 steps, casting a certain number of spells, and so forth.

302. The incidental dialogues players read while talking to the residents of Balfonheim make it clear that the life of a sky-pirate is all about hard work, not pillage. Here are some of the representative comments which shed light on the history of the city (note that each line of dialogue is delivered as a unique conversation by a separate non-player character in the city, i.e. there is no chronological order to the conversations). Especially noteworthy are the lines of the “Anti-Imperialist” and “Fair trader”:

Lofty sky pirate: “Me and me mates are off to make us a pretty gil. What? Now, don't get me wrong... all we do is ship cargo, you see. That pirate moniker is more of a tradition than a description.”

Port wench: “Ah, now that's a fresh face! Here to work the docks? Then you'd do well to speak to
Reddas. He's a busy man, though. If you get a chance, take it.”
Laboring bangaa: “What's with you? You lookin' for work!? Sorry, boy, but the loads we carry are too heavy for a hume! Now, outta the way!”
Hardy pirate: “Arrrrrr... you talkin' to me? What? Goin' to Giruvegan? Where's there? Me, I prefer workin' to ramblin'. And after a day of workin', a night of drinkin'!”
Hawker: “Here looking for liftin' work? Sorry, son, but I only needed me one man, and that's this fellow right here. Maybe next time, eh!”
Lazy man: “You there, you're not from this town. Finish your business and leave. There's talk of Imperial spies about, you know. Either you're here to buy something, or you're on your way out, understand?”
Born sky pirate: “Everyone you meet's got an opinion of Reddas. Personally, long as he lets me fly the skies freely, he's welcome to do as he pleases.”
Kind pirate: “What is it that pirates do, you ask? Well, not all pirates are created equal! Most here are in the shipping business, though. Exciting, eh?”
Fair trader: “Our motto is: buy cheap, and sell cheap! We're here to help support the port! ’Course, wars drive up prices something fierce...”
Well-traveled man: “Oh ho ho! Going to Giruvegan, are you? Hmm... south of Golmore Jungle, deep in the Feywood... that would put it in the Jagd Difohr, no?”
Wild-eyed pirate: “I grew up on the rough seas, with rough mates. Aye, we had our quarrels now and then, but we did all right. Then Reddas, he comes along, gets everyone workin' together, 'an look at us now! Sissified! Pirates're supposed to be rough as the waves!”
Proper pirate: “So you're wanting to go to this Giruvegan place, eh? Well, I always say, if you're a pirate, take the seas, and if you're a sky pirate, take the skies! Proper-like! Arr! Ahem. Sorry 'bout that.”
Thoughtful quayhand: “Thanks to Reddas, this place has become a right pleasant. Town. It's a shame about the money he gives to the Empire, though...”
Anti-Imperialist: “Officially, this is Imperial territory, you know. Sometimes an assayer braves our streets... but he don't last long, 'fore he's running home. Heh!”
Dyed-in-the-wool sky pirate: “Not so long ago, there was two pirate groups vying for control of this place. Port shut down for days... then Reddas came along, got everyone working together! Quite the man, that one.”
Hard-working bangaa: “If yer looking for work, try the docks. A man with a strong back could look like a seeq what's been keelhauled, and he'd still be welcome.”


306. Ibid. 106.

307. The full cut-scene is as follows:

Shot of ancient city of Giruvegan, glimmering with magical Mist. Bands of reddish glyphs radiate in the

359
sky. The city appears to float on water.

Ashe: recites: “On the farthest shores of the river of time, shrouded deep in the roiling Mist.”

Fran pauses, sensing something.

Penelo: “What is it, Fran?”

Fran: “The Mist runs thick here.”

Vaan: “Like on the Leviathan?”

Fran: “Do not worry. I will behave myself. The Mist here is cooled. I sense something like the shadow here.”

Balthier: “Venat. It appears Cid has yet to arrive. We’ll lie in wait for him here.”

Penelo: “So we’re not going inside?”

Balthier: “Not unless you want to end up twisted. Like the old man.”

Ashe sees something.

Balthier: “Something there?”

Ghost of Rasler appears to Ashe, turns and walks towards gate crystal. Ashe follows.

Penelo: “What is it?”

Vaan: “She can see him. Let’s follow her.”

308. The gates are named Avrio (αύριο), which means tomorrow in Greek; Chthes (χθές), which means yesterday; Tychi (τύχη), which means luck; Parelthon (παρελθόν), which means the past; Paron (παρόν), which means the present, Chronos (χρόνος), which means time; Aeon (αἰών – αἰώνας), which means century; Minas (μήνας), which means month; and finally Hemera (ημέρα – μέρα), which means the day.

309. The full cut-scene is transcribed below:

Fade-out to throne room of Emperor in Archades. Larsa is remonstrating with Vayne. Gabranth and Dr. Cid are also in attendance.

Larsa: “Restore Dalmasca’s sovereignty, and make our amends with Lady Ashe. It is the only way to avert war.”

Vayne: “It is a war of necessity. Your Lady Ashe herself is bent on it. She desires it above all else. She will not rest until her revenge is full-wrought.”

Larsa: “I fear you misread her intent. She would sooner shun war than embrace it.”

Vayne: “You are young, Larsa.”

Larsa: “And you presume beyond your ken!”

Vayne: “Then let us look closer. Judge Gabranth! I would have you seek after the lady Ashe... and adjudge whether she makes overtures of peace, or war. Yours shall be the eyes of the Empire.”

Gabranth: “And should I espy war, I am to put her to the sword. Is that your wish, Excellency?”

Larsa: “It will not come to that, I am sure. I have faith in her – faith in you both. On you, Gabranth, shall I wager all our fortunes.”

Gabranth: “As you will.”

Exit Gabranth and Larsa.

Cid: “That so sweet a child could be your brother is hard to believe.”

Vayne: “Larsa is as he should be.”

Cid: “What’s that, Venat? Ah, taken the bait already, have they? Splendid. The Occuria have given the Princess her Treaty-Blade.”

Vayne: “The gods have chosen their scribe, to write history as they deem fit. Yes, and she with fresh nethicite to aid her.”

Cid: “Bah, to hell with the Occuria and her stones! What good a power that cannot be harnessed? Baubles best suited for study, no more.”

Vayne: “Heh! We conquered two kingdoms, that you might study these ‘baubles’.”

360
Cid: “Oh, I am grateful for the sacrifice. Without it, manufacted nethicite would have eluded us – an unrivaled weapon, I warrant you. Tell me, Venat. Have I not been an apt pupil?”

Venat materializes.

Venat: “My council did but guide your able hand. Through power of man, the stones did you perfect. Yes. So much accomplished in six fleeting years. Man’s fervor o’er all obstacles prevailing.”

Cid: “Our lives are much too short. You undying might waste long centuries away, but we, I fear, cannot.”

Vayne: “Just so. Had we more time, we might have availed ourselves of more ‘prudent’ measures.”

Cid: “Your greatest work still lies before you. Not lightly will the Ocucia allow you to wrest the reins of history from their grasp back into the hands of man.”

Venat: “Indeed. What claim does Gerun have on history’s reins, seated on throne immortal, rent from time? For your ascendance, Vayne, I offer prayer. May you attain all that which is your due.”

Vayne: “Attain it I shall.” *Fade to black.* “For too long have my deeds gone unrewarded.”

310. This guilt is most evident in the form of Vayne's unnecessarily cruel and sadistic treatment of Gabranth. This is relayed by the cut-scene which occurs just after the player reaches Mt. Bur-Omisace, and talks to the Gran Kiltias for the first time. The following transcript takes place just after Emperor Gramis' carefully-staged death. One of the judges, Drace, immediately sees through Vayne's ruse and attempts to arrest Vayne for treason, but is defeated by Bergan:

Gabranth: “Your Excellency, Lord Larsa was placed under my charge.”

Vayne: “Oh? Perhaps you mistook your orders then. I can see no other explanation for why you were reporting and conjecturing on my doings to my late father.”

Gabranth: *humbly*: “Your Excellency—”

Vayne: *sneering*: “A hound, begging for scraps at the Emperor’s table. Would you serve another master, hound? You may fulfill your duty as Judge Magister before us all.” *Gabranth looks at the sprawling figure of Drace, unable to move.* “She has been tried and found guilty.”

Zargabath: “Your Excellency, I beg you reconsider!”

Drace: “Do it. I care not. Live, Gabranth. Protect the young lord. Protect Larsa...”

Gabranth: “Forgive me.”

Drace: “Pray be quick.”

Gabranth dispatches Drace, who groans and expires. Vayne places Emperor Gramis’ lifeless hand on Gramis’ lap.

Vayne: “And so House Solidor lives on.”

Vayne torments Gabranth precisely because of the latter's similarity to himself: Gabranth was charged by the late Emperor to hunt down Gabranth's twin brother, Basch.

311. The word “Pharos” derives from an actual lighthouse built during the 3rd century BC on the island of Pharos, near Alexandria, Egypt. The lighthouse is believed to have been destroyed by earthquakes in the 14th century. However, some of its original building-blocks have been recovered by underwater archeological expeditions in the 1990s. Nova Online: Treasures of the Sunken City. “Jean Yves Empereur: The Riches of Alexandria.” Web: http://www.pbs.org/wgbh/nova/sunken/empereur.html. Accessed November 10, 2011.

Ange, imprudent voyageur/ Qu'a tenté l'amour du difforme,/ Se débattant comme un nageur/ Et luttant, angoisses funèbres!/ Contre un gigantesque remous/ Qui va chantant comme les fous/ Et pirouettant dans les ténèbres”. My own literal (i.e. non-versified) translation: “An Angel, unwary traveler/ Tempted by the love of the malformed / At the bottom of a vast nightmare/ Thrashing and struggling like a swimmer/ in dread anguish! / Against a gigantic whirlpool/ Which goes and sings like mad/ and pirouettes in the gloom”. As with so much of Baudelaire's work, the emancipatory moments of his poetry are inextricably intertwined with the gendered and racialized violence of the French Empire during the reign of the second Napoleon (1848 to 1870). If the whirlpool symbolizes the deracinating and potentially liberating energies of Western European and US industrial capitalism, the object of the narrator's affections – the dark-skinned, African women who were Baudelaire's personal as well as poetic obsession – are characterized as exotic deviants, both alluring and threatening. Charles Baudelaire. Charles Baudelaire: The Flowers of Evil. London: Oxford University Press, 1993 (158).

313. It is worth noting that the trope of the Ridorana cataract will be cited by another videogame franchise of the highest quality, namely Sony Santa Monica’s God of War series. This is the episode entitled God of War: Ghost of Sparta (2010), which was created by independent developer Ready at Dawn in conjunction with the staff at Sony Santa Monica. Ghost of Sparta features a sequence where players must pass through a vast whirlpool on their way to the crumbling city of Atlantis. Atlantis lies at the bottom of a seabed, surrounded by a ring of falling ocean water which looks very much like the Ridorana cataract. This water is steadily pumped back into the ocean by vast underground machines.

314. One example will suffice to give the general tenor of these texts:

*Player action: read second pillar on floor 48.*

*Sign:* Carven pillar. Ancient letters hang in an effulgent glow.

“Ignorant child,
Blind whither you go
And whence you come.
It is the Undying who straighten
The weave you tangle so, who choose
The path you must walk.
So has it been, and so shall it be,
As befits those of our wisdom, ever-living.”

315. The transcript of the scene follows:

*Player action: defeat Famfrit and then defeat Dr. Cid. After the battle, Dr. Cid drops his guns and falls to the ground, mortally wounded. Status message: You obtain the esper Famfrit, the Darkening Cloud*

*Balthier tries to approach Dr. Cid but is blocked by Venat.*

Dr. Cid: “Let him by, Venat. It is done. Ah, how I have enjoyed these six years.”

*Cid staggers to his feet, Venat moves away.*

Venat: “The pleasure was all mine.”

*Balthier stands before his father. Cid’s body is beginning to dissolve into Mist.*

Balthier: tersely: “Was there no other way?”

Dr. Cid: fading: “Heh. Spend your pity elsewhere. If you are so set on running, hadn’t you best be off? Fool of a pirate.”
Dr. Cid vanishes. Mist begins to stream into Sun-Cryst. Fran drops to the ground.
Penelo: “Fran? Fran!”
Balthier rushes to Fran’s side. Close-up on Fran and Balthier.
Fran: to Balthier: “The Sun-Cryst bursts. You must run. As far as you can.”
Balthier: “Easy, Fran.”
Fran places hand on Balthier’s cheek.
Fran: “Hadn’t you best be off? That’s what a sky pirate does. You fly, don’t you?”
Balthier: “I suppose you’d better hang on then.”
Vaan: “Ashe! The sword! We have to stop it!”
Vaan and Ashe struggle towards the Sun-Cryst. Suddenly Reddas stops them.
Reddas: “You must quit this place. It’s reacting. I have not seen its like before! Nay, never this large.
Never such threat impendent.”
Reddas takes Sword of Kings, prepares to charge.
Vaan: “Reddas?”
Vaan: “Reddas, no!”
Reddas: “I, Judge Magister, condemn you to oblivion!”
He strikes. Sun-Cryst explodes. White-out. Cut to Eruyt village, where Jote watches a flash in the sky.
Cut to Jahara, where the garifs observe the same flash. Cut to Balfonheim, where the city-dwellers see the flash as well.
Cut to aerial panorama of Pharos lighthouse. The skies have cleared. The Strahl hovers over the water.
In the distance, the top of the Pharos tower has been partly destroyed by the explosion. Party is safely inside the Strahl.
Vaan: sadly: “Reddas...”

316. This is relayed by the following moment:

Player action: with Larsa’s assistance, defeat Vayne’s first form. Voice-acting continues.
Larsa: rushes to Vayne’s body: “Lord Brother!”
Vaan: “Larsa!”
Bolt of lightning strikes Larsa, knocking him unconscious. Mist streams throughout the chamber. Vayne returns to life, in a slightly distorted form. He remains humanoid, but his body bulges with magically-altered muscles. His body levitates, and he summons magical swords.
Ashe: “Manufactured nethicite!”
Vayne: “Behold the power left me by our fallen friend.”
Gabranth arrives, clutching his wounds.
Vayne: “Gabranth, you will defend my brother. He will have much need in the hell to follow.”
Gabranth draws his sword, but suddenly points it at Vayne.
Vayne: surprised: “Hm?”
Gabranth: “Yes, I will defend Lord Larsa!”
Vayne: sneers: “The hound strays. Treason bears a price.”
Gabranth: grimly: “One I gladly pay!”

317. The fatal hubris of Dr. Cid and Vayne, rooted in long years of imperial rule, now meets its match in the form of Venat's hubris. Venat simply cannot imagine that mere mortals could possibly challenge its authority:
Badly wounded, Vayne stumbles outside on a hanger deck of the Bahamut. Aerial dogfights are taking place all around.
Vayne: “Venat!”
Venat materializes.
Vayne: “I have failed us both. I am no Dynast-King. You must find another. One who might realize your ambitions.”
Venat: “They are fulfilled beyond your knowing. The Cryst is sundered, age of stones complete. From the undying ones the world is freed. You shall not tread this path alone. Together we go. Come.”
Vayne: grimacing: “Won’t Cid be eager to learn what has happened here. History begins anew.”
Venat fuses into Vayne’s body, which begins to glow with magical energies. They merge to form the Undying, a monstrous, clockwork monster with metal armor and wings. The body of the Undying emanates vast quantities of Mist, turning the sky blood-red and ripping apart nearby airships as well as the hull of the Bahamut.

318. The denouement does refer indirectly to a subsequent spin-off game for the Nintendo DS, called *Final Fantasy 12: Revenant Wings*. While many of the characters in *FF12* do reappear in this game, the storyline is aimed at a younger audience, and the theme of post-imperial culture is not developed further.

319. The fan community at World of Minecraft, one of the most popular fan sites, reached 454,711 registered users as of May 19, 2012. This fan community has spawned its own customized creations Web: http://www.worldofminecraft.com/. Accessed May 19, 2012.


322. Marx’s exact quote: “The working class did not expect miracles from the Commune. They have no ready-made utopias to introduce par décret du peuple [decrees of the people]. They know that in order to work out their own emancipation, and along with it that higher form to which present society is irresistibly tending by its own economical agencies, they will have to pass through long struggles, through a series of historic processes, transforming circumstances and men. They have no ideals to realize, but to set free the elements of the new society with which old collapsing bourgeois society itself is pregnant.” Karl Marx. *The Civil War in France*. Peking: Foreign Languages Press, 1977 (77).