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VIDEO GAME SUBCULTURES Playing at the periphery of mainstream culture

Edited by Marco Benoît Carbone & Paolo Ruffino







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GRAPHIC DESIGN

Alice Baraldi

COVER ART

Giovanni Fredi, Kinshasa vs Akihabara (http://kinshasavsakihabara.com).

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VIDEO GAME SUBCULTURES

Playing at the periphery of mainstream culture Edited by Marco Benoît Carbone & Paolo Ruffino

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MARCO BENOÎT CARBONE
University College London
PAOLO RUFFINO
Goldsmiths, University of London

Introduction: games and subcultural theory

This issue of GAME Journal offers an overview and a series of case studies on video games from the point of view of subcultural theory. There has been little work in game studies from this perspective, which offers a theoretical frame for the ever growing complexity of the audiences involved with the medium of the video game. The study of subcultures on the other hand has a long standing and complex tradition which culminates in what has been recently defined as the "post-subcultural" theoretical scenario.

This introduction provides, firstly, an overview of how subcultural theory could contribute to a study of games and gamers. It will discuss the implications of a study of video game subcultures and the complexity of such an endeavour. The first section will mostly review some of the most recent literature that addresses this topic, trying to evaluate how much has been said, and how it could contribute to a cultural study of video games. Secondly, the introduction will look at the pieces that are collected in this issue. The curated contributions are divided into two sections. The first part collects peer-reviewed essays that critically analyse specific cases and assess the relevance of a study of video game subcultures for the theoretical understanding of game culture as a whole. The second part, the "critical section" (now a constant presence in issues of GAME Journal), is comprised of texts that look at cases that have a geographical specificity.

AN OVERVIEW OF (POST)-SUBCULTURAL THEORY

This collection of essay on video game subcultures is naturally far from even attempting to summarize the complexity of the debate on subcultural theory. Moreover, the social reality of video games cultures (and subcultures) is in turn too complex to also allow for anything more than a broad apppreciation in this issue of *GAME Journal*. Yet the critical rethinking of the concept of subculture appears as a key, timely notion through which to tackle the overlapping families of practices and media to which we commonly refer under the umbrella term of "video games".

Some of the most recent works on subcultural theory have focused on the polyvalence of the very term "subculture". In a turning point in the debate, Rupert Weinzierl and David Muggleton (2003, p. 3) have showed that subcultural phenomena might have to be re-theorised and re-conceptualized "on the shifting social terrain of the new millennium, where global mainstreams and local substreams rearticulate and restructure in complex and uneven ways to produce new, hybrid cultural constellations" (p. 3). This process, argue the authors, involves a critical revision of what have been seen as past theoretical and political "orthodoxies" on the matter, such as the seminal 1970s approach of the Centre for Contemporary Cultural Studies (CCCS) from the University of Birmingham - a revered although still criticqued benchmark "against which to mark out and assess subsequent developments" (Weinzierl & Muggleton, 2003, p. 4). Part of the paradigm shift consists in challenging a model in which working-class youth subcultures would heroically resist subordination to dominant structures through semiotic guerrilla warfare. Nowadays, research would tend to reflect a more pragmatic approach compared to what could be seen as the "romantic" approach of the CCCS (Weinzierl & Muggleton, p. 4). In the wake of this critical shift, the cultural studies approach of the Manchester Institute for Popular Culture (Redhead, 1990, 1993, 1995, 1997; Redhead, Wynne & O'Connor, 1997) was followed by the "post-modern" developments like the ones by Bennett (1999), Muggleton (2000) and Thornton (1995).

In the process, the evolution of the critical debate has generated a vast array of new concepts and definitions. Singh (2000) has conceptualized youth groups as "channels" or "subchannels". Weinzierl (2000) categorized "temporary substream networks". Bennett (1999) proposed the formulation of "neo-tribes". Redhead (1997) wrote about "clubcultures" and global youth formations. As Hodkinson noted (2002, p. 23) "it is not readily apparent what to make of this remarkable plethora of concepts and explanations"; save that some of the confusion that it entails can be alleviated by acknowledging that different concepts are often used to define different aspects of social reality. Weinzierl and Muggleton (2003, p. 20) argue that the multiplication of perspectives opens to a world which may be seen as populated by formations as diverse as "bondage punks and anarchopunks", "DiY-protest cultures", "techno tribes", "Modern Primitives", "Latino gangs", "new-wave metallers", and "net.goths" amongst others. This panorama may seem to have more resonance with what Polhemus (1994) described as a "supermarket of style" than with 1970s British subcultural theory (Weinzierl and Muggleton, 2003, p. 20).

Yet such a multiplicity, while inevitable, does not mean that these different social formations should not be approached through a consistent theoretical approach. As Hodkinson and Deicke note (2007, p. 15), it is important that the desire to avoid the structural determinism and the

clearly cut collective identities with which subcultural theory has been traditionally associated "does not lead theorists to settle either for undertheorized (and arguably rather obvious) assertions that young people's identities are changeable and complicated, or for sweeping assumptions about electivity, individual distinctiveness and consumer choice". In other words, while it is necessary to consider the complexity of individual identities, the pursuit of ongoing significance for identifiable youth formations must not be overlooked.

For Weinzierl and Muggleton (2003, p. 20), "liminal" youth cultures attempt to accumulate subcultural capital (in Thornton's definition, 1995) while also maintaining distinction (consistently with Bourdieu, 1993) from other groups or sub-groups based on "authenticity" and "identity".

The complexity of the relations of power and identity that the subcultural terrain thus entails for research may be approached through what Weinzierl and Muggleton (2003, p. 4) define as the three main notions, or "contenders [...] for theoretical supremacy", in the analysis of youth culture: Bourdieu's definitions of "taste", "distinction" and "cultural capital" (1984); Butler's analysis of performativity and subcultural identities (1990 and 1993); and Maffesoli's (1996) post-modern framework for youth analysis which challenged traditionally conceived socio-structural identities.

It would seem as if the theoretical scenario highlighted so far would find an interesting terrain in the context of gaming cultures. As a large and complex "family" of audiences and cultural and social formations, the phenomenon of gaming may be approached through the diffraction of audiences and formations based on both specific or broader, trans-media genres and streams (FPS and MMORPG games; horror, sci-fi, sports, fantasy genres), on the frequency of playing habits or attitudes towards the medium ("casual" or "hardcore" gamers, "retrogamers", "early adopters"), or even on company and product-based affiliation (Nintendo aficionados, Sony supporters, Final Fantasy fans, Amiga and Psygnosis collectors). Each of these classifications possibly cuts in a peculiar and distinct way through a complex web of social intersections which may overlap with other lifestyles, contexts, scenes, consumption of other media, etc.

An attempt to "map" video game cultures specifically via youth and subcultural formations has been proposed by Crowe and Bradford, who defined through the term virtua-cultures the practices within the virtual worlds of online gaming communities, considering how young people "construct and maintain virtual identities within virtual social systems" through an analysis of the game Runescape (2007, p. 217). In this case study, argue the authors, power relations emerge through struggle and consensus throughout the dynamic of a virtua-culture.

While the notion may be useful to describe similar cases, we argue that it hardly might be considered to describe the variety of social formations falling under the umbrella term of the "gamer".

It is true that at the discursive level, gamers have been described according to a consistent type of media consumers. The gamer has often been characterised as belonging to a broad group of "geeky", or "techy" individuals, both by the "dominant" culture or media, and also by gamers themselves, as a means of asserting and affirming their identities. In many cases, the gamer has been conceived as possibly overlapping with the hacker and his or her practices of cyber-resistance. The constellations of gaming practices, however, seem to bring us far from actual identification with any stereotype or unique profile.

(Post-)subcultural theory offers a complex view of the notion of the subculture and the parent culture against which it is supposedly defined. It challenges the idea that there would be coherent and homogenous formations at plat that can be easily and clearly demarcated. It also suggests that contemporary youth cultures seem to be characterized by levels of stratifications which are far more complex than what might be suggested by simple dichotomies opposing a monolithic "mainstream" against "resistant subcultures" (Weinzierl & Muggleton, 2003, p. 7).

From this perspective, subcultures may be seen from case to case as either places of symbolic resistance, or as formations which are complicit in the niche marketing of their own identities and thus call for a less-than-clear-cut perspective on discursive and political interaction. Subcultural affiliation certainly offers "belonging, status, normative guidelines and, crucially, a rejection of dominant values" to contrast against the "outsiders" (Hodkinson & Deicke, 2007, p. 3).Yet, as Weinzierl and Muggleton have argued (2003, p. 8), commodity-oriented subcultures may also live out "of consumerist ambitions since their very beginnings": for instance, bikers (Willis, 1978), snowboarders (Humphreys, 1997) and windsurfers (Wheaton, 2000).

GAMES AND YOUTH (SUB)CULTURES

In spite of the relative lack of specific inquiries into gaming practice from the standpoint of subcultural analysis, some tendencies in research and in the reception of games as subcultural may still be highlighted.

Firstly, gamers and video game cultures have been often acknowledged as parts of larger lifestyle formations to which they appeared as marginally tied, and yet closely entangled with – for instance, clubbing (Malbon, 1999), or the "virtual" which would comprise together media and practices such as the Internet, virtual reality parks and computer games (Chatterton & Hollands, 2003, p. 22). In these cases, gaming practices are subsumed within broader processes and spaces in which lifestyles are addressed by and shaped by the economic processes of production and leisure (Featherstone, 1991).

Secondly, and broadly speaking, gaming (indeed subcultures broadly conceived) has also been strongly associated with youth cultures. McNamee (1998) focuses on games as a youth phenomenon in relation to gender, discussing the way in which power and control in the home are displayed in the gendered uses of games made by the audiences. As Hodkinson and Deicke argue, "the increasing relationship between young people and particular kinds of consumption has been a key theme of recent scholarship on youth cultures" (2007, p. 3). The long-standing association between games and youth is all the more important as it implies the equally enduring issue of media panic and deviance through which games have often been received and constructed, throughout a history of scapegoating that can be traced over many decades of media and moral panic (Drotner, 1992; Cohen, 1972).

Indeed, as Osgerby argues (2004), video games and media in general have been a pervasive presence in the cultural and social experience of young people. The average American child, note Rideout, Foehr, Roberts, and Brodie (1999) would grow up "in a home with three TVs, three tape players, three radios, two video recorders, two CD players, one video game player and one computer" (p. 10). The omnipresence of the media in young people's lives is also attested in a country like Great Britain by Livingstone and Bovill (1999) who found that young people aged between six and seventeen spent an average of five hours a day using some form of media. This would increase the chance to for games to attract negative connotations as cultural nasties associated with youth subcultures and deviancy. In the aftermath of tragedies like the Columbine massacre, as Osgerby notes (2004), "computer games were also blamed", serving alongside rock music and other forms of youth entertainment as a useful "whipping boy" - as a scapegoat that journalists, politicians and moral crusaders conveniently exploited for problems whose origins are rooted in more complex social and economic issues. (pp. 50-53).

In contrasting these narratives, post-subcultural theory may be efficiently deployed in order to defy grand claims and to show how consumption has rendered young people's already uncertain transitions increasingly characterized by ephemeral and individualized tastes, practices and identities (Furlong & Cartmel, 1997). This contrasts with the emphasis of previous scholarship on socio-economic aspects and categories which may be trivially employed for the construction of stereotypes.

From this point of view, subcultural and youth studies offer interpretative keys to tackle the social and political tendencies shaping up the reception of games and the ideas surrounding gamers in wide cultural contexts. Being games as a medium a relative novelty in the discourses the academic discourses of theory and critical approaches in the public sphere, subcultural analysis may help defy the tendency to frame them within excessively generalizing narratives.

Newman (2008) argues about what Johnson defined the ease with which videogames could be derided as "junk culture" that reduces their players "to blinking lizards, motionless, absorbed, only the twitching of their hands showing they are still conscious» (Johnson, 2006). For Newman, this speaks of an alarmist tendency that is seemingly "unaware of the richness and diversity of gaming cultures", associating gameplay "with cultural decline [and] falling standards of literacy and educational achievement (Newman, 2008, pp. vii-4).

Yet this kind of bias seemed reversed, in a positive sign, in some of the enthusiastic approaches to games over the last few years, according to which games would have the potential to cross over from subcultural realms to not only a "mainstream", but also a "healthy" and "salvific" medium (Carbone & Ruffino, 2012). While being positive rather negative, these takes reproduce a bullet-theory idea of media. The critical perspectives of post-subcultural theory may be especially useful in defying the cultural determinism at work both in the long-standing tradition of game-bashing and in the more recent trend of techno-enthusiasts, contributing to the understanding of how a "new medium" fits into this broader cultural debate. Part of the process through which a medium is defined certainly has to do with generational as well as technological and cultural aspects. As Bennet notes (2007), interpretations of contemporary youth often rely on a cultural bias in how they interpret them based on an idealized notion of the past: while "authentic" youth cultures are seen as "a thing of the past", contemporary youth is often "lambasted by those who claim to know better than young people themselves what being young is all about" and "regularly criticized for its consumer-centredness", which in this case, takes the shape of an "obsession with digital distractions, such as video-games and texting (p. 39)".

COMPLEXITY OF GAMING PRACTICES

An example of a complex issue which is often taken for granted and which could benefit from theory from a post-subcultural perspective is the commonplace identification of games with the consumption habits of young males (and relatedly, with the male gaze and its ideology). For Roberts and Foehr (2004), video games are a novelty medium that operates "through a TV screen" in a "changing media landscape" (pp. 3 and 128). For the authors, even though much has changed in recent times since the "rudimentary graphics and limited user control of early games", the proportion of girls and boys who utilize them are scrutinized through quantitative analysis to conclude that video games are still "largely the domain of boys, particularly during the late childhood and early adolescence (8 to 14 years)"(Roberts and Foehr, 2004, p. 128). Also, "Clearly, video games hold the greatest attraction for middle-school boys- a finding very much in line with claims that the content of most video games is highly gender-stereotyped, appealing far more to boys than girls (e.g., Calvert, 1999; Funk, 1993; Tanaka, 1996)" (Roberts and Foehr, 2004, p. 129).

While this kind of analysis focuses on what is arguably one of the largest sub-categories that may be employed to describe gamers (teenage males), the conclusions show many possible limitations of this approach. Firstly, the claim that "much has changed since the rudimentary graphics and limited user control of early games" (Roberts and Foehr, 2004, p. 127), in the absence of clear criteria, does not seem to be justified by any argumentation. It also displays a poor historical understanding of the achievements of the medium, since examples of highly "sophisticated", "artistic" or "complex" games may be traced back to the very beginning of the medium.

Secondly, although it is difficult to deny that gaming might have remained mostly a male-centred practice, the quantitative findings are probably not sufficient to investigate the diversity of audiences involved, including the gaming practices of women. Gender analysis in games, so far devoted primarily to a critique of female and normative stereotyping in a large part of "traditional" video games, might benefit from a subcultural take on possible areas of dissent and alternative consumption, for instance through ethnography of "atypical" or "creative" gendered gaming practices (Anthropy, 2012), or through historical investigation on fringe areas of female game development (Nooney, 2013).

Whether or not gaming subcultures will come to challenge, at the symbolic level, "the "inevitability", the "naturalness" of class and gender stereotypes" (Hebdige, 1979, p. 89), it is nevertheless important to approach gaming cultures while avoiding the same kind of "masculinist bias" in British sub- cultural theory that had led to an exclusive concentration on male styles and subcultures (Muggleton & Weinzierl, 2003, p. 31). The issue of possible over-simplification in the analysis of video game audiences in relation to trans-media consumption brings up the necessity to deploy complex views of gaming's underlying social, ideological, and political formations. Our impression is that many historical manifestations of gaming might have been overlooked, remaining fundamentally submerged, in contrast to more commonly understood or spectacularised areas. As Hodkinson and Deicke note (2007), even subcultural theory has often been criticized for its tendency "to present an overly fixed impression of the cultural boundaries between groups of young people", placing emphasis in some cases "on an untypical deviant or spectacular minority", in such a way that "differential and changing levels of individual commitment were under- played" - and perhaps, "the most significant group who were excluded from subcultural analysis were young women" (p. 7). As the contemporary relevance of so clear a dividing line between male and female youth cultures has been questioned, the male-centredness of gaming practices needs to be approached (and understood or challenged), thereby avoiding grand narratives in favour of circumstantial empirical, qualitative, and ethnographic analysis.

As Newman (2008) argues, we are only beginning to scratch the surface of what we might call "videogame culture", ranging from inherently social, productive and creative practices implied in their large scale production to "the extensive "shadow economy" of player-produced walk-throughs, FAQs, art, narratives and even games [...] that have emerged in terms of grass-roots production (p. vii). Newman notes that while some of these activities and communities are "reasonably widespread", others – such as the production of in-depth walkthroughs, fan fiction stories or game-inspired costumes – "are altogether more niche": for instance, "cosplay" would be more specifically located within other cultures such as science fiction fandom and contained with their institutions; likewise, within wider computing cultures, proficiency at games modding might be seen as "a necessary condition of entry", for instance "as a vital part of the cultures of FPS gaming (Newman, 2008, pp. viii and 175).

According to King and Krzywinska (2006), games, in order to be understood fully, should be situated within the cultures in which they are found, which includes looking at their wider industrial and economic context. For instance, the combined influence of "military-industrial funding, hacker experimentation and science-fiction oriented subcultures" on first-generation games such as *Spacewar* "made a significant contribution to the genealogy of the videogame", as did "the subculture of table-top *Dungeons and Dragons*, a primarily male-oriented sector in which many older game developers were involved"; it is through tendencies like these that a transition was made between relatively closed military and subcultural realms and commercial entertainment (King & Krzywinska, 2006, p. 207).

King and Krzywinska (2006) borrow Huizinga's definition of play to show its tendency to generate communities based on the feeling of being "apart together" or "mutually withdrawing from the rest of the world" – a quality similar to that invoked in more recent studies of subcultural forms; however they also point out that "far from all game players would regard themselves as part of a subculture defined in this manner, particularly those who play games more casually"; while on the contrary, "for many regular or hard-core gamers, gaming can provide a strong sense of identity and might, in some cases, frame the way they present themselves to others" (p. 219). Although diverse in its manifestations, it would seem that a "game culture" could be said to exist. King and Krzywinska (2006) quote Fine (1983), who showed how gaming magazines, websites and chat rooms devoted to gaming have become central to establishing a "general" gaming subculture as well as particular, "specific" subcultures related to individual games or genres; from this point of view gaming culture would appear like a large domain that "cuts across national boundaries and in which game players are particularly likely to be adept because of the computer-based nature of the medium", which promotes "a distinctive shared language that helps to mark gamers off as a subsection of society" (King & Krzywinska, 2006, p. 220).

King and Krzywinska argue that Fine's (1983) definition of an "idioculture" captures a sense of how, on the one hand, single games and genres can generate more localized and idiosyncratic subcultures; nevertheless, on the other hand, gaming has also established itself as a practice located in the "much wider landscape of popular culture and entertainment in recent decades", becoming the basis "of a very large industrial enterprise", to the point that "the mainstreaming of the games industry is seen by some as a threat to its roots in the kinds of smaller and more particular subcultures" (King & Krzywinska, 2006, p. 225).

IDEOLOGICAL PERSPECTIVES

In the cultural debate on the social potential of technologies, "both advertisers and Utopian visionaries (such as Timothy Leary) have extolled the potential for digital technology to open up new vistas of dazzling creativity" (Osgerby, 2004, p. 167). As we have already argued, games, too, have been considered as sharing the "the utopian potential of the Internet as subcultural community and bearer of a gift economy" (Muggleton & Weinzierl, 2003, p. 302), in the same way that it might be argued to happen in the case of the proximity between hacking practices and "elite" gaming subcultures (King & Krzywinska, 2006, p. 227).

In the domain of video games, another example of ideological resistance may be seen in the emergence of "serious games" as niche areas of resistance to the capitalist logic which is at the basis of the video gaming industry. Yet, as the Authors of this Introduction have already argued (Carbone & Ruffino, 2012), video games, in their contemporary heyday of growing social and academic recognition, have also been a-critically indicated as a redeeming medium, a position which only inverts the previous attitude of demonization and academic negligence, while being based on discursive myths and a techno-enthusiastic faith. Theorists should be particularly cautious of celebrating how "young people" can become "liberated" from old categories or conditions through being introduced by new media "into a world of active consumption and choice" (Hodkinson, 2007, p. 16).

Nevertheless, it would be cynical to deny the "enormously heightened media awareness" and potential of "computer-mediated communications" in their providing enhanced possibilities "for more encompassing and political forms of subcultural organization" (Weinzierl & Muggleton, 2003, p. 22). However most active practices activities beyond particular subcultures could be viewed as unserious, as "messing around" (Sefton-Green & Buckingham, 1998, p. 74, cited in Osgerby, 2006, p. 167) – an argument which challenges notions that access to computers in itself necessarily allows young people to become creative cultural producers – it is fair to acknowledge that "a broader, and perhaps less romantic, conception of creativity" (Sefton-Green & Buckingham 1998:77), may effectively blur the boundaries between production and consumption, so that what counts as a "text" or as a creative work of art may become subject to a wide range of definitions (Osgerby, 2006, p. 167).

Weinzierl and Muggleton (2003) argue that Thornton's (1995) work is able "to dispense with the (inaccurate) assumption that such subcultures are "inherently" resistant or oppositional simply by virtue of their positioning vis-à-vis a dominant cultural formation", thus challenging "the idea of the latent political nature" of subcultural practice (p. 13).

While the CCCS may have over-politicized youth formations, the risk with post-modernist and other post-subcultural positions is that they may under-politicize them, by assuming – according to Weinzierl and Muggleton (2003) – that youth cultures tend to be mainly hedonistic, individualistic and politically disengaged, or exclusively concerned about the assertion of their authenticity via the accumulation of subcultural capital – which would lead to an understatement of "the political activism and media visibility of new post-subcultural protest (p. 14).

As games are increasingly evoked for their interplay with other media and their role in defining and shaping our cultures, carrying artistic, cultural and social meanings – both ideologies and conversely "engaged", "alternative", or "redemptive" discourses – it becomes increasingly important to accompany the merely descriptive and (inter)textualist analysis shared by many approaches in game studies with elements of social and subcultural theory that could provide perspectives through which to de-essentialise the patronising or enthusiastic perspectives through which games are often observed.

Although technologies ought not to be treated as neutral tools, their effects depend on the contexts of their use (Kendall, 1999). In this respect, more empirical research is needed in order to bring to light the complexity of gaming cultures and subcultures and their relational positioning in broader social formations.

THE CONTRIBUTIONS IN THIS ISSUE

This introduction and the collection of essay in this issue merely tackle some of the many possible approaches and cases in the study of video game subcultures. In their entirety, we believe, they advocate for the adoption of fluid rather than fixed categories, and for empirical analysis rather than grand narratives. Perhaps the subcultural notion should be seen not as a point of arrival but rather, of departure, as a very useful albeit not universal key that we could use to enter the complexity of these practices.

The variety of the contributions collected in the present issue testifies how a study of video game subcultures is necessarily centrifugal: if we imagine the studies of the tendencies of the mainstream market as oriented towards the "centre" of video game culture, then analyses of marginalised and under-represented forms of reception look instead towards unlimited and dispersed directions. In this issue we proudly welcome papers with very diverse geographical focuses, based on a variety of methodologies and interested in phenomena which occurred in different periods in the history of the video game industry.

The peer-reviewed part of the issue includes essays by Rob Gallagher, Alison Harvey, Israel Márquez, Gabriel Menotti, Theo Plothe, Heikki Tyni and Olli Sotamaa, and Ge Zhang.

Two of the papers are symptomatic of the geographical diversity we hope to emphasise in this publication. Both Zhang and Gallagher look at particular examples of the reception of video game products. Ge Zhang looks at how players who live in Hong Kong received the video game Sleeping Dogs, set in the same city. The game, sold on a global market, presents the city through what Urry (1990) would define as a tourist gaze, filling it with martial art fighters and gangsters - the sort of things a Western gamer would expect to find in Hong Kong. However, the contemporary Hong Kong does not match such a description in the perception of younger generations who live there. Zhang draws on Lefebvre's (1991) spatial theory to re-map the city of Hong Kong through the video game Sleeping Dogs and the criticism offered on the message boards by local players. The conclusion depicts Sleeping Dog as an allegory, rather than a representation, of the real. This is an allegory which also disturbingly caricatures the networks of power and violence who are currently undermining the future of a generation of citizens.

Rob Gallagher's paper brings us to a completely different period and location, and yet focuses also on the particular case of reception of a video game product. Gallagher looks at how the console Sega Saturn was received in the United Kingdom during the 1990s after the console had been mostly dismissed in Western countries by the original manufacturer, which preferred to focus instead on the Japanese market. Publications such as Sega Saturn Magazine addressed an audience that quickly became peripheral, and which focused its its attention on the products being released in Japan and not on the "local" European market. Gallagher's understanding of that period, in which the author has been personally involved, does not indulge in nostalgia. It is, instead, a compelling case in favour of nuanced and personal forms of interpretation of video game products, as opposed to contemporary trends towards the individualisation of the playing experience. Here Gallagher draws on Sedgwick's distinction between the "camp" and the "kitsch". Metrics and users data are seen as moving towards the kitsch: a form of cynical manipulation which assumes a gullible audience. The "camp", on the other hand, is a form of excessive erudition and sophistication, a form of "hermeneutic ingenuity", a quality which Gallagher attributes to the community of Sega Saturn fans of that period. Gallagher keeps the question open as to whether camp could somehow re-emerge through new forms of independent production of video games.

Theo Plothe takes us in a completely different direction. He looks at how video game players are depicted as a subculture in the TV show The Big Bang Theory. Here qualitative analysis mixes with quantitative

data: the author traces 79 scenes, in 39 episodes, where video games are mentioned or take part in protagonists" jokes. Digital games are depicted as texts through which a specific community creates its own boundaries and identity. Spectators of the TV show are supposed to understand a subculture, its codes and processes of identification, through the reification of its tropes. However, the TV show is also oriented to a mass audience. The show plays precisely with the conflictual boundary between what makes video game players a subculture, and the immediate identification of such subculture by a mass audience. Interestingly, references to video games become less and less as the show became more and more popular, with the last two seasons having significantly fewer references than the first four. Márquez and Menotti look at communities built around the re-use of old video game technologies.

Israel Márquez presents the chiptune subculture as built on a process of reinvention of 8-bit consoles and home computers for the purpose of playing music. Márquez finds particularly interesting how such a community defines itself through the use of abandoned or outdated technologies, and how this practice is entangled with political statements of opposition against contemporary technological developments. The re-fashioning of old media is a practices that contributes in this context to a broader perception of video games as tools for the creation of the identity of a community.

On the other hand, **Gabriel Menotti** looks at *videorec* – the practice of video game recording. An apparently marginal phenomenon, videorec was developed in conjunction with other practices such as retro-gaming and machinima production. Menotti sees it here seen as an "interface" between players and industries. Drawing on studies on new media (Manovich, 2011 and 2013), cinema of attractions (Gunning, 2005), remediation (Bolter & Grusin, 2000) and machinima (Lowood, 2006), Menotti traces an analogy between video game play-throughs and the cinematic genre of documentaries. What is documented in a videorec also contributes to the establishment of the values of a video game within the community of players. As such, videorecs can also work as a communication tool between the subculture and the mainstream culture, documenting not only what the video game is, but also what else it could be. Referring to Newman (2008), videorec is seen by Menotti as a way of playing with video games, thus altering their meanings and values.

The following papers look more specifically at practices of production as they are developing in marginal contexts, and yet always already in relation to an "official", mainstream industry. **Alison Harvey** discusses about the emergence of the development tool Twine. The logic of (economic) success, central to the production of mainstream titles, is approached by Harvey through Halbestram's (2011) definition of queerness as that which does not conform to the status quo. Queering game design therefore favours an anti-hegemonic, de-individualised struggle against capitalist economies.

In such an approach, Harvey sees as an opportunity for the community of Twine developers, at risk of being de-legimitised and deprived of their political value by forms of capitalist co-optation.

Last but not least, **Heikki Tyni and Olli Sotamaa** offer an insight on the Finnish game convention Assembly. The convention is discussed as a context of production at the margins of an "official" industry. However, at the same time the convention has been offering to generations of video game programmers a place in which to receive necessary training to later work in the industry. Assembly is discussed in its historical developments and for the ways in which old and new generations of "outsiders" are hosted within the event. Three concepts frame the perspective of Tyni and Sotamaa: the notions of scene, taken from Gosling and Crawford (2011), technicity (Dovey & Kennedy, 2006) and gaming capital (Consalvo, 2007). As Assembly became more "normal" in the last years, it still preserves an interesting interplay between hobbyism and professionalism, as well as both marginality and affinity with the video game industry

Moreover, the critical, non-peer reviewed section of this issue offers three important critical contributions on region-specific subcultures which together provide an important additional commentary.

Ideally connecting to Tyni and Sotamaa's look at the Scandinavian event Assembly, **Mathias Fuchs** provides a deeper look at the Nordic Game Culture, focusing in particular on the LARP (live action role playing) scene. The scene is put in context and connected to other avant-garde communities that have been specifically grounded in Scandinavian culture.

A second critical note is provided by **Thaiane Oliveira**, **Andre Boechat**, **Emmanoel Ferreira**, **and Louise Carvalho**, who take us far away from the Scandinavian countries. The authors look at the Brazilian context and how numerous forms of fan-game production have been emerging in the last decades. The historical perspective is also enriched by looking at how participatory culture has been shaping in Brazil, and to what extent fan-made modifications of existing games have been dependent on the success of the original product, in a complex ongoing interplay between "tribute and resistance".

The interest for the relation between producers and consumers is also central in the contribution by Rossana Sampugnaro, Salvatore Mica, Salvatore Fallica, Ambra Bonaiuto, and Marta Mingrino. Their sociological research collects and analyses data taken at the transnational Global Game Jam events. The authors are specifically interested in understanding how the demographics of the attendants of the event has been changing in the last years. Originally intended as an industry-only event, the new demographic of Global Game Jam is symptomatic, according to the authors, of the emergence of a wider, participatory culture of the kind discussed by Jenkins. In this case, it is the industry that opens its boundaries to welcome a larger group of potential "producers".

The number of peripherical sites where we could have wandered with this publication is indeed innumerable. In this issue we have made a selection of a series of possible ventures beyond the most frequently illustrated mainstream locations and commonplaces of video game culture. We are aware that to wander at the periphery of an idea also means to trace and reinforce those very same boundaries that separate the "periphery" from its centre. However, the authors who have contributed to this special issue have all shown, through different cases and approaches, how those boundaries collapse at every reading, and how they seem to be established by contingent interpretations more than any radical separation or "quantitative" analysis. We hope that this special issue will contribute to the study of digital games especially by encouraging further research on under-represented forms of play, surpassing the cumbersome fascination of game studies for texts and practices already discussed in mainstream media - which are often packaged, defined and sold as "new" by marketing strategies, more than anything else.

ADDENDUM: A NOTE ON OUR COVER ARTISTS

This issue is also enriched by the work of two Italian artists who have contributed with their visual work. Although not explicitly intended to appear in an academic journal, both works fit in well together with the collected essays. Giovanni Fredi's Kinshasa vs Akihabara, on the cover of the peer-reviewed part of this journal, compares and analyses the habits of video gamers from two very different locations. On the one hand there is Akihabara, the technological district of Tokyo, Japan, with its individualised gamers completely absorbed in their playing activity with a Nintendo DS handheld system. On the other hand there is Kinshasa, Congo, and the communities of gamers who gather to play Pro Evolution Soccer 2008 on Sony's PlayStation console. Apart from highlighting the well-known economic disparities between the areas, the project visualises a practice (playing video games) that keeps these two distant cultures together, although in very different ways. It provides a visual commentary on two game subcultures, one largely represented and discussed (Japanese gamers), the other less known and confined to a restricted number of people in the city of Kinshasa.

The other visual project, which visually accompanies the cover of the critical, non-peer reviewed section of the printed version of this issue, is *Contradictions* by **Filippo Minelli**. Although not directly mentioning video game products (apart from *Second Life*) the work ironically displaces the names of brands, social networks and online services by re-writing them in contexts that are completely extraneous with the experiences they are usually associated with. Contradictions is about how the "first world" dream of a 2.0 reality appears completely displaced in the "third world"

- or in any of the many places of the planet that is not connected, not sharing, not viewing, not liking and not playing. It is about contradictions we are probably all well aware of, but often tend to forget or overlook while evaluating the alleged effects of online technologies in "our" world. We believe both Minelli's work and this issue intend to multiply our ideas of and on the world(s) we live in, establishing and framing a multitude of worlds and possible uses and interpretations of video games.

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GE ZHANG

Hong Kong Polytechnic University

The stroller in the virtual city:

Spatial practice of Hong Kong players in *Sleeping Dogs*

ABSTRACT

Sleeping Dogs is an open-world role-playing game developed by United Front Games, a Canadian Studio based in Vancouver, in conjunction with Square Enix London Studios and released by Square Enix in 2012. The game features the city of Hong Kong and the society of Chinese Triads. While the game itself is mainly a representation of post-colonial Hong Kong targeting a transnational audience entrenched in similar gameplay mechanics of the genre, the native Hong Kong players react to these reconstructions of Hong Kong through their own gameplay and unique interpretations. The virtual city is not a static representation but a congruence of vigorous interactions between the originally designed space and gamic actions of the players. This paper seeks to explore the spatial and bodily practices of Sleeping Dogs players in the virtual terrain of Hong Kong through the lens of Lefebvre's spatial theory.

KEYWORDS: Spatial Practice, Hong Kong, Lefebvre, Virtual City, Realism

INTRODUCTION

Space in videogames is not a "passive absorption of images, but rather through an active and largely self-directed process of exploration" (Fraser, 2011, p.94). Following this line, I argue that the virtual Hong Kong in Sleeping Dogs is a reinterpretation of Hong Kong—"a socially and visually prism of the real thing" (Murray 2013) —not only through the algorithmic dispositions on the developers" end but also gamic actions on the side of players. Even though there is the homogenising tendency of the global game industry, local variances still play a determining role in the polyrhythmic "glocal" digital game ecology (Apperley, 2010). Local gamers' individual in-game performative practices and interpretations of the reconstructions of virtual Hong Kong should be

understood in association with their everyday lives. This paper will discuss Sleeping Dogs as a living space produced by the introduction of urban folk culture into the virtual terrain by players. These folkloristic cultures include Cantonese vernacular oral traditions, street scenes such as vendors and back alleys, public transports and so forth. The aim of this research is not to assess the accuracy of representation per se but the reception as well as subversion of the "representations of space" by the Hong Kong interpretative community and their cultural expression in the actions of gameplay. Videogames in this sense are treated not as ruptures of the mundane existence for the gamers but expressions of everyday life: the lived experiences of players and their aesthetic and spatial intervention in gameplay.

NOTES ON METHODOLOGY

This research is based on analysis of contents from several online Cantonese discussion boards¹ as well as five online interviews of players. This research is deeply entrenched in my own experiences in the game and my conversations with other Hong Kong gamers. After finishing the main story line of *Sleeping Dogs* once, I spent many hours wandering in the virtual city taking screenshots and field-notes, then posting my observations in the discussion boards. Questions and issues emerging from my interpretations of forum posts were then asked to and further extrapolated by my interviewees. Throughout the online interactions and data collection process, I mostly positioned myself as a participant of discussion rather than a distinguished researcher. This paper is the result of a synthesis of my phenomenological reflection of strolling in the virtual city, dialogues with other players I met online anonymously, and interpretation of the documenting and sharing of these tales of non-diegetic actions and alternative narratives as well as various strategies and screenshots in the online forums.

GAMING SUBCULTURES

The most influential strand of subculture studies comes from the tradition of Centre for Contemporary Cultural Studies (CCCS), which defines subculture as a "way of life" against hegemony of mainstream society's invisible but ubiquitous power (Hebdige 1979). Subcultural style exposes the implicit dominance of ideology and therefore prepares individuals to overcome hegemonic normality and un-reflexivity. However, in recent developments, this class-based "semiotic guerrilla warfare" through "stylistic rituals" had shifted toward a "fluidity of a variety of nebulous 'tribal formations' (Wienzierl & Muggelton, 2003, p.5)- "ad hoc communities with fluid boundaries" (p.8). The spectacular subcultures of resistance according to the Cultural Studies tradition of CCCS may be no longer satisfactory model for studies of contemporary videogame (sub)cultures. The primary feature of contemporary subculture is likely no longer "a rigid, reified and realist entity, rooted in

1. http://www.discuss. com.hk/viewthread. php?tid=20489083&page=1 (Cantonese); http://www. uwants.com/forumdisplay. php?fid=1672&page=7 (Cantonese). underlying class relationship" (Wienzierl & Muggelton, 2003, p.23) but "manifestations of self-expression, individual autonomy and cultural diversity" (Muggleton 2000, p.167 cited Hall & Jefferson, p.xiii). In contrast to disengagement with consumerism, I argue that contemporary subculture's chief traits are active engagement and appropriation of consumer products. Explicit violent tactics in previous subcultures had converted into an implicit "resistance" via appropriation. Borrowing from Azuma (2009)'s concept of "database culture" in his theorisation of otakus, we can understand this "oblique resistance" as forms of information elitism, critical consumption, and "an aesthetic preference for cultural products outside social norms" (Stevens, 2010, p.212).

Similar to the approach of the fandom studies exemplified by Henry Jenkins (1992), I aim to document a collective of users (or "prod-users")'s alternative interpretation or engagement with commercial works- reading (in the case of videogames, performing) practices in novel ways as well as reconfiguration of the existing materials into a derivative oeuvre that subverts the "appropriate" and "intended" use or interpretation of the original. My approach is to focus on "cultures of uses". Through this perspective, we can avoid homogenising or generalising gameplay experiences and inspect the often-overlooked "emergent and dynamic practices of gamers, rather than 'intended use' of the software" (Apperley 2010, p.87). In the case of Sleeping dogs, these practices are further exacerbated by the genre of open-world or sandbox games. Secondly, "cultures of use" are situated into "heterogenous, myriad and plural" local variances (p.21). King and Krzywinksa (2006, p.75) argue that "contextual background material...can have considerable impact on overall experience offered to the player". Although Sleeping dogs involves global production and distribution, its consumption in Hong Kong is deeply rooted in local factors. For a local player, the familiar everyday of urban life in Hong Kong spontaneously blends into the virtual gameplay experiences.

SPATIAL TRIAD IN GAMESPACE

Space has always been a pressing issue since the inception of game studies. Moreover, the past decade's academic attention on Lefebvre has brought his theories into active applications in many disciplines including the prospering field of game studies. As Nitsche (2008) states, "experience, comprehension, and spatial practice are phenomenological key elements that reappear throughout this discussion of virtual space" (p.3). Later, an edited book *Space Time Play: Computer Games* (2007) explores the relationships between computer games and urban space from a variety of perspectives including both academics and designers. Both of the texts recurrently allude to Lefebvre's original book *Production of Space* (1991). Futhermore, in his frequently quoted essay "Allegories of Space", Aarseth (2000, p.163) identifies the comparability of game space to spatial practice: "as spatial practice, computer games are both representations

of space (a formal system of relations) and representational spaces (symbolic imagery with a primarily aesthetic purpose)". Inspired by this adaptation, I intend to build on this approach and explicate the application into a particular direction focusing on the role of "inhabitants" in lived virtual space and their potentialities to reverse "alienated spatiality" in "representational spaces". The key idea of Lefebvre is that "space is socially produced" (Lefebvre, 1991, p.26) —it is a complex process instead of a static representation. Lefebvre thereby breaks down social space into a tripartite system:

- 1. "The spatial practice of a society secretes that society's space" (Lefebvre 1991, p38); It secures a certain degree of cohesion for a "guaranteed level of competence and a specific level of performance" of every society member's social relationship in space (p.33). Spatial practice is also linked to "perceived spaces" it is revealed through the deciphering and decoding of its space (Merrifield 2006).
- 2. Representations of space, which is "conceptualized space", the space of scientists, planners, urbanists, technocratic subdividers and social engineers" (Lefebvre, 1991, p38); this is the dominant space in the society.
- 3. Representational space, "space as directly lived through its associated images and symbols, and hence the space of "inhabitants" and "users"... This is the dominated—and hence passively experienced—space which the imagination seeks to change and appropriate" (p.39). This realm stays dominated thus characterised by non-reflexive everydayness.

Firstly, videogames are representations of space because developers primarily implement the symbolic imagery or narratives and players interact with environments in forms predicted and programmed by the game designers. This predetermined design and prominence of algorithmic control are similar to static conceptualisation of space practiced by the urban planners. Apperley (2010, p.27) suggests, "all options, actions and possibilities are contained "in quantifiable, dynamic relationships" in the digital code of the game's algorithm". In these "conceived spaces", game developers inscribe the intended usages of different spaces just as city planners conceived the organisation and segregation of public and private spaces.

Secondly, video games are also representational spaces because these are the directly "lived" environments where players perform through the proxy of avatars. Players are required to obey and learn algorithm in order to progress in the game. Hence, players or, "inhabitants", passively experience space for the most part. However, videogames are not just designed experiences. Players, in other words, the "users" of the space also seek to appropriate and surpass the passivity of the experience through their imagination. The operator of the game is not entirely subject to machinic actions.

There is always a "simulation gap between the rule-based representation of a source system and a user's subjectivity" (Bogost, 2006). Moreover, experimental practices can gradually reveal the hidden design principles thus develop strategies to evade and even transcend certain limitations of originally designed usages of the virtual space. This conceptualisation also resonates with the action (rather than textual)-oriented game theories' emphasis on correspondences- material and affective negotiation with the regimes of algorithms (Galloway 2006). As Huizinga (1970, p.15) states, play is "methectic rather than mimetic". This subversion of "conceived space" through spatial practice of lived spaces is the focal point of my study of spaces in videogames.

In his critique of "functionalism" in modern architecture and urban planning, Lefebvre demonstrates that the representation of this ideology of urban space as it is lived in the material acts of individuals. It symbolises "the imaginary, 'naturally' and normatively separated, relations of individuals to their real, interdependent living conditions" (Prigge 2008, p.53). In Lefebvre's own words, "What is lived and perceived is of secondary importance compared to what is conceived" (1988, cited from Merrifield 2006, p.175). Furthermore, the counteraction against this dominance of "representations of spaces" is the appropriation of the intended use of the space, which will distort the ruling spatial practice and "shatter conceptions of space ... in dreams, in imaginings, in utopias or in science fiction" (Lefebvre, 1991, p.285). This is similar to Debord's approach "détournement" that reuses "the pre-existing artistic elements in a new ensemble" and "a politicised use of irony and pastiche" (Elias, 2010, p.835). Through parodying a seemingly natural reality, the aesthetics of détournement denaturalise the non-reflexive everydayness and expose the alienation and boredom. In addition, this manoeuvre of spaces through aesthetic spatial practices can potentially shift the boundaries between dominant and dominated spaces- thus it is possible to imagine an alternative utopia. This is a realm "where the collective unconscious of functionalized metropolitan daily life can be made accessible to the inhabitants by means of shock experiences in language, images, and cinema. This is to allow inhabitants to set their own ideas of their real conditions of existence that may contradict the dominant ideological representations of these conditions" (Prigge 2008, p.54).

Continuing the discussion on space in videogames, the virtual city is in itself another algorithmic space and thus manifestation of the spectacle. In other words, the virtual city is born a spectacle, a perfection of urban planning and organisation. However, it also potentially provides another playground for a Situationist aesthetic that simulates "will to playful creation" (Debord 1958 cited in Elias, 2010, p.825).

SPATIAL REPRESENTATION AND REALISM

Spatial practices of Hong Kong *Sleeping Dogs* players is particularly captivating subject because of the bizarre situation where Hong Kong players are natives in the real space of Hong Kong but relegated to the position of visitors in the virtual replication of their hometown. Strolling through the luminous geometry of urban cyberspace, gameworld exploration is, put forward by Miller (2008a), similar to a kind of tourism. Schwartz (2006) studied *Shenmue* and *Grand Theft Auto: San Andreas* players in a similar perspective and found that

"realism and detail allow gamers to accept game spaces as 'real' and visit them as tourists. He or she does not only complete the game objectives but also takes in the sights. Clearly, one aspect of engaging with game environments is this virtual tourism...players also spoke of the game environments in terms of visiting exotic locations" (p.315).

One crucial argument one can derive from the study of tourism is that people often do bring perceptions and beliefs to these exotic and recreational spaces. In Craik (1997 cited in Miller 2008b)'s words, "cultural experiences offered by tourism are consumed in terms of prior knowledge, expectations, fantasies, and mythologies generated in the tourist' origin culture rather than by the cultural offerings of the destination". The case of Hong Kong players may appear different since they are in fact native to Hong Kong and quite familiar with the urban geography and culture. In other words, "at home she feels like a tourist" (Wark, 2007, p.162). The juxtaposition of the tourist and the native provides a very peculiar entry point into the virtual world for Hong Kong players. "Like tourism, games are rituals which both differ from and reinforce certain aspects of the structure and the values of everyday life" (Graburn, 1983, p.95 cited Miller 2008b).

Initial intention of the development team was to capture the cityscape as accurate as possible. In the words of the lead producer Dan Sochan (Houlihan, 2012), "we have a few members of the team from Hong Kong and we also did several research...we tried to capture the essence and culture of Hong Kong". In fact, United Front Games hired writers and voice actors who were born and raised in Hong Kong to review all of Cantonese dialogues and details such as billboard in order to make sure the representation of city is "authentic"- a word appeared repeatedly in the interview. However, the forum discussions suggest that Hong Kong players are well aware of the origin of the production of this virtual terrain and many emphasise the representation was from the perspective of foreign expatriates rather than locals. Several of my interviewees remarked that the disposition of different spaces and particular choices of locations and landmarks all reflected the stereotypical images of Hong Kong. It is a challenge, as admitted by developers themselves, to "capture all that (authenticity) as a western developer without trying to play on stereotypes" (Houlihan, 2012).

Since the inception of the development, the inspirations the development team drew on were largely popular and cinematic portrayals of Hong Kong rather than ethnographic data gathered through lived experiences. In my interpretation, the game is not able to avoid the Orientalist lens that strives for "authenticity" in development but apparently romanticises the "Eurocentric prejudices" (Said 1979). Instead of feeling intimate to the landscape, a dozen of participants in the discussion board were frustrated by a number of aspects of the map, particularly, the "incorrect" representation of Hong Kong in their opinions². To begin with, the city map of Sleeping Dogs only includes Hong Kong Island excluding Kowloon and New Territory; however, it also attempts to incorporate locations in Kowloon (for example, Kowloon Market) within the map of Hong Kong Island, which makes the entire cityscape a hybrid territory rather than a realistic re-construction. One interviewee lamented the frequent reappearances of Tin Hau Temple in the main storyline, as it had become a famous tourist spot and considered as clichés by many young locals despites its continuing popularity in festive rituals. He commented, "I think gweilo's perception of Hong Kong still lingers in Bruce Lee's movies. It seems these impressions are never updated ever since".

As demonstrated by the above examples, the pre-existing conceptions of Hong Kong players are brought into direct conflict and negotiation with designers' "conceived space". This discontent also leads to a position of "distant immersion" (Miller, 2008a) — while players are reluctant to fully immerse, they still maintain a viewing position to judge a virtual city as the locals of its original imagery. For this reason, large quantities of forum threads focused on the maps, landscapes, buildings and people (NPCs) to assess the genuinity or quality of the representation. Players' understandings of Hong Kong— its folkloristic and habitual culture— are immediately brought to the virtual city.

Indeed, players are very much concerned with how well the game space mimics real space. However, two interviewees proposed that most players were clearly it missing the point to compare the virtual city to the real one. It is impossible to adopt entire realisticness of the space of Hong Kong in the game. The streets in the virtual space are deliberately made wider and emptier. If the game were to portray the real Hong Kong—the narrow and crowded streets and incessant traffic jams, the gameplay experience would be devastating since one probably spends most of the game time fighting his or her out of the crowds or getting trapped in the car. Furthermore, these discussions brought up the distinction between realistic-ness and realism (these two terms were interchangeably used by many discussants in the forum) by Galloway (2006). Game spaces approximate the real space but they are still "allegories of the real": games "still rely on the deviation from reality in order to make the illusion playable" (Aarseth, 2000). In fact, the more realistic representation of space, the more the space will be detached from gaming rather it is reduced to simulation.

^{2.} Link to the original post: http://www.uwants.com/viewthread.

"Realisticness is yard-stick held up to representation" (Galloway, 2006, p.72) while realism "requires a special congruence between the social reality depicted in the game and social reality known and lived by the player" (p.83). Through experiencing the gamespace, players can then critically reflect upon the trivialities of everyday life.

In my conversions with other players, the topic of minibuses came around several times. Minibuses are 16-seats small vans operating outside the realm of public transport. In contrast to normal buses in Hong Kong, minibuses are less regulated and route-flexible and served as a unique and yet conventional transportation in ordinary lives of locals. Sleeping Dogs includes a plot (part of the main story) where the main character Weishen has to drive a minibus loaded with passengers recklessly in order to compete with a hostile minibus controlled by a rival triad. The appearance of minibuses in the game triggered intimate feelings toward minibuses—the small-scale operations of minibuses in mostly older and poorer districts³, communal and personal connections with other fellow commuters, the prevalence of aggressive driving and evasion of normal traffic rules and routes⁴, which are all integral bits and parts of the "red van" culture in Hong Kong. However, in real life, minibus drivers are excessively hasty simply due to the particular business model rather than triad competition. Minibus drivers' incomes depend on daily earnings of these buses so they have to be hasty in driving and aggressive in getting passengers. This hurriedness of driving is sometimes detrimental to safety of drivers and passengers. Nonetheless, for many locals, this means of transport is incorporated into the hustle and bustle of city life; thus, it represents a unique aspect of Hong Kong urban culture. Indeed, the game's lack of miniature portrayal and practical usage of these minibuses (apart from the plot I discussed earlier) led to many players' demands for more opportunities to ride these buses besides the main means of transportation, which are taxi and carjacking. In this instance, players naturally reflect on congruence between their real life experience of mini buses and in-game experience. This is exactly the "realism" that I attempt to theorise. The demand for minibus in gamespace is motivated by the intimacy to minibuses despites its rude services and the anxieties rooted in the fact that the monopoly of large transportation corporations threatens to take over this private sector that serves the local community. The minibus as a means of transportation represents a vanishing community value in the dominance of the gigantic monopolies that governs almost every aspect of city life including public transport. Minibuses' operation style defies the uniformity of the "conceived space" of public transport monopoly— its faceless service and sole pursuit for profits. This defiance is carried on in the virtual space where players demand to nostalgically re-"live" the chaos of street and triad owned business before the monopoly takeover—when street life was ferocious yet alive. In Fredric Jameson (cited in Galloway 2006, p.74) words, "the artistic devices and technological equipment whereby it captures that truth of the world are explored and stressed and foregrounded, 'realism' will stand unmasked as a mere reality- or realism- effect".

- **3.** Passengers can get off at preferred locations roughly along the route rather than bus stops, which serves as convenient supplementary alternative to fixed routes public buses.
- 4. Minibus drivers often take flexible routes and shortcuts to customisable locations. There is a mandatory legal speed limit of 100km/h due to the ubiquity of reckless driving and a number of fatal traffic accidents. Most of time, this legal restriction is ignored by both drivers and customers who prefer to spend minimum time on travelling.



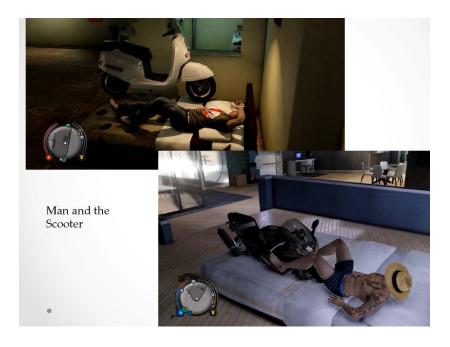
FROM SPATIAL DISCIPLINE TO SUBVERSION OF "CONCEIVED SPACE"

In his early writings on Grand Theft Auto, Frasca (2003) provides a utopian vision of sandbox games, "the environment is a giant laboratory for experimentation, where I could test the system's boundaries and set my own creative goals". In contrast, Chess (2005) provides a Foucauldian interpretation of the space in Grand Theft Auto: "Space...as a means of both disciplining and controlling a player, as well as a system of rewarding his acumen" (Chess, 2005, p.82). This type of spatial discipline also persists in the design of Sleeping Dogs although in different forms. Progression in the game primarily depends on effectively negotiating and memorising the virtual terrain. Player develops a sense of direction through practicing navigation in an ever-brocading territory during questing or simply wandering/cruising. There are locked boxes and health shrines scattered in various locations in the city. Unlocking these boxes will reward the player bonus money and praying at newly found health shrines will increase the avatar's maximum health. The process of looking for these upgrades compels the players to travel around the city including areas where main quests do not take place. Moreover, players' desires and pleasures in the Sleeping dogs are predominately manufactured by the developers in an algorithmic manner- the artificial need for physical strength, social reputation (which is measured by a "face meter"), and financial management.

In Chess (2005)'s words, this "spectacle" of gamespace "ultimately helps to reinforce the player's encapsulation within the game". In other words, the gamespace internalises disciplinary rules and submissive mindsets. Similarly, in Lefebvre's terms, these spaces of urban planning and traffic rules are grounded in rationality and institutional knowledge, detached from lived practices. However, this "conceived space" or the intended use of the space does not necessarily coincide with the entirety of users' experiences. In the case of Hong Kong players, the situation is in fact quite peculiar because the virtual city is

supposed to resemble the traffic rules of Hong Kong in a realistic manner: that is, players drive on the left. However, this seemingly accommodating design in practice turned out to be a disorientating hindrance for many local Hong Kong players. Due to highly developed public traffic as well as fairly limited and expensive parking spaces, few of the interviewed gamers drove in real life but they did so very often in digital games such as in driving simulators or racing games, where they mostly drove on the right. As we can see from this example, the developers are only the initiator. The result of the gameplay on the end of the player is not necessarily what the developer originally intended- but rather a result of the interactions between the dynamic (non-static) algorithms, which is deeply situated in the local condition, and infrastructure provided by the developers.

The primacy of "conceived space" over the "lived space" and the condition of "silence of users" will not necessarily always persist; playful distractions can invert the situation. These are activities or interactions in game spaces where players can establish their own goals that oppose instrumentality or immediate usability of actions in the main game algorithm. Instead of striving for upgrades, levels, or better vehicles, players can pursue self-defined goals and exploit the space outside it intended uses. These experimentations of space and alternative narrative sometimes lead to surprises exposing options that are even beyond the spatial liberties provided. Even given a defined set of parameters, the players can manipulate spatial elements in order to achieve a goal that may be great enjoyment. For example, all the apartments available for the avatar in *Sleeping Dogs* are above the ground floor and there are usually parking spaces near the residence. However, some players are determined to drive their scooters into their rooms, which is no straightforward task since they have to ride up stairs and fit through the tiny front door.



The player has a central role to play in the production of gamespace. The main process takes place in the player, which can be directed by "conceived space" through repetitive training of navigation and mastery of algorithm. However, spatial or narrative elements provided by the algorithm not only help deciphering the designed events and space, but also prepares the contexts and tools that can be taken in control by the players to create meaningful space and experiences. Murray remarked (2005), "by learning how to effectively navigate a simulated body within this manifestation, the quality of place comes to life" (p.92). Electronic games are living spaces where condition of non-reflexive alienation can be inverted through active disruption of the functionalist mathematical algorithms and this inversion occurs in the space of representation—the living practice of players.

THE GROTESQUE VIRTUAL BODY

Lefebvre's spatial analysis is a process of practice, or "lived experiences" that situates the body in the space (Nunes, 2006, p.xxv). At the centre of his theory, human beings are "in their corporeality and sensuousness, with their sensitivity and imagination, their thinking and their ideologies; human beings who enter into relationships with each other through their activity and practice" (p.29). Thus it is possible to situate the avatar body in the gamespace. Chess (2005) describes the effect of the management of the avatar body on players of *Grand Theft Auto*: "this use of discipline where players must memorize and master game controls for each game essentially produces Foucault's 'docile bodies'" (p.9). In other words, through repetitive exercises, gamers master the control system with speed and dexterity; at the time, the operator's subjectivity is completely submitted to machine.

In *Sleeping Dogs*, we can observe similar patterns of disciplinary complex. Initially the player is only an apprentice of the avatar. As the game progresses, the player builds up skills through constant exercises and purchases of upgrades. Furthermore, players are responsible for a simulated body that needs exercise (in the form of Kung Fu), food, clothing and even defecation. The game employs a quantified face point system that can be gained from quests and the level of your "face" determines what outfits and accessories the avatar can wear. High face level unlocks luxurious suits, designer sunglasses and leather shoes; low face level characters are only eligible for T-shirts, jeans and snickers. Expensively clothed avatar can also automatically "captivate" females at nightclubs (otherwise, no one will even notice you are dancing). However, players are not necessarily subsumed to algorithmic discipline of the body. As I have shown, the avatar body satirically imitates the social pressures originated from the obsession over superficial appearances and materialism deeply rooted in Hong Kong city life. In the course of everyday life in the gameworld, the avatar becomes "a caricature through players' interpretative intervention" (Miller, 2008, p.273). Through this body, players participate in a series of performances of masculinity, racial stereotypes and metropolitan lifestyle.

The body seeks "naked immediacy of experience as it is felt from within the utmost particularities of a specific life" (Bakhtin,1993, p.10). The shocking performance in language and images mobilises the inhabitants to reflect upon their functionalised metropolitan daily life and non-reflective mundaneness. For instance, one of the most discussed portions of the *Sleeping Dogs* is the incorporation of Cantonese oral traditions in the game⁵.

Many local players were originally excited about the Cantonese speaking aspect, particularly the profanity. The ambience and the soundtracks were at the centre of the discussion: celebrity voice acting, the surrounding environment, the street noise, the engine, random conversations on the street, traffic lights, convenience stores, radios and vociferous citygoers. The game embeds a special feature: when the avatar physically contacts ordinary pedestrians or drivers on the streets either by car or direct body contact, they will respond in Cantonese offensive swearing. In order to document these various profanities and exhaust all the possibilities recorded in the game, some went so far to spend many hours strolling in the city and harassing random (NPC) pedestrians⁶. This episode entails a perfect example of "playful constructive behaviour" (Debord 1958 cited in Elias 2010, p.844) in an urban walking journey.

This virtual body does constitute desires of torturing, beating and cursing and other abusive behaviours. However, we cannot interpret these practices as mindless violence or simply utter profanities but contextualise it. The depictions of urban spaces can function as neutral zones in which to manifest more pervasive urban anxieties around lived situations (Murray 2013). The virtual Hong Kong is the playground to re-experience the "real" differently; evasion of boundaries makes it possible to experiment safely extremely disorienting/ disturbing aspects of modern life. The performative dimensions of these complex worlds provide sites for openended explorations the societies they mirror. In the virtual Hong Kong, the disdainful is the everyday; taboos may still be in force whereas transgression is the main motivation of the game. Dyer-Witheford and De Peuter (2009) opposes this kind "satires" that "takes pleasures in the powerlessness and distress of men" (p.182). However, I argue this playful cynicism can be analytical: in the course of discussion on the game, players also express their concerns about the lack of space and the ubiquitous disciplines in hyperurbanised Hong Kong. After all, this is not same as the open confrontation against alienated spatiality as exemplified by the "Star Pier Saga" (Ng et al, 2010). At least, we realise that any fight against the dominant space originates from the mundane "representational space", the living practices, which, in the case of this study, improvisation and experimentation of gameplay in the virtual space.

^{5.} Link to the original post http://www.uwants.com/viewthread.php?tid=15182197

^{6.} See the video at http:// www.youtube.com/ watch?v=VVHjCAPf5Ns

CONCLUSION: UNREALITY OF HONG KONG

Xu Xi states in the Unwalled City, "the perceived unreality of Hong Kong... (is) heightened by the stock constituents of drugs, oriental sex, and political intrigues, and triads" (p.293). Cultural productions such as cinema have consistently contributed to construct a specialised spectacle of Hong Kong—its violent, chaotic and mysterious legend. This constructed spectacle has now become common perception of visitors of Hong Kong. There is an interesting juxtaposition of the virtual and the real at work in the production of this spectacle. In 2012, Japanese company Square Enix saved United Front Games from its development hell and revamped the original *True Crime* series into a brand new title *Sleeping Dogs*. In 2001, Sega AM2 was in charge of the production of *Shenmue II*, which featured the Walled Kowloon City. In fact, most of remaining visual images of Walled Kowloon City and a map of the interior were documented by a Japanese survey team before its demise in 1994.

Recently, an arcade game centre "digital Kowloon Walled City" was built in Kawasaki to commemorate the dying images of the city. Throughout these instances, one can get a glimpse of the persistent interests and efforts from the Japanese cultural industry in curating and preserving, at least in a digital form, the city of Hong Kong. However, the bizarre reality is that while triad activity, street violence, drug dealing have been mostly absent after the hand-over in 1997, urban anxieties are further intensified and the future appears obscure and uncertain for many Hong Kongers. The city is no longer run by triads and colonists, as depicted in the classic Hong Kong triad movies and *Sleeping Dogs*, but corporate monopolists who manage virtually every aspect of the operations of the city.

The virtual Hong Kong in *Sleeping Dogs* and the level of urban violence may look unrealistic but economic turbulence and political violence take place in reality on a regular basis (Law, 2002). The virtual does not accurately mirror the real but it is simplified and stylised caricature: everything fits into the algorithmic structure. The argument is no longer that games are simulacra but precisely the opposite: "games are the real, emptied of all reality, existing in a permanent state of anticipation". (Galloway, 2007, p.388). Perhaps the point is that games are "not failed representations of the world, but the reverse" (Wark, 2007, p.22). Games are not representations of the real world but allegories of the real. Our everyday life is an imperfect vision of the gamespace. "While digital games lack complexity, everyday life lacks the consistency, fairness and coherence of digital games" (Apperley, 2010, p.22). The virtual thus can provoke a critique of the "unreality" of everyday life.

Gaming subculture provides critical insights into the contemporary landscape of subcultures. Videogame as a medium should be no longer situated in the dichotomy of apocalyptic versus redemptive debate. While acknowledging much of philosophical speculation of videogames as mechanism of control or discipline or "representation of space", we should not be paranoid about a seemingly pessimistic picture; instead, I argue we should look at players'

7. In November 2006, there was a series of massive protests, occupations and violent confrontations against the police in defense of the 48-year-old Star Ferry Pier, which was under imminent threats of being demolished. The pier was considered as an important site of the local folk memories.

lived and mundane practice in the virtual space and their circulated stories about the sense of urban space, spontaneous subjectivities, and grassroots folk culture. If there is to be any real changes, an alternative algorithm of play has to emerge, which requires the central actors, the players, to change. As Miller (2008b, p. 266) indicated, "this gameworld is meaningful place, something with the power to gather lives and things, each with its own space and time, into one arena of common engagement".

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ROB GALLAGHER

Concordia University - Montréal

From camp to kitsch: A queer eye on console fandom

ABSTRACT

Offering a queer perspective on video game fandom, this article considers the factors that fostered a subculture of Western devotees of Japanese video games in the 1990s. Focused on readers of the English publication Sega Saturn Magazine, it shows how, for these players, Japanese games became the basis of a collective identity founded on precisely the kinds of perverse over-attachment, projective identification and hermeneutic ingenuity that Eve Kosofsky Sedgwick identifies with camp. Citing this subculture as an example of how fans transform the texts they put to use, the article also addresses its implications for our understanding of fandom today, at a time when the proliferation of quantitative analysis techniques is transforming the production and consumption of games. Such techniques, I argue, threaten to compromise the contingency and ambiguity on which camp thrives, instead fostering the kinds of cynical calculation Sedgwick associates with kitsch.

KEYWORDS: Fandom, Video games, Queer theory, Camp, Kitsch

Video gaming is often considered a very male hobby, all guns, gore and cheap titillation. It may seem strange, as such, to associate game fandom with camp. If, however, we take Eve Kosofsky Sedgwick's (2003) definition of camp as our benchmark — a definition that foregrounds "startling, juicy displays of excess erudition... passionate, often hilarious antiquarianism; the prodigal production of alternative historiographies; the 'over'-attachment to fragmentary, marginal, waste and leftover products... disorienting juxtapositions of present with past, and popular with high culture" (p.150) — then there are few camper moments in recent pop culture than the sequence in *Castlevania: Symphony of the Night* (1997) wherein Dracula quotes Andre Malraux before metamorphosing into a gigantic, fire-breathing demon. Indeed, the contradictoriness, perversity and excess that Sedgwick identifies with camp abound throughout the game, from that hammily grandiloquent subtitle to the castle's baroque vaults and secret passages to a soundtrack that vacillates between orchestral pomp and squealing rock.

While Symphony of the Night's giddily promiscuous blend of cultural materials and representational registers is striking, it is also fairly typical of Japanese games of this era, and begins to make more sense when we consider the complexion of the 1990s gaming scene. As I will show, this remarkably dynamic period in gaming's history proved conducive to precisely the kinds of projective identification, enthused amateurism and felicitous mistranslation that Sedgwick identifies with camp, fostering a subculture of Western devotees of Japanese video games. Analysing this subculture through the lens of Sedgwick's writing, I hope both to draw out its implications for our understanding of game fandom today and to suggest that — the considerable value of empirical work notwithstanding — game studies might learn much from queer theory's amenability to ambiguity and ambivalence.

Camp itself is of course a highly ambiguous, hotly contested concept. Scholars customarily stress "the problem of defining (camp)" (Bergman, 1993, p.4), its inherent "slipperiness" (Cleto, 1999, p.2), its antipathy to taxonomies and hierarchies (Ludlam, 1992, p.226). Perhaps the best way to understand camp, in fact, is to review the questions that render its definition so problematic. Is camp about objects or attitudes, a style of production or of reception? Is it elitist or inclusive? And, by extension, is it about guileless reverence or a gleeful relativism that dictates "nothing can be taken seriously" (Dyer, 2002, p.145)? Isherwood (1954) differentiates "high" camp, elevated by its "underlying seriousness" (p.110), from a vulgar, parodic low strain — but by admitting straight artists to the camp canon he raises the thorny issue of camp's relation to homosexuality. Can heterosexuals participate in camp, or is it "solely a queer (and/or sometimes gay and lesbian) discourse" (Meyer, 1994, p.1)? Does camp signal complicity with a homophobic mainstream, or does it subvert straight culture from within (Halperin, 1995, p.29)?

Part of the problem is camp's overlap with the equally embattled concept of taste. Gigante (2005) frames the story of European taste as a shift "from neoclassical principles of correctness to feeling as foundation for aesthetics" (p.58), from Hume's belief in sedulously removing "impediments to a correct judgment of taste" (p.55) to today's hypersensory culture, in which Lash (2002) claims "critical distance" is impossible (p.174). Of course, this necessarily simplifies things: the last few decades alone have seen Bourdieu's (1984) reduction of taste to marker of socioeconomic status, social constructivist attacks on the prejudices enshrined in notionally meritocratic canons and, latterly, the emergence of neuroaesthetics (Stafford, 2007). To consider camp is to grapple with similar issues: is camp about cultivating a taste for objects less refined palates would reject as cloying or offensive, or is it about indulging our passion for that which we know to be inferior but enjoy nevertheless?

Sedgwick takes a stand on some of these questions, associating the idea that camp entails "self-hating complicity with the status quo" with paranoid thinking (2003, p.149) and deconstructing the homo/hetero binary in a way that problematizes Meyer's distinction between authentic camp and straight approximations and appropriations thereof (2008, pp.9-10). For the most part, however, she is not interested in resolving camp's productive ambiguities, and nor am I. Instead, I want to show how Sedgwick's conception of camp, with its focus on the uses to which audiences put cultural texts and the attempts of cultural producers to predict and recuperate that usage, can inform our understanding of video game fandom. I begin by sketching some of the factors that fostered a culture of camp game fandom in the 1990s, before zooming in on one of the vectors for this culture's spread: EMAP publishing's Sega Saturn Magazine. Drawing on Hills (2002) and Hebdige (1979, 1988) I show how this publication helped its English audience not just to acquire, play and appreciate Japanese games but to fashion a subcultural identity on this basis. The final part of the article turns to today, proposing that contemporary gaming culture risks shifting away from camp and toward kitsch, a term Sedgwick reserves for cynical and contemptuous modes of production and consumption, concerned not (as camp is) with discovering points of commonality amid difference, but with mocking and exploiting the ostensible credulity and ignorance of others.

LOOKING BACK

The 1990s saw dramatic changes for console gaming. 32- and 64-bit systems facilitated a transition from 2D imagery toward polygonal 3D gameworlds, while the increasing ubiquity of save-game facilities allowed for longer, more complex games. Joypads acquired triggers, screens, analogue sticks and haptic feedback, and the move to cheaper, roomier optical storage formats enabled multimedia spectaculars like Final Fantasy VII (1997), which mingled pre-rendered images with real-time 3D while incorporating full motion video and CD-quality audio. Sony's canny marketing of the PlayStation, meanwhile, helped to diminish gaming's social stigma, attracting a broader, older audience (Newman, 2013, p.57) and letting developers experiment with new genres. The pace of change meant orthodoxies had little time to coalesce, and interdisciplinarity, autodidacticism and improvisation often carried the day. This resulted in software ripe for camp appreciation, as designers' enthusiasms, specialisms and frustrated ambitions manifested themselves in strange indulgences, sly repurposings, and cryptic in-jokes. This is not to suggest the era saw a clean break with gaming's past, however. Here Symphony of the Night is again typical: a hybrid, it built on its 8- and 16-bit predecessors by integrating 3D graphics, cutscenes and high fidelity sound, while borrowing concepts from role-playing games and Super Metroid (1994).

Significantly, this was also a time when Japanese platform holders controlled the Western console market; even into the mid-2000s, console gaming remained an "industry where Japanese products and corporations are the dominant if not hegemonic influence" (Consalvo, 2006, p.119). This period of dominance is part of a wider story whereby Japanese companies, having long aspired to an "odourless" anonymity for their products (Koichi, 2002, p.33), began embracing and trading on the suddenly saleable idea of "Japaneseness" (Allison, 2006, pp.115-6). In the 1990s, however, this shift was still underway, and while localizers were not as intent on deodorizing Japanese games as they had been in the 1980s, many Western players would have been surprised to learn that a blockbuster like Resident Evil (1996) had come from Japan – which only heightened the pleasure for cognoscenti. As this suggests, and as Chan (2007) and Consalvo (2007) insist, games like Symphony of the Night are not expressions of some essential or innate Japanese sensibility but products of a global(ised) imaginary, implicated in complex circuits of influence and exchange.

Of course, these circuits are always subject to "friction" as exchanges "are facilitated, channeled and restricted" by various human and nonhuman actors (Carlson & Corliss, 2011, p.78). There were often large gaps between the Japanese, American and European releases of even the most anticipated games in the 1990s (Newman, 2008, p.156), and many titles were simply considered too Japanese for release in the West (Carlson & Corliss, 2011). With the internet in its infancy, fans were dependent for news of such games on magazine coverage, which, as Newman (2008) notes, spurred some readers to move "beyond lusting over screenshots and... remedy the iniquity of the situation" by importing games themselves (p.157). Running these titles entailed either buying Japanese hardware or else "modify(ing)... consoles, opening them and soldering circuitry to override the technological lockouts" — an operation that voided the warranty and was illegal in some territories (Consalvo, 2006, p.132). With no localizers to "reterritorialize" and "mediate" these games (Carlson & Corliss, 2011, p.72), print publications stepped in to fill the void. Helping readers to select and play import games by way of reviews, guides and translations, magazines also facilitated interpretation and appreciation via articles situating these strange games within a wider culture and history. In so doing they helped to consolidate a subculture characterized by longing, fascination and literal and figurative mistranslation. If, as Sedgwick argues, camp involves projection and productive confusion, desire and decoding, this was fertile camping ground indeed.

SCRIPTING A SUBCULTURE

It's to one of these magazines, Sega Saturn Magazine (hereafter SSM), that I'd like to turn now, considering how it equipped English readers to construct a subcultural identity. As Hills (2002) argues, it is often the case with studies of fandom that "academics' fan experiences (are) implied in their work" rather than being explicitly acknowledged and interrogated (p.22). For him such a step is necessary in order to effect an "opening (of) the 'subjective' and the intimately personal up to the cultural contexts in which it is formed and experienced" (ibid. p.72). With this in mind, I feel beholden both to acknowledge my own experience as a white, British, middle class, Saturn-owning, SSM-reading teenage boy, and to try and contextualize this experience. Viewed this way, my love for the Saturn is revealed to have been shaped by corporate hierarchies, the "glocal" flows of entertainment product, intellectual property law and the peculiarities of particular hardware platforms: my initial desire to buy (or rather, be bought) the console was piqued by Capcom's X-Men: Children of the Atom (1995), a Japanese 2D fighting game featuring characters licensed from the American comics company Marvel. That X-Men was a Saturn exclusive is, in some ways, a result of Sega's failure to anticipate the speed with which 3D gaming would catch on; where the PlayStation was designed for 3D (an inspired but risky decision, as Asakura (2000) explains), as was the Nintendo 64, the Saturn was conceived with 2D titles in mind. This contributed to its comparative failure in the UK, where around 300 games were released for the platform — less than a quarter of the number published in Japan (Satakore, 2013). As domestic releases dwindled, SSM increasingly turned to import coverage, inspiring many UK Saturn owners, myself included, to mod their consoles.

As Newman (2008, p.31) suggests, a key function of console-specific magazines is to fuel so-called "fanboyism": loyalty to one platform and, perhaps as importantly, scorn for its competitors. The phenomenon is understandably common among youths who, bought one console by their parents, are driven to defend their choice as legitimate and autonomous. Thus SSM portrays its audience as a discriminating community of elite players, unjustly marginalized by a mainstream bewitched by Sony's marketing spin; readers are told (of themselves) that "Saturn gamers value playability over graphics and demand the best" while PlayStation owners are content with "vast amounts of middle-of-the-road software" (Leadbetter, 1998, p.38). Key to the communal identity SSM constructs is the ability to acquire and appreciate Japanese titles like Elevator Action Returns — characterized, with distinctly camp hauteur, as "a cultish videogame... not likely to appeal to the masses" ("Review: Elevator Action Returns", 1998, p.69). Also central is a sense of martyrdom, of being unfairly deprived or maligned. Thus while SSM presents import gaming as a way for "game-starved European players" to access "a whole new dimension of gaming" ("Preview: Grandia Digital

Museum", 1998, p.40; "Review: Gun Griffon II", 1998, p.65), it is also shown to be fraught with frustration and risk. Like the subcultural talismans Hebdige (1979) analyses, Japanese games "take on a symbolic dimension, becoming a form of stigmata, tokens of a self-imposed exile" (p.2), as articles foster a sense of solidarity underwritten by hardship: "ever slogged through a Japanese RPG for four hours straight, before accidentally selecting the 'Quit' option...? Ever seen a grown man cry?" asks one preview ("Preview: Dragon Force II", 1998, p.30).

Japan itself assumes a number of contradictory roles and associations. Equating Japaneseness with authenticity, SSM privileges information obtained "straight (from) the source... Japan" ("Preview: Street Fighter Collection 2", 1998, p.30). Sega Europe, by contrast, is presented as inept and untrustworthy (e.g. "Q&A", 1998, p.40). As the place from whence new games come (albeit after an agonizing wait) Japan is also identified with the future; at the same time it is, unlike the novelty-obsessed "West", a place where "classic" genres, from 2D shooters to side-scrolling platformers, can flourish. Reverence for Japan, however, is not incompatible with ridicule. Rather "the weird and wonderful world of Nippon" is treated with a mixture of awe, incredulity and derisive amusement ("Preview: Choro Q", 1998, p.34). Harrison (2008) has argued that Japanese "misuse" of English, despite often striking native speakers as absurd, is in many instances attributable not to error but an aesthetic agenda with its own "internal logic" (pp.144-6); in SSM, however, such "Engrish" constructions are mocked with little consideration of their intended context and effect (e.g. Cutlack, 1998, p.61). The magazine's monthly "... And Finally" section, meanwhile, offers innuendo-laced profiles of games' heroines in which virtual bodies and Japanese sensibilities alike are subjected to prurient scrutiny, cementing a stereotypical identification of Japanese pop culture with perverse sexuality.

It is tempting to read this mixture of captivation and condescension as textbook *Orientalism* (Said, 2003): as was Said, we are dealing with the discursive production of an Oriental "Other" who functions "as a sort of surrogate and even underground self" (p.3). Said, however, is primarily concerned with a body of nineteenth-century Franco-British writing addressing Islamic culture, and has reservations as to the broader applicability of his model (pp.16-18). Consalvo (2007) also cautions against uncritically applying Said's conclusions to video game fandom, arguing that while

"Western interest in Japanese games and the game industry can include a certain element of exoticization... it is also as likely to include understanding, reworking, and identification. For some gamers, Japanese games are a delightful escape from more "normal" Western games.... (and) may be a source of affiliation and identification with a larger group or subculture (2007, p. 740).

Carlson and Corliss (2011) likewise observe that if cultural essentialism is at work when players are drawn to games they consider delightfully Japanese, it is also at work when localizers deem certain games inappropriate for a Western audience; at least in the former case we see a willingness to find ways to engage with and enjoy these objects, to fashion an "identity that resonates with difference" (pp.67, 63).

These accounts are perhaps too ready to assume that subcultural affiliations underwritten by exotic commodities involve meaningful identification. This is a shame, for while it is easy to applaud the refunctioning of mainstream texts by a marginalized audience, the division of power in the case of imported video games is not so straightforwardly asymmetric, and raises some awkward but interesting questions regarding the ethics and dynamics of camp cultural appropriation. One of the virtues of Sedgwick's (2003) account of the camp consumer's desire to "assemble and confer plenitude on an object that will then have resources to offer an inchoate self" (p.149) is that it does not presume the consumer will show respect for the provenance or proper context of the object they fix upon. Instead, it suggests a pragmatic, even self-serving motive; an eye to what that object can do for me, here and now.

For the subculture in question, Japanese video games provided an object capable of supporting various self-fashioning strategies. Of course, the stakes here were lower than for some of the groups Hebdige (1988) analyses, or indeed for those whose performances of camp style put them at risk of violent homophobic reprisal. The model, however, remains similar: cohering on the basis of "emphatically stated taste preferences" (ibid. p.30) this community refunctioned specific commodities as badges of identity and proved capable of acts (albeit small and self-interested ones) of sedition and protest, from petitioning publishers to willfully voiding warranties via mods. Playing Japanese games as an English Saturn owner may not seem as radical a repurposing as, say, a 1970s punk wearing a safety pin as jewelry, but rendering import titles viable still entailed various kinds of effort, from soldering circuit boards to writing guides to the hermeneutic labor involved in interpreting texts intended for a very different audience. It takes numerous actors to fit a game such as Grandia (1997) for camp adoration: its designers, certainly, but also those at Sega who declined to localize the expansive, ingenious game they had made, the importers who capitalized on this decision and the SSM journalists who canonized the title with a speed that speaks, at least in part, to its compatibility with their professional agenda (an exclusive, lauded in Japan and unavailable in Europe, Grandia was also a fanboy-pleasing testament to the Saturn's capabilities, coaxing some spectacular effects from the system's idiosyncratic architecture). Indeed, for proof that texts and commodities accrete meanings as they circulate one need only point to the way Grandia's plot — which follows a globe-trotting band of adolescent treasure hunters — now serves as an allegory for the activities

1. Where translation attempts to account for linguistic differences, localization addresses cultural ones, adapting "images, animations, and overall design aesthetics, game mechanics and interface, narrative, and even button mapping" to fit different territories' standards and sensibilities (or the localizers' conceptions thereof) (Carlson & Corlis, 2011, p.64).

of the subculture that embraced it, colonial resonances and all. For players such as myself, dependent on guides like that published across multiple issues of *SSM*, it was less *Grandia*'s (near incomprehensible) narrative than its utility as a vehicle for speculation and projection that proved endearing.

If Grandia was a text this community of players cherished, we can learn just as much from what they rejected. United in its hostility to other gaming platforms, publishers' licensing policies and Western canons of taste, perhaps most striking is this subculture's disregard for conventional notions of maturity and masculinity; as games were beginning to adopt the aesthetic of self-serious cinematic realism still prevalent today, these players sought refuge in a foreign, florid, juvenile universe of skyscraping robots, androgynous vampires and laser-spitting dragons, while aligning themselves with some unexpectedly queer archetypes (epicure, scholar, martyr). As Litvak (1997) argues, camp connoisseurship has always entailed an ability to find things simultaneously tacky and ravishing, an appreciation for the piquancy and pungency of "gamier" cultural dishes (pp.82-3). His metaphor is felicitously appropriate for this subculture's celebration of defiantly "gamey" video games, which might be seen to presage the "indie" scene's championing of abstract and putatively outmoded styles in recent years. Nor is this the only respect in which it invites us to reconsider today's gaming landscape. For, as I will suggest in the remainder of the article, the structure of this subculture has interesting implications in an era when game fandom may be drifting toward kitsch.

A KITSCHER FUTURE?

In a recent preview of the Xbox One game *Dead Rising 3*, a Canadian-made sequel to a franchise that originated in Japan, Matulef (2013) sounds an increasingly familiar note of consternation. While conceding that "in many ways *Dead Rising 3* looks like a distinct improvement over its sandbox curio predecessors" he worries that "some of (the series') flavour has been lost in translation", lamenting the loss of a certain "uniquely Japanese campiness".

The fond but patronizing tone echoes *SSM*, but is inflected, here, by a sense that campy Japanese curios may be dying out. If *Symphony of the Night* and *Grandia* reflect circumstances peculiar to the 1990s, then *Dead Rising 3* functions similarly for today. The series' east-to-west development trajectory hints at the Japanese industry's waning influence, a decline dateable to Sega's exit from the console market and the subsequent launch of Microsoft's Xbox, which was succeeded by the Xbox 360 in 2005 and the Xbox One in 2013. A success in North America and Europe, the 360 performed feebly in Japan, where few players enjoy the sorts of US-made shooters with which the platform has become synonymous. As a result, Microsoft has classed Japan among the "tier two" countries that will have to wait until some as yet undetermined point in 2014 to receive the Xbox One (Davies, 2013).

Like its direct rival, Sony's PlayStation 4, the One is a PC-like system, a departure from the tradition of consoles constructed from bespoke components with their own idiosyncrasies. Based on the established X86 standard, these new systems allow developers to continue using familiar tools and methodologies, an important concern given the logistical challenges and financial risks game development entails today (Newman, 2013, p.38).

Considering Dead Rising 3, various ways of framing a shift toward kitsch suggest themselves. One might discuss genre, technology, graphical vocabularies, economics, national character or auteur creativity. I want, however, to take a different approach, drawing on Sedgwick's (2008) account of the dynamics of "kitsch-attribution". For Sedgwick, kitsch(ing) entails an attributor contemptuously imagining a less discerning consumer, capable of appreciating the kitsch (or kitsched) object guilelessly (p.156). Kitsch, in other words, is that which we judge ourselves to be above, but which we can imagine other "unenlightened" people enjoying (p.155). If cynical, corner-cutting game publishers are guilty of kitsching, then, so too are those fans, critics and developers who partake in the sort of snobbery Sedgwick describes, disparaging the contemporary by comparison with the putatively classic in a fashion consistent with hipster culture's celebration of the "authenticity" of bygone forms and styles (Kinzey, 2012, pp.76-77)². For Sedgwick (2008), such judgments are always suspicious, bespeaking a perceived susceptibility to being "kitsched" oneself (p.153) — a point Hills (2002) echoes in observing that scholars' discussions of fandom are wont to lapse into bids to shore up a particular self-image (pp.73-77). Who am I, after all, to declare Grandia gloriously camp and Call of Duty: Ghosts (2013) merely kitsch? If, as Dyer (2002) affirms, camp is about "how you respond to things" as much as "qualities actually inherent in those things" (p.52) this judgment is open to question, and my vested interests (from cultural capital to potentially saleable games and magazines) only render it more so. Fortunately, Sedgwick hints at a more productive and inclusive approach to discussing kitsch: shifting the onus away from texts per se and onto the forecasting and "cynical manipulation" of consumer taste (2008, p.155), she suggests the importance of taking modes of monitoring and modeling audience behavior into account.

This approach has particular relevance for games. For while other phenomena, from downloadable content to gestural interfaces, have received more attention, the widespread adoption of quantitative analytics has had a considerable impact on the direction of the industry in recent years. It is now comparatively easy to telemetrically monitor what, when, how and with whom we play, and such information is increasingly important in determining how games are balanced, regulated and monetized (Bramwell, 2012), much to the chagrin of developers who fear for their creative autonomy (Hurley, 2012; Whitson, 2012). To be sure, online spaces for fan commentary and critique have also multiplied — and, as BioWare's alteration

2. Kinzey (2012) in fact draws parallels between hipsterdom and camp as portrayed in Sontag's seminal 1964 essay (pp.94, 96); Sedgwick would probably identify the phenomena he highlights with kitsch rather than camp however.

of *Mass Effect 3*'s (2012) ending demonstrates, developers monitor these channels too. As Kerr (2011) suggests, however, publishers tend to set more store by the vast amounts of "implicitly gathered data" collected without players' conscious participation (p.29).

This is in part because telemetric data collection, like the forms of biometric research with which it is increasingly supplemented, claims to eliminate the distortion presented by more explicit modes of player research, which for McAllister (2012) are hamstrung by the fact that players "often lie", whether "to please the person asking them" or because "they've fabricated something in their mind, perhaps, or they've remembered it differently". McAllister's comment foregrounds the fact that these systems are, in a sense, directed toward the same questions as camp: they grapple with the difference between acquired and innate preference, pose and practice, private and public, the visceral and the intellectual, authorial intention and audience reception. The crucial difference, though, is that quantitative analysis often dismisses as distorting the very things camp revels in — reflexivity, performance, mediation, ambiguity, irony.

As we have seen, camp fandom thrives on noisy and attenuated channels of (mis)information. It is a speculative, projective, messy process, involving happy accidents and chance discoveries, dependent upon imperfect correspondences between consumers, producers and objects. As Sedgwick (2008) puts it, camp asks "what if: What if the right audience for this were exactly me?" (p.156, emphasis original). Such was true of the fans I have discussed, who evolved strategies for appreciating texts never intended for them. Metrical analysis, by contrast, too often aims to eliminate noise, creating ever-closer couplings of demand and supply, expectation and experience, stimulus and response. In the process potentially rich objects (which richness is neither wholly inherent nor wholly granted, but emerges from the encounter between object and audience (Sedgwick, 2003, p.149)) risk being kitsched, stripped of anything that might alienate or confuse their projected audience. That the "ever closing feedback loop of game design" (p.316) initiated by such systems creates opportunities for exploitation is amply demonstrated by Schüll's (2012) discussion of the gambling industry; perhaps equally worrying is the prospect of metrics pushing even wellintentioned designers toward results that are easily quantifiable and reproducible, compromising the ingenuity and vitality key to gaming's camp appeal.

But I am in danger, here, of indulging the paranoid tendencies to which, for Sedgwick (2008), camp provides a corrective (pp.147-9). The present is not so bleak as I have perhaps made it seem, nor was the past so rosy. It is neither possible nor desirable to recreate the conditions that nurtured a camp subculture among 1990s console gamers, based as that culture was on technological limitations, underdeveloped channels of communication and distribution and the problematic fetishization of reified notions of

Japaneseness. Equally, the trajectory from camp to kitsch that my title proposes is too reductive. If that title is framed as a question, it is because I intend not merely to leave my proposition open to dispute, but to highlight the pernicious appeal of such binarized thinking, underwritten as it tends to be by uninterrogated assumptions and attachments. For if new technologies facilitate kitsching, they also have other uses. Independent games are thriving thanks to online promotion and distribution platforms, middleware technologies are enabling amateurs to code innovative, personal games, and while player research can have a normative effect it can also testify to the complexity and variety of gameplay experience (Lindley & Nacke, 2009). Looking back at bygone gaming subcultures, in short, need not make us too nostalgic —but it should remind us of the importance of providing spaces for new, queer forms of play to flourish.

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THEO PLOTHE American University

"I am a rogue night elf":

Avatars, gaming and *The Big Bang Theory*

ABSTRACT

CBS's *The Big Bang Theory* (*TBBT*) frequently exhibits elements of video games and gaming culture. The author uses subculture theory to consider the representation of video games, gamers, and their avatars within popular culture. This paper investigates the representation of avatars within the characterization of gaming subculture on the *TBBT*. The author performed a content analysis of the program's six seasons, examining the relationship between the show's video game playing characters and their avatars. This investigation found that almost half of the scenes that contained video gaming activities contained some aspect of avatars. *TBBT* reifies gaming as a subculture through the relationship between the characters and their avatars. Examining the representation of these relationships is essential to understanding the representation of the gaming subculture in the mass media and within culture at large.

KEYWORDS: Subculture, Gaming, Avatar, Television, Content analysis.

Television situation comedies have long exploited quirky subcultures for laughs, from Desi Arnez and his rumba beat of *I Love Lucy*, to the greaser gangs of Laverne & Shirley, or even the lascivious libido of Jack on *Will & Grace*. The representation of specific subcultures on broadcast television is important in how they inform mainstream audiences about a particular subculture and reinforce boundaries between mainstream culture and specialized subcultures. The representation of subcultures within mainstream culture is often exaggerated and even stereotyped to reinforce these boundaries, discursively created through the television program. This situation holds true today as television's most popular and profitable sitcom exploits the antics of gamers and gaming culture. CBS's *The Big Bang Theory (TBBT)* is a ratings juggernaut third in the Nielsen ratings during its sixth season with an average of over 19 million viewers tuning in each

week ("Nielsen Ratings"). TBBT frequently exhibits elements of video games and gaming culture.

This paper examines the representation of video game subcultures on *TBBT* through an investigation of player agency and controllable objects (Linderoth, 2005) within the characterization of gaming and gaming culture. Jörgensen (2009) notes that avatars "must be a functional extension of the player into that gameworld both emotionally and by allowing the player direct action into it" (p. 2). Avatars represent the site through which players interact with the gameworld and are indicative of a player's relationship with it.

The author performed a content analysis of the *TBBT*, examining the relationship between the show's video game playing characters and their avatars. *TBBT*'s representation of these relationships is essential to understanding the representation of the gaming subculture in the mass media. This analysis will provide a greater understanding of a particular representation of the gaming subculture within mainstream American popular culture.

THE BIG BANG THEORY

CBS describes the show as follows:

Leonard and Sheldon are brilliant physicists, the kind of "beautiful minds" that understand how the universe works. But none of that genius helps them interact with people, especially women. All this begins to change when a free-spirited beauty named Penny moves in next door. Sheldon, Leonard's roommate, is quite content spending his nights playing Klingon Boggle with their socially dysfunctional friends, fellow CalTech scientists Wolowitz and Koothrappali. However, Leonard sees in Penny a whole new universe of possibilities... including love. (CBS, 2012)

The description is telling in how it reinforces stereotypes of "geeks" and gamers, distinct though not mutually exclusive categories; they are often seen on the show as one and the same. Gamers are seen as male, socially inept, awkward around women, and slightly dumb despite their high intelligence and advanced degrees. This image is often played for comedic effect, using Penny as the audience stand-in against the comedic foil of the boy geniuses. In this series, Penny acts as the mediator for the audience to relate to these highly intelligent but unconventional men, as well as focus point through which the boundary between the gamer subculture and mainstream culture is constructed.

SUBCULTURE THEORY

In Subculture and The Meaning of Style (1979), Dick Hebdidge defines a subculture as a group of like-minded individuals who feel neglected by societal standards and develop a sense of identity different from the dominant one. While Hebdidge and Cohen both studied groups considered to be deviants, their conception of a subculture applies to any number of groups with values different from that of the so-called "mainstream" culture. As Cohen (1972) theorized, subcultures are made up of individuals who resolve issues of their own societal status by promoting values that make their own characteristics status-worthy.

Williams (2011) calls attention to a distinction in Gelder's (2005) definition of a subculture, between groups seen as "non-normative" and groups seen as "marginal" (p. 5). There is a difference between those particular subcultures and those considered simply different from the norm. Williams argues that subcultures today are "often characterized by either perpetuating non-normativity or by temporariness and liminality than by perpetuated marginalization" (p. 5). Copes and Williams (2007) argue that both mainstream cultures and subcultures are dialogically constructed; the boundaries between the two are constantly reconstructed and are not stable. Williams (2011) describes this negotiation as "an ongoing process of (re)classifying certain tastes and behaviors as legitimate or illegitimate" (p.10). For Williams, fan and participatory cultures represent subcultures because members of the group are "grounded in non-normativity" (p. 177) and situate themselves at the boundary between commitment and resistance to mass culture. Lastly, fan cultures are concerned with "the reification of insider authenticity and the guest of subcultural capital" (p. 179). Participation in fan cultures means participating in particular events that offset oneself as part of the mainstream. In his work on fan subcultures, Henry Jenkins (2006a) notes the importance of these groups as innovative creators and "central to how culture operates" (2006b, p. 1) through participation in "grassroots convergence" (2006b, p. 155). The portrayal of gamer culture as part of geek subcultures on TBBT demonstrates the prominence these subcultures within pop culture as a whole.

For the purposes of this paper, TBBT represents a site through which gaming is articulated as a subculture. As Williams (2011) notes, subcultures must constantly define themselves against mainstream culture. TBBT has the tendency to simplify complex subcultures, but it also has the ability to shape public conceptions of games and gamers.

GAMING CULTURE

According to the *PEW Internet and American Life Project*, 53% of American adults play some kind of video games, either on a computer, gaming console, cell phone, or handheld gaming device (Lenhart et al., 2008).

Yet those who avidly play games are often seen as part of a strange subculture, as Shaw (2010) notes, one filled with late-night button-mashing sessions with other players from halfway around the world, completing quests with other socially inept guild members, and suffering from repetitive motion injuries from playing too many Nintendo games and not enough real-life sports, all aspects of gaming portrayed in *TBBT*.

Consalvo (2007) argues that gaming is too large and diverse a world to qualify as a subculture (p. 3). While Shaw (2010) agrees that there are a vast array of both types of players and games, she asserts that video game culture is defined more narrowly, as a subset of users, sometimes described as "serious gamers," who play specific kinds of games: immersive, time-intensive, usually multi-player games that involve an element of violence (p. 404-05). Video game culture, for many, goes beyond the game play itself. Winkler (2006) defines game culture as being "marked by modes of dress, specific linguistic jargon, and a sense of solidarity. Gamers often wear clothing that references specific games, comics, television shows, or movies that are not widely known outside of a small following" (p. 147). These external markers of gaming culture are also prevalent on the television show *TBBT*, which often equates gaming culture with geek culture. This paper argues that *TBBT* reifies these conceptions of gaming subculture Shaw (2010) discusses through its representation of gamer/avatar relationships.

AVATARS

The avatar, the figure that represents the player within a game world, is one of the most studied aspects of video games, as it represents the "the user's representative in a fictional universe," (Filiciack, 2003, p. 89). Navarro (2012) describes it as having "a dual role as a set of mechanics and a protagonist character, thus providing dual embodiment that results in a relation of identification" (p. 63). Studying avatars means studying the nexus of interaction between the player and the game, the central component of the gaming experience that gives meaning to the interaction (Kucklich, 2006). Gamers' conceptions of their avatars, as Waggoner (2009) argues, play a role in their conceptions of the game, their conceptions of themselves, and the importance of the activity of gaming within their everyday lives. For the TBBT, the representation of the relationship between player and avatar is an important aspect of the gaming subculture, as "serious gamers" (Shaw, 2010) have a greater identification with that avatar and the world of game play. As Williams (2011) describes, subcultures constantly redefine their identity against mainstream culture; the relationship between avatar and player is one of the strongest examples of where that distinction happens on TBBT.

METHODOLOGY - RESEARCH QUESTIONS

This study considered the following research questions:

- 1) How does TBBT represent gaming as a subculture?
- 2) How do the characters reify their membership in the gaming subculture through their relationships with their avatars?
- 3) Which of the typological representations was most prominent in the data?

DATA COLLECTION

The author performed a content analysis of the first six seasons of *TBBT*, containing 135 22-minute episodes. Scenes were the operationalized units of measurement.

Episodes on *TBBT* theory are broken into scenes in one of three ways:

1) A simple animated transition of a moving molecule with spinning electrons. 2) A fade-to-black transition that usually signifies a commercial break. 3) a slight change in location. An example might be from Sheldon and Leonard's apartment to a laboratory or office at Cal Tech. The author determined scenes and the number of scenes with the assistance of a fan WordPress website (http://bigbangtrans.wordpress.com) containing transcripts of the show detailing scenes. For example: "Scene: Outside Penny's door. Leonard knocks." This website split scenes according to the three context markers noted above as well.

Any scene in which a character was seen playing a video game, discussing or commenting on a game as it was being played, or referencing a video game or game situation was recorded. Scenes were transcribed using the website, closed captioning, and discourse analysis from the author. Dialogue was transcribed and placed in an Excel file where it was analyzed and coded.

CODING

Coding categories were created; if a particular scene had more than one instance of these parameters, the data was still coded for the one scene and not for each individual instance. This allowed for a more holistic analysis, freeing the author from keyword searches often too small to provide content and large enough to provide context.

During the course of this study, there were 79 scenes within the 135 episodes with video game references for analysis. During coding, the presence of the avatar was noted. In each instance where an avatar was included, the author included this as a binary measurement, yes or no, along with a qualitative measurement of the nature of the representation, as described below.

The author created a typology, with its coding scheme derived from the data, to describe the act or presence of gaming in individual scenes. Creating typologies for motivations and behaviors can be a productive way to describe and code them (Raudenbush, 2012; Green, 2001). Fine (1983), for example, derived different frame categories for the different worlds through which fantasy role players operate.

The qualitative categories used by the author in the present study showed the function of gaming and the nature of its representation within the scene in a utilitarian, easily categorized way. These categories were derived from the data and based on motivations for gaming widely discussed within game studies literature. This analysis examines the representation of the gaming subculture as acting through these categories and avatars are the conduit through which this representation happens.

The four typological representation categories (social, cultural, power, and economic) are described below:

1) – SOCIAL: A driving purpose of video gaming is to socialize with friends. Pena and Hancock (2006) note the important element of sociability in gaming, arguing gamers in collaborative, task-based games communicated more frequently about socioemotional content than task-based content. This category refers to interactions that emphasize the social aspects of gaming, that center around social interactions between the characters on TBBT. For example, in S01:E07, "Halo night" is described as a weekly social event for the four friends:

SHELDON: If we're all through playing mock the flawed technology, can we get on with Halo night? We were supposed to start at eight, it is now 8:06.

LEONARD: So? We'll start now.

SHELDON: Yes, first we have to decide if those lost six minutes will be coming out of game time, bathroom time or the pizza break. As a character, Sheldon is preoccupied with keeping to a schedule in all aspects of his life, but this interaction demonstrates the important social function of gaming within their friend group in that it is a weekly scheduled event.

2) – CULTURAL: This category refers to an interaction that reflects the norms of video game culture. As Winkler (2006) noted, this culture includes not only the act of gaming, but social conventions as well as the out of game marks of identity (pop culture affinities, references to classic games, etc.) common within the culture. For example, in the "The Dumpling Paradox" (S01:E07), Penny plays Halo for the first time with Sheldon, Leonard, and Raj. Sheldon complains that Penny doesn't understand the conventions of the game:

"[EXPLOSION] PENNY: Ha-ha! There goes your head again. SHELDON: Okay, it's not good sportsmanship to shoot somebody who's just respawned. You need to give them a chance to -- Now come on."

The function of this interaction is to demonstrate how Penny has not been enculturated into gaming culture, and her actions violate its norms.

5. See http://www.theesa.com/facts/pdfs/ESA_EF_2011.pdf

3) – POWER: As video games are friendly forms of competition, interactions that involve gaming to demonstrate some kind of prowess are common. Voida, Carpendale & Greenberg (2010) note the importance of "trash talking" in building and maintaining hierarchies among individuals within a game to foster hierarchical divisions or to defend one's space (p. 376). In S01:E15, for example, Leonard, Howard, and Raj fight over the opportunity to ask out Sheldon's sister. Leonard finally announces a competition to settle the debate:

LEONARD: If we're gonna fight over Missy, let's do it the right way. The honorable way. (Time shift. Sheldon enters to hear sounds of fighting. It becomes apparent that the guys are playing Wii Boxing.) HOWARD: Ow! Ow, ow, ow.

LEONARD: Take that. You want some more?

RAJESH: And he's down.

In this example, the winner of the game not only asserts his dominance, but also wins a coveted prize. In his discussion of the avatar, Rehak (2003) describes the ways in which an avatar is a surrogate, and in this case, the Wii Boxing game represents a surrogate for Leonard's impositional will.

4) – ECONOMIC: Economic interactions are those that call attention to the economics of gaming or within the gaming world. Humphreys (2004) argues for attention to not only the ways in which games are commodities, but how players become part of this dynamic as player actions become commodified and players own in-game virtual goods (p. 3). This economic value is best seen in season 4, episode 19 where someone steals the items in Sheldon's World of Warcraft account. Sheldon first calls the police and then laments: "Three thousand hours. Three thousand hours clicking on that mouse, collecting weapons and gold. It's almost as if it was a huge waste of time." In this example, Sheldon reflects on the labor required to acquire those items within the game. Sheldon's actions reflect how valuable these items are within the economy of the game.

Given that scenes often contained several minutes of dialogue and different game references, these categories were multi-categorical. A scene that highlights the social interactions between the characters when playing a video game may also reinforce aspects of gaming culture, for example.

RESULTS

The author found 79 scenes with gaming referents in 39 episodes. Interestingly, only 18 scenes containing gaming references appeared in Seasons 5 and 6. As the show has gained mainstream popularity, the show has tried to appeal to a larger audience, and the niche jokes surrounding gaming culture have decreased. As noted in an interview with *TV Guide*, creator Chuck Lorre has noted the important addition of showrunner Steve

Molaro in focusing on the characters' interpersonal relations, changing from an emphasis on the relationships between the four main male characters to include their significant others as well (Schneider, 2013).

In total, 24 different games were mentioned on *TBBT*. The games referenced range from those with more mass appeal, such as *Tetris*, *Wii Sports*, and *Dance Dance Revolution*, to those considered more central to avid gamers and gaming culture, such as *Halo* and *World of Warcraft*. The program also references vintage games like *Zork*, as well as casual social games like *Words with Friends*. *Halo*, a quintessential representative of gaming subculture, is most frequently mentioned.

DISCUSSION: AVATARS

Using the presence of the avatar as an investigation point, 45.6% of the scenes contained some aspect of avatars. The relationship between the character and his/her avatar shown on the show reifies the portrayal of gaming as a subculture. *TBBT* was rich with these discussions of characters' avatars and their relationship with them. In the very first episode (S01:E01) "Pilot," Howard does not delineate between his and his avatar's identities.

HOWARD: This is one of my favorite places to kick back after a quest, they have a great house ale.

PENNY: Wow, cool tiger.

HOWARD: Yeah, I've had him since level ten. His name is Buttons. Anyway, if you had your own game character we could hang out, maybe go on a quest.

PENNY: Uh, sounds interesting.

After describing game play in the immersive and expansive virtual world of *World of Warcraft (WoW)*, Howard invites Penny to join him online in play. Despite Howard's bravado, he realizes that his best attempt may be online in the virtual world. Howard can use his heavily armored and well-muscled avatar (traits not shared by the diminutive Howard) to impress her. The avatar represents everything Howard wishes he were: tall, athletic, powerful, and of great import, so much so that he owns a giant tiger comically named Buttons. But importantly, he does not separate this virtual identity from his own.

As a gamer, Howard exhibits what *TBBT* represents as a common relationship between gamers and their avatars: "The player has a series of tools to interact with the game: they act as her embodiment with the gameworld and usually coincide with (but are not limited to) the avatar" (Navarro, 2012, p. 63). Navarro's notion of player embodiment is interesting for this inquiry, because it suggests a merging of the players and their avatars. This dual agency is important as well, because it moves the avatar from simple game-control subject, i.e. the spaceship in games like Asteroids or Arkanoid or the arrow shooting elf in Centipede, to something more, an

interactive agent of the player within the immersive gameworld: "The avatar has a dual role as a set of mechanics and a protagonist character, thus providing dual embodiment that results in a relation of identification" (Navarro, 2012, p. 63). By representing this relationship on *TBBT*, the program presents this position as a natural one for gamers and as an essential aspect of the gaming subculture. The program reifies this subculture and gamers themselves through a specific subset of gaming practices, as individuals who play massive multiplayer online role-playing games (MMORPGs) and identify strongly with their avatars, who represent an idealized self.

Another instance of this dual embodiment of the avatar can be seen in Episode 3 of Season 1, "The Fuzzy Boots Corollary." The four main characters are shown executing a raid in WoW, with a rather unsuccessful result as Sheldon betrays the group for his own ends:

LEONARD: Forget the sword, Sheldon, help Raj.

SHELDON: There is no more Sheldon. I am the sword master.

HOWARD: Leonard, look out.

LEONARD: Damn it, man, we're dying here.

SHELDON: Goodbye, peasants.

[WHOOSHING SOUND ON LAPTOPS] LEONARD: The bastard teleported.

RAJESH: He's selling the Sword of Azeroth on eBay.

LEONARD: You betrayed us for money? Who are you?

SHELDON: I'm a rogue night elf. Don't you people read character descriptions? Wait, wait, wait. Somebody just clicked "Buy It Now."

HOWARD: I am the sword master.

Howard, of course, had just purchased the sword on eBay, becoming the sword master. In this scene, Sheldon is seen as an expert gamer, one who has adopted his avatar's persona in detriment of the raid and his friends' virtual lives. When Leonard challenges him regarding his betrayal, Sheldon responds, "I'm a rogue night elf. Don't you people read character descriptions?" Sheldon identifies so strongly with his avatar that his gameplay has changed to better represent the character. This behavior is antithetical to both Sheldon's personality and the typical cooperative style with which he and his friends play. Leonard recognizes the difference and asks, "You betrayed us for money? Who are you?" Within the context of the game and the personality type of his avatar, Sheldon becomes his avatar.

For gameplay to be a series of seamless action of the player and the game, "all player actions therefore are one step removed from gameworld" (Jörgensen in Navarro, 2012, p. 70). It should come as no surprise that in order to represent gaming and gaming culture to viewers possibly unfamiliar with gaming, this relationship between the gamer and avatar needs to be explored, and is shown by TBBT as an essential element of the gaming subculture.

The scene mentioned above also contains all four typological representations. The activity portrayed in the scene features a communal gaming session, where the four friends play *World of Warcraft* together as a social activity (social), yet this is also a competitive activity, as Sheldon obtains the sword and abandons his friends, only to have the sword taken by Howard (power). The scene represents elements of gaming culture, in portraying a collaborative mission within a role-playing game stereotypical of gamer culture as Shaw (2010) defines it (cultural). In this scene, Sheldon also acts against in-game social conventions in abandoning his partners, which represents social norms within gaming culture. Lastly, the scene represents economic aspects of gaming in how Sheldon capitalizes on his winnings and monetizes them by selling a virtual, in-game object on eBay, showing the overlap between in-game and real life economies.

TYPOLOGICAL REPRESENTATIONS

Of the typological categories of gaming presented, cultural was most often connected to avatar representations, demonstrating the importance of avatars in portraying the gaming subculture. Avatars were often present in scenes featuring the representation of power; TBBT often shows gaming as an active and competitive enterprise, what better way to display this competition but through the use of avatars.

Many of the references to economics of gaming within the series were also related to gaming culture, best shown through "The Zarnecki Incursion," (Season 4, Episode 19) when Sheldon's WoW account is hacked, and all of his possessions within the game are stolen. Howard and Raj try to help Sheldon track down his items within the gameworld, and Howard believes to have found some of Sheldon's items: "Whoa, somebody's auctioning off a jeweled ostrich bridle." Sheldon replies, "No, Glenn's was leather. He was a simple ostrich. Is. Is. I haven't given up hope." Penny sums up the situation at the end of the scene, "He was robbed of a bunch of imaginary crap that's useful in a make-believe place." Sheldon's attachment to what Penny calls "imaginary crap" both reflects the culture of gamers and the economics and labor through which they operate. Like many representations of gaming on TBBT, this example also discursively constructs a boundary between the gaming subculture and mainstream culture. Penny's comment is presented as a position the audience should also have; this is "imaginary crap" from a "make-believe place," things that non-gamers, i.e., normal people, should not care about.

CONCLUSION

When studying a media representation of a subculture, it is important to understand how the media product represents that subculture, but it is also important to understand how the characters reify their position within the subculture. If we only saw the characters of *TBBT* playing games but never

refer to themselves as gamers or participants within the social norms of the gaming community, this example would be a representation of an activity rather than a subculture. Through the representation of avatars, however, the characters constantly define themselves as gamers. By contrasting the actions and interests of show's four main characters with Penny and therefore, with the audience, TBBT constantly defines the boundary between mainstream culture and this gaming subculture. In providing a mainstream audience with what are portrayed as "typical" gamer experiences, TBBT is an example of a popular view of the gaming subculture strengthened by the reification of the tropes the show promotes.

As Shaw (2010) argues, the popular conception of the gamer is much narrower than the demographics of those who actually play video games, and television programs like *TBBT* help to shape that conception. The depictions of certain relationships between the game player and his/her avatar on the show marks this relationship as part of the subculture, thereby distinguishing it from mainstream culture. As Shaw (2010) argues, these conceptions not only play a role in cultural attitudes about gaming, but can also influence the way academics conceive of and study these relationships. The aspects of gaming portrayed on *TBBT* marks gamers as "geeks," using a subset of games and gamer practices to stand for the increasingly diverse nature of games and those who play them. Programs like *TBBT* reify gaming culture and can shape cultural attitudes about gamers and video games as a whole.

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ISRAEL MÁRQUEZ Universidad Complutense de Madrid

Playing new music with old games:

The chiptune subculture

ABSTRACT

Although video games have been studied from a wide range of perspectives, from film to literature, little attention has been given to the role of music and sound in games. Not only to the role of music and sound within games, but also to the many different forms in which video games are influencing the development of popular music. One of these forms is the so-called "chiptune music". Chiptune (also known as chip music or 8-bit music) is electronic music that uses the microchip-based audio hardware of early home computers and gaming consoles and repurposes it for artistic expression. Chiptune artists reinvent the technology found in old computers such as Commodore 64, Amiga and ZX Spectrum as well as in outdated video game consoles such as Nintendo Game Boy or Mega Drive/Genesis in order to create new music. This paper is an attempt to document the chiptune phenomena and the subculture scene that has been created around it during the last years: a subculture that is resuscitating and redefining old and "dead" gaming devices to play new music at the periphery of mainstream culture.

KEYWORDS: Chiptune, Video games, Popular music, Subculture, Hacking.

"Less is more" Ludwig Mies van der Rohe

INTRODUCTION

Although video games and computer games have been studied from a wide range of perspectives, from film to literature, little attention has been given to the role of music and sound in games. This tendency is part of a wider tradition of ignoring the audio side of audio visual media, as it happens in film and television studies, where music and sound have traditionally received less attention compared with the analysis of moving images. As a result, the study of audio in games remains relatively unexplored and there is a lack of

literature on the topic that makes difficult to discuss the importance of music, sound and even noise for the gaming experience. Something similar happens with the study of the many different ways in which video games and computer games have affected the development of modern popular music, lyrically, technically or aesthetically. Games are a cultural force that look and interact with other media and other cultural trends in novel and creative ways. Games are in complex interaction not only with music but also with art, cinema, literature, comics, and even with everyday objects such as pens, notebooks, posters, socks, caps, T-shirts, etc. Games thus represent a growing sub-program of a much broader and "ever-expanding entertainment supersystem" based on "transmedia intertextuality" (Kinder, 1991, p.1; Gottschalk, 1995).

In the field of music, some of the most famous orchestras around the world have recorded music for video games. Some records companies have begun to use video games to promote their artists. Prestigious electronic musicians such as Aphex Twin have used sound effects and sampled elements of game's soundtracks. Artists and bands of different musical genres have incorporated video game aesthetics in their videoclips, album covers and merchandising. The same is true for more peripheral manifestations such as the chiptune subculture, which is an interesting case because it tells "an alternate narrative about the hardware, software and social practices of personal computing" (Driscoll and Diaz, 2009, p. 52) and how the music, sounds and noises of early games can develop a particular form of subcultural expression. This paper is an attempt to document the chiptune phenomena and the subculture scene that has been created around it: a subculture that has creative, nostalgic, political, and social dimensions, and that is centered around making conspicuous the multimodal aesthetic of old games that seems to be lost in modern devices.

A BRIEF HISTORY OF CHIPTUNES

Chiptune (also known as chiptunes, chip music or 8-bit music) is electronic music that uses the microchip-based audio hardware of early home computers and gaming consoles and repurposes it for artistic expression. Chiptune artists reinvent the technology found in old computers such as Commodore 64, Amiga and ZX Spectrum as well as in outdated video game consoles such as Nintendo Game Boy or Mega Drive/Genesis in order to create new music. The evolution of sound throughout the history of video games has been based on the technological capabilities of the computers or game consoles in which the game are played (McDonald, 2004). As with the visual side, the history of video game music is highlighted by the type of technology available at that time. As a result, we have the 8-bit, 16-bit, 64-bit, and the 128-bit eras. The first video games lacked a sound component, included only a brief theme, a few sound effects or were limited to simple melodies by early sound synthesizer technology.

Chiptune artists embraced the limitations of early computing platforms by experimenting with their chips through practices such as hacking, cracking and reverse-engineering. The Tracking, Cracking and Demo scenes that flourished between the 1980s and the 1990s played a major role in the chiptune development. In 1985, Commodore 64 programmers such as Rob Hubbard and David Whittaker started to explore the musical capabilities of the SID chip in order to produce interesting video game music. In 1987, Karsten Obarski built a tool called The Ultimate Soundtracker for his Amiga A500, which inspired great numbers of nonprogrammers to create computer music in their homes. Cracker groups and members of the Demoscene adopted tools like Soundtracker to compose the background music for their crack intros and demos. Demos were first created by crackers as a signature inserted at the beginning of a cracked programme, a kind of digital graffiti, but soon developed into complex audio visual "demonstrations" where music played an important role. In the 1990s, thanks to the growth of international communication via Fidonet and the Internet, tracker music became independent of their origins as the backgrounds of demos. Musicians and groups released their own collections of tracker music called musicdisks or musicpacks (Driscoll and Diaz, 2009).

In 1998, more specific chiptune labels began to appear, such as micromusic.net, which was also the first online community devoted to chiptune music. The same year the American collective Beige started working on the 8-Bit Construction Set, a vinyl battle record featuring music and software that can be played on Atari or Commodore 64 (Quaranta, 2009). 1998 is also the year in which Oliver Wittchow released *Nanoloop*, the first real-time Game Boy sound editor. It was developed by Wittchow as part of a study project at the University of Fine Arts of Hamburg. He performed the program for the first time in 1998 in a Lo-Fi context in Cologne, which he won.

In 2000, Johan Kotlinski created the program *Little Sound Dj (LSDJ)*, a type of four-track tracker. The basic idea was to transform a Game Boy into a full-fledged music workstation through a cartridge containing tracking software. As Driscoll and Diaz (2009) point out, *LSDJ* "embodies the history of chiptunes in software. It gives composers direct access to the four-voice poliphony of the Game Boy sound architecture" and it also "implements the digital sample playback and a piano roll sequencer introduced in Obarski's Soundtracker" (p. 59). In the early 2000s, *LSDJ* implemented MIDI compatibility and this is one of the features that distinguish the Game Boy community of chiptune artists from those of the tracker era. Although tracker software enabled nonprogrammers to create music with their computers, it remained largely isolated from conventional recording studio technology. By adding a MIDI interface to a game console, a tool like *LSDJ* connects

chiptunes to the traditional electronic music world. Not only do non-programming musicians make music with their game console, they can now integrate the console with their existing studio practice (Driscoll and Diaz, 2009, p. 59). *Nanoloop*, and especially *LSDJ*, gave rise to the emergence of the Game Boy generation. The popular handheld gaming console started to gain prominence among chiptune artists, becoming the most popular (and powerful) symbol of the chiptune community, even today. Domenico Quaranta summarizes the reasons of the Game Boy popularity among chiptune artists in the following interview excerpt:

Accessibility: Gameboys are all over the world, easy to forget in a drawer to rediscover them years later, cheap on eBay etc. History: the first modified cartridges allowing you to play music were for Gameboy. Fashion, success and nostalgia: if you forget everything of your 8-bit infancy, you probably still remember Super Mario and his funny mustache (Márquez, 2011).

BEYOND THE CHIPS: AN APPROACH TO THE CHIPTUNE SUBCULTURE

Since the early days of chip music a whole subculture scene has been created around it. Just like every other subculture (punk, ska, hip hop, rave, etc.), the chiptune scene transcends from just music. It embodies different forms of expression sharing a common theme: a respect and devotion to the old sounds of the 8-bit era and the obsolete game technologies related to them. According to Sarah Thornton (1997a), subcultures are "groups of people that have something in common with each other (i.e. they share a problem, and interest, a practice) which distinguishes them in a significant way from the members of other social groups" (p. 1). What distinguishes the chiptune subculture from other social groups is precisely that its members are centered around a specific era in the history of videogames: the 8-bit era. What is unique about this subculture is its devotion to old forms of gaming devices through the playful exploration of their sound capabilities. As Quaranta (2009) says, while in the Demoscene of the 1980s "coding visuals as well as music were two sides of the same coin, in the chiptune scene of the late 1990s music took the foreground" (p. 23). Therefore, in the chiptune subculture music is the driving force. But the visual side is also important, although it often works at the service of the main activity: music. The chiptune subculture is about people playing music with Game Boys and other retro game devices but it is also about people making visuals for musical performances, designing covers for music albums, flyers and posters for concerts, creating videoclips with a pixelated 8-bit aesthetic, wearing retro gaming inspired clothing, etc. All these elements form the style (Hebdige, 1979) of the chiptune subculture, which allows chiptune members to recognize themselves and to be recognized by others. Style functions, as Gelder (1997) suggests, like the "totem" according to Emile Durkheim, as "something which gives visible expression to an individual's sense of belonging to a group" (p. 373).

International chiptune events such as Blip Festival are the best way to understand the chiptune style. As Bittanti (2009) points out: "if chip music was a purely technological practice, its impact would be minimal, if not irrelevant. The true relevance of chip music lies in the social aspect, that is, in the live performance itself" (p. 34). It is in the chiptune performance at concerts and festivals that we can see all the symbolic elements that take part in this subculture –music, visuals, dress, appearance, language, styles of interaction, rituals, etc. A chiptune event is an interesting flow of 8-bit sounds and images that requires the co-presence of the artist, the technology and the audience. Sebastian Tomczak, alias Little-Scale, talks about the role of performance in the chiptune events:

It's not like a rock band where you can see each person playing each note, so it's much less live in that sense. On a Game Boy, you might have everything pre-written, and then what you're controlling is the structure of the music. Or you might be controlling the effects in real time. So it's sort of a macro performance in some way. I guess one big part of it, which I get the sense of playing live here at Blip Festival, is to get the audience excited. To be dancing or moving on stage is really important (Chang, 2010).

Most of what the audience hears during a typical chiptune set is pre-programmed. So, the chiptune performance is like Djing, "except with original compositions instead of vinyl and 8-bit microprocessors instead of turntables" (Kopstein, 2011). At concerts and festivals, chiptune musicians need to actually perform in order to get the audience excited, just as the Dj does. They are the Djs of the game community, the techno-shamans that guide the audience through game sounds and images, through playful flows of 8-bit aesthetics.



FIGURE 1. Live 2007 12 01 @ The Blip Festival, New York NY US. Photo by Marjorie Becker.

But the most important aspect of these events is that they are unique meetings in which members from this subculture can experiment face-to-face dialogue within the same geographical space. Meeting in a physical place is part of an "intertextual network" that also includes communicate in Internet and sharing music, videos, readings, and other popular materials, as the fan communities studied by Henry Jenkins (1992) do. Chiptune members are also fans. They congregate around specific gaming symbols and meanings that make them unique as a subculture, that is, as a social formation that has developed its game-specific lingo, online and offline. They form a "knowledge community" (Levy, 1997) that shares information about music, videos and games via websites, online forums and face-to-face conversations. Gaming is thus a resource for conversation, social interaction and identity construction. In fact, many chiptune artists and fans identify themselves as "chiptuners", just as other game fans identify themselves as "modders", "LANners" or "hardcore gamers".

If chiptune is a subculture it is because is something different and there is a distinction between this particular social group and the larger culture/ society. As Thornton (1997a) says: "the emphasis is on variance from a larger collectivity who are invariably, but not unproblematically, positioned as normal, average and dominant" (p. 5). Chiptune music works in opposition to the mainstream culture and its trendy products. In fact, the prefix "sub" in "subcultures" ascribes "a lower or secondary rank to the entity it modifies" and "gives us a clue to one of the main assumptions of this tradition of scholarship": that the social groups investigated "are subordinate, subaltern or subterranean", even deviant or debased (Thornton, 1997a, p. 4). In this sense, chiptunes musicians are sometimes qualified as infantilized geeks, nerds or fans, groups that are also seen as deviant or outsiders, whose interests are alien to the realm of "normal" cultural experience and whose mentality is out of touch with reality, as Henry Jenkins (1997) says about the fans. As I already said, chiptune artists are also fans: fans of Game Boys, Commodores, Amiga computers and other old gaming and computer devices. For people outside the subculture chiptune musicians and fans can be interpreted as fanatics with obsessive or weird likings, but for people inside the subculture it is just a particular lifestyle: "an underground sound community, a digital lifestyle platform", as can be read in micromusic.net, the first online community devoted to chiptune music.

LOCAL AND GLOBAL CHIPSOUNDS

The description of micromusic.net as an "underground sound community" and a "digital lifestyle platform" shows the importance of online communications for the development of the chiptune subculture. As Thornton (1997b) suggests: "mediated communication has long been integral to the definition and operation of subcultures" and they can have "a strong sense of unity over vast geographical and social distances" (pp. 473–475).

Since the early days of chiptunes, in the tracker and demo era, groups of people used online communication technologies such as BBS "to trade software, communicate with friendly users, and taunt others" (Driscoll and Diaz, 2009, p. 57). With the rise of the Internet and the World Wide Web, it was possible to communicate more easily with people around the world. The Web made possible for the first time to store images and sounds in a manner accessible to millions and technical information about how to hack gaming platforms and how to create chip music became more accessible. A whole Internet music scene started to grow up around the net, especially with the release of micromusic.net and 8bitpeoples in 1998 and 1999 respectively, the first and most important online communities devoted to chiptune music. In micromusic.net users could upload their own works, to advertise local events and to interact as a global community. 8bitpeoples [Figure 2] is a record label centered in New York City that was founded in 1999 by Jeremiah "Nullsleep" Johnson and Mike "Tangible" Hanlon. It is currently run by Nullsleep and Joshua "Bit Shifter" Davis, two of the most important chiptune international figures.



FIGURE 2 –8bitpeoples. Source: 8bitpeoples.com.

1. Publishing quality music for free and with limited copyright (Creative Commons License, or Copyleft) has been another characteristic of the chiptune scene, firmly embedded in open source culture. Chiptune artists have pioneered new distribution strategies, encouraging the dissemination of their work rather than its systematic protection and taking the counterpoint to the record industry (Weil, 2009).

8bitpeoples is also involved in the organization of the international Blip Festival event series, probably the most important chiptune events in the world. As it can be read in the website:

The 8bitpeoples first came together in 1999 as a collective of artists sharing a common love for classic videogames and an approach to music which reflected this obsession. Our primary interests were to provide quality music for free and most importantly to have fun. In the years since, we have grown in rank and expanded our goals¹.

Indeed, with the explosive growth of international communication thanks to the emergence of the web 2.0 and the development of social networks services such as MySpace, Facebook, Flickr or Youtube, the chiptune audience has grown significantly. The result, as Bittanti (2009) says, is a phenomenon that is both local and global: "Local because these artists still perform in small electronic clubs that dare to be different" (p. 35); and global because thanks to the Internet and the social networks the community is growing in novel and creative ways, taking advantage of the tools provided for the web 2.0 for the production, distribution and reception of this type of music.

HACKING AND PLAYFULNESS IN THE CHIPTUNE SUBCULTURE

The experimentation with old gaming devices and computer platforms that is at the center of the chiptune scene is in close relationship with the hacker culture and its sense of playfulness. There is a passion within the chiptune subculture -especially during its early days- of forcing a limited machine to make unexpected things and create new types of sounds. This is another form of immerse oneself in game culture: exploring the details of gaming devices and how to stretch their sound capabilities.

According to hackers' self-definition, a hacker is a person who enjoys "exploring the details of programmable systems and how to stretch their capabilities", or "one who enjoys the intellectual challenge of creatively overcoming or circumventing limitations" (Raymond, 1996, pp. 233-234). Playfulness is therefore "absolutely central to what hackers do and how they perceive themselves" (Danet, 2001, p. 26). In fact, the origin of the term hack is ludic. It derives from MIT jargon for "prank". A hack is thus a project undertaken or a product "built not solely to fulfill some constructive goal, but with some wild pleasure taken in mere involvement..., to qualify as a hack, the feat must be imbued with innovation, style, and technical virtuosity" (Levy, 1994, p. 23).

Chiptune artists, like the first hackers and the home computer hobbyists to follow, were seeing what the machine would do, interacting with the computer system in a playful and exploratory rather than a goal-directed way. The history of chiptune subculture is thus the history of people modifying and hacking early computer devices and video game consoles in order to explore their sound capabilities and make them full-fledged music workstations. The result is the development of a multi-faceted cultural phenomenon that lies at the intersection of technology, music, art, and politics (Bittanti, 2009) and that tell us an alternate history about personal computing and gaming practices in the digital age.

CHIP MUSIC AS THE NEW PUNK

In November 2003, Malcolm McLaren, former Sex Pistols manager, wrote an article for *Wired Magazine* claiming chiptune music to be the new punk. The article was very controversial among the chiptune community because it was interpreted as a McLaren's effort to create a new hype around what he called "8-bit punk". The result was an open letter from chiptune community member Gareth Morris (2004), aka gwEm, questioning McLaren's statements. Morris and the chiptune community understood the McLaren's portrait as "at least inaccurate, certainly without acknowledgement of the 25 years of chip music history, and possibly even using ideas and concepts taken from us", for example the phrase "Fuck Pro Tools":

In Wired magazine you mention that the phrase "FUCK PRO TOOLS" perfectly described what you'd "been feeling for months". However we wonder if you were aware the phrase 'Fuck Pro Tools' was one original voiced by the founders of micromusic in the Spring of 2000, and one that we still stand by? (Morris, 2004).

While it is true that McLaren was trying to create a new hype around chip music, it is also true that this music shares some of the characteristics of the punk ideology, that is, the group of varied social, aesthetic and political beliefs associated with the punk subculture: DIY (do it yourself) ethics, rebellion, anti-establishment, sincerity, authenticity, etc. For example, in the chiptune subculture we can see a small-scale "do it yourself" world of music recording and distribution, events, concert promotion, festivals, and visual texts such as posters, t-shirts and flyers. Also, chiptune music sounds raw, noisy and subversive, just as early punk music. People not familiar with chiptune music describe it as "noisy" or "unlistenable".

As Laing (1997) points out, this is always one effect of innovation in popular music: "the introduction of material from a discourse outside the mainstream is recognized by many as 'unlistenable" (p. 418). According to this author, the identity of punk as something different "depends in part of its achieving a disquieting impact on listeners whose expectations are framed by mainstream popular music and its values" (p. 419). Punk is not alone here. Chiptune music is another manifestation of this consciousness of "otherness" or difference built at the periphery of the mainstream culture. It is music that has "shock effects" and that, like punk, "involves confronting an audience with unexpected or unfamiliar material which invades and disturbs the discourse to which the audience is attuned" (p. 416), in this case that of the clean, quiet, and unobtrusive modern gaming devices and their bright and pure sounds.

LESS IS MORE: THE POLITICS OF CHIPTUNES

As we can see in the hacker/punk implications pointed above, chiptune artists tend to present themselves as inherently subversive. From the oppositional standpoint they claim, they disregard the latest technological developments, upgrades, sound and 3D graphic cards. Also, they tend to oppose the idea of the "planned obsolescence"², which has proved to be one of the best ways to control and manipulate the masses through technology, especially in the digital age. They prefer old computers and gaming devices to the latest digital audio workstations. "Fuck Pro Tools", as the member of the micromusic online community said.

Dragan Espenschied of Bodenständig 2000, a popular German chiptune band, recognizes this: "There is no secrecy about it, or elitism. It's not about having the latest Pro Tools or whatever. This is what made me first go into this chip music: the do-it-yourself thing" (Van Buskirk, 2007). Chiptune musicians design their own music workstations by modifying and hacking commercial products such as the Game Boy, exploring their details in playful and exploratory ways. In so doing, they shed new life to old and "dead media" (Sterling, 2008) creating new uses, new practices, new aesthetics, and a whole new sound/gaming community.

These practices exemplify Michel de Certeau's (2002) distinction between "strategy" and "tactics". According to this author, governments, corporations and other institutional bodies produce "strategies" to achieve their goals (for example, to produce things like maps to describe the city as a unified whole and transmit the idea of a unified view). By contrast, individuals can go beyond these systems of meaning by using "tactics" that are never fully determined by the strategies of the institutional bodies. De Certeau gives us the example of the walker taking shortcuts in spite of the strategic grid of the streets that appear in the maps. The French author then claim that everyday life works by a process of "poaching" on the territory of others, using already existing rules and products in new ways. That way "consumers" can be "producers" by using "tactics" in novel and unexpected ways, as for example appropriating Game Boys and other obsolete technologies to transform them into useful music workstations. In this sense, chiptune artists are similar to game modders who take the resources which capitalism gives (or more accurately, sells) them and use these creatively, subverting their "intended meanings", making their own games, adaptations or levels or even sometimes for deviants ends, such as illegally "cracking", copying and distributing software (Crawford and Rutter, 2006, p. 160).

Most chiptune artists express an explicit reaction against new technologies and trendy gaming devices such as Wii, Playstation or Kinect. As chiptune artist Nullsleep says: "There's nothing inherent to the Wii

2. It was the American industrial designer Brooks Stevens who in 1954 coined the term "planned obsolescence" to describe the strategy of "instilling in the buyer the desire to own something a little newer, a little better, a little sooner than is necessary" (Adamson, 2003). The term "planned obsolescence" refers thus to the forceful policy of planning or designing a product with a limited useful life, so it will become obsolete, unfashionable or no longer functional after a certain period of time in ways that are designed by the corporation itself.

that you hear it, and it makes you say, 'Oh, this is music from the Wii.' It sounds the same as music you go and buy on CD" (Ryzik, 2007). Chiptune artists are very tied to a particular sound synthesis chip. The Game Boy sound chip, for example, has a very distinctive style that is not possible to find in the sound of modern gaming devices. As Little-Scale points out: "Old video game consoles have got a very unique sound, and each console has its own unique sound because it's got different hardware inside of it that generates the sound, as opposed to modern video games that can play anything" (Chang, 2010).

The same is true for up-to-date audio programs and the newest personal computers. Chiptune production is not about sitting in a modern computer like Apple and pretty much do whatever you want with heaps of tracks and channels provided by programs like Pro Tools or Ableton. Chiptune production is about having limited resources that will force you to work creatively within those limitations, like finding clever ways of getting new sounds out of a system that might not have been heard as much before, or working around limitations. For example, the Game Boy only has four channels, so you can only make four sounds at once. The challenge is how to write music that sounds really full and textually interesting with only those four channels (Chang, 2010).

This is thus a new version of Ludwig Mies van der Rohe's motto "Less is more", that is, to use the simplest and fewest elements to create the maximum effect. "Giant sounds from small machines", as chiptune musician Bit Shifter describes his own work. As he says in its webpage bit.shifter.net:

Bit Shifter explores high-impact, low-res music produced using primitive gear and synthesis as a deliberate aesthetic choice. Adopting a distillation of the less-is-more philosophy, Bit Shifter operates with a standard Nintendo Game Boy as a means of exploring the aesthetics of economy, pushing minimal hardware to its maximum.

The hacker philosophy is very clear here: the goal is to stretch the capabilities of the systems in a ludic and exploratory way; to enjoy the intellectual challenge of creatively overcoming or circumventing limitations, just as the hacker does. However, it is also true that some chiptune producers are using programming tools that can be freely downloaded on the Internet and that do not require such a detailed technical knowledge (Morris, 2004). Modern computers can also play a variety of chiptune formats through the use of emulators and platform-specific plugins. The hacker practice was more common in the beginning, but it remains as a reminder of the politics of appropriation embedded in the hacker philosophy and its ability to disrupt a system of power in unexpected ways. But all chiptune artists play music under some limitations, and the intellectual challenge of creatively overcoming or circumventing those limitations will always be a hacker thing.

CONCLUSIONS

Chiptune music is an interesting cultural phenomenon that has not received significant scholarly attention. This is far from strange if we acknowledge that there is a wider tradition of ignoring the audio side of audio visual media. The case of the chiptune movement is special because it is a mainly musical scene born out of a particular audio visual and interactive medium: video games. It is an interesting case of study because it shows how the music, sounds and noises of early games and gaming devices can develop a particular form of subcultural expression.

The chiptune subculture has grown significantly since the tracker and demo era and there are more and more artists and persons interested in this type of music and the subculture that has been built around it. They form a "knowledge community" (Levy, 1997) where individuals exchange information about music, videos and games via websites, online forums and face-to-face meetings.

What distinguishes the chiptune subculture from other social groups and what makes it an important object of study is that its participants are centered around a specific era in the history of video games: the 8-bit era. It is a movement that is socially constructed through artists' playful congregation around retro-gaming symbols. What is unique about this subculture is its reaction against the latest technological developments and digital workstations and its respect and devotion to old forms of gaming devices through the exploration of their sound capabilities. But as I have shown throughout this paper, although the music is at the center, the visual aspect is also important, as well as the social, political and performative implications.

To study this particular subculture is thus to study a multi-faceted cultural phenomenon that lies at the intersection of technology, music, art, and politics (Bittanti, 2009). It is also to study an interesting and alternate history about personal computing and gaming practices in the digital age: a history about how old, obsolete and "dead" gaming devices can be sources of innovation and creativity in contemporary digital society.

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GABRIEL MENOTTI

Universidade Federal do Espirito Santo

Videorec as gameplay:

Recording playthroughs and video game engagement

ABSTRACT

This paper outlines an alternative genealogy of "non-narrative machinima" by the means of tracing a parallel with different cinematographic genres. It analyses the circuit of production and distribution of such material as a field for modes of superplay, in which users both compete and collaborate. Doing so, it proposes that the recording of playthroughs, a practice seemingly secondary to videogame consumption, might constitute an essential part of its culture and development, creating meaningful interfaces between players and industries.

KEYWORDS: Machinima, Cinema, Appropriation, Superplay, Videogame culture.

INTRODUCTION

The conventions of filmmaking are not entirely strange to videogames, one could presume, given the prevalence of movie genre plots and imaginary among Triple-A franchises. Following the lineage that Lev Manovich traces from cinematographic montage to the digital aesthetics of continuity (2001, p. 143), this kinship would seem operational as well as semiotic. Thus, it should come as no surprise that the very act of filming could take part in the dynamics of playing, as it is demonstrated by the vast culture around recording playthroughs in video. This practice garnished popularity around 2003, due to fictional machinima series such as those produced by the company Rooster Teeth, which promoted it as a quick-and-dirty form of 3D animation. Employing scenes captured from mainstream titles, overdubbed and re-edited, works such as *Red vs Blue* and the discontinued *The Strangerhood* could be reasonably classified as sitcoms. Years later, the genre would reveal a documental vein with the short *French Democracy* (Alex Chan, 2005). Made with the game *The Movies* (Activision, 2005), this puerile

docudrama portrays the uprisings in Parisian banlieus through the eyes of its author, a young immigrant. Thanks to it, machinima also earned some legitimacy within mainstream media: soon after the short's release, a headline in the traditional *The Washington Post* loudly proclaimed "Game Turns Players Into Indie Moviemakers" (Musgrove, 2005).

Nevertheless, before having their place in the cinematographic circuit thus acknowledged, the fundaments of machinima already existed in subcultural gaming practices. In 2005, the production of movies from videogame playthroughs was well established, having started around a decade before - and, ironically, in an eminently documental way. In the article "Highperformance play: the making of machinima," researcher Henry Lowood will find the origins of this genre amidst the culture of speedrunning (2006). In general terms, speedrunning consists in finishing a game (or one of its stages) in the shortest time possible. Already popular among the players of first-person shooters during the 1990s, this practice motivated an extraofficial form of competition. One of the ways the players had to compare their achievements was to record the playthroughs in video and exchange the results with one another. In such videos, produced primarily as a proof of dexterity, there is no "narrative" besides pure gameplay - however, not any kind of gameplay, but a rather skilful one, which Lowood qualifies as high-performance play. Thus, before anyone had even thought about staging a performance in the game to tell a story, the very performance of the game constituted a source of spectacle. The origins of machinima lie in this particular way of playing, attached to a hardcore gaming subculture.

Extrapolating the analogy between videogame and cinema, one could trace a parallel between early machinima and what Tom Gunning has called cinema of attractions: a form of "exhibitionist film" that privileges visual spectacle over storytelling (1990). Constituting the primary mode of spectatorship until 1906, it is a genre particularly characterized by its sensual and psychological impact on the viewers (Gunning, 1990, p. 60).

For Walter Benjamin, the heavy stimuli of these first films helped preparing people to cope with the shocking environment of modern cities (Singer, 1995, p. 94). Similarly, early machinima taught players to navigate and act in the new gamespace: beyond their function as evidence in ability contests, speedruning videos were also watched by the players in order to study each other's performances and improve their own technique (Lowood, 2006, p. 30). Even so, this does not seem to have exhausted the use or poetic appeal of such operations. Nowadays, we got so used to virtual worlds that we have started to appropriate them as stages or backgrounds for representation. The very idea of machinima seems to have developed into forms of virtual puppetry and interactive performance. On the hand, the pure audiovisual recording of videogame playthroughs still exists, giving body to a diverse range of subcultures. In a rhetorical move similar to

Gunning's, we should avoid theorizing speedrunning under the hegemony of narrative machinima, paying attention instead to the different forms it takes nowadays, as an autonomous form.

This paper hopes to demonstrate that the recording of videogame playthroughs pervades many forms of gaming culture. These recordings might constitute a legitimate way of engaging with the game, as well as an intrinsic part of its experience. In that sense, we could evoke the work of James Newman, who proposes that playing videogames is necessarily supplemented by many different forms of playing with videogames (2008, p. 13). Newman departs from the idea that any match, as isolated as it might be, is:

always and already located within a community-authored set of meanings, readings and interpretations and the collective knowledge of players, commentators, critics and fans alike who have contributed to this very public understanding and evaluation of the game through public performances, readings of previews, and reviews, for example (2008, p. 13).

Therefore, Newman states that a videogame cannot be reduced to its mere "formal structure or mechanism," but must be also understood in terms of "what happens to it, what can be made with it, in the playing – how it is made real, transformed, used and abused" (2008, p. 12). That means to say that a videogame acquires meaning and value due to the "inherently social, productive and creative nature" of the different cultures that surround and support it (2008, p. VII). In other words, the context of interactions that go beyond gameplay informs the way videogames are played and watched. As we shall see in the following sections, the video recordings of playthroughs should be considered first and foremost as an element of the discursive and operational networks that result in videogaming. Such recordings are relevant to the medium even when they are not deployed in favour of a seemingly autonomous, creative practice – in other words, even when they do not result in isolated "artworks."

Attentive to this fact, we can further develop the warning made by Lowood, concerning how speculations about the possibilities of machinima substituting traditional cinematographic expedients might obscure its connections to gameplay (2006, p. 26). While evaluating machinima as a mere form of audiovisual production (and a form to be perfected as such), we are already framing this practice within parameters specific to cinema. By doing so, we lose from sight that the very definition of a videogame and of what it means to play are dynamic processes, in continuing iteration. One way of understanding this iteration is by organizing such processes dialectically: on the one side, there is the public that occupies and appropriates the gaming system – on the other, the system itself, incorporating and crystallizing the activity of the public. Based on this

organization, one could highlight the fact that video production, a practice entirely collateral to the gameplay of *DOOM*, instituted by the players themselves in a particular subcultural niche, years later would become the main appeal of a title such as *The Movies*, and therefore central to its gameplay. In that sense, the genealogy of machinima as an audiovisual format or genre could be approached as a rationalization of this normative cycle in an historical narrative. Supplementary to the evolution of videogames, this narrative takes care of its boundaries, causing the impression of a stability that the medium does not have, and in fact never had. Videogame, as a practice as well as a territory, is in continuous transformation.

The transformations of the medium can be perceived more clearly if we address some of the activities instituted through videogaming that still have not acquired complete autonomy, and therefore do not have their genealogy rigidly fixated. Departing from this proposal, I intend to analyse different cultural forms based on the recording of playthroughs – forms that, extrapolating the analogy between machinima and the cinematographic tradition, could be classified as genres of "non-narrative machinima." These activities, instead of subverting the videogame performance in order to build fictional representations, mean to explore it to its full extents. Hence, I will present examples of ways in which video recordings can be employed for the primary engagement with the game; for its critical analysis; and even for its development.

SPEEDRUNNING, RETROGRAMING AND EMULATION

Our investigation can start by following up on Lowood's study and examining the latest advances in the speedrunning scene, progressively mingled with the practices of retrograming and emulation. In his paper, Lowood focuses on that which is considered the inaugural trilogy of machinima: Diary of a Camper, Quake done Quick and Operation Bayshield. As their names suggest, these three pieces are based on the first-person shooter Quake, released in 1996 by id Software. DOOM, the company's previous title, already allowed the players to record their matches as demo movies - videos composed not by real screenshots, but as "scripts that could reproduce the movements and actions of players in the game, thus re-generating the images" (2006, p. 30). Quake upgraded this function by allowing the virtual position of the camera to be different from that of the player, producing third-person perspectives much more appropriate for cinematographic fiction, therefore making it possible for the sheer documentation of gameplay to be turned into a great variety of staged stories (2006, p. 33).

Lowood believes it is important to consider that these seminal projects were made by hardcore gamers that participated of a "technical community" established around Quake. Creating mods such as Capture the Flag, which allowed a new mode of competition, these superusers contributed to the development of the game and of its gameplay in many meaningful ways. In the context of machinima, for instance, Lowood call our attention to the work of Uwe Girlich, who programmed specific editors for demo movies, as well as a script that exported them to standard video formats (such as MPEG), thus amplifying their reach amongst an audience that did not had the original game (2006, p. 32-33). Id Software, far for recriminating this sort of practice, encouraged it as "the seed of an ongoing relationship with the player community" (2006, p. 28). In that sense, Lowood localizes the "convergence of filmmaking, animation and game development" (2006, p. 25) as part of a "new cultural economy," within which the user becomes a coproducer of content, and the game exists as "as much a set of design tools as a finished product" (2006, p. 29).

What should be noticed in the consolidation of machinima as an audiovisual genre is the specialization of this aspect of the game as a tool, employed for a sole specific use – that of filmmaking. Upon its specialization, the system frames certain operations according to predetermined functions, inhibiting its free exploration. Therefore, we could say that the difference between playing a game and using it to produce a movie becomes crystallized: from a continuum of possible practices, an almost binary separation of functions arises.

The speedrunning scene, on the other hand, seems to have gone on the contrary direction. In that milieu, what can be noticed is the growth of the production of "films" based on games that are not especially cinematographic. Instead of devoting themselves to the latest tri-dimensional releases, full of possibilities for camera control and image filters, today's speedrunners pay special attention to classic games from the 8- and 16-bit eras, with their flat, low-resolution visuals. This change of focus – which implies in a multiplication of techniques for the détournement of any videogame – can be attested by the history of the websites dedicated to the practice. The Speed Demos Archive, one of the most important ones, created in 1998 after the fusion of two pages dedicated exclusively to *Quake*, from 2004 onwards would accept videos made with any game (Speed Demos Archive, 2010).

This new scope of speedrunning seems to be directly related to the development of emulators, applications that "enable one piece of hardware to manifest the operational and functional behaviours of another" (Newman, 2008, p. 160). Thus, with the appropriate software, any PC

might operate as a virtual gaming console, becoming able to execute the original code of its games recorded in a ROM image file. As a rule of thumb, since the possibilities of emulation are limited by the power of the system to be emulated, it is unlikely to find an application able to deal with the current generation of videogame consoles. Nevertheless, already in 2004, many consumer-level PCs were able to emulate machines such as SuperNES, PlayStation and even some arcades. Complete collections of ROMs could be found in sites such as Romhustler and Romnation, providing players with an almost unrestricted access to the game library of these systems.

As a case of computerized hybridization of media, emulation fosters what Manovich has termed a deep remix of the fundamental techniques and properties of different systems (2013, p. 46). Thus, it allowed old console titles to be played in ways that were so far exclusive to PC gaming, incorporating functions such as saving and loading states in real time; isolating audio channels and image layers; rewinding and fast-forwarding the playthrough; and even recording demo movies from any compatible game. Given that range of possibilities, it seems natural that speedrunners would turn to the 8- and 16-bit classics with an interest beyond the archaeological.

THE TRICKERY BEHIND TOOL-ASSISTED GAME MOVIES

More than the proliferation of speedrunning, emulators provoked their transformation, originating the modality of the tool-assisted game movies. In this genre, the users employ all the resources available in order to play better than it would be humanly possible. According to the website TASvideos,

the emulators we use allow for undoing mistakes, slow-motion gameplay, and even in some cases utilizing robots to do our bidding. [...] Using these tools, we overcome human limitations to complete games with extremely high precision, entertaining our viewers as our players tear through games at seemingly impossible speeds (TASVideos, 2011).

Therefore, the main objective of this modality is to produce infallible performances, whether by exploring bugs in the game code or by programming the joystick controls in advance. Taking the spectacular character of speedrunning to its last consequences, the tool-assisted movies promote this (almost circus-like) division between the performers and the audience – a separation that did not seem to exist in the scene during the 1990s. But this division does not imply in a stiffening of roles; on the contrary, it expresses an amplification of the speedrunning public beyond the players directly involved with it – a growth that follows the multiplication of

platforms employed for the practice beyond one singular title (as it was with *Quake*). Thus, means of interaction are established between a subcultural niche and the more general, mainstream gamer culture.

The quest for perfection is another factor that restricts the autonomy of tool-assisted movies as artworks, challenging a conventional regime of authorship. More than the skills or the style of a particular player, what these recordings mean to show is a performance that is super-human, hence ideal: movements that fit into the game design with the exact precision. Therefore, a video is relevant only while it is the shortest one; when it loses its place in the podium, it is also deprived of its meaning and value. Consistently, the author becomes just a small element in the title of these videos, less important for their identification than their running time. The case of HappyLee's NES *Super Mario Bros* "warped" in 04:57.31, one of the actual "champions" at TASvideos, is exemplar: it assumed this position by overcoming the previous challenger by only one frame.

As the perfect negative of game design, this modality of speedrunning should expose its mechanisms working without any obstructions. It is no coincidence that among the most popular tool-assisted movies there are a number of platformers, such as the many Super Marios, Sonics e Mega Mans: these are titles prized for the highly precise organisation of their levels. The pleasure of watching them being solved in the most efficient way is similar to witnessing the chain reaction of a Rube Goldberg machine, as already demonstrated by hypnotic movie *The Way Things Go* (Peter Fischli & David Weiss, 1987).

Sometimes, the playthrough might be so perfect that the game is not prepared to support it. In such situations, what the tool-assisted movie reveals are the very limits of the gaming system, by the means of absurd visual effects. One example of this happens in NES *Excitebike* (JPN/USA) in 05:29.44 by Thomas Seufert (Lord Tom), based on the classic game of motorbike racing. Without missing any of the track's jumping ramps, the player manages to accumulate so much speed that its biker is thrown outside of the screen – only to immediately return by its bottom, getting into a loop that is repeated several times over the course of the playthrough.

Finally, it is important to foreground two significant differences between tool-assisted movies and traditional speedruns. The first is the fact that tool-assisted movies employ a certain kind of editing. However, it is not conventional cinematographic montage, such as the one used in the manufacture of regular machinimas, but rather a kind of trickery, which is made during the very recording of the playthrough. In that sense, inasmuch they are based on cheating, tool-assisted movies involve a very specific kind of performing skills. In them, one does not only play for the recording, but also through it. The video not only registers the specificities of this kind of gameplay: it makes them exist.

While on the one hand the tricks are performed live (for instance, when the player rewinds a jump that went wrong, or reduces the speed of the game to be able to dodge some bullets), the gameplay of a tool-assisted movie is far from "real time." As it is revealed in TASvideos' page of works in progress, it entails a calculated activity, which might take months to be concluded.

The other distinction refers to the legal status of these practices. While the modding employed in the first speedruns was not only accepted, but even encouraged by a certain commercial model, the emulation and the exchange of ROMs, essential for the tool-assisted movies, are vehemently recriminated by game developers (Newman, 2008, p. 163). The legal information section of Nintendo's website, for example, states that emulation "represents the greatest threat to date to the intellectual property rights of video game developers" (Nintendo, 2011). At the same time, the company offers an official alternative for emulation: Wii's virtual console, which allows the videogame system to run titles from old ones – obviously, without the functions required for the making of tool-assisted movies. In that sense, the practice goes on existing in a completely unauthorized way.

A FORM OF DIRECT CINEMA IN THE LET'S PLAY VIDEOS

Another modality of audiovisual recording to be considered are videos in the let's play (LP) format, which constitute extensive playthroughs of diverse games, captured by the means of screenshot applications such as FRAPS. This genre has first appeared in the videogame forums of the Something Awful website, one of the catalysers of Internet folklore (Janitor, 2010). From there, it has spread all over the web, finding an official repository in the Let's Play Archive – which thus describes the format:

LPs show a videogame being played while the player talks about what he is doing in commentary with video, screenshots or both. Generally the playthroughs are spread over several segments of play (varying in time). Rarely some action is done "off screen" or speeded up to not get too repetitive, but in most cases the playthrough is a complete run of the game including all "Game Overs" and deaths, done in informative or humorous style so as to keep your attention (Let's Play Archive, 2011).

Thus, contrary to the diverse kinds of speedrunning, in the let's play there is no competition. This modality is characterized less by demonstrations of the player's skills than by their humour or by the diversity of titles explored. More than exciting the spectators, the objective of such performances seems to be amusing or teaching them how to play. In that sense, one way of thinking about the let's play is as video walkthroughs: tutorials that "record playing styles, encourage the adoption of new styles of engagement, and perhaps even seek to regulate the way videogames are played" (Newman, 2008, p. 93). Such is the case of the series Achievement Hunter, which could be easily classified under this rubric.

Made by the traditional machinima studio Rooster Teeth, the episodes of Achievement Hunter explain how to get the achievements and trophies of newly released games. Even though the casual voiceover narration of these videos is very characteristic of the let's play format, the efficiency demonstrated by the players/filmmakers is an exception to the rule. Since a great number of let's play videos come from the uninterrupted, almost automatic recording of gameplay, with the narration produced in synchrony to the recording, they normally exhibit considerable disorder. The players spend precious time navigating menus; miss their chances and are forced to try again; lose track of their own explanations. Thus, after having compared tool-assisted movies to a cinema based on trickery, it would be coherent to relate the let's play to a form of direct cinema, which does not avoid documenting the effort and emotions of the filmmaker during its manufacture.

This aspect is throughout evident in the video "Super Mario Brothers – Frustration", in which someone seems to try for the first time a hacked (and extremely difficult) version of this game, without using any kind of cheat. Already in the beginning of the recording, it becomes clear that we will not be seeing the filmmaker simply play, but mostly fail and die at an impressive rate. Each time this happens, the narrator cannot manage to hide his frustration, rampaging and cursing the game. On the other hand, when he finally makes something right, he does not hesitate to celebrate either – only to die again in the following second, and in an even more ridiculous way.

In these circumstances, the game design reveals itself by leaps, in a process of trial and error. Certainly, the main appeal of such slowrunning is not the player's skills, but his reactions, which become a source of amusement. The voiceover narration confirms that he is human – too human –, thus evoking the spectator's sympathy. This feeling of complicity highlights another dimension of the video recording, which the Let's Play Archive describes as "going round to your friend's house after school and watching them run and jump around madly in Sonic 2" (Let's Play Archive, 2011). In other words, the let's play promotes a remediation of those fundamental circumstances, as if it was implementing its characteristics in another medium (Bolter & Grusin, 1999), With this, the genre emphasizes the naturally spectacular character of videogames, reminding us that spectators were always around in many situations of play.

By the means of this analogy, we can identify another function of the recording of playthroughs: sharing discoveries or, to keep our cinematographic metaphor, explore unknown territories. The widely experimental scope of let's play makes it the ideal field to test and get to known obscure games. On YouTube, there are a great number of videos of this genre devoted to games such as *Mighty Jill Off* (Auntie Pixelante,

2008) and *Mondo Medicals* (Cactus, 2007), independent titles that do not get equivalent attention from mainstream media. The rhythm of the genre favours a kind of audiovisual review, which, instead of demonstrating a videogame working, analyses the way in which it works. Therefore, even the initial hesitation of the filmmakers is positive, since it exposes narrative and aesthetic mechanisms that, otherwise, would not be perceived – including interface elements such as menus and game over screens that (for obvious reasons) very rarely appear in speedrunning.

THE DOCUMENTATION OF INTERVENTIONS IN THE UNIVERSE OF MINECRAFT

In the tool-assisted movies, the video recordings become part of the game procedures; with let's play, they are employed to describe or analyse them critically. However, its effects in videogame culture can go even beyond, influencing the very production and development of titles. This can be perceived if we pay attention to how the recording of playthroughs have been used by the players of a game such as *Minecraft* (Mojang, 2011) – and how its original designer, by its turn, reacts to this community.

Originally released only for PC, *Minecraft* is an independent title that, while still in beta version, had already sold more than a million copies (Reilly, 2011). At first glance, it seems to be a very low-resolution first-person shooter. There is no predetermined objective: the game dynamics consists of the sheer exploration of a tri-dimensional world made of colour blocks. During the day, the player is free to collect such blocks, as if they were natural resources that can be used to assemble tools and build constructions. These structures are important so that, during the night, the player can defend himself from the monsters that roam the game universe.

With such minimal background, the game consists of a legitimate example of the sandbox genre, in which the player is free to do whatever he wants – and, apparently, what a great number of them wishes for is to play Lego. Among its adepts, the great appeal of *Minecraft* is the possibility of using the colour blocks as the prime matter for sculptures, creating a sort of tri-dimensional pixel art. The results of this practice are wide and diverse: from simple castles and sprites of 16-bit characters up to literally monumental objects – including the Titanic, the USS Enterprise spaceship, and a complete recreation of the underwater city of Rapture, from the game *Bioshock*. These objects are normally created on private servers, configured to run the game on "creative" mode, which provides the player with an infinite amount of energy and blocks to be used. In this situation, the screenshots and video recordings become a necessary means for sharing the sculptures with the rest of the game community, whether on YouTube or specialized websites such as the Minecraft Museum.

If we were to insist on the analogy between the recordings of playthroughs and different cinematographic genres, we could say that here the video assumes the character of the documentation of in situ interventions, which diffuses them outside their immediate location. But that is not all. Spreading gameplay beyond the game environment, the videos also foster its presence and cultural value. On YouTube, a *Minecraft* trailer made by fans has already achieved two million and a half views. The video that portrays the building of the Enterprise, by its turn, more than eleven million. Therefore, it would not be an exaggeration to say that the recordings also work as advertisements for the game, turning the players into "viral agents" of its commercialization and development.

Hence, we return to a situation in which aspects of "community-based tools and content development" are entrenched in the economic model of the game, as it was in the case of *Quake* (Lowood, 2006, p. 26). In that sense, Markus "Notch" Persson, *Minecraft*'s creator, seems to be much more radical than id Software has ever been. Notch kept himself attentive to the community of players, following their demands and questions in the official forums. Once, he public declared that he does not condemn piracy, and the best way to demotivate this practice is to think of games not as consumable goods, but as services (Notch, 2010).

A final example of how the recording of playthroughs might influence the universe of *Minecraft* in a radical way is the story behind Herobrine, a supposed ghost-user that haunts the videogame. This hoax was created by two players and spread by the means of a video streaming that made it credible. When he was asked on Twitter, Notch admitted that Herobrine was not a real ingame entity, but "it might be soon" – suggesting that the player imagination could be incorporated into one of the game's future updates (Minecraft Wiki, 2011). Even though this possibility had been later denied and readmitted many times, it seems coherent with Minecraft's logic of open development, which entails frequent updates that bring game-changing novelties. The Beta 1.2 version, for example, released in January 2011, introduced the note blocks that play different musical notes when activated. Two days later, the players were already posting on the Internet videos in which they employed this new resource to perform songs such as "Billy Jean" e "Still Alive".

In the light of those mutual appropriations, the recording of playthroughs demonstrates a fundamental importance: more than a quick-and-dirty method to produce short movies, it is one of the ways through which videogame unfurls into a dialogical field. Willing or not, video recordings may propagate very specific practices, playing rhetoric and imaginations beyond their restricted niches, becoming a means of communication between publics that are normally kept separated – different sorts of players, designers, academics, journalists, etc. While inscribing these practices into a wider circuit, the recordings of playthroughs seem to produce a collective, multiple vision of what medium could be, enabling meaningful interactions between subcultures and the videogame mainstream.

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ALISON HARVEY

University of Leicester

Twine's revolution:

Democratization, depoliticization, and the queering of game design

ABSTRACT

This paper considers the *Twine* application's "revolution" in order to assess the consequences and challenges of the democratization of game design for those often marginalized from the mainstream digital games industry. Through a review of Twine as a tool, Twine games and design practices, and the community that has formed around Twine production, I examine the challenges Twine makes to the hegemonic context of digital game production. Through their subversion of assumed norms in game design and distribution, Twine game-makers provide queer alternatives to traditional digital game culture. At the same time, they face a number of significant challenges, including the delegitimization and depoliticization of their work, the co-optation of their labour, and the risks entailed living within alternative, anti-capitalist economies. I conclude with a discussion of the tenuous role of queerness in game design and the responsibilities of games scholars in discussions of gaming on the periphery.

KEYWORDS: Twine, Queer, Indie, Subversion, Capitalism

INTRODUCTION

The focus of the 2013 Game Developer's Conference on inclusion was nearly inevitable after 2012, a year that will go down in game history as the one where harassment, sexism, and misogyny came under the greatest scrutiny across the spectrum of academic, games, and mainstream media venues. Celebratory discourse reigned as many noted the triumph of the move of discussions of oppression, difference, and marginalization from the silo of "women in games" to a broader audience, with many voices tackling "toxic game culture" (Consalvo, 2012).

Interestingly, this emphasis on inclusivity is often linked directly or implicitly to independent games production as a bastion for alternative or experimental modes of operation in games culture. In this way, the attention bestowed upon female-identified game developers, journalists, and academics as they take the stage to talk about intersecting forms of oppression within games production and culture demonstrates in many ways how indie game-making in particular is mapped in opposition to the ideology of the mainstream industry, offering enlightenment in the face of market-based efficiencies.

Research has shown that independent game development, however, is marked by many of the same conditions that govern the precarious cycles of production characterizing big business in games, from crunch time to contract labour to exclusionary cultures that still marginalize many people (Fisher & Harvey, 2012; Harvey & Fisher, 2012). While indie and mainstream game cultures are often positioned as oppositional and at different ends of the spectrum, in terms of working conditions, end products, and types of makers, in many ways they share similar notions of success. And of course, independent games production, and the "indie" label, are only provisionally defined, with its categorization a subject of great debate (Ruffino, 2013).

However, if a great deal of what is called indie development is mobilized as oppositional while still supporting the basic premises of mainstream games culture, there are also significant sites, instances, and moments that serve to challenge not only big industry but also the hegemonic context that shapes it and defines normative understandings of game design processes, outcomes, and successes. Fron, Fullerton, Morie & Pearce (2007) call this the "hegemony of play", a set of conventions that value particular configurations of the production context, technological developments, and play practices at the exclusion of others, resulting in a narrowly constituted power elite of by-and-large white male game-makers and game-players.

In this paper, I consider one such site, the community of *Twine* games production. While Twine as a tool for the creation of interactive fiction has existed for several years, its profile has increased a great deal in recent months, particularly with the visibility of game designer and writer Anna Anthropy and media coverage of the so-called Twine Revolution. I argue that the Twine community, the response to its recent radicalization, and the issues related to democratization and politicization that it provokes make an important challenge to the normative framing of indie and mainstream as totalizing categories. Significantly, this "Twine Revolution" queers the norms of game design, from who does it to what they make to what success looks like. Queerness as a concept here is informed by Halberstam's (2011) work on the counter-hegemonic constructions of success and failure in animation and other "low theory" texts, which she describes as "central to the struggle against

corporate domination... the queer is not represented as a singularity but as part of an assemblage of resistant technologies that include collectivity, imagination, and a kind of situationist commitment to surprise and shock" (p.29). But does this queering offer the promise of providing resistant alternatives to mainstream games and game production (Anthropy, 2012a; Pedercini, 2012, Westecott, 2013), challenging the foundations of the hegemony of play that devalue a range of play forms in its risk-averse attunement to the market? This paper explores that question through a discussion of Twine as a game design tool, a community, a topic of discussion within digital game culture, and a revolution.

TWINE AS DESIGN TOOL AND COMMUNITY

"twine succeeded precisely because of its violence--because it was suited for guerilla warfare--a cheap, disposable weapon of underdogs".

A great deal of Twine's power lies in its multiple axes of accessibility. It is a free to download, open-source tool for the creation of texts that export to HTML, requiring only an Internet connection to share and access. The output of Twine is a file so small that it can be emailed or copied to small capacity storage devices, including a CD-ROM or even a floppy disc. Created by writer and developer Chris Klimas in 2009, Twine can be used on both Windows and Mac systems, as well as Linux with a few modifications to the source code. Aside from its system agnosticism as well as the minimal storage and hardware specifications required to acquire, use and distribute the final products of Twine, it is accessible because of its simple graphical editing tools. Twine's editing interface provides a visual map of the connections and choices the user makes, easily understood error messages for unconnected sections of the text, and the fluid ability to switch between working and published mode and back again, allowing for rapid testing.

Twine was not originally envisioned as a game design tool. In the three video tutorials created by Klimas to help get users started², he consistently refers to the outputs of Twine as "stories" akin to non-linear Choose Your Own Adventure (CYOA) texts, and to those who engage with them as "readers". In many circles Twine is referred to as a system for authoring, a tool for the creation of interactive stories, and a "choose your own adventure-maker" (Bernardi, 2013). Because Twine was not conceptualized as a technology of game-making, assumptions about what these kinds of tools do are not embedded in its structure and paratexts in the same way as other dedicated digital game design programs. Instead, Twine is a program that has been adopted by rather than targeted at digital game-makers, its affordances identified rather than prescribed as useful for the creation of games that often do not resemble those made in suites of programs expressly intended for digital game design.

1. Porpentine (2013, 18 May). twine succeeded precisely because of its violence--because it was suited for guerilla warfare--a cheap, disposable weapon of underdogs [Twitter post]. Retrieved from https://twitter.com/aliendovecote/status/335845879229595648.

2. These videos as well as more information about Twine from Chris Klimas are available at http://

gimcrackd.com/etc/src/.

While Twine has been available online since 2009, many credit game designer and writer Anna Anthropy with the Twine Revolution and the recent surge in attention paid to it (Bernardi, 2013; Ellison, 2013; Keogh, 2013), as she has promoted its ease of use in contrast to the multiple barriers to entry to be found in using other kinds of game design tools, including financial and technical-based exclusions (Anthropy, 2012b). Unlike other kinds of software recommended for first-time game designers such as Stencyl and GameMaker (Quinn, 2013), Twine does not require knowledge of even basic programming concepts such as if-then constructs. Instead, its WYSIWYG (what you see is what you get) interface offers a fairly intuitive entry point into creating linked passages. A bevy of resources made available by prolific Twine designers including Anthropy³ and Porpentine⁴ provide details on more technically complex ways to engage with the affordances of the tool, including CSS and HTML modifications.

These collections of resources indicate the character of the community of those making and sharing Twine games. The message that accompanies these and other repositories of games, techniques, and sources of help and advice is that everyone can make games. Finances, programming skills, or any other material conditions need not act as a barrier. Underlying that universalist position is the argument that the hegemonic identity of the digital game designer⁵ can (and must) be broadened, as demonstrated by the subtitle of Anthropy's book (2012a). By highlighting the multiple facets of Twine's accessibility, those who use and promote it also trouble the fairly rigid distinctions that qualify some as game designers while restricting a great deal of others, particularly those without the economic and technical capital required to engage in 3D game design, for instance. And in never qualifying the end product of Twine development as in any way different from the end product of a large, multinational game design company -- as a game like any other digital game-- these designers provide a subversive lens through which to engage with game design and the identity of "digital game designer".

This subversion becomes particularly evident when we consider the kinds of games being produced using Twine and shared with the Twine community. A central meeting place for Twine game-makers is TwineHub⁶, which was itself created within Twine. This is an important site to consider, as it does more than indicate a community ethos of sharing and supporting other Twine developers. The presumptions about what constitutes a fundamental game design process become clear in the tutorials of many development programs; in the case of several of the above-mentioned tools this includes shooting a projectile from one sprite to, or more accurately, at another. The community *fora* for Stencyl, GameMaker, and other programs for beginners and amateurs demonstrate the prevalence of creating games premised on these activities. Collections of Twine games, such as the TwineHub gallery, on the other hand, evince a different set of preferred affordances.

- **3.** Anthropy's Twine guide is located at http://www.auntiepixelante.com/twine/
- **4.** Porpentine's Twine guide is located at http://aliendovecote.com/?page_id=4047.
- **5.** According to Fron, Fullerton, Morie, and Pearce (2011) this would be a power elite of White and Asian men.
- **6.** TwineHub is located at http://twinehub.weebly.com/, and it provides links to recommended games and stories as well as resources for using Twine.

The character of these games is so novel that many of have taken to using the phrase "personal games" to describe them (Alexander, 2013a; Bernardi, 2013), a label that many game designers seem to have cautiously embraced 7 . The "personal" in personal games refers to both their stories and often individual production. Through this personal perspective, Twine games often challenge many of the dominant norms and values of mainstream game design, from process to mechanics to content. In terms of process, they challenge the notion that games take many years, large teams, and depths of technological prowess to create. To wit, Courtney Stanton, founder of Women in Games Boston, made a new Twine game every single day in December 2012 (Bernardi, 2013). In terms of mechanics, these games tend to work without avatars, artificial intelligence, graphical environments, and in many cases winning conditions, opponents, and engrained game design values such as balance and challenge. Playing even a handful of these games demonstrates the ways in which the content of Twine games diverges from the traditional fare of the mainstream industry. For instance, Rob Simmons' Enough can take under two minutes to play in its entirety. All the pleading emoticons by Finny grapples with the grounds for self-harm while merritt kopas' Conversations with My Mother lets you change the outcome of a familial chat in simple but powerful ways. Anthropy describes a great deal of her work as "smutty", exemplified by Encylopedia Fuckme and the Case of the Vanishing Entrée and Sex Cops of Tickle City. Aside from the personal content of these games, Twine games challenge mainstream standards by subverting the celebration of difficulty, in both production and play, as they are often quick to both make and play. This is significant as the valuation of difficulty has been demonstrated to be highly gendered (Shaw, 2013) and often exclusionary when tied to the valuation of 'hardcore' play (Fron, Fullerton, Morie & Pearce, 2007; Harvey, 2011). In sum, through their radical, experimental, and non-normative development, stories, and mechanics, Twine games offer queer alternatives to the interactive entertainment of the mainstream.

These games are the consequence of Twine's revolution, the queering of the hegemonic culture of game design. This queerness stems from Twine's accessibility, and its resulting use by a wide range of people, including women, genderqueer, and trans* people, poor people, older people, younger people, people of color and first-time game-makers, among others (Anthropy, 2012a, 2012c). Twine queers game design through its inclusion of those typically excluded from the traditional training and education of game-makers; as Anthropy says "twine has become fertile territory for marginalized voices to grow" (2012c). Significantly, this means that most vocal users and proponents of Twine are those who are so rarely found in the mainstream industry spaces of digital game design, raising the visibility of queer and other marginalized game-makers in the process.

7. For instance, there was an entire panel of designers at the April 2013 Different Games conference, including Anthropy, Mattie Brice, Robert Yang, and Haitham Ennasr, discussing the creation of personal games.

Their contributions are their games, certainly, but also their voices, bringing forward a plurality of perspectives not typically found in the mainstream of games culture⁸. However, the response to this Twine revolution and its queering of digital games has been mixed, and provides insights into the power of the contributions of these games and game-makers.

THE LEGITIMACY OF TWINE GAMES

"these creators and their games are still often trapped on the outside. Despite being beautiful works, their games are often dismissed as being too short, too simple, too straightforward or simply not even games at all" (Keogh, 2013)

The use of the word "game" to describe the products of Twine development is contentious. Bernardi (2013) notes that even before Anthropy's evangelization of Twine many "serious" indie developers regarded it with "disdain". The accessibility of this tool means that many people without the various types of capital required to get into game design have done so, which has resulted in the participation and visibility of a number of people from often-marginalized communities. Combined with the frequently queer content of these games, it may come as no surprise that the response to the Twine revolution has been mixed, a reception that resonates with the queering of other media before games, including film and video⁹. For instance, negative responses to the claim that everyone can make games (see for example Adamkiewicz, 2012) tend to be met with a valorization of digital games that are "hard to make", leading to the devaluation of accessibility and ease of use (Houlden, 2012). There have been a number of heated discussions about whether games that do not replicate the values inherent within games culture, such as play difficulty, programming abilities, or high-level graphics, should be called games at all, or classified instead as interactive fiction. Alexander (2013a) sees this rhetorical debate as part of the growing pains of the video game medium, an ideologically-fuelled wrestling match for power by those whose pleasures and pastimes have historically been demonized. kopas (2012) links the desire to police boundaries around games and "not games" to what we have come to expect of games made by a narrow range of producers, a perspective that highlights the wide-reaching implications of the hegemony of play and its power elite of game-makers even beyond the corporate sphere of production. As a result, the response to the queering of game design afforded by Twine has varied.

As noted, positive media coverage of Twine has referred to its rising profile as "The Twine Revolution", a heady label that celebrates a number of powerful concepts, including democratization, inclusivity, openness and diversity. In conjunction with the large-scale, mainstream discussions related to gender-based harassment and exclusion noted in the introduction, it would be

^{8.} See for example Porpentine & kopas (2013) as well as the contributions to re/Action zine at http://www.reactionzine.com/
9. For a review of the marginalization and delegitimization of queer film and video festivals, see the January 2008 issue of GBL: A Journal of Gay and Lesbian Studies

satisfying to say that the industry has reached a turning point and has "woke[n] up" (Hamilton, 2013). This is particularly true given the attention paid to the topics of diversity and inclusion at the Game Developers Conference (GDC) in 2013, a gathering that up until that point had been seen as a culminating celebration befitting an industry plagued by accusations of being exclusionary and conservative. In a 2012 interview, Anthropy described her experience of GDC as a "deliberately sheltered" space (Weiss, 2012). GDC 2013 seemed to be a qualitatively different experience, one not of reversal entirely but with a sense of incipient change. Hamilton (2013) and Alexander (2013b), both games journalism veterans, reflected on this feeling of transformation at this incarnation of GDC. The difference stemmed from the fact that gender, sexuality and race were discussed outside of special interest sessions dedicated to identity politics, and that one of the most enduring tropes of digital games design-- ultraviolent content-- was challenged. It was different that some of the most visible queer game-makers spoke on panels, and had their work cited by other game designers. And difference was implicit in the act of Richard Hofmeier, winner of the Independent Games Festival (IGF) grand prize, spraypainting his booth, replacing his game Cart Life with Porpentine's Twine game Howling Dogs. As Petit (2013) notes, this was a powerful statement about the legitimacy of Twine games, and that "the creative work of a self-identified queer tranarchafeminist like Porpentine should be showcased and engaged with and celebrated just as much as the work of any other creator or the members of any other group". Petit indicates how the identities of these makers matter, as up until then their contributions were frequently excluded and denigrated.

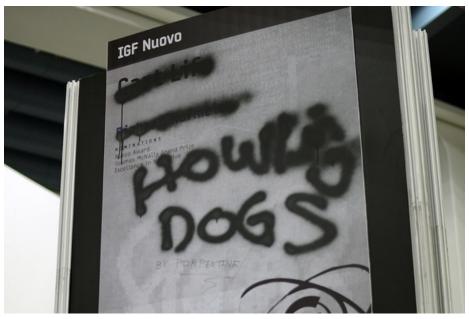


Figure 1 – Retrieved from http://gamechurch.com/ seeking-the-face-of-god-an-interview-with-cart-lifes-richard-hofmeier

This citation and naming is important, because to be queer is still political, and the significance of this naming becomes clear when it does not happen. For instance, Kellee Santiago, an often-cited example of a woman finding success in the mainstream game industry, paraphrased Porpentine's statement about queer women and women of color making games simply as "different and innovative games are being made every day" 10. Santiago's rhetorical maneuver works to soften what are deeply political contributions -- the participation of marginalized people in digital games production. Addressing these gamemakers with industry buzzwords (and political panacea) such as diversity and innovation rather than as women, queer, trans*, of color or feminist, results in the depoliticization of the still-radical nature of their participation. It also demonstrates how the discourses of democratization can allow the industry to co-opt this work, nullifying the subversive challenge Twine and queer game design make to the norms and traditions of the mainstream sphere, which is deeply heteronormative. However, queer game design is a domain that resists co-optation in a number of important ways, which I discuss below.

THE ECONOMIES OF QUEER GAME PRODUCTION

In his opening editorial on indie game studies, Bart Simon (2013) noted the centrality of the context of the production in this type of scholarly analysis, and the importance of considering "the specificities of all games-as-made" (p.3). The milieu of Twine design, and queer game design broadly, not only entails but requires such analysis, since a key component of their challenge to the hegemony of play is how these practices are not only premised on access to the means of production but also fundamentally anti-capitalist and antireproduction tactics. These practices run counter to prevalent independent game design rhetoric (exemplified in Indie Game: The Movie), which sees the activities of do-it-yourself game-making as a means by which to create a "successful" game, defined through a limited set of criteria. Success in this domain is measured according to a set of standardized benchmarks, including popularity, fame and, of course, sales/financial success. Twine games, on the other hand, stand outside these traditional ways of understanding success and undermine its logic, becoming a part of the "assemblage of resistant technologies" that constitute queerness (Halberstam, 2011, p.29).

In *The Queer Art of Failure*, Halberstam considers a range of texts, including animated films, to explore methods of being and knowing that do not conform to status quo ways of defining success, including reproduction and capital accumulation, in order to take apart "the logics of success and failure with which we currently live" (Halberstam, 2011, p.2). While digital games are not part of the book's analysis, in an interview with LeJacq (2012) Halberstam considers the queerness of digital games in general, seeing some resonance there but also limitations given that they are "a straight, white-guy world" characterized by a fear of intimacy.

10. According to daphny (2013, 29 March) "porp said "queer women and women of color are making games every day» [and] santiago quoted "different and innovative games are made every days".

[Twitter post]. Retrieved from https://twitter.com/daphaknee/status/317731302461825024.

In the communities of game-making at the periphery, especially personal games, we might find a better example of how digital games might encapsulate the queer art of failure, in rejecting challenge and thus validations of hegemonic masculinity, as Anthropy notes (Spiro, 2012). Beyond their content, Twine games turn away from the orthodox path of traditional success. They are not produced with the intention of getting into the mainstream industry or even making sales, as many Twine designers see the industry as the problem motivating their work rather than a place to aspire to. Instead Twine games are created for a multiplicity of "unprofitable" reasons and purposes abstracted from either accumulation of capital or reproduction. They resist commodification. And their production occurs through an ecosystem of tactics that provide Twine designers support for their work while still challenging the hegemony of mainstream games production.

Twine game designers operate within an alternative economy of their own making, one characterized by non-normative means of financial support, distribution, and dissemination. Requesting money to play Twine games is rare, and in the case where compensation is sought, it tends to take the form of donations and pay-what-you-can, often with a portion of funds going to relevant charities (see for example Depression Quest 11). A barter or goodwill system is also observable in the frequent collaborations between Twine designers, musicians, artists, and writers. And of course, as in the case of more mainstream independent and even now triple-A or blockbuster titles, crowdfunding via Kickstarter and Indiegogo is a method by which to secure the funds necessary to develop a game. In the case of the queer game developer, however, the use of crowdfunding goes beyond seeking start-up capital, as it has also been used to sustain the distribution and dissemination channels of this sphere of development. Two recent examples are the Indiegogo campaigns for re/Action zine¹² and Imagining Better Futures through Play, part of the Allied Media Conference¹³. Zines, non-industry conferences, and the growing breed of "unconferences" (such as Lost Levels¹⁴) are a counter-hegemonic response to the often hyper-professionalized nature of mainstream digital games events. They have provided venues for Twine designers and other queer game-makers to discuss their work, the milieu of game design, and tactics and strategies for coalition-building, providing a range of perspectives on games that have been typically excluded from the traditional, popular venues. But what fills the gaps in between these events and slightly more formal channels for dialogue is the use of social media to construct a queer game design community. In an interview with Keogh (2013), Twine designer merritt kopas cites the centrality of social networking, including Twitter, tumblr, and personal websites, for the growth of the queer game design community, many of whose members are prolific users of these tools.

^{11.} Payment details available at http://www.depressionquest.com/

^{12.} Campaign can be seen at http://www.indiegogo.com/projects/reaction-2013-fundraiser

^{13.} Campaign can be seen at http://www.indiegogo.com/projects/imagining-better-futures-throughplay

^{14.} Event details can be found at http://www.lostlevels.net/

What these sites and practices indicate is a way for digital game designers who have been excluded from the mainstream system to create, expand, and promote their own economy of production. However, the precarity of these practices, particularly the modes of funding, is striking. They tend to be contingent on goodwill, just enough, temporary measures, a reality that begs the question of sustainability and the livelihoods of these game designers.

MOVING FORWARD

The tactics, techniques, and practices I have discussed above, as well as their contributions, are not unique to Twine production, as Twine is but one example of accessible game design and its plural community of makers. But what I have hoped to indicate through these specific examples in the tenuous relationship between the queering of game design within the broader ideology of game design. Queerness acts as a destabilizing force, challenging norms of who gets to be a producer and what should be made, but it is wrought with the dangers and precarity of this position. Operating beyond hegemonic spheres of production and reproduction entails a number of real risks, and we should be careful not to equate emancipatory promise with poorly paid, insecure work and life below, on, or near the poverty line, dependent on the vicissitudes of crowdfunding. Furthermore, it would be fallacious to conclude that the discussions and developments explored in this paper indicate that the binaries established in digital game culture are crumbling, crushed by the Twine Revolution. While queerness is becoming pervasive in games culture, just as in other areas of heteronormative everyday life it is often effaced, targeted, reappropriated, and depoliticized.

As such, it is important to attend to the communities of practice in digital games that do not fulfill the standardized criteria for laying claim to the territory of the mainstream. When talking about game play, we tend to reify a particular identity that is constructed through a market logic (Shaw, 2013), when perhaps we should be more critical of the criteria one must fulfill when laying claim to an identity within digital game culture, be it gamer or game designer. Shaw posits that the flaw of the normatively defined gamer identity is that it is one constructed through the lens of good consumption and intelligible participation in capitalism. Though Shaw is talking about gameplay activities rather than game-making practices, this is an important rejoinder for those discussing the production of digital games, and how we identify and discuss those who engage in these activities. Game designer is a politicized position to take just as gamer is, and henceforth too little scholarly attention has been paid to those making games outside of the dominant, professional, and industrial context. We need to address what constitutes our dominant construction of game designer and challenge those rubrics in order to understand the subversive and radical contributions of those who do not align with the normative constitution of the producer.

In accounting for these different modes of production and participation, however, we must be careful to not broaden the definition of game-maker to encompass this production, as this could entail further depoliticization of these queer contributions. Instead, let us consider the ways in which these digital games, game-makers, game-making communities, game-making tools, and discussions about games culture highlight the limiting, exclusionary, and violent boundaries around mainstream video games, and the consequences of these borders for people's emotional, physical, economic, and social well-being.

Game-making on the periphery is clearly fraught with significant challenges. Free labour in the digital game industry, from user-generated content to machinima, as well as the recent surge in incubators for first-time game-makers often support capital's reliance on free labour's commodities (Kline, Dyer-Witheford & de Peuter, 2003; Harvey & Fisher, 2013). And yet at the same time capital creates the tools necessary for autonomy and challenge, and potentially the means of exodus from contemporary global capitalism (Dyer-Witheford & de Peuter, 2009). While this in theory is compelling, there are even more basic challenges here, those that are endemic to anti-capitalist practices and being queer in this world- poverty and violence. In the introduction to her game Parasite, Porpentine (2013) asks: "What does it mean to make games when we're unhealthy? When we're under threat of violence? When we're hungry? When we have no money?" These are not hypothetical questions. And the emancipatory possibilities of queer gamemaking do not provide an adequate answer when the sustainability of this life for many of these game-makers is a constant source of fear.

In sum, there is no easy conclusion here. We must be attuned to other kinds of game-makers and the challenge their participation can make, but academic validation is in its own way a conservative, normative frame with which to understand these communities and practices, as we too often reaffirm increasingly depoliticized concepts such as diversity and accessibility in our examinations of the peripheries. The alternative, however, is still unclear. I suggest we open a discussion about this, not just amongst ourselves but with the communities we examine, whoever they are. If they are at the periphery, they likely face similar issues of precarity. What do we as researchers with access to all the privileges of the academic sphere do after identifying these practices, spaces and challenges? What interventions do we undertake? And how do we ensure that in our examinations of marginalized practices, we do not simply reaffirm their marginality or, alternately, attempt to reconcile them with dominant, mainstream activities? Is the question "what can we do?" actually paternalism exemplified?

By way of conclusion, let us return to one key observation. The queering of game design troubles dominant power relations, highlighting their instability through the sheer effort made to depoliticize and co-opt this work. The game is changing, regardless of the blockbuster-fixated, conservative, risk-averse monolithic structure characterizing a great deal of the mainstream industry, whose challengers are often those in the most precarious positions in society. But we must not lose sight of the cost of these contributions.

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HEIKKI TYNI &
OLLI SOTAMAA
University of Tampere

Assembling a game development scene?

Uncovering Finland's largest demo party

ABSTRACT

The study takes look at Assembly, a large-scale LAN and demo party founded in 1992 and organized annually in Helsinki, Finland. Assembly is used as a case study to explore the relationship between computer hobbyism – including gaming, demoscene and other related activities – and professional game development. Drawing from expert interviews, a visitor query and news coverage we ask what kind of functions Assembly has played for the scene in general, and on the formation and fostering of the Finnish game industry in particular. The conceptual contribution of the paper is constructed around the interrelated concepts of scene, technicity and gaming capital.

KEYWORDS: Assembly, Demoscene, Finland, Industry, Scene, Technicity, Capital.

INTRODUCTION

For someone interested in computer games and related hobbyist culture, LAN and demo parties were often the only way to meet like-minded individuals in the early 1990s. Twenty years later, the ubiquity of networked communication has significantly changed both digital gaming and the cultures around it. Nevertheless, the continued existence of local gaming parties indicates that they still hold a particular significance for a notable audience. This article looks at Assembly, a large-scale annual LAN and demo party founded in 1992 and organized annually in Helsinki, Finland. The two decades of Assembly allow us to explicate the appeal of a long-standing gaming event and to explore the larger narratives of continuity and change in the history of Finnish computer game culture.

While previous studies have addressed Finnish demoscene (Saarikoski, 2004; Reunanen, 2010), the role of Assembly as one of its corner stones might benefit from a closer scrutiny, giving us additional information on the cultural significance of the event in Finnish computer entertainment landscape. Furthermore, it is a widely held belief that the Finnish demoscene acted as the seed bed for the game industry to come (Saarikoski & Suominen, 2009) and that Assembly as an internationally significant competition ground has a special place in this development. Drawing from expert interviews, a visitor query and news coverage we ask how Assembly and its role has changed over the years and what kind of functions Assembly has played on the formation and fostering of the Finnish game industry.

For a generation of Finnish programmers, demos – showcase "videos" incorporating sound with computer generated imagery rendered in real-time – acted as the highest demonstration of programming talent. Whereas typical demoparties of the late 1980s and early 1990s were fairly small scale affairs, Assembly gathered all the smaller groups together for a unified event. Both the rising popularity of the demo hobby and the growing public interest led to rapid growth of the event: from 700 attendees in 1992 to 4500 in 1995. These days the event is held at Hartwall ice hockey arena and lasts four days. Most visitors – roughly 5000 per event – bring their own computers and purchase a table spot with a very fast Internet/LAN connection and a power socket. The event consists of the festival, competition categories in the field of digital arts (demos, graphics, music, etc.), various gaming competitions, live concerts, expert seminars, game industry recruitment desks and other attractions.

All in all, for over twenty years Assembly has brought together gaming hobbyists, notable programming talent and an atmosphere that fosters competition and creativity in a unique way. Although the Finnish context is surely unique, we feel that analyzing the dynamics that define the ideal subject within the described scene and how they change over time can have larger significance for the study of game cultures. At the same time, the study contributes to the growing body of comparative research on cross-sectoral skill transfer and the origins of national game industries (see Izushi & Aoyama, 2006).

ASSEMBLY AS A SCENE OF TECHNICITIES

Game cultures have been studied from a variety of perspectives in the past years (Shaw, 2010). Although many scholars have used 'subculture' to describe gamers and gaming activities, according to Gosling & Crawford (2011, p.141) the use of the term has rarely been critically reflected. Some of the recognized problems with the idea of subculture are related to underestimating the fluidity of social groupings, seeing them as clearly distinguished from wider society, committing to relatively static

conception of class distinctions and underemphasizing the economic perspective (Weinzierl & Muggleton, 2003; Gosling & Crawford, 2011). More specifically, the usefulness of the concept of subculture has also been challenged within explaining the connections between gameplay, emerging cultures and game industry dynamics (Consalvo, 2007, p.3-4). To work towards an alternative, the conceptual contribution of the paper is constructed around the interrelated concepts of scene, technicity and gaming capital.

Gosling & Crawford (2011) suggest that 'scene' helps us better understand "how gaming and game-related narratives are located within the ordinary and everyday lives of gamers but take on greater significance within certain physical locations" (p.135). As such it provides an adequate starting point for studying Assembly participants, who for most of the year remain part of this scene only through a sense of identity, but at certain times and in certain places – especially once the annual event is happening – openly celebrate the particular scene.

According to Dovey & Kennedy (2006) 'technicity' encapsulates "the connections between an identity based on certain types of attitude, practices, preferences and so on and the importance of technology as a critical aspect of the construction of that identity" (p.17). The authors further describe a 'dominant technicity' typical of game development that foregrounds technical virtuosity and a deeply gendered desire to create imaginary, controllable worlds. The discussion here sides with the hacker ethos (Levy, 1984), of which demoscene too is a clear progeny with its sheltered community of whiz-kids constantly striving to outperform technological boundaries. The case of Assembly allows us to observe the different and constantly changing technicities at work.

Furthermore, Assembly crowd actively resists easy generalizations. As pointed out by Reunanen & Silvast (2009), demoscene members may not actually be the most enthusiastic early adopters of technology. Instead, many of the Assembly participants actively negotiate and play with their scener identities by adopting a particular retro sensibility, or by mixing together ingredients from digital games, scene history, popular culture, internet memes and various other sources. All this is connected to Consalvo's (2007) idea of gaming capital, a dynamic social currency that is accumulated through playing and being knowledgeable about games. The case of Assembly nicely highlights how the sources and ways of acquiring gaming capital are more diverse than many assume.

UNDERSTANDING ASSEMBLY - METHOD AND DATA

To get a multi-perspectival picture of Assembly, our methodological approach is threefold. First, we conducted a series of thematic interviews.

Interviewees were handpicked to incrementally add on each other's knowledge: an Assembly organizer, a demoscene veteran, a game journalist and game developers with an Assembly background. Reaching the informants was relatively straightforward, as the key people are still alive and easily accessible. Following an oral history approach, some caution needs to be exercised here though. Instead of only seeking "real facts", we rather use the interviews on tracing the narratives and cultural values that can help explain the mentalities of Assembly participants over the years.

Second, we also conducted an online survey for the Assembly visitors. Our focus was both to gather general information on Assembly goers and to gain insight on reasons to participate the festival. The online survey (n=92) was conducted in 2011 in association with the event organizers. The average age of the respondents was 22,7 years and three quarters of the respondents were over 18. Nine out of ten respondents were male. The survey helps us better understand the reasons why entirely new generations find their way to Assembly. In addition, we can draw on participant observation and informal discussions, both carried out at Assembly over the years.

Finally, in order to contextualize both the interviews and the survey data, we examined the media coverage the event has received during the years. The analysis is based on Assembly-related newspaper stories published in *Helsingin Sanomat* (*HS* from now), the largest subscription newspaper in Finland, and covers the stories from the first published news piece in 1995 to the present day. Although the news stories often recycle a common set of stereotypes, they at the same time document the changing relationship to industrial actors in general, and professional game development in particular.

THE COMMERCIALIZED EVENT

Saarikoski & Suominen (2009) point out how demoscene has often been portrayed as a movement of "altruistic multimedia hackers fighting their way through the harsh realities of the entertainment business" (p. 30). Following this line of thought, our analysis begins by exploring the commercial aspects of Assembly. Interestingly, the interviews effectively debunk the romanticized accounts by highlighting how already the initial rapid growth led to readjustments toward more commercialized event. This was mostly visible through Assembly attracting sponsors already in its first year, 1992. The sponsors were mainly hardware manufacturers, some of which were offering free devices (for example sound cards) to demo builders, most likely to advertise their products.

The sudden emergence of a community of potent programmers, graphics artists, and sound designers meant also that companies, even from as far as the US, started to view Assembly as potential venue for hiring work force. Graphically more impressive than the digital games of the day, demos were seen as perfectly suitable CV for a variety of positions.

During the late 1990s when the "IT bubble" started to form and practically any IT related experience was a guarantee for employment, this development grew only stronger (Aakko, 2011). Not confined to demoparties, the most celebrated demo builders were often contacted by domestic and foreign companies directly by phone or email to discuss job opportunities (Pasula, 2011). Already in 1996, HS reported how the game industry recruiters actively scout the demoscene gatherings. According to the news story, the motive of many young demo makers is to find employment in game development or computer graphics (Backström, 1996). In 1999 HS highlights how the "hunting season for codemasters" is underway. The local software company Data Fellows was reported to lure potential recruitments by arranging a special screening of the latest *Star Wars* episode (Rainisto, 1999). Another popular strategy of gaining attention was (and still is) through the sponsored competitions.

Overall, Assembly competitions highlight and celebrate extraordinary technical virtuosity and define a particularly skillful ideal subject within the scene. The general aim is to create something fascinating "from the scratch" and to see how much one can "get out of the given devices" (Korhonen & Alanen, 1996). It is also highlighted how "the gurus" for example use no graphical interface in order to optimize the performance of their hardware (Kaihovaara, 2001). This particular connection between technology and identity, technicity, then becomes the basis for affiliations with likeminded peers (Dovey & Kennedy 2006, p.64). The quest for succeeding in competitions and thereby getting your work to the big screen of the Assembly main hall, highlighted both by Korhonen & Alanen (1996) and Kaihovaara (2001), makes visible the dynamics of how fame and subcultural capital operates in the Assembly framework. Altogether, these discourses work to naturalize and legitimize a hegemonic technicity that is competitive, often gendered and not available to everyone.

The stories that connect the sometimes marginal and obscure forms of virtuosity to commercial entities and foreground the potential of getting recruited actively produce a particular kind of 'truth'. It is worth noticing that while the news stories of the recent years appear to take the interconnectedness of demo parties and game industry as given (Mäkinen, 2007; Lappalainen, 2009; Koskinen, 2010), Assembly may not anymore be the most obvious channel to game companies. The exhilarating and electrifying spirit of Assembly supports creativity, collaboration and competition in a unique fashion. At the same time, transforming subcultural capital to economic capital appears seldom as straightforward as suggested by the news stories.

GAMES CRASHING THE PARTY?

Over the twenty years of Assembly, game playing has gradually outgrown demo building. Playing, however, has always been a visible part of demo parties, as games were played already at the first recognized demoparty in 1987. According to Kauppinen there have always been sceners who strongly oppose game playing, those who eventually abandon games for demo building hobby, and those who like to play and carry on doing it (Kauppinen, 2011). These days few attend for demos only – visitors come to spend time on their computers and do a lot of the same things they would normally do with them, including playing and surfing the net, only in a massive local area network with the company of 5000 like-minded people (Aakko, 2011).

Still, gaming in particular has a history of clashing with demo building at Assembly. Nowadays this history is mostly present when the competition demos are screened in the main hall of the venue. As majority of the players play their games here, only stopping for a moment to watch the competition demos, it is common for the audience to complain about the blinking screen lights distracting the show. During one of the 1990s competitions an unknown person yelled "Guaket vittuun!" (Shut your fucking Quakes!), referring to the iD Software LAN game *Quake*, popular among gaming crowd at the time, and famously mispronouncing the first letter of the game, consequently epitomizing the Assembly "feud" between games and demos. Now, every time when somebody lets their screen lights shine during demo competitions – and this happens often – crowd starts to get audibly irritated, somebody eventually barking out the infamous shout.

Here we see how playing games, a part of these people's everyday life also outside this particular event, becomes contested because of the particular location and setting. Certainly the meanings of these physical spaces are not set – remember that Assembly is organized in an ice hockey arena – but it is the social performances within them, that eventually produce their significance and meaning (Gosling & Crawford, 2011). As the idea of "scene" suggests, entering Assembly does not represent a break from one's everyday identity. Still the particular setting can foreground particular behaviors that might feel foreign in other situations. The example also nicely accentuates how the event gives birth to behaviors and traditions that are over the years communicated to new generations of Assembly goers.

In recent years various e-sports tournaments with famous guilds and notable prizes have strengthened gaming as the most immediately visible aspect of Assembly. The development mirrors that of the other major Nordic demoparties, such as DreamHack in Sweden and The Gathering in Norway.

Responding to this, the organizers have updated the event program with game development competitions and seminar talks by game industry and programming professionals. In addition, to accompany the Summer Assembly, there is now also Winter Assembly, dedicated entirely to gaming. When asked about the reasons for participating the event, the two most commonly chosen answer in our survey were 'I was there mainly to watch' and 'I came to play'. As respondents could choose multiple answers, many attended probably for both reasons. However, when asked in a free-form question 'What does Assembly mean to you', only six respondents brought up game playing. Instead, majority of the answers highlighted the social aspects (friends, meeting people etc.) (51 mentions) and the festival program (seeing the demos, the competitions) (33 mentions).

Combined together, these results lead us to conclude that the 'festival' identity of the event has only grown stronger over the years. Already in the pre-broadband years, Assembly not only provided an opportunity to get a lightning-fast Internet connection for one weekend but it was also a unique chance to meet online connections and other like-minded people. These days one could possibly compare the event to a rock festival, in which visitors first and foremost participate for the social aspects of the event, to meet people and especially to feel the connection to the scene.

Traditionally, demoscene has often been portrayed through the distinction between "elites" and "lamers", a clear-cut line between those who have the skills and those who don't (Reunanen & Silvast, 2009, p.298-299). Assembly competitions – not only demo compos but increasingly also game tournaments – still foreground this particular technicity, based importantly on skill and virtuosity. At the same time it appears increasingly acceptable to enjoy the party without taking part in the more demanding activities. Shared activities like playing are instrumental to the feeling of connection, though it would seem that already taking part by watching would give participants some sense of identity. In this respect, the ways of entering the scene are not limited to being competitive and playing well, but the sources of gaming capital appear more diverse than thought.

THE INTENSIFYING RELATIONSHIP TO GAME INDUSTRY

In their study of cross-sectoral skill transfer, Izushi and Aoyama (2006) point out how each national game development scene draws on a different set of creative resources, based on the prior high-skill industries. Whereas the Japanese game industry drew skills from the comic book and animation industries, the US industry evolved from arcades and personal computers and the UK grew bottom-up, largely based on computer hobbyists and self-taught programmers. In this respect, the demoscene-based origins of the Finnish industry result in a rather unique trajectory.

The particular background, including some insider arrogance, is visible in the early approaches towards game development. Already in the first years of the event, game studios from as far as USA sent talent scouts to Assembly. Based on the interviews, demosceners responded in varied ways to these courtings. Syvähuoko (2011) describes how the CFO of Epic, Mark Rein, visited their demo group, Future Crew, trying to persuade them to get into game development. According to Syvähuoko, the members were so "hippie" that they instantly turned Rein down, dismissing his claims of money and stardom. In fact, most early sceners saw demos as a more interesting challenge compared to games, due to the technical superiority of demo graphics.

It is fair to say that most of the early day participants never consciously thought of Assembly as a means to get employed by the game industry – rather, the various careers launched by the demoscene were simply a byproduct of a passionate hobby (Saarikoski, 2004, p.205; Reunanen in Demoscene documentary 2010). Whereas there was no game specific education available (Backström, 1997), the skills needed for demo building, however, mirrored closely those needed for game development. As the demoscene developed during the 1990s, more groups grew interested in making games and even created some game demos.

Having already specialized roles in the development process, demo groups could fairly easily transform into game development teams. Particular skill sets like coding and graphic design transferred easily, whereas others like project management and game design required more training (Petri Järvilehto in Niipola, 2012, p.54). Often, largely related to lacking the appropriate contacts and the required negotiation skills, the groups still found it hard to get their games published from Finland (Renqvist, 2011). Altogether, the hobbyist based background can partly explain the relatively slow start of the industry. Demoscene actively reproduced the outsider hacker ethos and also produced its own esoteric technicities. While some of this cultural capital was relatively easily transferred to game development, the scene mentally remained far from the world of publishers and potential investors.

Later on, the short development span of demo building seemed to translate relatively well to smaller handheld games, popular in Finnish game development especially during the early 2000s. At this point, demoscene and Assembly were already going through a second or perhaps the third generation of demo builders. Because of the growing significance of the digital games culture and the first recognized successes within the Finnish game development scene, this new generation appeared to have a more optimistic view about game industry job opportunities. The mobile games companies of the day had numerous employees with demoscene background and openly hired old friends and demoscene contacts based only on demo resumes (Pasula, 2011). Due to specialized graphics cards and large development teams, games had by now surpassed demos as the leading edge in graphics coding.

Coming into this day, the most visible aspect of the game industry hiring practices in Assembly are the game industry stands. While a lively buzz surrounded the stands of companies such as Rovio and Supercell, some of the older generation developers – despite their own background in demoscene – answered that they would not hire sceners of today, suspecting them having too little patience for the long project times of game development (Syvähuoko, 2011). Or, should they require new work force they would rather utilize their personal connections within the industry, with no need to publicly seek for employees (Kalliokoski, 2011; Syvähuoko, 2011). Overall, the significance of demoscene as the key source for new game industry recruitments has decreased over time (Ilari Kuittinen in Niipola, 2012, p.54). One reason for this is the emergence of formal game development education since the early 2000s. Accordingly, in the present day Assembly the game industry headhunters are accompanied by booths advertising the game development degree programmes (Piirainen, 2011).

Finally, given the described development, we asked the Assembly visitors about their interest in working in the game industry. In the corresponding Likert item in our survey, over half of the respondents told that they were much or very much "interested to work in game development". However, when asked what they had done to achieve this, only a quarter of the respondents reported to have done much or very much about it. Within the free-form answers to "What Assembly means to you?", only four participants brought up some kind of professional motivation for attending the festival. This nicely once more highlights the key points we have tried to make. First, not only games but also the game industry has become an inseparable part of Assembly. Second, skill transfer between hobbyist circles and game development can be identified, but only particular forms of game capital can be converted. Third, technicities cultivated by Assembly lead to various directions, game making being only one domain that can benefit from the scene.

DISCUSSION AND CONCLUSION: THE ASSEMBLY GENERATIONS

Our analysis has revealed a variety of functions for Assembly: a meeting point, a billboard, a distribution channel, a training ground and a melting pot. At a time when there was no formal game development education, Assembly came to act as happenstance school for graphics programming, technical virtuosity, and creativity. As a condensing crossing point, Assembly provided Finnish demoscene and its most talented programmers visibility and a popular channel of circulating works. It formed a pedestal which was observed with special interest, both by the press and talent scouts. Its significance was felt especially during the early scene, before high-speed Internet, when it was the prime opportunity for serendipitous networking, cultural exchange and skill-transfer.

As we have showed, games never stood in true opposition to demos – rather, they offered a natural way to continue the culture of creative programming in a financially viable manner. The Assembly organization has certainly chosen to support this development. By fostering and accepting a certain type of culture and set of values, it has steered and influenced Finnish creative programming to set directions. Exchanging demo programming tips with peers has shifted towards organized game development seminars, while the competitive culture that has been a part of the demoparties from the beginning continues in the e-sports competitions. It would seem, then, that the dominant technicity has largely shifted from demos – previously the most impressive demonstration of programming talent and consequently the most valuable in cultural capital – to digital games, more and more culturally significant, also outside demoparties.

As discussed, these days many visitors attend Assembly to play or simply to meet friends and take a look at the event. Initially more isolated in nature – once described to be reminiscent of "a space surveillance center of the future" (YLE, 1994) – Assembly has surely lost some of its exoticism. If the vast majority of 1990s Assembly goers were young males (Korhonen & Alanen, 1996; Rainisto, 1999), the attendance has grown more heterogeneous in the recent years. Among other things, female participants have taken a more visible and sovereign role within the Assembly crowd (Lindell, 2006). One could say that the scene has grown more accessible and "normal", reflecting the overall development and increased visibility of computer culture.

In an attempt to maintain some of its original flavor, the festival now gives established demo builders the opportunity to purchase special "old skool" tickets for a cheaper price, and there is also a separate area reserved for these visitors. In this "demo ghetto" the average age is reported to be ten years higher than in the general party (Koskinen, 2010). Additionally, many sceners belonging to the "old family" have opted to meet in an unofficial event "Boozembly", arranged outside the Assembly venue. The emergence of "Assembly generations" not only denotes the increasing age range of the scene but also accentuates how an event of this size necessarily spawns a quite a variety of experiences, activities and narratives (for similar findings see also Taylor & Witkowski, 2010).

Using Assembly festival as a case study, we have explored the development of the Finnish game culture in general and its relationship to emerging game industry in particular. We feel that the selected loose framework, utilizing the concepts of scene, technicity and gaming capital has worked relatively well in exposing and clarifying some of the dynamics and potential tensions between hobbyism and professionalism, subculture and industry. Once portrayed through the distinction between "elites" and "lamers", the Assembly scene has grown more multifaceted, flexible and mature. At the same time, the competitions still celebrate extraordinary technical virtuosity.

Some parts of this technicity can be cultivated into game development skills, but transforming subcultural capital to economic capital appears seldom as straightforward as suggested by the news stories. Furthermore, technicities facilitated and idolized by Assembly have always led to various directions, game making being just one possible goal for skillful sceners.

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