

**THE DIGITAL CHILD AT PLAY:
HOW TECHNOLOGICAL, POLITICAL AND COMMERCIAL
RULE SYSTEMS SHAPE CHILDREN'S PLAY IN
VIRTUAL WORLDS**

by

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Abstract

Over the past three decades, digital gaming has become an increasingly important part of children's culture. While this development has attracted significant academic attention, much less attention has been given to the technological dimensions of the games themselves. As critical theories of technology demonstrate, however, technological artifacts are far from "neutral." Rather, technologies embody and at times reproduce the social, economic and political conditions within which they are constructed. Through the inclusion of certain technological affordances (and not others), design decisions, industry norms, legal/regulatory requirements, and programmed game rules, this thesis argues that corporate priorities and dominant discourses about children's digital play become embedded within the very technical code of digital games. Focusing on game-themed virtual worlds, or massively multiplayer online games (MMOGs), this thesis uncovers the political and social dimensions of children's MMOGs, and identifies the conditions these new game systems introduce into children's play.

Drawing on a multidisciplinary theoretical framework, the research methodology follows a two-level approach to children's MMOGs as sites of struggle, in which children are in constant negotiation with the games' formal and informal "rule systems," which include industry trends, design choices, game rules, and government policy. A general overview of the children's multiplayer online game environment is provided, and major trends are identified. In-depth analysis of six case studies is provided, which include *Nicktropolis*, *BarbieGirls*, *Toontown* and *Club Penguin*, *Magi-Nation* and *GalaXseeds*. Through design analysis, political economic analysis, and in-game observations, this examination reveals how systems of regulation, social assumptions and power relations are reflected within the rule systems contained within the design, management and configuration of the games and their players.

The findings reveal that the games contain a rigid rule system aimed at aligning children's play with commercial interests. Although players are able to workaround and occasionally subvert the games' many rule systems in their online play, user initiative is limited by reflexivity and a narrow margin of manoeuvre. The discussion concludes that the privileging of cross-promotional interests enforced by the underlying technical code of children's MMOGs has led to a dramatic reduction in opportunities for cultural participation, player creativity and collaboration.

Keywords: virtual worlds; digital games; play; children's digital culture; technology studies; commercialization; transmedia intertextuality; cultural rights and participation; rules of play; political economy of communication.

Dedication

I would like to dedicate this dissertation to Patrick Grimes, my grandfather, whose heartfelt appreciation of education and hard work was a constant inspiration to keep going, to do better.

And to Annabelle Grimes, my sister, whose sincere appreciation for fun and play kept me on the right track throughout my research.

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Glossary

Avatar	Visual representation of the player and the player's moves inside the game environment.
CCG	Collectible card game
Console game	Digital game played on a dedicated gaming console system, which is either self-contained (as with portable console devices) or operates in connection with a television/monitor. Includes the Microsoft Xbox and Xbox 360, Sony Playstations (PS2 and PS3), various generations of Nintendo systems (e.g. Wii), and handhelds such as the Nintendo DS and PSP.
EULA	End-user license agreement
GUI	Graphic user interface
ICT	Information communication technology
IP	Intellectual property
MMOG	Massively multiplayer online game. A virtual world that is primarily focused around a specific game, or a system of games, in which the majority of users actively take part.
MMORPG	Massively multiplayer online role-playing game. A specific type of MMOG that involves the players in collaborative role-play performances.
NPC	Non-player character. Limited AI-driven avatar that players can often interact with to a limited (i.e. pre-programmed) extent.
RPG	Role-playing game
UGC	User-generated content
USD	United States Dollars
Virtual world	Online, persistent, three-dimensional, multiuser digital environment, within which users, actions, interactions and items are situated and represented visually.
www	World Wide Web

Introduction

Over the past decade, online virtual worlds have undergone a profound transformation. From obscure sci-fi reference¹, to niche digital gaming genre, to their current position as an emerging staple of the “web 2.0” era of digital culture, virtual worlds are slowly being integrated into common lexicon and into the public consciousness. As a technological and cultural form, virtual worlds provide an excellent metaphor for the enduring promise of “cyberspace” (Gibson, 1984). These virtual, multi-user 3-D environments appear to represent an early actualization of the popular imaginary that has long dreamt of computer-mediated transcendence. This dream appears frequently in popular science fiction, as depicted in the cyberpunk virtual realms of Gibson’s (W. Gibson, 1984) *Neuromancer*, the “holodecks” of *Star Trek: The Next Generation* (Roddenberry, 1987-1994), and in the computer simulated reality of *The Matrix* (Wachowski & Wachowski, 1999) film series. Within virtual worlds, users are digitally (dis)embodied in a visually immersive graphical user interface (GUI) that communicates spatiality and movement. Multiple users can interact with one another simultaneously, participating in discussions, social movements, game play and the creation of content. Events unfold in real time and continue to evolve whether or not individual users are present.

Examples such as *Second Life* (Linden Research Inc., 2003-2010) and Blizzard’s *World of Warcraft* (Pardo, Kaplan, & Chilton, 2004-2010) have attracted concerted media attention and public fascination, as society tries to grapple with the cultural implications of virtual worlds. As digital game scholar Taylor (2006) describes, virtual worlds are many things to many people—they are consumer products, they are cultural texts, they are games, they are emergent cultures generated by their inhabitants, and they are also the dynamic spaces in between. Virtual worlds are the sites of economic processes (Castronova, 2005), of legal battles (Lastowka & Hunter, 2004) of philosophical discussions and “communities of play” (Pearce & Artemesia, 2009). They provide a perfect locale for ongoing debates about internet governance (Kücklich, 2009), digital personhood (Crowe & Bradford, 2006) and the ongoing expansion of corporate control over personal information and user-generated content (Humphreys, 2008).

As with so many online applications and initiatives, the full economic and social potential of virtual worlds has yet to be determined. Serious questions remain as to their durability, (financial) viability, and ultimate relevance within the ever-shifting digital landscape. A noteworthy feature of the virtual worlds that have emerged to date is that

¹ The term cyberspace, frequently accredited to science fiction author William Gibson, is described in Gibson’s 1984 novel *Neuromancer* as: “A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts... A graphic representation of data abstracted from banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding...” (p.51).

most are dedicated to leisure activities, especially social networking and massively multiplayer online game (MMOG) play. This has proven to be a powerful “path of influence” (Pinch & Bijker, 1987) within virtual worlds development, whilst producing some fascinating tensions in terms of how these artifacts function as sites of cultural meaning, as well as of social and political processes. On the one hand, the promise that virtual worlds technologies might be harnessed for educational and civic purposes has attracted interest from a number of NGOs, schools and non-profit groups (Bonham Carter, 2007; Jarmon, Lim, & Carpenter, 2009). Governments and corporations alike have now invested significant amounts of time and money exploring the possible instrumentalization of virtual worlds applications (“MacArthur to explore the role of philanthropy in virtual worlds,” 2007). On the other hand, early associations between virtual worlds and leisure has meant that questions of great consequence are being asked, and oftentimes resolved, within a realm of digital culture that society as whole tends not to take all that seriously.

Today, a significant proportion of growth and investment within virtual worlds and MMOG development is focused on children. Beginning with the massive, unanticipated successes of two Canadian virtual worlds in 2006, *Club Penguin* and *Webkinz*, the children’s market for virtual worlds quickly mushroomed. In 2008, industry analyst *Virtual Worlds News* announced that in just a couple of years, the number of virtual worlds designed specifically for children under the age of 13 years had skyrocketed from just a few to over one hundred and fifty individual titles (either live or in development). Since then, that number has allegedly grown to over two hundred (Virtual Worlds Management, 2009). The vast majority of these are either game-themed (also known as MMOGs) or otherwise centred around creative play activities, such as virtual paper dolls, virtual pets and toys, mini-games, props for dramatic or pretend play, etc. Most place a large emphasis on user collaboration, community-building, and social (peer play) interaction. The top ranking virtual worlds for children currently claim “populations” of over 10 million players, and industry analysts estimate that over 24 per cent of children visited a virtual world at least once a month in 2007 (“Virtual Worlds Are Trendiest Spot Online for Kids and Teens,” 2007).

The introduction of virtual worlds to the children’s digital game environment represents a shift of potentially profound significance, particularly in relation to the enhanced social features and vastly increased opportunities for peer play and collaboration that are provided by these technologies. Coinciding with the “web 2.0” phenomenon, children’s virtual worlds appear to reflect a renewed emphasis within digital culture on providing even the youngest users with tools to produce user-generated content and engage in participatory culture. While research on children’s virtual worlds is still in the early stages, findings drawn from the handful of case studies conducted to date indicate that the users of these worlds adopt many of the same activities and behaviours commonly found in virtual worlds for teens and adults. This emerging work includes examinations of informal learning and gender play in the educational virtual world *Whyville* (Fields & Kafai, 2007), the behavioural profiles of players in the CBBC produced *Adventure Rock* (Gauntlett & Jackson, 2008), children’s

literacy in Disney's *Club Penguin* (Marsh, 2008), and identity play practices within tween-oriented *Runescape* (Crowe & Bradford, 2006). These studies have found numerous examples of children chatting and social networking, participating in multiplayer and collaborative gaming, engaging in subversive forms of emergent play (such as cheating, using workarounds and breaking rules of conduct), as well as producing UGC. Preliminary evidence that virtual worlds provide children with important new forums for cultural participation is moreover supported by use trend surveys. For instance, according to a report conducted in 2007 for the National School Boards Association (Grunwald Associates, 2007), approximately one in six students with internet access used online tools to create and share virtual objects commonly found in virtual worlds, such as "houses" and "clothing" and virtual characters.

The integration of UGC tools in children's online games is significant for a number of reasons. For one, younger children rarely have the technical knowledge and skills required to engage with complex technological systems at the level of design, such as hacking or programming code (Donovan & Katz, 2009; Y. Kafai, 2008; Livingstone, 2009). The current generation of UGC tools accommodate for varying skill levels by providing accessible, and increasingly child-friendly, platforms for both creating and disseminating content. These tools thereby have the potential to greatly facilitate children's entry into media and cultural production. Second, the incorporation of UGC tools in online spaces designed and targeted specifically to children represents an important departure from the existing trends found within digital culture. Despite widespread enthusiasm about the democratic potential of "web 2.0," the vast majority of social-networking sites, MMOGs and other venues for creating and sharing UGC formally prohibit users under the age of 13 years from participating. Meanwhile, websites and applications designed for children tend to either emphasize "educational" outcomes or promote corporately-produced content, brands and advertisements (Ito, 2008; Kathryn C. Montgomery, 2007). In both cases, cultural content is predominantly viewed as something that is created *for* children *by* adults, a paradigm that is directly challenged by the idea of child-produced UGC. Third, children already dedicate a large amount of their time online to playing digital games. As it is an area of digital culture to which children have already laid claim and choose to engage in with high frequency, there is a greater likelihood that children will actually encounter the UGC tools that are introduced into these spaces.

The advent of children's virtual worlds thus holds great potential for children's cultural rights, particularly in terms of the new opportunities they present for direct interventions in the social shaping of digital culture. In their traditional form, virtual worlds technologies provide users with access to a shared, mutually constructed virtual public sphere. A fitting analogy, drawn from the realm of childhood, is that of a virtual playground—a public space where users can congregate, negotiate social relations and identities, share knowledge and display cultural capital, create and reproduce various forms of cultural practice, interact and play. On the other hand, preliminary investigations indicate that when virtual worlds technologies are adapted for children, this potential is not necessarily being carried over. While virtual worlds for children enable many of the

same cultural and community practices found in teen and adult-oriented sites, they also contain a number of striking differences. Primary among these is the noticeable presence of commercial content, advertising and branding. Related to this trend is a concurrent divergence within production and ownership patterns. Whereas virtual worlds for teens and adults are designed and developed by the digital games industry, the majority of children's virtual worlds to date have been produced by media and toy companies. As Gibson (2008), describes, the children's virtual worlds market remains one of great, mostly untapped potential, but it is a market "in which most 'traditional' games companies appear largely disinterested. As a result, this new market for children's MMOGs and virtual worlds is witnessing a stampede of companies from outside of the games industry, especially from the toy and TV industries." Participants in this "stampede" include media conglomerates Disney and Nickelodeon, as well as toy manufacturers Mattel and MGA.

As the current thesis will demonstrate, this facet of the emerging children's virtual worlds environment is significant because of the particular set of industry norms and priorities that the children's media and toy industries bring to the design process. Over the past thirty years, these industries have utilized convergence and cross-promotion to construct a commercial children's culture dominated by wide reaching, transmedia brands. The early and pervasive presence of these industries within children's virtual worlds production suggests that these artifacts must be approached from the outset as an intersection of two cultural forces. The phenomenon is not only the result of the ongoing growth of virtual worlds within a new "untapped" demographic group, but is also driven by the continued expansion of the established children's industries into the cultural spaces of childhood (Mitchell & Reid-Walsh, 2002). Starting with the merger of toys and television in the later half of the twentieth century, the children's industries have long held a stranglehold over western children's culture, becoming at once the creators and the gatekeepers of an ever expanding swath of children's daily lives. As such, the recent influx of child-specific virtual worlds represents the latest stage in a long history of the commercialization of childhood.

Perhaps the most important innovation that is introduced through the commercialization of virtual worlds is the new and intense emphasis that this places on children's *play* as the locus for commercialization. Within virtual worlds, the children's industries are not merely providing their audience with branded toys and cross-promotional narratives, but reaching deep into their fantasy worlds as well. To paraphrase an executive at MindCandy, creators of virtual pet site *Moshi Monsters*, virtual worlds are "not only an additional revenue source, but [something that] allows for a deeper connection with" children and their everyday play experiences. By enabling a coordinated commercial construction of the design, rule systems and action opportunities that make up the play space, virtual worlds technologies offer the promise of much greater control over the contents and themes of play itself. If this promise were realized, then the children's industries would finally attain their long time goal of colonizing the "social milieu of childhood" itself (Kline, 1993).

Background

Children's leisure has changed significantly in recent years. Much of the scholarship in this area links the current state of childhood to massive social and cultural upheavals that unfolded over the course of the twentieth century. For instance, the phenomenon of "latchkey kids" (Linn, 2004; Kincheloe, 1997), combined with the spread of moral panics about child predators, kidnappings, and youth gang violence, came to produce an exaggerated emphasis on the home as the "safest" place for children (Valentine, 2004; Blakeley, 1994; Cahill, 1990). The focus on keeping children contained within the domestic sphere gave rise to what Bovill and Livingstone (2001) call the "children's bedroom culture," an adaptation of McRobbie and Garber's (1976) "girls' bedroom culture" theory that better accounts for contemporary social norms, in which girls *and* boys are increasingly confined to the domestic sphere. With the domestic containment of childhood, Looms (2002) explains, children's bedrooms became equipped "with TVs, audio and [eventually] computer equipment" which represented "an ideal compromise in which children are both entertained and kept safe." The domestication of children's leisure was thus accompanied by an increased reliance on media and toys, along with associated increases in solitary and sedentary play.

The growth of the children's media and toy industries over the past three decades is also tightly linked to children's own growing role as consumers and as audiences. According to Sutherland and Thompson (Sutherland & Thompson, 2001), children's spending has since "doubled during each decade of the 1960s, 1970s and 1980s and has tripled in the 1990s" (p.79). Recent estimates place children's market value at around USD \$115 billion (\$1.8 billion for the Canadian "tween" market alone), including both the money children spend themselves and the influence they exert over family purchases (Sutherland & Thompson, 2001). In many ways, the contemporary children's bedroom culture is a culture that revolves around consumption—of products and of media. It is also a culture that has been largely defined by cross-promotion and market synergies since its inception. For example, the children's toy market is heavily dominated by media licensing (Hendershot, 1998). Following the removal of regulatory restrictions in the early 1980s, licensing potential soon came to dictate which creative properties were selected for production. By 1985, toys based on children's media characters reportedly made up 40-50% of all toy sales (Pecora, 1998), a trend that continued well into the late 1990s (Guinaudeau, 2009; Kapur, 1999). In 2003, a study conducted by Rideout, Vandewater and Wartella (2004) found that nearly all American children (97%) under the age of six years owned toys and other products "based on characters from TV shows or movies" (p.4).

The toy and media industries have reproduced these same strategies in their digital and online endeavours. During the late 1990s the children's television networks produced a number of highly popular websites based around established media brands (and characters) that continue to rank among the top rated and most frequented online destinations for children ("Top Kid-Entertainment Sites," 2001; Loechner, 2005). These sites have retained their target audience by remaining at the cutting edge of digital

media technology, incorporating new trends as they arise, from discussion forums and mini-games in the early 2000s, to downloadable ringtones and exclusive “webisodes” in 2005, to more recent entries such as social networking features and tools for producing user-generated content (Mayo & Nairn, 2009; Kathryn C. Montgomery, 2007; Shuler, 2007). Websites and other digital components serve a variety of functions, most of which contribute significantly to cross-promotional “commodity flow.” For example, The Cartoon Network operates a successful online store through its website, selling media products (such as DVDs), toys and other licensed merchandise based on its programs. Nickelodeon’s *TurboNick* serves as a way to showcase prospective new series and product lines, which can be “tested out” at low cost and little risk online before being incorporated into television broadcast schedules (Shields, 2006). These features work to extend and promote existing media brands, as well as expose users to new products (both media and consumer goods) and marketing initiatives.

In recent years, digital and online games have become a particularly successful element of the commercial children’s culture matrix. According to recent estimates by PricewaterhouseCoopers (2008), the global digital games market generated \$41.9 billion in sales in 2007, and is expected to surpass \$68 billion by 2012 (Bond, 2008). Industry analysis firm comScore (Lipsman, 2007) estimates that approximately 217 million people worldwide played online games in 2007—a number that continues to multiply as broadband Internet access spreads across Asia and other regions (Castronova, 2005). Since the mid-1980s, an increasingly significant proportion of commercial videogames have been based on existing media brands. According to Bogost (2007), licensed properties currently represent about 20 percent of all console game sales. Toy and media licenses have generated many of the most popular and best-selling games of the past few years, from Lego’s *Lego Star Wars* games (which sold over 16.67 million units between 2005 and 2008²) to EA’s numerous *Harry Potter* titles, to Nintendo’s various Pokémon videogames, which as of 2007 have generated an estimated \$15 billion for parent company Nintendo, Inc. (Levine, 2007).

Similarly, online games and game-based websites produced by the children’s media and toy industries consistently rank among the top online destinations for child internet users (Loechner, 2005). This is significant not only because the vast majority of children today play digital games³, but also because children are spending an increasing amount of time engaged in digital gameplay (‘Amount of Time’, 2007). Among older children and teens, participation rates are even higher, as demonstrated by a recent study by the Pew Internet and American Life Project showing that 99% of boys and 94% of girls aged 12 to 17 years now play digital games (Lenhart et al., 2008). Industry analyst NPD Funworld recently announced that 45% of “heavy gamers” and nearly one-third of “avid console gamers” are between the youthful ages of 6 and 17 (Graft, 2006). Meanwhile, studies of children’s internet use have shown that children spend more time

² According to VGChartz, an online videogame sales tracking service. URL: <http://vgchartz.com>

³ While many studies show high digital game participation rates among “children and teens”—a category often loosely defined as youth between the ages of 6 and 18 years—there are very few that specify usage rates among younger children aged 6 to 12 years.

playing online games than any other online activity (including email, instant messaging and chatrooms) (*Gaming is Nearly Ubiquitous with Kids Online* 2007; Roberts, Foehr, & Rideout, 2005). When considered alongside the predominance of game-themed virtual worlds that have emerged within the children's market, the particular significance of MMOGs within this discussion becomes all the more apparent.

By creating opportunities for children to play with digital versions of their favourite toys and media brands, all within the confines of a corporately-controlled branded environment, the children's industries gain access to ever greater portions of children's time, attention and cultural practices. Digital game technologies have enabled the children's industries to create a variety of new and highly immersive forms of cross-promotion and marketing. These range from using games to conduct covert market research (by tracking users and collecting personal information from them), to in-game advertising (wherein ads and product placement are incorporated into a game's content), to "advergaming" (interactive advertisements loosely disguised as games) and "immersive advertising" (an embedded form of product placement which integrates brands and products into the features and spaces of a game's environment and activities). In the example of "advergaming," described in an early whitepaper by Chen and Ringel (2001) as "the use of interactive gaming technology to deliver embedded advertising messages to consumers" (cited in Bogost, 2007, p.152), promotion and play become nearly indistinguishable. In the case of young children, who can already have difficulty distinguishing between content and advertising, advergaming represents a highly deceptive marketing tactic that is often not fully understood by parents (Grimes & Shade, 2005) and has yet to be adequately addressed by regulators (Kathryn C. Montgomery, 2007; Nairn, 2006; Valerie Steeves, 2006; Valerie Steeves & Webster, 2008).

It is within this context that virtual worlds have emerged as the most recent entries in a vast cross-promotional matrix, generated by the children's industries and represented throughout the commercial children's culture ("Cartoon Network to Develop," 2006; "Take Note," 2007; Calder, 2007). Virtual worlds, particularly MMOGs, have not only proven to be immensely popular with other demographics (namely teens and young adults), but are an increasingly important revenue source for the digital games industry. One of the most popular MMOGs to date, *World of Warcraft*, currently claims a population base of over 11.5 million players worldwide (Blizzard Entertainment, Inc., 2008), and generates annual revenues estimated to be in the hundreds of millions (Vella, 2008). Early examples of MMOGs designed specifically for children have mirrored this success. Child-specific MMOGs such as *Club Penguin* and *Webkinz* claim populations in the millions, a large proportion of which consist of children and "tweens" (children aged 9 to 12 years). Recent market studies claim that 8.2 million US children are currently members of at least one virtual world, and that 24 per cent of children visited a virtual world at least once a month in 2007 ("Virtual Worlds Are," 2007). Although *World of Warcraft's* revenues dwarf those generated by any other MMOG in North America (the game is currently responsible for 58% of the market), children's virtual world *Club Penguin* recently ranked second on *Screen Digest's* list of the top ten

most profitable MMOGs of 2008 (Screen Digest, 2009). Currently owned and operated by Disney, *Club Penguin* represents a key example of the reach and significance of these trends within children's online experience. It also points to the importance and timeliness of a concerted examination into the political economic dimensions of children's MMOGs as commercial cultural texts, as well as a critical analysis of how these dimensions surface within the design and implementation of MMOGs as technological artifacts.

The Current Study

The emergence of child-specific MMOGs is part of a much larger trend that sees children not only using digital media at increasingly younger ages (Rideout, Vandewater, & Wartella, 2004), but also engaging with online tools and applications more readily associated with older users. This trend includes participating in social networking and multiplayer gaming, as well as producing user-generated content (Jenkins, 2008). In almost all areas of children's digital culture, however, the toy and media industries have established themselves at the foreground, defining the spaces and forging the tools through which children participate in their communities of interest. With the integration of digital play technologies into the cross-media mix, the relationship between media, promotion and play is intensified, as unprecedented levels of corporate control and monitoring are introduced (Montgomery 2000; Seiter 2005). As business practices and digital technologies evolve in concert, the underlying commercial mechanisms of the children's digital culture are likely to continue to intensify and merge.

What makes current developments in this area so unique is that they emerge out of a much more intense intertwining of market imperatives and technological design than was previously possible. Applications such as advergames and corporately-defined "dictionary chat"—both of which are now common features on children's websites and online games—integrate branding and market research directly into the computer code, delimiting users and commercializing their activities at the most basic level. In other instances, such as with child-specific computers and mobile phones, as well as "plug-in" toys (traditional or electronic toys that come with a virtual component), commercial imperatives are translated into the design as technological affordances. Commercial priorities are increasingly embedded in technological artifacts and systems designed for children—a user group who, despite celebratory "digital child" discourses (David Buckingham, 2003; Holloway & Valentine, 2003; Rushkoff, 2006), have very little power or even obvious incentive to challenge them.

The current study adopts the two-level approach outlined in Feenberg's (1999) instrumentalization theory, using a multidisciplinary theoretical framework to examine technologies at both "the level of the basic rationalizing operations⁴ and the level of the power relations or socio-cultural conditions that specify definite designs." The research design followed a methodology first established within the traditions of social

⁴ By "basic rationalizing operations," Feenberg (1999) refers to the functions of a particular device and the laws of its operation.

construction of technology (SCOT) and science and technology studies (STS), using case studies to focus the analysis on specific examples of the artifacts (or collection of artifacts) and systems under investigation. This approach was further expanded to incorporate themes and considerations introduced to technology studies by critical theories of technology—including Feenberg’s (1999) instrumentalization theory, Winner’s (1986; 1993) framework for studying the politics of technologies, and Wajcman’s (1991) social shaping of technology approach. Critical theories of technology posit that in order to truly understand the function of technology within modern societies, researchers must consider both the technologies themselves—the physical and technical realities of the artifacts and systems with which users interact—as well as their larger social, ideological and political implications.

In particular, Feenberg’s (2006) two-level approach allows us to consider both the “social, cultural and political conditions” which provide the context, rules and norms under which technological design choices must be made, as well as the types of rational practice within which these systems are engaged. This approach positions technological artifacts as “sites of struggle” where both designers and users play a role (though often unequal) in the shaping of technological systems. The current study also draws upon concepts and methodologies established within the area of political economy of communication, particularly by Mosco (1996), Wasko (2008) and Meehan (1991), which provide a uniquely comprehensive framework for understanding the institutional forces and power relations that are often engaged in this “struggle” (Feenberg, 1999). As Mosco (1996) describes, the political economy of communication approach examines the “economic, political and other material constituents” of the media, enabling a better understanding of how these constituents come to shape the contents and function of the media within a “wider social totality,” while working to reproduce and extend existing power relations (p.71).

By unravelling the ways in which political, social and economic interests are integrated into the design and management of children’s MMOGs, this dissertation will demonstrate how these new play forms are enabling an acceleration of the commercialization of children’s digital culture. While a growing body of scholarship has examined children’s digital play cultures, particularly within the context of digital games and online communities (Seiter 2005; Montgomery 2007; Weber & Dixon 2007), very little attention has been paid to the ways in which the technologies themselves come to embody political biases, economic imperatives and social expectations. The approach proposed herein thus represents an important divergence from the existing work in this area, connecting social processes to technological design and implementation, as well as their eventual use and appropriation. Drawing upon multiple sources and modes of inquiry, the research design consists of a series of case studies that will combine political economic analysis, design analysis and in-game observations. Out of this multi-method design, and subsequent discussion of findings, I will attempt to answer the following research questions:

What are the “rules” (or conditions) of children’s MMOGs? In order to identify the rule systems and conditions of play present within children’s MMOGs, I will examine both

the official “game rules” (the stated rules of play, reward systems, etc.) as well as the underlying technological code (rules that are embedded within the game design). This will be achieved through a combination of design analysis and content analysis. I will also identify any “unofficial” rules, conditions and other social norms that emerge (or are otherwise negotiated) during gameplay, through in-game observation of gameplay and player practices. Brief comparisons will be made between the conditions of play found within MMOGs and within more traditional (non-digital) games, as reported in the literature, as well as within other digital games, including titles that are not specifically designed for children.

What are the social, political and economic dimensions (including power relations) of these rule systems? A critical examination of the rule systems and conditions of each case study will be conducted, in order to identify any underlying social and political dimensions of the specific design and structure of children’s MMOGs. An analysis of the terms of service contracts, privacy policies, business models, corporate materials, and popular press coverage associated with each case study will be conducted, and linked back to the games’ rules and designs where applicable.

How do children negotiate the rules/conditions of digital game play? In order to establish emerging patterns in the gameplay found within these MMOGs, I will conduct a non-invasive, passive observation of children playing within the digital game environments of selected case studies. Special attention will be placed on players’ interactions with the rules and conditions governing digital game technologies, watching for signs of tension (frustration, compliance, resistance, appropriation, subversion, etc.) as well as evidence of subversive play and user initiative.

How is the “child player” configured within the design and implementation of MMOG rules/conditions? In order to discover how the child player is “configured” within the case study MMOGs (a term and approach established in the works of Akrieh (1992) and Woolgar (1991)), I will conduct a critical design analysis that draws upon previous work on “configuring the user,” specifically the semiotic approach outlined by Oudshoorn et al (2007) which enables an analysis of “how, even in cases where users are not formally involved in the design, technologies may become adjusted to certain groups of users [and certain barriers incorporated] because of the incorporation of specific images of the future users” (p.31). This part of the analysis thus seeks to identify the “ideal user” that is implied (and constructed) by the MMOGs’ designs, contents and rule systems.

Chapter Overview

In order to understand the larger context within which child-specific virtual worlds and MMOGs have emerged, the discussion will begin with a review of the previous literature examining the relationships between the commercial children’s culture and children’s play. The contemporary trends driving this study will thus be situated within a larger socio-historical context that encompasses licensed toys, branded media and the commercialization of children’s play. Chapter 1 will also provide an in-depth description of the theoretical framework, a combination of critical theory of technology (Feenberg,

1999) and political economy of communication (Mosco, 1996), as well as establish some of the assumptions or premises that guide the current research.

Chapter 2 provides a detailed mapping of the commercial children's MMOG market, as well as an exploration of the argument that MMOGs represent a particularly important area of focus within discussions of children's virtual worlds. An overview of the case study selection process will be provided, followed by a brief introduction of the six case studies identified for in-depth analysis (Disney's *Club Penguin* and *Toontown*, Mattel's *BarbieGirls*, Cookie Jar Entertainment's *Magi-Nation*, Nickelodeon's *Nicktropolis*, Corus Entertainment's *GalaXseeds*).

In order to uncover the implicit rule systems contained within children's MMOGs and to begin to determine the particular set of "interests" they represent, Chapter 3 examines the GUI designs of the six case study MMOGs. A detailed overview of dominant features of the gameplay design and contents of the case studies is provided, and a preliminary typology of kids' MMOGs is delineated. Out of the patterns identified among the six case studies, four key "types" emerge, which I have termed Conventional MMOGs, Parallel Multiplayer RPGs, MMO Playgrounds and Social Arcades.

In Chapter 4, I attempt to deconstruct some of the ideological, political and social underpinnings of children's MMOGs. The goal of this chapter is to examine some of the texts that are used within the six case study MMOGs to articulate socially and politically embedded rule systems, including terms of service (TOS) contracts, privacy policies and regulatory considerations, as well as official rulebooks. By uncovering the visible remnants of the "technical code" (Feenberg, 1999) through which the MMOGs are constructed, I also begin to contextualize the design features examined in the previous chapter with some of the other types of rule systems present within these digital spaces.

Drawing upon findings uncovered in the first three chapters of analysis, Chapter 5 focuses specifically on the recurring theme of commercialization. Through a critical exploration of the promotional and intertextual dimensions found within the case studies, this chapter examines the ways in which commercialization, corporate priorities, and promotional interests operate as implicit rules of play. Primarily, this is accomplished through a discussion of play script theory, and how an adapted and expanded interpretation of "play scripts" may be used to better understand the way in which the technical code comes to operate as its own form of rule system.

Chapter 6 provides answers to some of the major questions raised over the course of the study, and addresses one of the primary research questions outlined above through a focused examination of user interactions within two of the case study MMOGs—*Club Penguin* and *Barbie Girls*. This chapter explores the relationship between rule systems and gameplay, by considering a series of anecdotal snapshots of play that demonstrate some of the ways in which "digital children" negotiate game rules, conditions and possible play scripts. A major finding described in this section is that although players are indeed able to workaround and occasionally subvert the MMOGs' strictly designed rule systems in their online play, user initiative is limited by the high

level of reflexivity⁵ that is demanded by the system and by the narrow margin of manoeuvre available to the players.

The last chapter, Chapter 7, draws together the findings and discussions of the previous six chapters in order to formulate a number of conclusions about the function of rule systems and branding mechanisms within commercial children's MMOGs. By focusing on how the various rule systems contained within the case study MMOGs "configure" their users, I explore the idea that there is an underlying tension between corporate governance goals, design decisions, and player norms. This tension manifests as a series of contradictions, to which commercialization is presented as the only viable resolution. A consistent and overarching pattern of removing opportunities for player interaction and creativity so that these may be replaced by (and oftentimes confined to) cross-promotional content is consequently enabled.

The discussion ends with some concluding thoughts about the implications of these findings for the "children's bedroom culture" framework, put forth by Bovill and Livingstone (2001) and currently at the heart of much academic research into the role and impact of "web 2.0" in children's lives. I propose that although virtual worlds technologies contain enormous potential for transformative play and cultural participation, in their current form this potential is sacrificed in the interest of producing new "subjectivities of consumption" (Pybus, 2007) that configure play as a commercialized culture of practice.

⁵ Here, reflexivity refers to a mode of interacting with the game system that is highly self-referential and exclusionary of themes and activities from outside the constructed reality of the play activity or game. The system and structures of the game, along with the player's role within the technological system, gain in primacy and come to shape the form and contents of user action (Grimes & Feenberg, 2009).

Chapter 1: Literature Review

Within digital game studies, virtual worlds and massively multiplayer online games (MMOGs) are most often described as the shared descendents of tabletop role-playing games (RPGs), which first emerged in the 1970s (such as *Dungeons and Dragons*), and multi-user dungeons (MUDs), early text-based online multiplayer games that became popular in the 1980s and early 1990s (Castronova, 2005; Dibbell, 1998; Yee, 2006). As Taylor (2006c) describes, “[MMOGs] can be traced back to several traditions in gaming and virtual multiuser spaces. Tabletop gaming, most notably *Dungeons and Dragons* (D&D), provides some of the basic structure and underpinning of many multiuser fantasy-genre games” while MUDs “form a second thread in [this] history” (p.21), informing not only the designers but the entire genre. Indeed, many of today’s most popular and frequently studied virtual worlds, including *EverQuest* (Taylor, 2006c), *World of Warcraft* (Corneliussen & Rettberg, 2008), and *Lord of the Rings Online* (Consalvo, 2007), consist of MMOGs containing rule systems and thematic motifs initially established in *D&D*.

When it comes to virtual worlds and MMOGs designed specifically for children, however, a much different set of technological and cultural antecedents emerge. In many cases, child-specific virtual worlds function as nodes within vast cross-promotional networks of commercial media and licensed consumer goods. Not only are many of these virtual worlds owned and operated by the same corporate entities that have long dominated the children’s media and toy industries—including Nickelodeon (*Nicktropolis*), Disney (*Club Penguin*, *Toontown Online*), Cartoon Network (*Fusion Fall*), Mattel (*BarbieGirls*) and Ganz (*Webkinz*)—but they also feature many of the same characters, themes and cross-promotional messages found throughout the “children’s commercial culture” (Cross, 2004). There are likely additional continuities within children’s experience of playing with toys and digital games that have not yet been adequately explored. For instance, one of the most important factors in digital game design (and gameplay) is the balance achieved between structure and agency. Similarly, as Fleming (2008) describes, “This tension, between structure and agency, typifies the relationship that the playing child must inevitably have with toys that are spin-offs from movies, TV programmes or comics, which embrace most popular toys today” (p.59). Thus, while there are many ways of thinking about digital games, “considering them as toys” (Fleming, 2008) can help us to build a comprehensive picture of their relationship with the rest of children’s play culture. In order to understand the nature and development of child-specific MMOGs, we must therefore first situate them within a larger socio-historical context that encompasses licensed toys, branded media and the commercialization of children’s play.

Previous Research on Branding Play

Over the past three decades, the rise, spread and integration of the children's industries (a term that encompasses media, toy, apparel, food and beverage companies, as well as ancillary corporations that target goods and services to children) has introduced a number of new elements into children's play and leisure practices (Kinder, 1991; Linn, 2004; Schor, 2004). In addition to a proliferation of licensed toys, games and other playthings (Pecora, 1998; Kapur, 1999; Rideout et al., 2003), studies conducted since the 1980s have discovered an increased presence of media-based storylines and branded characters within children's own imaginative play narratives (Götz, 2005; Gussin Paley, 2004; Kline, 1993; Singer, 1973). Accordingly, a number of scholars have tried to make sense of these developments and determine their potential consequences for the various instrumental benefits commonly associated with children's play (including cognitive development, socialization, learning and creativity) (Sutton-Smith, 1997). Among the most compelling and controversial issues addressed to date are lingering questions about the extent to which licensing and cross-promotion influence the shape and contents of children's play practices (Engelhardt, 1986; Carlson-Page & Levin, 1987; Kline, 1993; Linn, 2004), and whether or not children are able to resist or even subvert commercial messages in their play (Seiter, 1993; Sutton-Smith, 1986; Willis, 1991). Starting with early examinations of licensed toy play conducted by children's media and culture scholars throughout the 1980s and 1990s, and then shifting into more recent explorations of the commercialization of children's digital play spaces and the contributions of digital game scholarship, this section provides an overview of the key debates, concepts and theoretical contributions that have shaped much of the previous research in this area.

It is important to start the discussion by noting that the majority of scholars contributing to research in this area endeavour to avoid essentialism in their discussions of the complex relationships that form between media brands, licensed toys or games, and children's play. Nonetheless, there is a clear tendency within the literature to divide into two major 'camps' or dominant positions that has guided much of the discussion and debate in this area (Banet-Weiser, 2004; Turkle, 2004). On the one hand, a number of academics argue that the ongoing integration of children's toys, media and cultural practice has a profound impact on how and what children play. Children's play with licensed toys and media narratives is not only understood to be qualitatively different from traditional play activities, but is also seen as less beneficial (if not outright detrimental) to children's development (Kline, 1993; Linn, 2008). On the other hand, there are numerous children's scholars who emphasize the creative ways in which children integrate, appropriate, subvert and transform the narrative discourses provided by media texts and licensed toys, particularly when playing with peers (Götz, 2005; Gussin Paley, 1984, 2004; Seiter, 1993; Willis, 1991). For example, Seiter (1993) describes how licensed toys can provide children with important opportunities for "creative ritualization, victorious self-images," as well as "facilitate group, co-operative play, by encouraging children to make up stories with shared codes and narratives" (p.190-1). Together, these two perspectives paint a picture of an ongoing struggle

between freedom and constraint, wherein children's play constitutes a highly negotiated and often ambiguous terrain of activity (Sutton-Smith, 1997).

Within this debate there nonetheless appears to be an underlying consensus that the cross-promotional strategies currently adopted by the children's industries operate as a type of "supersystem" (Kinder, 1991). As Kapur (1999) describes, children's media and commodities are almost always presented as components of a much larger collection of objects and activities, as stepping stones into entire "media brands" that only construct their full meaning when positioned (i.e. consumed and owned) together. These media brands thus generate a form of "transmedia intertextuality," which Kinder (1991) describes as, "a means of structuring characters, genres, voices and visual conventions into paradigms, and models for interpreting and generating new combinations" (p.35). Similarly, Fleming's (1996, 2008) notion of "mediatization" describes the process through which toys become embedded in a media-driven popular culture, "with meanings circulating through object and culture in mutually reinforcing ways" (p.56). Through the complex layering of meaning that media narratives generate around tie-in toys and ancillary products, a "thoroughly mediated relationship" (Fleming, 1997, p.128) is produced, through which even toys that do not have very elaborate or appealing qualities can become meaningful by their association with other media. Work in this area furthermore suggests that the resulting organizing supersystem is one that fosters a consumerist ethos (Langer, 2004; Meehan, 1991) by celebrating children's growing role as consumers and promoting a "pedagogy of consumption" (D. Buckingham & Sefton-Green, 2003). Each text promotes consumption of the other (related) texts—by promising that purchase of ancillary products will enable more intimate access to the narrative and its characters. As Varney (2002) argues, "Mass marketed toys act as powerful media, transmitting messages, offering interpretations and interacting with other toys and commodities, particularly in terms of communicating the appeals and joys of consumerism on which their existence so heavily relies."

When the discussion turns to the broader implications of transmedia intertextuality for children's culture and play, however, academic opinion diverges considerably. Scholars such as Levin and Carlsson-Paige (2006), Greenfield (1990) Kline (1995) and Linn (2006; 2008) argue that the concerted, narrowly-defined scripts constructed around licensed toys promote a repetitive, simplistic, and stereotyped mode of play (Bruner, Jolly, & Sylva, 1976). Kline (1993) argues that although the full impact of transmedia intertextuality on children's play is complex and difficult to identify, licensed toys are much more likely to strengthen the media's influence than to diminish or subvert it. Through toy ads and associated media programs, children are taught to internalize certain narrative themes and values into their own "play scripts," which Kline defines as "sequential patterns of action and meaning which children replicate in their play" (p. 327). Play scripts, he argues, assign toys with a highly specialized set of "rules" and thematic conventions, confining the "possibilities for pretending" to those that conform with the child's understanding of the toy's encoded character and storyline. Kline's argument is supported by Greenfield et al. (1990), who describe how the integration of media and licensed toys has an inhibiting effect on children's "transcendent

imagination...the number of imaginary items supplied by the child, as opposed to what was already supplied in a given situation” (p.16). This stands in contrast with traditional forms of make-believe play, wherein children create and collaborate to discover their own rules of play and structuring themes, or even traditional game play, wherein rules can be negotiated or suspended at the whim of the players.

Conversely, there is also a large body of research suggesting that the very nature of children’s play, which often contains subversive elements, prohibits these types of conclusions (Formanek-Brunell, 1998; Griffiths & Machin, 2003; Messner, 2000; Pellegrini, 1995; Schwartzman, 1978). While this research confirms that licensing and cross-promotion have assumed increasingly prominent roles within children’s play cultures, it also provides the counter-argument that the implications of this development for children’s play are not necessarily negative. What studies of children’s play demonstrate is that rather than simply providing children with stifling play scripts and narrative baggage, licensed toys can actually become important tools for assessing, negotiating and even challenging dominant ideologies (Götz, 2005; Hendershot, 1996; Seiter, 1993; Willis, 1991). Singer and Singer (1981) suggest that licensed toys can be beneficial in counteracting otherwise negative media effects. As Singer (1973) argues, “If television stimulates the make-believe play then the child can engage in rehearsal processes, and gain a sense of efficacy that permits a very different mode of storage of the material than is possible only from the gross viewing experience” (p.13). Gussin Paley (2004) also concludes that children’s incorporation of licensed toys and media narratives into their fantasy play enables them to better understand, master and integrate cultural discourses and ideologies.

Others maintain that the flexible, creative and spontaneous dimensions of children’s play lead to important acts of appropriation and transformation. As Willis (1991) points out, “Barbie can slide down avalanches just as He-Man can become the inhabitant of a two-story Victorian doll’s house” (p.31). Ethnographic studies conducted over the past thirty years have revealed strong traditions of subversion, innovation, and appropriation within children’s play cultures, through which children are able to assess, select, accept or reject the play scripts found in licensed toys and their associated cultural texts (Griffiths & Machin, 2003; Schwartzman, 1978; Sutton-Smith, 1986). Much of the scholarship in this area draws upon feminist youth research, which describes a similar relationship between the discursive structures (social expectations, constituted subjectivities, gender norms and ideals) provided by the “gender scripts” encoded in many children’s toys and games (such as hyper-masculine action figures and hyper-feminine fashion dolls), and the active meaning-making that girls and boys engage in during play (Formanek-Brunell, 1998; Reid-Walsh & Mitchell, 2000; Seiter, 1993). Within this dynamic, even the most stereotypical toys and games come to embody “multiple meanings” that reflect and reproduce the “gender contradictions” children experience in their daily lives (Forman-Brunell & Eaton, 2009, p. 340).

Through the incorporation of gendered roles and toys within their play, children are able to “manoeuvre between gendered expectations and more daring identities” (Forman-Brunell & Eaton, 2009, p.340). Several feminist play scholars have examined

the contrast between the role of dolls as obvious "vehicle[s] of feminine socialization"—in terms of their embodiment of dominant sex-role stereotypes and gender ideals—and the longstanding traditions of gender role subversion and the rejection of adult authority found within girls' doll play (Hendershot, 1996; Lamb, 2001; Reid-Walsh & Mitchell, 2000; Vallone, 1995). As Formanek-Brunell (1998), describes, although historically many girls (and boys) played with dolls in prescribed ways, "Evidence reveals that doll players pushed at the margins of acceptable feminine and genteel behaviour" (p.374), through practices such as doll torture and body modification, doll bashing and doll funerals. Despite their strong ideological associations, dolls have thus served a dual and often contradictory function—as pedagogical tools to promote domestic feminine ideals, but also as weapons for thwarting social norms and undermining parental restrictions.

Many of the same debates and issues have since resurfaced within the scholarship on children's digital play, particularly in relation to online computer games and home console videogames. Although much of the early research on children's digital games centred, as Pearce (2008) describes, "Around the proverbial (and still unresolved) question of whether video games inspire real-world violence in children" as well as the "potential educational and neurological benefits of games" (p.146), more recent studies have begun to examine how issues of commercialization, transmedia intertextuality and licensing pertain to digital contexts (Grimes & Shade, 2005; Kline, Dyer-Witthford, & de Peuter, 2003; Mayo & Nairn, 2009; Kathryn C. Montgomery, 2007; Seiter, 2005; Wasko, 2008). Thus far this work has reproduced many of the same conclusions and controversies found in the literature on licensed toy play, but with the added consideration of the unique attributes and issues introduced by digital technologies. For example, digitization presents important opportunities for cross-promotion and brand expansion within highly engaging new cultural forms, including online social networks and virtual communities. Concurrently, however, the underlying technological systems of digital cultural forms can contain processes of user surveillance and data collection that allow unprecedented access to users' thoughts, feelings and experiences. Turow (2001) and Montgomery (2000) and were among the first⁶ to explore the integration of digital market research tools within children's digital commercial culture, and how this process accelerates the dissolution of traditional boundaries between "content and commerce" (p.636). Since then, scholars such as Montgomery (2007), Seiter (2005), Steeves (2006; Valerie Steeves & Kerr, 2005), Mayo and Nairn (2009) have gathered compelling evidence that the cross-promotional strategies and market research tools found throughout the children's digital landscape not only undermine children's cultural participation but infringe upon their rights and freedoms, including the right to privacy and right to informed consent.

As with the scholarship on licensed toy play, academic opinion about the impact of promotional content and licensing on children's digital play remains mixed. Studies by

⁶ Some of this work has led directly to the establishment of child-specific internet regulation, such as the Children's Online Privacy Protection Act (COPPA) in the US and the recent bans on unhealthy food advertising in the UK. However, questions about commercial content are often downplayed within public discourses, especially in Canada, which remains one of the only western nations without child-specific regulation of digital media and its contents.

Kline (2005; Kline et al., 2003) and Schor (2004) suggest that the continued expansion of promotional discourses within children's play spaces (whether traditional or digital) has a limiting effect on play, as well as negative consequences for children's well-being and sense of ownership over the contents of their play. In the case of digital games, Kline, Dyer-Witford and de Peuter (2003) describe, promotional content is increasingly integrated directly "into game content" (p.21). Advertisements and market research tools are programmed into the very code of the game software, while "immersive advertising" techniques imbue activities and features of the GUI environment with promotional messages (see also Grimes & Shade, 2005). As Kline et al. (2003) argue, "Though gamers navigate through virtual environments, their actions consist of selections (rather than choices) made between alternatives that have been anticipated by the game designers" (p.18). When each of those alternatives is designed to promote corporate interests, there is arguably little room left for "active" participation.

At least part of Kline et al.'s argument is supported by emerging research on the impact of licensing on both digital game design and the gameplay experience, which suggests that a certain degree of player interactivity must be sacrificed in order for a game to effectively function as a cross-promotional transmedia intertext. In an analysis of EA's *The Lord of the Rings: Return of the King* (ROTK) (Robbins & Tremmel, 2003), a console videogame based on the third instalment of the *Lord of the Rings* (LOTR) movie franchise, Brookey and Booth (2006) found that player interactivity was in fact structured around the cross-promotional elements that had been inserted into the game in order to generate synergy with the feature film. For example, after completing certain levels of the game, players were rewarded with access to "special features" which consisted of promotional materials for the films (including interviews with the actors) and books. Many of the game levels closely followed plot lines from the films, while the cut-scenes (non-playable segments used to advance the narrative) often featured footage drawn directly from the films. As a result, Brookey and Booth (2006) conclude, "the interactivity that the player enjoys in ROTK is strategically limited, and the strategy that informs these limitations serves to incorporate the player into the LOTR franchise" (p.226). It thus appears that commercial priorities and branding strategies introduce a particular set of constraints into digital game design and gameplay. In order to ensure that players are exposed to promotional content, and to prevent the promotional intent from becoming diluted, limits are placed on the scope and type of "action opportunities" provided to the players.

However, as Brookey and Booth (2006) explain, this does not "suggest that resistance is impossible in game play or that video games are a monolithic medium, but [rather] resistance must be realized in ways other than mere interactivity" (p.228). Indeed, research conducted by Fields and Kafai (2007), Willett (2007), and Jenkins (2008), shows that many children are able to subvert and resist the "strategic limitations" embedded in commercial digital products and services. This includes discovering ways to bypass or "work around" programmed limitations, engaging in creative appropriations of corporately produced content and ads, constructing active cultures of practice, as well as forming and sharing negotiated and resistant readings. For example, Giddings (2007)

observed various examples of subversion in his study of children playing with a digital game based on the Lego franchise⁷, including “improvised games” that emerged out of the children’s discovery of programmed “limitations” in the game design and their frequent reassignment of the game’s formal rules and objectives. For instance, the children in his study played at purposefully finding new ways to “die” within the game, rather than abide by the formal rule that death equals defeat. As Giddings argues, children’s digital play is not only “constituted by the complex interactions among the gameworld’s physics...the affordances of software elements” and transmedia intertextuality, but also by the very “characteristics of more traditional children’s play with toys, notably the pleasures of exploration and creative destruction” (p.41).

Another approach adopted by a number of children’s media scholars centres on the notion that with the right skills and levels of media literacy, children can use branded digital content to explore, remix and deconstruct commercial discourses, thereby challenging the influence and authority of the culture industries (David Buckingham, 2003; Jenkins, 2008). Proponents of this argument draw support from the ample research tracking digital technology and ICT usage patterns of children and teens. For example, studies of social-networking sites⁸ and user-generated content (UGC) tools reveal high participation rates among young users. A study conducted by the Pew Internet and American Life Project in 2005 describes that more than half of American teens are now “media creators”—producing blogs and websites, posting original artwork, stories and videos, and “remixing” pre-existing content into new compositions (cited in Jenkins, 2008). Meanwhile, a survey commissioned by the National School Boards Association (Grunwald Associates, 2007) found that more than a third (37%) of students aged 9 and 17 years with online access have created websites and online profiles, while nearly a third have their own blog (30%). In addition, one in six (16%) have used online tools to create virtual objects such as “puzzles, houses, clothing and games,” and 14 per cent have created virtual characters online (Grunwald Associates, 2007, p. 2).

These activities are relevant to contemporary discussions of children’s digital play, since digital games across genres and formats increasingly incorporate tools for social networking and user-generated content within their design. This is particularly the case with virtual worlds and MMOGs, which already contain many of the features identified as most amenable to creative and collaborative play. Within the realm of teen and adult gaming, MMOGs are viewed as promoting a particularly unique and innovative form of cultural participation through their emphasis on multiplayer communication, UGC and collaborative authorship, and open-ended gameplay environments (Taylor, 2006c). Studies have uncovered significant instances of cultural participation among MMOG players, including the establishment of player-driven (unsanctioned) virtual economies (Castronova, 2005), the co-authoring of complex storylines (Taylor, 2002), and the

⁷ Since the 1990s, the LEGO company has expanded operations from its traditional building block sets to include an expanding array of cross-media partnerships and digital media ventures, including a hugely successful series of videogames based upon the Star Wars movies (*Lego Star Wars*).

⁸ A recent study commissioned by the National School Boards Association found that “96 percent of students with online access” aged 9 to 17 years use social networking technologies, including “chatting, text messaging, blogging and visiting online communities” (Grunwald Associates, 2007, p.1).

widespread circulation of player-modified game code (Postigo, 2003). Recently, players have begun using MMOGs to create short films called 'machinima,' transforming game environments into virtual film sets and avatars into actors. The dual focus on community and creativity found within MMOG environments has led some game theorists to argue that they are more than "just a game," but also important social spaces (Castronova, 2003; Pearce & Artemesia, 2009; Taylor, 2006c).

Contexts of Play

Since so much of children's play occurs alone and within the private domain of the children's "bedroom culture" (Bovill & Livingstone, 2001), MMOGs could serve an important function within children's play cultures by providing them with an opportune venue for peer interaction and cultural participation. Despite the many differences of opinion that divide researchers in this area, the vast majority nonetheless agree that the forms and contents of children's play are first and foremost shaped by context. The general consensus among play scholars about the importance of the "contexts of play" is illustrative of the fact that the different approaches that make up the literature on children's play are not always oppositional, but also intersect on a variety of points and issues. As Ito (2008) describes, "in contexts of play we see competing discourses and genres of participation jockeying for position in the micro-politics of kids' everyday lives" (p.104). Just as certain conditions appear to be necessary in order for a branded plaything to have a limiting or "scripted" effect on children's play (Kline, 1993), other condition appears to facilitate subversive or transgressive forms of play (Schwartzman, 1978; Sutton-Smith, 1986).

For example, one of the key variables seems to be whether play is solitary (alone or without interaction with other players) or collaborative (involving "peer play" or "group play"). Overall, studies suggest that the presence of peers greatly increases the likelihood of subversive, creative and innovative play (Bergen, 2004; Sutton-Smith, 1986). In most cases, the studies that identify patterns of children's subversive play with licensed toys draw upon observations of group play scenarios (Gussin Paley, 2004). Conversely, much of the research supporting the argument that licensed toys limit creativity and active participation draws upon observations of children engaged in solitary play⁹. What this overlap suggests is that solitary play is both less conducive of resistant practices and creative transformations, as well as more amenable to the scripts and structures suggested by narrativization and licensing. The biggest problem with licensed toys and other commercialized playthings may therefore not be their links with transmedia intertextuality *per se* but rather, as Sutton-Smith (1986) suggests, the toys' associations with solitary play and its growing role in children's lives.

⁹ Admittedly, this is not always the case. For example, Kline and Stewart's (1999) study of children playing with *Rescue Heroes* action figures found that children tended to play alone with the toys even when in groups, in a form of parallel play more frequently found in infants.

Narrative as Context

The research also indicates that some toys, games and media texts carry more “narrative baggage” than others, providing more or less structure and direction as to how the story, characters or toys “should” be played with. This suggests that the specific features of the texts themselves are also an important factor in shaping the contexts of play. Kinder (1991), Fleming (1996) and Zipes (1997) each highlight the enormous influence of narrative—including formal narrative elements and structures, as well as the specific attributes of the characters, aesthetic conventions and thematic motifs—in determining the various forms and functions of transmedia intertextuality within children’s commercial culture. For example, Kinder’s (1992) landmark study of intertextuality in children’s media and toys found numerous examples of Saturday morning cartoon programs that “Encourage[d] the kind of negotiated reading theorized by Stuart Hall...where generational subgroups actively appropriate images from mass culture” (p.44). She points to innovative programs such as Jim Henson’s *The Muppet Babies* and Paul Reubens’ *PeeWee’s Playhouse* as primary examples of narratives that emphasize the reinterpretation of shared cultural texts and icons, appropriating themes and imagery taken from other media and rearranging them in fluid, postmodern juxtaposition with one another. Kinder argues that these texts invite the audience to enter into an “intermediate space” of “interactive fantasy” which stands in “contrast to a passive reliance on high-tech toys” (p.38) promoted by other texts and media brands. Kinder (1992) furthermore argues that engagement with this particular form of transmedia intertextuality “facilitates the kind of transgressive identification across other borders of genre, generation, race, culture, and species” (p.39). In other words, it generates a pedagogy of intertextuality.

Similar arguments have been made by Zipes (1997), who proposes that whereas many children’s media texts, such as Disney’s fairy tale films, employ “techniques of infantilization, narrative strategies of closure, and the exaltation of homogeneity” (p.96) there are also many children’s cultural texts that instead work to challenge hegemonic conventions. Like Kinder, Zipes also points to the works of the late Jim Henson as key examples of subversive children’s media texts¹⁰. Using bricolage, multimedia pastiche, satire and parody, these texts subvert their own authority by transgressing established norms and conventions (such as “breaking the fourth wall” or having characters step “out of character” to question a particular plot development) and reviving pre-Industrial, oral storytelling traditions that invite children “to explore the tale’s manifold meanings” (p.99). Rather than simply promoting conformity to established scripts, structures and consumer behaviours (although these features may nonetheless also be present), some texts are thus seen as “challeng[ing] the creative and critical capabilities of young viewers” (p.95). As the transgressive, ambiguous qualities of these texts are spread across the various nodes of their associated transmedia supersystem, Fleming (2008) argues, the tie-in toys come to display a similar “semiotic complexity” and “cultural resonance” (p.67).

¹⁰ In addition to *The Muppet Babies*, Zipes includes several of Henson’s other productions in this discussion, including both television programs (namely *Sesame Street*, *The Muppet Show* and *The Storyteller*) and films (*The Frog Prince*, *The Great Muppet Caper*, etc).

Toy and Game Design

Another point of overlap within the literature, albeit one that has not yet received sufficient attention or analysis, is the role of design in shaping the form and contents of children's play. A number of children's media and play studies include only brief discussions of the role of toy design in fostering narrativization (and brand identity) and maximizing profits. For example, Kline (1993), and Pearson and Mullins (1999) argue that highly specialized toy designs have dominated the market for the past thirty years as a way of perpetuating endless cycles of consumption. Licensed toylines are continuously expanded to include products specifically designed to reflect the latest plotline or the newest character featured in the associated media text(s). While some of these toys are only "functionally distinct"—in appearance or thematic motif (Pearson & Mullins, 1999)—others are designed as materially distinct components of a larger system (the design equivalent of transmedia intertextuality). The purchase of one toy can thus require the purchase of many others at the practical level as well as the symbolic, with each additional toy, accessory and playset specifically designed to fulfil a unique function within the larger whole.

In a similar vein, researchers such as Hendershot (1996), Formanek-Brunel (1990), Attfield (1996), Kline (Kline & Stewart, 1999), Seiter (1993), Griffiths (2002) and McAllister (2007), address aspects of toy design in their discussions of the evolution, characteristics and impact of "gendered toy design." Although much of the emphasis within these works is placed on the aesthetic elements (in terms of symbolic and representational meaning), cultural markers and surrounding marketing discourses that position certain toys as "for girls" or "for boys," other design issues are also addressed to at least some extent. For instance, many of the studies on gendered toy design argue that toys designed for girls are frequently less durable and less conducive to "active" play than toys designed for boys. A particularly salient example of how this body of work addresses the intersection of gender expectations and toy design is found in Formanek-Brunel's (1998) discussion of the shift from rag dolls to porcelain dolls that took place in the late-eighteenth and early-nineteenth centuries. The shift from malleable durable cloth to fragile (and easily-stained) porcelain, which Formanek-Brunel relates to the Victorian emphasis on conspicuous consumption and aestheticized domesticity, had a limiting effect on what could be done with the dolls without ruining them. Within middle-class families in particular, porcelain doll play—which involved tea parties, dressing up the dolls, crafting and shopping for doll clothes and accessories—came to be seen as "appropriate" play for girls, as it was believed to prepare them for their domestic futures as wives and mothers.

Design is also a key area of inquiry within digital game studies, particularly within the practitioner-focused field of game design studies, which examines everything from interface design and game engine coding structures (Salen & Zimmerman, 2004), to the relationship between narrative and game rules (Aarseth, 2004; Frasca, 1999; Juul, 2005), to questions about human-computer interaction (Barr, Noble, & Biddle, 2007; Mateas & Stern, 2006). Within the broader discipline of game studies, in which digital games are typically approached as a cultural form or practice, design is seen as one of

many factors contributing to the “social construction” of digital gameplay. Design is also described within the literature as an important facet of the relationship between play (players) and games, as well as between structure and agency (Grimes & Feenberg, 2009; Taylor, 2006b; Walther, 2003). Digital games scholarship has similarly attempted to address the dialectical dimension of gameplay (or game/play), which is increasingly envisioned as a sort of continuous dialogue that occurs between a game’s system (program code, rules, graphical user interface (GUI)) and its players (Kirkpatrick, 2008). For instance, Salen and Zimmerman (2004) identify “meaningful play” as emerging “from the relationship between play action and system outcome; it is the process by which a player takes action within the designed system of a game and the system responds to the action” (p.34). Furthermore, various feminist game scholars have identified design as a key site in which gender norms and expectations are assigned to digital games, both as a leisure activity and as a techno-cultural form (Cassell & Jenkins, 1998; Graner Ray, 2004; Yasmin B. Kafai, Heeter, Denner, & Sun, 2008; Laurel, 2001).

More recently, questions of design have resurfaced around the phenomenon of “emergent play,” as well as the shift from linear or “closed” game design to open-world, “sandbox games¹¹” (Weise, 2007) and user-generated content (UGC). The term emergence seeks to describe how “complex possibilities are the result of a simple set of rules” (Salen & Zimmerman, 2004, p.159). Salen and Zimmerman (2004) apply the term to a broad array of game phenomenon, explaining that “Emergence can come about through complex programmed mechanisms that simulate adaptive agents and systems, but it can also happen on an experiential level, where extremely simple rules give rise to complex social or psychological relationships among players” (p.159). One of the key characteristics of emergence is that it is the product of *context-dependent interactions*, evidence that the behaviour of an overall system cannot be “obtained” or predicted by “summing the behaviors of its constituent parts” (Holland, 1998 cited in Salen & Zimmerman, 2004, p.160). Another important facet of emergence is that games exhibit different degrees of emergent complexity, and that emergence can occur at more than one level of a particular game. For example, as Rollins and Morris () argue, it can occur “at the level of local context of interaction between game units,” as well as at the level of the “player’s larger behavior within the game” (cited in Salen & Zimmerman, 2004, p.165-6). According to Salen and Zimmerman, emergent play can also unfold in many different forms and serve a variety of functions. Of particular interest to the current discussion is their description of subversive forms of emergent play—a type of conflicted engagement with the game system that draws on the transformative features of free-play, and which can at times enact forms of resistance. This resistance, which can sometimes be political or cultural but can take “other forms as well,” is produced out of the “friction that can occur between games and their cultural contexts.” One of the ways that frictions within a game system (such as the frictions between rules and play, for example) act as a catalyst for resistance is in instances wherein players engage in forms

¹¹ As Weise (2007) describes, “Sandbox is a term often used but rarely defined. There is a general awareness that the term refers to open-ended game design, but there are many types of open-endedness. In the loosest sense almost any game that does not funnel player navigation into some obvious path could be considered sandbox.”

of emergent play that defy or diverge from the programmed game rules, revealing the “special disconnect between the rules of the system and the ways those rules play out” (Salen & Zimmerman, 2004, p.160).

Concurrently, game scholars must now grapple with the profound transformation that is occurring within digital games design in terms of the shift toward increasingly open-ended, player-determined and even at times player-generated game structures. A growing number of digital games, both MMOGs and single-player console titles, contain features that fly in the face of traditional game design conventions—they do not measure player progress by the standard numerical levelling system (e.g. Cyan World’s *Myst*, TGC’s *flow* and *Flower*, Q-Games’ *PixelJunk Eden*), the plot is not strictly enforced through narrative-based sequences of action but rather allows for vast amounts of non-linear improvisation and exploration (thus increasing the likelihood of subversive forms of emergent play) (e.g. Rockstar’s *Grand Theft Auto*, Clover Studio’s *Okami*, EA’s *The Sims* and Activision’s *Spider-Man 2*), and they allow players opportunities to contribute in significant ways to the game structures and contents (e.g. Media Molecule’s *LittleBigPlanet* and EA’s *Spore*). Unsurprisingly, each of these developments is closely linked to the advent and evolution of MMOGs, within which many of the earliest examples of innovative emergence, open-world structures and user-generated content were first observed by digital game scholars (Lastowka & Hunter, 2004; Taylor, 2002).

On the other hand, the above examples notwithstanding, the vast majority of the work conducted thus far has failed to adequately address or explore the underlying significance and implications of toy and game design. This trend is a reflection of a much broader oversight found within both the literature on children’s play and as well as the literature on children’s use of technologies—namely, that very little attention is given to the technologies themselves (Livingstone, 2003). Instead, the tendency to adopt a deterministic approach to technology remains. As Ito (2008) describes:

While the boosters and debunkers may seem to be operating under completely different frames of reference, what they share is the tendency to fetishize technology as a force with its own internal logic standing outside of history, society, and culture. The problem with both of these stances is that they fail to recognize that technologies are in fact embodiments, stabilizations, and concretizations of existing social structure and cultural meanings. The promises and the pitfalls of certain technological forms are realized only through active and ongoing struggle over their creation, uptake, and revision. (p.90)

As Ito suggests, there is a strong indication that in order for the discussion to continue to proceed, a concerted, critical analysis of the technologies of children’s play is now required. As described above, the research (and surrounding debates) reveals the immense importance of considering both *text* and *context* when attempting to understand complex relationships such as those that exist between commercial culture (transmedia intertextuality, commercialization and digitization) and children’s play (itself a highly ambiguous and contested terrain of cultural activity). Adopting this type of dual-level approach allows for a more nuanced understanding of how texts are produced and

consumed within specific social, historical and cultural contexts. But the “texts” and “contexts” of children’s play do not exist solely in the realm of the immaterial. As described above, they frequently involve and are enacted through technological artifacts (including toys and other playthings) and systems (such as digital games and playspaces). It is thus equally important to consider the technological design and use of the artifacts and systems through which the texts and contexts of children’s play are ultimately enacted.

A more concerted focus on technology would allow us to avoid many of the epistemological pitfalls that have stalemated much of the previous work in this area, namely the overbearing emphasis that has been placed on the purposive outcomes of children’s digital play (Sutton-Smith, 1997). To this end, the majority of the existing literature has revolved around constructing and debating a false binary, positioning structure, constraint and negative effects at one end, and agency, interpretative freedom and creativity at the other (Sutton-Smith, 1997). Instead of focusing solely on impacts, Hutchby and Moran-Ellis (2001) propose that the more important questions are:

What are the shapes and the outcomes of specific, situated encounters between children and technologies: how do children interact with, in light of, the affordances that technologies have; how do those affordances constrain such interactions; and how is the complex of relations brought about here consequential for our understanding both of children themselves and of technological forms? (p.3)

This approach draws out and highlights the widely shared notion among children’s scholars that the “contexts of play” are themselves a key factor in determining the roles and functions of both structure *and* agency within specific play cultures and experiences. Luckily, a multi-modal approach to technology is already well established within the multidisciplinary area of technology studies—particularly within the traditions of social shaping/social construction of technology (SCOT), user studies and critical theories of technology.

Technology Studies

More than simply adding a novel slant to existing debates, the multidisciplinary field of “technology studies” (a branch of science and technology studies (STS)) provides a uniquely relevant and timely framework for studying the material and social construction of children’s digital play. Constructivist theories of technology, especially social construction of technology (SCOT) theory (Pinch & Bijker, 1987), its major critiques (Woolgar, 1991; Winner, 1993), variants (Brey, 1997; MacKenzie & Wajman, 1999) and reinterpretations (Winner, 1986; Feenberg, 1999), enable exactly the type of two-level critique suggested above—one that addresses the design and implementation of technological artifacts and systems, as well as the specific social, cultural and economic contexts within which these technologies are used. The approach can be traced back to the works of SCOT theorists, who establish a framework for examining how social factors shape the development and adoption of technological artifacts (Pinch

& Bijker, 1987). SCOT theory rests on the argument that many alternatives or different paths of development (and adoption) are possible in the early stages of any new technology. Contrary to positivism and determinism, which see technological development as following modern imperatives of "efficiency" and "progress," constructivism argues that it is the particular local circumstances and social environments that determine which artifacts (or versions of artifacts) will succeed and which ones will fail. They thus highlight the "interpretative flexibility" of technologies, by exploring the various meanings and problems that "relevant social groups" (from engineers to managers, to users and special interest groups) attach to specific artifacts, and how this influences the design process (Pinch & Bijker, 1987).

This approach allows us to envision technologies as particular arrangements of intersecting, and sometimes conflicting, social processes that have as much to do with cultural norms, user agency, and everyday practices as they do with technical specifications and material limitations, economic imperatives and shifting political climates. They also follow the "principle of symmetry," which demonstrates that during the initial stages of any technology, several viable alternatives are available. The option that "fits" best within the particular circumstances of its social context, and that best appeases the (sometimes conflicting) interests of "relevant social groups," undergoes a "process of stabilization" through which it eventually comes to represent the technology in question (Pinch & Bijker, 1987). At this stage the stabilized artifact is said to achieve "closure" and becomes, as Feenberg (1999) describes, a "'black box,' an artifact that is no longer called into question but is taken for granted" (p.11). Because technology is seen as a "form of social knowledge, practices and products" (Wajcman 1991, p.162), some of which eventually become stabilized and accepted as the norm, we can position technology alongside other cultural forms, which are also amenable to stabilization and enact similar systems of social rationalization (Feenberg, 2008). This makes the approach particularly well suited to studies of media technologies and "mediatised" cultural practices.

As suggested by both Feenberg (1999) and Bakardjieva (2000), Morley and Silverstone's (1990) "domestication theory" provides a useful starting point for understanding the role of technology studies within communication research. Stemming from a communications tradition, Morley and Silverstone (1990) approach television not only as a cultural form, but also as a material, technological artifact that becomes situated in different ways within specific households, family dynamics and patterns of use. Drawing from Noble's (1984) argument that technologies lead a "double life," domestication theory posits that media technologies are "articulated through two sets of meanings" (Morley & Silverstone, 1990, p.35). The first consists of the "public" meanings created by producers and consumers "around the selling and buying of all objects and their subsequent use in a display of style" (p.36). The second set includes the "private meanings" that the technology comes to embody as it is "positioned, used and displayed" (p.35) by individuals and families within specific domestic contexts. While both sets of meaning are open to negotiation, television's relationship to everyday culture and its "modalities" of consumption are structured by the technology's design,

marketing, program schedules and narratives, which limit the extent to which audiences are able to exert agency.

In keeping with the notion of the “black box,” one could argue that as these modalities become encoded as cultural norms and technical standards, the opportunities for user innovation or intervention at the level of design and representation become increasingly limited, not to mention extremely difficult to enact on a large-scale. As Morley and Silverstone (1990) caution, “In acknowledging audiences as active in a range of ways as they integrate what they see and hear into their domestic lives, we should not romanticize or exaggerate the audience’s creative freedoms. There is a difference between power over a text and power over an agenda” (p.34). Morley and Silverstone’s position on the importance of technological designs and arrangements in shaping the contexts of use and agency highlights the need for communication scholars to pay more attention to the material features of media forms. A similar, albeit more fully developed articulation of this argument can be found in the critical theories of technology proposed by Feenberg (1999) and Winner (1993, 1986), who argue that in order to truly understand the function of technology within modern societies, theories of technology must take into account the larger social, ideological and political implications of both technological use *and* design. As Feenberg (1999) points out, “Technological development actually involves another kind of politics, or rather, several other kinds of politics in which the actors cross all these boundaries between roles” (p.12).

In order to achieve this, Winner and Feenberg each propose an approach that brings the analysis back to the physical and material realities of actual technological artifacts and systems. For instance, Winner (1986) argues that technology studies must integrate a theory of technological politics that “Draws attention to the momentum of large-scale sociotechnical systems, to the response of modern societies to certain technological imperatives, and to the ways human ends are powerfully transformed as they are adapted to technical means” (p.3). Winner’s argument is that specific features within the design or arrangement of a technological device can provide a means of establishing (and maintaining) power relations. In this way, “Seemingly innocuous design features...actually mask social choices of profound significance” (p.8). However, Winner’s approach fails to adequately account for “use” in his analysis, overlooking the possibility of user innovation and the potential for democratic rationalization that exists despite unequal distributions of power. In contrast, Feenberg’s (1999) “critical theory of technology” provides a framework that not only allows exploration of the underlying political and social dimension of technological design, but contains a much broader consideration of both the user as agent of change and of practice itself (or “use”) as a crucial factor in the social shaping of technologies.

Just as Sutton-Smith (1997) envisions children’s play as a highly negotiated and ambiguous terrain of activity, Feenberg (1999) conceptualizes technical relations as “a terrain of struggle between different types of actors differently engaged with technology and meanings” (p.xiii). Feenberg provides a two-level approach that considers the roles and influence—though often unequal—of both designers and users in shaping technological systems. As Arisaka (2001) explains, Feenberg’s theory allows us to

approach technology as “A particular configuration of patterns of actual stuff, an engineering design, a project, a budget, planners, users, a series of decisions, location, cultural milieu, and so on.” The social and political dimensions of technologies are revealed through an examination of development processes, design decisions, marketing discourses, struggles and user appropriations, and a consideration of how these become embedded within the design and implementation of technological objects or artifacts (Winner, 1986; Wajcman, 1991; Berg & Lie, 1995). Feenberg (1999) furthermore introduces the “theory of instrumentalization” as a framework for analyzing technology on two levels: the primary instrumentalization, which describes how “functions are separated from the continuum of everyday life and subjects positioned to relate to them” (p.202), and the secondary instrumentalization, which focuses on the social, cultural and political forces that influence design choices as these functions are realized in devices and systems. The two instrumentalizations are analytic categories that are helpful in understanding the two-sidedness of technical artifacts, which are both technically rational and socio-culturally meaningful.

More recent applications of Feenberg’s critical theory of technology have included various studies of internet technologies, which provide a template for applying a similar approach to the study of digital games and virtual worlds, wherein the site of study does not simply consist of a material artifact but exists as a series of distinct digital systems. Feenberg suggests that the process through which social and political dimensions become embedded within technological artifacts is amplified within digital culture, where the ongoing co-construction of user and technology is broadcast for all to see. With the introduction of digital media technologies and the shift from the audience-consumer to user-producer (or “prosumer¹²”), greater opportunities for empowerment and creative freedom become available. Unlike users of television sets, Feenberg (1999) argues, users of ICTs and digital technologies can “resignify and even modify the devices they use in accordance with their own codes and values” (p.107). While the metaphor of the “double life” still applies—indeed, designers, programmers, engineers and marketers still play dominant roles in the creation and maintenance of new media applications and content—the “private” meanings and appropriations of domestication are now more likely to be integrated into the “public construction” or “democratic rationalization” of new media technologies. Interventions into the technological design, content and function of new media forms enable the audience-as-user to “challenge undemocratic power structures rooted in modern technology” (p.108). As domestication is opened up to the peer-to-peer realm of digital culture, Feenberg argues, user appropriations assume a potentially prefigurative rather than conservative function, the private “moral economy of the household” (p.108) begins to represent wider social concerns, and individual communicative strategies are translated into public issues.

¹² As articulated by Herman, Coombe and Kaye (2006), who draw upon Lister et al.’s (2003) concept of the “prosumer,” a hybrid joiner of the positions of producer and consumer enabled by the relative extensibility of digital media (in programs like Photoshop or Garageband for example)” (p.194). The term seeks to describe user production practices that rely heavily on (or derive out of) existing content (usually industry-generated), as well as content provided by other producers or users, in the creation/circulation of “co-authored” texts.

Furthermore, an increased emphasis on user-technology relationships can reveal important aspects of the audience/user experience that may otherwise have remained obscured or unexamined.

A particularly useful concept introduced by Feenberg's (1995) approach is the notion of the "technical code," which describes "those features of technologies that reflect the hegemonic values and beliefs that prevail in the design process" (p.4), which form a "background of unexamined cultural assumptions literally designed into technology itself" (p.87). The concept of technical code builds on the argument that "technical design is not neutral but is normatively biased through delegations that favour the hegemonic interests" (p.87). Like culture itself, the technical code of systems and objects appear self-evident and therefore largely go unnoticed and unchallenged. For example, Feenberg describes that under capitalism the technical code biases toward designs that are centralized and hierarchical, while diminishing opportunities for agency and open access. Another example is how tools and workplaces are designed for adult bodies (height, hand size) and not for children, a reflection of child labour laws passed in the nineteenth century that "expelled children from the work process...with design consequences we now take for granted" (p.4). The cultural dimensions of technological development, design and use represent an important area of epistemological overlap with communication theories, which similarly examine the underlying assumptions, cultural politics, social relations, ideologies and political economic processes that shape media texts and systems. Both approaches allow for a broader consideration of the contexts of production and use, and how these are translated into specific features and aspects of cultural texts and artifacts.

Technology and design studies supplies a number of additional concepts and theories that can be useful in delineating and expanding a new media research design. For example, attempts to examine and delineate digital game design based primarily on a "end-user" analysis of the GUI are greatly facilitated by the notions of "action opportunities" and "affordances." The term "action opportunities," Mateas and Stern (2006) describe, encompasses all actions available to the player or user, as supported by the "material resources present in the game" (p.652). It draws on the notion of "affordances," which in the field of interface design describes, "the opportunities for action made available by an object or interface" (p.652). In this context, "affordance" does not simply refer to that which is "made available" by the technological design, but rather that which presents itself as the most intuitive or "natural" action to take. As Mateas and Stern (2006) explain, "[I]n order for an interface to be said to afford a certain action, the interface must in some sense "cry out" for the action to be taken. There should be a naturalness to the afforded action that makes it the obvious thing to do" (p.653). Thus, even if the specific computer code of a game or other digital application is not available for analysis, its technical design can nonetheless be examined by adopting a user-centred approach focused on affordances and action opportunities.

Within usability design and practice, the concept of affordance is further specified into four complementary types: "cognitive" or "perceived" affordance, "physical" or "real" affordance, sensory affordance and functional affordance (Hartson, 2003; Norman,

2002). While the current study does not seek to address questions of usability *per se*, these distinctions and the relationships between them have important implications for the way in which the notion of affordances is mobilized. Within the context of a MMOG, in which narrative, GUI design, action opportunities, physical affordances and cultural norms combine to produce a particular set of expectations about how a game “should” be played, the concept of cognitive or perceived affordance provides a particularly useful analytic tool. Within this category, Hartson describes, are all those “characteristics in the appearance of a device that give clues for its proper operation” (p.316). He furthermore provides a definition of cognitive affordance as “a design feature that helps, aids, supports, facilitates, or enables thinking and/or knowing about something” (p.319). These affordances exist in close relationship with physical affordances, in that the effectiveness of cognitive affordances in enabling users to understand the physical affordances of a device becomes a key determinant of its usability (Hartson, 2003).

Another important resource is found in the contributions of feminist technology scholars, who have critiqued and adapted constructivist and critical theories of technology to uncover the politics of gender within technological design and development. As Wajcman (1991) explains, technology is often “The result of conflicts and compromises, the outcomes of which depend primarily on the distribution of power and resources between different groups in society” (p.62). Berg and Lie (1995) argue that the compatibility between technology studies and feminist theory begins with the fact that both gender and technology are social constructs, and that both feminism and constructivism are concerned with the need to “blur the boundaries of categories normally kept apart” (Berg & Lie, 1995, p. 345). The work done in this area also provides a number of useful concepts for understanding the processes involved in children’s technology design specifically. Like women, children have traditionally been marginalized or excluded altogether from technological design processes. They are also subject to a variety of powerful yet conflicting ideological discourses about their role and position in society, including highly gendered notions about technological use and access. Feminist technology studies provide a valuable toolset for examining how hegemonic subjectivities (or subject positions) are not only embedded in a technology’s design, but also within discursive representations of its intended or ideal users.

For instance, feminist design scholars emphasize the ways in which technological artifacts and consumer products become gender-coded at various stages of their development, promotion and implementation (Kirkham, 1996). Feminist theorists such as van Oost (2005) have proposed the concept of “gender script” (an adaptation of Akrich’s “script” theory¹³) as a way to “drastically redefin[e] the exclusion of specific groups of people from technological domains and activities” (Oudshoorn & Pinch, 2005, p. 10). As van Oost (2005) describes, “Gender scripts function on an individual and symbolic level, reflecting and constructing gender identities, and on a structural level, reflecting and constructing gender differences in the division of labour” (p.195). Notions of gender become transformed into “design specifications” that operate at the level of technological, aesthetic or marketing design. In particular, advertising is seen as an

¹³ As articulated by Akrich (1992) and Latour (1992).

“important locus for linking an object to a specific consumer group” (p.194), although the concept could easily be expanded to include other ways in which artifacts become “coded” through narrativization, transmedia intertextuality and media representation. The notion of “gender script” is also comparable in many ways with the notion of “play script” proposed by children’s media scholars (and described above) (Kline 1995), and in fact provides a framework for approaching questions of gendered toy and game design (Graner Ray, 2004; Hendershot, 1996).

A further important contribution of feminist technology studies has been the identification of a systematic omission of women from dominant histories, theories and studies of technology (Franklin, 1990). This is equally true of constructivist technology studies, which have a tendency of delineating “relevant social groups”¹⁴ based on direct involvement in technological design. As Wajcman (1991) describes, technology studies often overlook “the fact that the absence of influence from certain groups may also be significant” (p.24). She highlights that the historical absence of women from public struggles to define technologies does not mean that gender interests were not being mobilized. In response, feminist scholars highlight the importance of shifting the focus away from (paid) labour processes and onto the ways in which products and rational systems are integrated into everyday life, locating use or “consumption” practices within the private realm of the home (Schwartz Cowan, 2001). This approach is similar to the one adopted by feminist play scholars, who respond to the systematic exclusion of girls and women from most of the literature on the history of play by providing an alternative account of girls’ play practices. This “hidden history” of girls’ play reveals domesticity as a powerful ideology and form of social rationalization within the realm of female leisure, in contrast to the industrialization processes most often associated with the socialization of boys and men. The literature also uncovers a strong tradition of resistance, appropriation and rebellion within the play of women and girls (Formanek-Brunel, 1998; Schwartzman, 1978). Again, there are clear parallels between these traditions and those found within media and cultural studies, as articulated in McRobbie and Garber’s (1976) early work on “girls’ bedroom culture” as a response to the “invisibility” of girls and young women within studies of youth subcultures.

Both the concept of gender scripting and the problem of “relevant social groups,” touch upon a process termed “configuring the user” (Akrich, 1992, 1995; Oudshoorn & Pinch, 2005; Woolgar, 1991). As Oudshoorn, Rommes and Stienstra (2004) describe, “Engineers, and other actors involved in the design process, configure the user and the context of use as an integrated part of the entire process of technological development” (p.31). Here, users are “configured” in the semiotic sense, as designers’ formulate ideas about the potential future users of their designs, implicitly and explicitly constructing representations of users by assigning them “specific tastes, competences, motives, aspirations, political prejudices, etc.” (Akrich, 1992, p.208). As representations, these images of the user inevitably carry ideological underpinnings, reflecting the biases and

¹⁴ According to Pinch and Bijker (1987), studies of the social construction of technology must consider how the needs of the various “relevant social groups” influence the design and development of technological artifacts while in the initial stages of interpretive flexibility.

assumptions of the designers, marketers and other producers of technological artifacts, as well as aspects of the institutional and professional cultures within which technologies are designed (Suchman, 1987), that may or may not reflect reality. In keeping with SCOT theory, these representations become embedded or “inscribed” in the technical design of the artifacts or system (van Oost, 2005). As artifacts are inscribed with representations of users and use practices, they develop a particular “script” that “attribute[s] and delegate[s] specific competencies, actions, and responsibilities to users and technological artifacts” (Akrich, 1992; Oudshoorn et al., 2004, p. 32). The concept of “configuring the user” allows us to understand how technologies become adjusted to the (perceived) needs and abilities of certain groups of users, as well as how “specific practices...may lead to the exclusion of specific users” (van Oost, 2005, p. 194). It also reveals the importance of considering the multiple functions that “the user” performs in the shaping of new technologies—not only in terms of actual use practices, but also in terms of the influence (and primacy) of “the user” as a powerful, albeit frequently unacknowledged, social construct.

Studying Children’s Technologies

Following the logic of the preceding discussion of the applicability of technology studies to new media research, there is clearly much to suggest that a concerted and critical analysis of children’s technologies would add valuable insight into the evolving role of digital games and media within children’s lives. As outlined above, technology studies provides a unique approach for studying both the material and cultural dimensions of technological design and use. This type of approach is crucial for understanding the shifting contexts of play as children migrate to emerging play spaces—such as virtual worlds—as well as the importance of content and design in children’s interactions with digital play technologies. Furthermore, given that children are some of the most prominent and enthusiastic users of digital technologies, play technologies and new media technologies, the lack of research into child-specific technological artifacts and systems represents a significant gap in our overall understanding of these technological forms.

This oversight recalls the feminist critiques of biased delineations of “relevant social groups” within constructivist technology studies and the ways in which key groups are excluded from analysis simply because they lack direct involvement in the production process. Much like the women in Wajcman’s (1991) and Franklin’s (1990) analyses of domestic technologies, as well as the teenage girls in McRobbie and Garber’s (1976) “bedroom culture” treatise, children predominantly interact with technologies within the domestic sphere, a realm traditionally assumed to exclude any meaningful forms of production (Kearney, 2007). The bias toward the public sphere as the only relevant site of technological and cultural engagement might also explain why so much of the research that *has* been conducted on children’s use of computer technologies has focused on classrooms, computer labs (Y. B. Kafai, 2008) and public libraries (Sandvig, 2006). It also explains some of the ongoing emphasis on purposive uses, such as educational outcomes and economic impacts, rather than on the “home

environment” and its associations with consumption and leisure (Shade, Porter, & Sanchez, 2005).

Although there is a growing body of research examining children and technology, very few of the studies conducted to date have drawn upon the theories and frameworks provided by constructivist technology studies or critical theories of technology. Even within design studies, inquiries into children’s technologies and the notion of child-centered design are fairly recent developments, and work in this area is still in the preliminary stages. For the most part, in-depth critical analysis of child-specific technologies and the role of the child as user of technologies remain notably underdeveloped. As Hutchby and Moran-Ellis (2000) describe, early research on children’s technologies tended “to focus on *representations* of technological artefacts within discursive contexts at the expense of more focused empirical concern with the materiality of artefacts in contexts of social interaction” (p.3). Subsequently, the focus was shifted onto situated or embodied use practices, with research that examined everything from children’s use of and access to computers in public and at home (Bovill & Livingstone, 2001; Livingstone, 2004, 2005; Sandvig, 2006; Shade et al., 2005), to offline interactions among children playing computer and videogames (Y. B. Kafai, 2008; Y.B. Kafai & Sutton, 1999; Walkerdine, 2007), to children’s use of online tools and content (David Buckingham & Willett, 2006; Livingstone, 2008a, 2008b; Weber & Dixon, 2007), and children’s emerging uses of mobile technologies (Haddon, 2007; Kasesniemi & Rautianen, 2002). Nonetheless, work in this area generally continues to neglect the technologies *themselves*, and too often fails to address children’s roles (both acknowledged and hidden) in shaping technological design and development.

Important exceptions can be found, however, in a small but growing body of research that is aimed at disrupting these tendencies and building a space within technology and design studies for children’s technology research. Together, these works represent the initial building blocks of a constructivist, critical approach to children’s technologies studies, which promises to significantly alter the scholarly landscape, not only within the field of technology studies, but within children’s media and play studies as well. This emerging tradition includes Bergen (2004) and Plowman’s (2004) studies of electronic toy play and design, Druin’s (1999) explorations of child-centered design, Robinson and Delahooke’s (2000) studies of children’s everyday interactions with medical technologies, as well as Antle’s (2004, 2007) and Allen’s (2004) research on children’s play and informal learning with tangible interfaces. Within digital games studies, where the inclusion of constructivist theories of technology and design studies is becoming increasingly common (Grimes & Feenberg, 2009; Kirkpatrick, 2007; Kline et al., 2003; Taylor, 2006c), scholars such as Ito (2006, 2008) have further contributed to the expansion of this burgeoning area of inquiry by applying constructivist and critical theories of technology to the specific example of children’s games and gameplay. The remainder of this section provides a brief overview of these key contributions, and draws on them to construct a preliminary framework for exploring children’s virtual worlds from a critical theory of technology approach.

In her study of electronic toys, Bergen (2004) addresses the idea that licensed toys have a limiting or “scripting” effect on children’s play. Through observations of children playing with both “talking” and “non-talking” action figures based on the children’s television program *Rescue Heroes*, Bergen confirms the importance of specific design features or “affordances” within examinations of children’s toy play. She argues that although “there was little evidence in this study that technology-enhanced toys of this type were overly directive of the children’s play” (p.205), the “children who played with the talking toys were more likely to have a rescue hero theme at both the first and second play session” (p.203). They also tended to repeat the phrases and sounds made by the toys, even though their play practices otherwise contained the same actions and language exhibited by children playing with the non-talking toys. Bergen concludes that the toys themselves have “highly salient affordances” that are specific to individuals and to the “given environment” (p.195). She argues that affordances can be limited by physical, developmental or other perceptual constraints. By highlighting the role of perception (Norman, 2002) in determining the affordances of various artifacts, Bergen introduces a crucial nuance to the discussion of affordances within technologies designed specifically for children, who interact with technological design at various stages of cognitive development. Bergen’s findings also confirm the importance of peer play in that, “The presence of a peer (even of opposite gender) increased the quality of play in numerous ways. There were more actions, pretend themes, block/toy pretend, and labelling or describing of the toys. The peer’s presence also increased the length of the session and amount of time spent in pretend” (p.205).

Similar to Bergen, Plowman (2004) seeks to explore and challenge earlier research findings (particularly those of Levin and Rosenquest (2001)) that claim “electronic toys produce limited and repetitive interactions” which in turn detract from children’s “real play” (p.210). Her experimental study (Plowman & Luckin, 2004) focused on children interacting with two highly technologized, educational “smart toys” (plush toys featuring motorized movements and electronic chips designed to recognize certain inputs, including an interactive CD-ROM game) based on characters from the PBS children’s television program *Arthur*. Plowman and Luckin (2004) found that in some cases, children integrated the technological features into play and combined them with non-technological themes and toys. For instance, some of the children incorporated themes of bedtime and wake-up time in their play with the toys, a phenomenon the researchers thought was at least “partly attributable to [the toys’] time-telling features” (p.213). Some of the children anthropomorphized the toys, whereas others expressed fear about sleeping with them because they might fall and break during the night. Younger children tended to think the toys “had feelings and could talk and think on [their] own” (p.216), whereas older children knew batteries powered the toy. As with Bergen’s study, Plowman’s research highlights the enormous significance of context and the plural nature of “user experience”—wherein each individual user brings to the experience his or her own specific set of expectations, skills, constraints, needs and ideas which in turn contribute to the emergence of particular technological use practices.

Furthermore, Plowman's (2004) study demonstrates the importance of functionality and usability in children's technology design. When the children interacted with the toys' electronically enhanced features, such as the interactive CD-ROM game, they frequently became frustrated with the toys' design limitations. As Plowman describes, "Most children found the toys' talking monotonous or irritating" (p.99), and the children rarely used the toys' help feature¹⁵ (designed to answer children's questions about the CD-ROM game) but preferred instead to ask an adult. As a result, despite the fact that most of the children had no difficulty receiving input from the toys or interacting with both the toy and the computer game concurrently, most "preferred to play with it switched off" (Plowman & Luckin, 2004, p. 99). These findings suggest that when the design provides limited usability and relevance, children can choose to abandon or "workaround" these features. They also highlight the role of the user in determining the contexts of a particular technology's use, even when the ability to directly influence the design and shape its affordances is beyond reach.

Another of Plowman's more significant findings was that although the toys were constructed and promoted as "interactive learning partners," and although parents did not tend to describe their children's interactions with the toys as "playing," children's interactions with the toys were in fact much more in line with established toy play patterns than they were with the toys' "educational" aims and features. The children enacted unpredictable play activities with toys, including becoming bored with them and refusing to engage, integrating them into daily domestic schedules, showing them off, and incorporating them into traditional toy play. This discrepancy highlights the interpretive flexibility and the social constructedness of the toys, as well as the distinct and often contradictory ways in which parents and children are targeted by advertising and cultural discourse (Seiter, 1993). The parents' hesitation to describe their children's interactions with the toys as "play" also reflects some of the powerful assumptions that continue to be associated with children's technology use (e.g. that it is necessarily educational, that it must be purposive, etc.).

Many of the same conclusions are found in the research conducted by Ito (2008) on children's software and digital games. In Ito's (2008) recent analysis of the dominant trends shaping children's software development, she describes how computer applications designed for children have acted as "embodiments, stabilizations, and concretizations of existing social structure and cultural meaning" (p.90) in regards to children's learning, entertainment and play. In particular, she argues that children's software and game development have been significantly influenced by the notion of "edutainment"—the idea of combining learning and play or other forms of entertainment. The emphasis placed on edutainment and pro-social outcomes within children's software development has not only led to the establishment of a new genre and market segment, but has also served as a handy response to continued social criticisms about the role and value of computer software in children's development and learning (Narine &

¹⁵ As Plowman (2004) describes, the toy's interactive features had poor feedback and was "not intelligent enough to recognize all [the children's] errors...too primitive to provide adaptive feedback" (p.218). The toys were designed to provide only the "illusion of reciprocity," and were insufficient for learning.

Grimes, 2009). Ito's (2006; 2008) work also provides much needed insight into the importance of design in considering issues around the commercialization of children's software, particularly in terms of the growing prominence (and controversy) around "edutainment" titles and licensed edugames, along with the documented lack of educational content found within many so called "educational" toys and games (Schor, 2004; Shuler, 2007).

In comparing the contents and designs of both educational and entertainment oriented games for children, Ito (2008) discovered that although commercially produced entertainment-oriented titles generally featured a "unified fantasy scenario" (p.97), they were also characterized by more exploratory, "more open-ended structure" (p.98) than the academic-produced, educational games she examined. In contrast, "Educational titles, particularly those that make curricular claims, are generally linear and make much of achieving certain levels and scores" (p.98). These findings appear to conflict with much of the research and dominant discourses about play and the importance of open-ended narratives, creativity and self-authoring in fostering children's development, learning, social skills and other purposive outcomes. That the commercial games provided more of these qualities than the educational titles problematizes widely held assumptions about commercial games and playthings (that they are more restrictive and overly-scripted than non-commercial games and toys, that they detract from or diminish children's play, etc.), and again emphasizes the need for a broader consideration of content, design and context when approaching these artifacts.

From the works of these scholars, along with the numerous studies and theoretical contributions described in preceding sections of this chapter, we can finally begin to formulate a suitable framework for studying children's virtual worlds from multiple perspectives—as digital media forms, as technological artifacts, and especially as sites of play. This framework identifies the artifact or system as the key site of inquiry, allowing for two-leveled exploration that will emphasize both the user (practice, appropriation, resistance and workarounds) and the technological artifact itself (design, affordances, action opportunities, configuring the user, discursive representations). Using the many overlaps between communication theories and critical theories of technology as a starting point, this framework must also account for the marginal status of children as an often-overlooked "relevant social group," one that has a particularly unique set of needs, abilities and challenges when it comes to the social shaping of their technologies and cultures. It is here that recent work into "user studies" (emerging out of technology studies and cultural studies) and feminist theory can provide guidance, allowing for a broader conceptualization of "relevant social groups," while enabling a more focused consideration of the specific contexts of use (or play). Addressing the major critiques that have stemmed from these two emerging traditions also allows for a more comprehensive conceptualization of the power relations, ideological assumptions, communities of practice, *and* forms of resistance that come to shape the contents, designs and uses of new technological artifacts and systems. This approach is furthermore supported by the various studies into children's play, toys and media that emphasize the importance of addressing both text and context when conducting

research on the complex, contentious and changeable relationships that form between children's material cultures and their cultural practices.

Some Thoughts on Play

Before I begin the analysis, I feel I should first situate myself within the literature and ongoing debates about play, which is itself a contentious and difficult term to define. Drawing on existing research, as well as my own prior studies into children's online games (Grimes, 2005; 2006; 2008; Grimes & Shade, 2005; Chung & Grimes, 2006), this project is guided by two premises, which together provide a concise overview of my own position on play. The first premise is that play—particularly children's play—is a non-rational realm of activity. This position is worth articulating as it runs counter with much of the literature on children's play and many of the dominant theories that have influenced the discussion and debates to date. As Sutton-Smith (1996) describes, these traditional approaches to play, while oftentimes conflicting, share a common underlying belief in a purposive or functional understanding of play. Despite little evidence to support the dominant belief that play has a positive influence on child development, Sutton-Smith (1986) argues, "There is no major play theorist of this century that does not make play out to be a positive force in child growth and child achievement" (p.123). This includes the vast majority of child development scholars (Vygotsky, 1933; Piaget, 1965; Winnicott, 1971; Erikson, 1977; Pepler & Rubin, 1982; Csikszentmihalyi, 1991), various cultural theorists and philosophers of play (Huizinga, 1950; Caillois, 1958/2001; Bateson, 1973; Suits, 1978; Bettelheim, 1987), as well as a number of contemporary researchers of children's culture (Kline, 1993; Jenkins, 1998; Gussin Paley, 2004).

Taking a cue from Sutton-Smith (1996), the current study draws instead upon emerging research within play studies that suggests deep inconsistencies between the traditional, functional notions of play and children's actual play practices (Formanek-Brunell, 1998; James, 1998; Lamb, 2001; Schwartzman, 1978). Using Bakhtinian concepts of liminality, inversion, and the grotesque, these works suggest a new approach to children's play studies that better accounts for the at times "dark," at times subversive, and always ambiguous aspects of play. For example, a number of these works explore the "grotesque" within children's culture, the at once terrifying and "buffoon-like" themes and games that serve to dispel fears by laughing at them (Schwartzman, 1978). Children's games such as Bloody Mary and the tradition of telling ghost stories often integrate elements of fear and laughter, while many popular toys feature "monster" characters (such as *Sesame Street's* Grover and Elmo, or Sully from Disney's *Monsters Inc.*) who reconfigure the "aesthetics of the monstrous" (Bakhtin, 1984, p.43) in the form of buffoonish and lovable friends.

Other studies describe the "grotesque" dimensions of children's culture as involving combinations of adult repulsion and sensory pleasure, as exhibited by children's predilection for distastefully-themed and strangely textured candies (James, 1982), obnoxiously loud cartoon programs (Seiter, 1993), and sickly-sweet smelling dolls (Hendershot, 1996). Hendershot argues that while adults may find "children's tastes to

be object,” children delight in finding practices and themes that illicitly transgress “adult standards of taste” (p.98). Sutton-Smith (1997) has also found that violent themes and “social testing” games make up a large proportion of playground play, where children frequently engage in play activities that adults disapprove of. In stating that one of the key assumptions of the current study is that play is non-rational, I seek to adopt a similarly broad and inclusive understanding of children’s play.

It is important to note that although some of this work, such as that of Sutton-Smith (1997), reflects a conscious attempt to integrate Bakhtin’s theories into play studies, others appear to have incorporated Bakhtinian themes and notions more or less inadvertently. In delineating my own approach to play as a non-rational field of cultural practice, I intend to align myself more explicitly with the Bakhtinian tradition. Bakhtin’s theory of the carnivalesque provides a valuable starting point for understanding the transgressive, spontaneous, symbolic and subversive aspects of play, while enabling us to understand play as a form of “symbolic action which is rarely mere play; it articulates cultural and political meanings” (Stallybrass & White, 1986, p.43). It suggests that in order to understand play, it is important to first consider how its practice might function in relation to the ordinary rules, structures, and aesthetics of everyday life.

For example, Bakhtin’s concept of the “grotesque” also describes the ways in which the carnivalesque (or play for that matter) seeks to distance itself from the quotidian, the beautiful, the sanctioned, and the sacred by representing all that is exceptional, repulsive, taboo, and profane within a particular cultural milieu. As Stallybrass and White (1986) describe, “The grotesque tends to operate as a critique of a dominant ideology which has already set the terms, designating what is high and low” (p. 43). The same can be said of children’s play cultures, which as Schwartzman (1978) describes, often aim to critique social worlds that are ordered and structured almost entirely by adults (e.g. in games of Mother May I?). As Hendershot (1996) suggests, children often transgress adult binaries between putrid and pleasurable in part *because* they are ‘adult’ boundaries, which indicates an underlying political dimension to children’s play practices that has yet to be fully understood. In this vein, Bakhtin’s theories enable us to approach children’s transgressive, grotesque, and subversive play practices as symbolic action—in dialogue with larger cultural, political and social discourses, and through which modes of (adult) authority are likely being negotiated and challenged much more than we might realize.

The second premise is that play is currently undergoing a process of rationalization, a notion that has already been strongly argued and clearly established within multiple disciplines and bodies of literature, from critical theory and cultural studies (Lasch, 1979; Marcuse, 1964), to play studies (Caillois, 1958/2001; Huizinga, 1950/1955; Sutton-Smith, 1986) and the ongoing research into children’s play and leisure practices (Dyck, 2000; Gussin Paley, 2004). Although traditionally the rationalization of play has been envisioned as the expansion of the production process into the realm of leisure, research into the play of children (a group largely excluded from production processes) provides a number of alternative ways of understanding and approaching these processes. Moving beyond the restrictive work/play binary that has

thus far characterised discussions of the rationalization of play, allows us not only to construct a broader conceptualization of play as much more than simply “not work,” but also enables us to consider the various and overlapping ways in which leisure comes to operate as a system of social rationality (Grimes & Feenberg, 2009).

Within the literature on children’s play, two themes arise that appear to be particularly relevant in this regard. The first is commercialization, a concept derived from the political economy of communication tradition, and a process that is well accounted for within the existing research into the “mediatization” of children’s play culture described above. The second emerges out of feminist scholarship which, in seeking to recuperate the “hidden” histories of girls’ play, has uncovered that girls’ play cultures since the Victorian period have been heavily characterized by concurrent, unacknowledged traditions of rationalization and resistance coinciding with the alignment (and segregation) of girls within the domestic private sphere. The association between the rationalization of girls’ play and the cult of domesticity—a system of social rationality that could be described as a process of domesticization—provides a framework for understanding the home as a key site of social rationalization. A combination of both themes, a template for which can be found in McRobbie and Garber’s (1976) study of girls’ “bedroom culture” and in more recent investigations of the “children’s bedroom culture,” provides a highly relevant and timely point of reference for understanding the rationalization of children’s play in the contemporary era. Utilizing this particular approach also represents a significant divergence from the more common emphases on violence, hyper-masculine themes, and the positioning of digital gaming within boys’ culture, that are usually found within academic discussions of gender, digital games and mainstream gaming culture.

Both concepts provide crucial gateways through which we can address ongoing questions about the transformation and rationalization of children’s play. Furthermore, each of these concepts allows us to consider that despite the higher levels of rationalization enabled by technical mediation and commercialization, some unpredictable outcomes remain not only possible but also likely (Grimes & Feenberg, 2009). These processes intersect with the (oftentimes) competing interests of child players, as well as with children’s own play practices and communities of interest. Here, digital play becomes a site of struggle in which children are in constant negotiation with the games’ technical code—formal and informal “rule systems” that include design features, commercial imperatives, policy decisions and family dynamics—to determine how (and by whom) these virtual playspaces will ultimately be defined.

Chapter 2: Mapping the Children's MMO Landscape

Although virtual worlds first appeared on the internet in the mid-1990s, the market for child-specific MMOGs remained for the most part untapped until 2003, when Disney introduced its cartoon-themed MMORPG *Toontown Online* (Walt Disney Internet Group, 2002-2010). At the time, *Toontown* was frequently described within corporate communications and the industry press as “the first” (“Disney’s Toontown Online Launches in UK,” 2004) or “one of the first” MMOGs specifically designed and targeted to children under the age of 13 years (Mine, Shochet, & Hughston, 2003). But while *Toontown Online* was indeed an important turning point in the evolution of child-specific MMOGs, it did not exactly represent the first game-themed virtual world for children to be introduced onto the market. In the late 1990s, when teen and adult-oriented MMOGs such as *Ultima Online* and *EverQuest* first began attracting headlines and establishing their player-bases, a number of virtual worlds were developed with the child audience in mind. Unlike the virtual worlds designed for teens and adults which revolved around gameplay and socializing, however, the early virtual worlds for children were primarily conceived of as pedagogical tools and were built out of academic institutions. As in other areas of children’s software development (see Ito, 2006), initial attempts to establish a market for children’s virtual worlds emphasized educational content, purposive activities, and the perceived developmental benefits associated with children’s use of computer technologies.

Amy Bruckman’s *MOOSE Crossing* is illustrative of the kind of academic initiatives introduced during this period. *MOOSE Crossing* originated as a PhD thesis project aimed at building “a context for learning through community-supported collaborative construction” among school children (Bruckman, 1997). The stress on (and promise of) educational outcomes was also found within the commercial sector, inspiring a number of “edutainment” or “edugame”-themed virtual worlds for children that were primarily promoted as learning spaces. For example, *Whyville* (Numedeon Inc., 1999-2010), a two-dimensional virtual world launched in 1999 that operates on an ad-based revenue model, was described from the outset as an “educational” virtual world because it features activities and content aimed at teaching children about various school subjects, such as natural science and economics. On the other hand, research shows that the pedagogical claims made by the vast majority of commercial “edutainment” software developers are for the most part unsubstantiated, and that a preponderance of the “edugames” available on the consumer market contain little if any established educational content or proven pedagogical tools¹⁶ (Shuler, 2007). As Ito (2006, 2008) describes, children’s software development in general has been heavily influenced by

¹⁶ In contrast, recent research by Shuler (2007) and Jenkins (2008) highlight that many “non-educational” games and virtual worlds could provide children with important opportunities for “informal learning.”

the highly celebratory public (and industry) discourses that have circulated since the early 1980s about the educational value and “spillover effect”¹⁷ of children’s digital gaming, especially around computer-based edugames. These discourses have not only shaped a number of policy decisions made over the past three decades¹⁸, but have led to the establishment of enduring trends within children’s software and game development. At various junctures throughout the brief history of children’s digital gaming, the promise of educational and pro-social outcomes has served as an efficient antidote against continued social anxieties associated with children’s precocious usage of digital technologies, as well as broader tensions around children’s leisure and the contemporary state of the family (Narine & Grimes, 2009; Shade, 2002).

It is important to note that the vast majority of these early virtual worlds for children were also much less sophisticated and more limited than the teen and adult offerings—not only in terms of the size and scope, but also in terms of the design and contents of their virtual environments. Early child-oriented virtual worlds were browser-based, whereas the better-known virtual worlds for teens and adults required an initial software installation. The child-oriented titles featured two-dimensional environments either in static, interconnected rooms or against side-scrolling backgrounds, whereas the virtual worlds for teens and adults contained expansive, three-dimensional surface areas through which players could move and interact. The child-oriented virtual worlds also provided players with a relatively narrow range of affordances or “action opportunities” (Mateas & Stern, 2006) and limited tools for communicating with other players. The restrictive designs and limited interactivity of the first child-specific virtual worlds distinguished them considerably from the sprawling, three-dimensional, rich graphic environments that were fast becoming the standard among virtual worlds for teens and adults—particularly within MMOGs. The emphasis on educational content found within the early virtual worlds for children also stood in stark contrast with the themes found in virtual worlds designed for teens and adults. Designed predominantly as vehicles for leisure and entertainment, teen and adult-oriented virtual worlds have from the outset prioritized fantasy fulfillment, dramaturgical role-play and player agency—not to mention fun and social interaction (Castronova, 2007).

Despite the rapidly growing number of children online during this period, as well as the increasing popularity of online gaming among both children and teens, the first generation of child-specific virtual worlds failed to captivate widespread interest or participation rates. Instead, user trend studies conducted during this period showed that the majority of children preferred to frequent entertainment websites (e.g. *CartoonNetwork.com*), online game sites (including *AddictingGames.com*, *Pogo* and *Yahoo!Games*), and virtual communities (such as *gURL*, *Alloy.com* and *Neopets*, sites

¹⁷ The perception that gaming skills can translate into other types of skills, such as computing skills, enhanced literacy and composition skills, logic and analytic skills, etc.

¹⁸ Which is not to say that children’s initial and widespread adoption of Internet technologies in the late 1990s did not have vocal detractors as well. Public discourses about children and digital technologies (including computers and videogames) oscillated between the highly celebratory and deeply condemnatory. See for example Banet-Weiser (2004), Turkle (2004), Williams (2003) and Narine & Grimes (2009).

that are not multiplayer but allow for community interaction on forums and through UGC) (“Nearly 20 Percent,” 2002; Greenspan, 2003). As is still the case today, the vast majority of successful children’s online destinations (in terms of most visited and highly rated by the target audience) were corporately-owned commercial sites that emphasized fun and peer interaction (Seiter, 2004; Moore, 2006). For the most part, these sites also featured advertising, promotional content and other marketing initiatives, reflecting larger trends found throughout children’s digital culture wherein, as Neuborne (2001) reports, the proportion of children’s sites with no advertising or branding “dropped from 10% of all kids’ sites [in 1999] to just 2%” in 2000 (p. 108).

Child internet users not only gravitated toward entertainment rather than educational content, but they also spent increasing amounts of their time engaged in digital gaming. By the early 2000s, 87% of children aged 7 to 12 years reported that “playing online games” was their favourite online activity (Greenspan, 2003), while all five of the “top five” online destinations most visited by children aged 2 to 11 featured online games. Roberts, Foehr and Rideout (2005) found that children aged 8 to 18 years spent more time playing online games than on any other online activity (including email, instant messaging and chatrooms). Over the years, established child-oriented websites and online games have maintained their relevance in the ever-shifting children’s digital culture by keeping up with the latest technologies, adapting their spaces to include emerging forms of participatory culture¹⁹, and incorporating increasingly sophisticated design features. By the early 2000s, children’s online community sites such as *Neopets.com* (a community centered on caring for and nurturing virtual pets) and *KidsCom.com* (an early online community that eventually morphed into a quest-based “edugame” about environmentalism) had gradually begun to include elements of virtual worlds and to feature multiplayer activities. This process was significantly accelerated with the introduction and relative success of Disney’s *Toontown Online* in 2003. However it would nonetheless take another four years for the children’s virtual worlds market to establish itself as a significant forum for children’s online digital play.

On the other hand, it was during this same period that the market for teen and adult-oriented virtual worlds was first established as an important cultural form within the larger digital environment (Castronova, 2005). As described above, the vast majority of virtual worlds introduced in the late 1990s and early 2000s were designed and marketed primarily to teens and adults. Eventually, even game-themed virtual worlds (MMOGs) came to be understood as “adult” leisure spaces that were more-or-less “inappropriate” for children. For one thing, the vast majority of commercial MMOGs, including popular titles such as *World of Warcraft*, *The Sims Online*, and *Lord of the Rings Online*, carry a “T” (for Teen) rating, assigned by the US-based Entertainment Software Rating Board

¹⁹ Jenkins (2008) defines participatory culture in terms of five key characteristics: “relatively low barriers to artistic expression and civic engagement”; “strong support for creating and sharing one’s creations with others”; “some type of informal mentorship whereby what is known by the most experienced is passed along to novices”; in which “members believe that their contributions matter” and “members feel some degree of social connection with one another (at the least they care what other people think about what they have created)” (p.7). He further specifies that in order for a cultural forum to be considered participatory, not every member has to contribute, but rather every member must “believe they are free to contribute...and that what they contribute will be appropriately valued” (p.7).

(ESRB) due to “inappropriate” thematic content (e.g. “blood and gore,” “use of alcohol” or “suggestive themes”). An additional factor contributing to the exclusion of child users from these games is that fact that many (if not all) teen and adult-oriented virtual worlds contain moderation systems²⁰ and user data collection practices that fail to meet the requirements of the Children’s Online Privacy Protection Act (COPPA). COPPA restricts the type of information websites and online service providers are allowed to collect directly from child users (upon registration, for example), while also prohibiting sites from displaying any personally identifiable information about child users (such as name, email, address, etc.), including data and content posted by the children themselves (such as in a forum or via a chat tool). The COPPA requirements fill a current gap in the ESRB ratings system, which does not rate or regulate “online interactions” (including text, audio or video chat and other types of user-generated content (e.g., maps, skins)) contained within web-enabled games²¹.

For sites with a significant population base originating in the US, failure to meet the COPPA requirements means making a choice between either formally restricting users under the age of 13 years or placing additional, and at times quite severe, restrictions on users’ communications and interactions. Depending on the site’s intended audience, thematic content, design priorities and budgetary concerns, the costs associated with COPPA compliance—which include both financial costs as well as the social cost of restricting users’ freedom of expression—may not appear to justify the perceived benefits of including child users. It is thus quite common for virtual worlds to formally prohibit child users by including a minimum age requirement (of either 13 years or 18 years) in their EULAs, privacy policies and TOS agreements, even in cases where a “T” rating has not been assigned or is otherwise inapplicable, as is the case with browser-based games (which are also not covered by the ESRB ratings system).

As with most other restricted cultural materials, however, children have found a myriad of ways around these formal age barriers, becoming active—although not always welcome—participants within multiple virtual worlds and MMOGs that claim to be targeted exclusively to teens and adults. As Jenkins (2008) describes, “many sites depend on self-disclosure to police whether the participants are children or adults. Yet, many young people seem willing to lie to access those communities.” Indeed, numerous studies of children’s online activities have found that children frequently lie about their age in order to join restricted sites, and that many prefer to frequent sites that are explicitly designed for adults (Livingstone, 2008a; Shade et al., 2005; Valerie Steeves, 2006; Turow, 2001). Within virtual worlds, the phenomenon appears to be particularly prevalent within high-profile MMOGs such as *World of Warcraft* (Taylor, 2006b), as well as youth-oriented virtual worlds such as *Habbo Hotel* (Karjalainen & Kyrölä, 2000-2010). For instance, Yee’s six-year longitudinal study of MMORPG players, which tracked the play patterns of 40,000 players of popular MMOGs such as *Ultima Online*, *EverQuest*,

²⁰ Within the majority of privately-owned virtual worlds, users’ communications and interactions are monitored by an automated and/or manned system that checks for and filters out words, materials or activities that are illegal, fail to meet the terms of service, or have otherwise been deemed “inappropriate.”

²¹ It is instead required that online-enabled games carry a notice, “Online Interactions Not Rated by the ESRB.” URL [consulted May 11, 2009]: http://www.esrb.org/ratings/ratings_guide.jsp

City of Heroes and *World of Warcraft*, included players as young as 11 years (Yee, 2008).

Many of the processes currently in place to verify age or to ensure parental consent (in the case of COPPA-compliant sites) are ineffective and inconvenient. Furthermore, as Burkell and Steeves argue, “policing non-compliance is difficult as it is hard to detect violations” (Hertzal, 2000, p. 443). The online anonymity afforded by virtual worlds might also be a factor. As Jenkins (2008) suggests, “Ethics become much murkier in game spaces, where identities are assumed and actions are fictive, designed to allow broader rein to explore darker fantasies” (p.17). The practice of transgressing age restrictions within virtual worlds is furthermore consistent with children’s consumption habits across media formats (Roberts et al., 2005), from videogames (Olson et al., 2007) to television (Valkenburg, 2004), to movies (Cantor, 2004) and other forms of online content²² (“Parents, Get a Clue!,” 2008). As far as children are concerned, the presence of age restrictions can itself become part of the appeal, a process described in the “forbidden fruit theory” (Nikken & Janz, 2007; Bushman & Stack, 1996). Here, children are seen as engaging in acts of “psychological reactance,” which Nikken and Janz (2007) describe occurs when “restricting a person’s freedom of choice motivates him or her to evaluate the eliminated alternatives more positively, and to try to restore the freedom” (p.238). For other children, as Buckingham (2007) argues, an element of “aspiration” is likely involved, since “children frequently aspire to consume things that appear to be targeted at a somewhat older audience” (particularly to teens) which are “seen to embody a degree of freedom from adult constraints” (p.20).

Furthermore, although the majority of teen and adult-oriented virtual worlds implement official age restrictions in their terms of use (TOU) contracts and privacy policies, the age criterion for virtual worlds participation (as well as the regulation and enforcement of age restrictions) are often much more ambiguous in practice. For instance, in interviews the developers of *Habbo Hotel* (a cartoon-style virtual world for teens) describe their player population as including a large percentage of children aged 12 years and under (Nutt, 2007), despite the fact that the TOU and Privacy Policy (2008) of the US site stipulate that “Habbo Hotel is for users who are thirteen (13) years of age or older.” Similarly, *MapleStory* (Wiznet, 2003-2010), a fantasy-themed MMORPG, carries an E10+ (suitable for “Everyone 10 [years] and older”) rating from the ESRB but also formally “prohibits” players under the age of 13 years in its TOU²³ and Privacy

²² For example, research conducted by Symantec found that although most social-networking sites officially ban children under the age of 13 years, 46 per cent of US children between the ages of 8 and 12 years use social networks (“Parents, Get a Clue!,” 2008).

²³ This age restriction can be found as part of the “terms of use” contract included on the North American *MapleStory* website, which stipulates: “By signing up for an Account and using the Service, you represent and warrant that you are 18 years of age or over and have the right, authority and capacity to enter into this Agreement, or you are the legal age required to form a binding contract in your jurisdiction if that age is greater than 18. [...]Your Account may be used only by you, except that if you are a parent or guardian, you may permit one (1) of your minor children who is 13 years of age or older to use the Account...”

Policy²⁴, and only allows teens to participate if they play through an account registered to a parent or guardian. The “animé” look and feel of the *MapleStory* environment, along with the E10+ rating, are thus misleading as they encode the game as suitable for older children (aged 10 years and older) while obscuring the quasi-legally enforced age restrictions outlined in the TOU and privacy policy.

At the same time, however, emerging research into intergenerational play patterns have found that not only do “35% of parents play videogames,” but that “80% report playing games with their children” (Pearce, 2008, p. 144). While these statistics encompass all forms of digital gameplay, including console and computer games, as well as online games, the notion that the practices they describe extend to virtual worlds as well is not without merit. For instance, Yee (2001) found that approximately 8% of *EverQuest* players played the game with a parent or child, a group that included a number of younger children as well as teens. It is thus likely that in many of these cases, household rules and family dynamics take precedence over the unenforceable recommendations of the ESRB or the corporate policies of the game’s developers.

Within at least some MMOGs, the unauthorized presence of child players has triggered various different attempts to enforce the official age restrictions through unofficial forms of regulation and social disciplining. As Taylor (2006) found in her study of *World of Warcraft*, although many adult players condone and encourage the presence of children within the virtual world of Azeroth (for example, by collaborating with them on quests), “There is also a strong undercurrent you hear in conversations...that lays blame for the ills of the game at the feet of ‘12 year old boys’ or ‘the kids’” (p.324). Taylor (2006) describes that on some servers, age segregation can “become fairly institutionalized” (p.324) (see also Aihoshi, 2008). For example, a number of raiding guilds have set minimum age requirements for membership, and conduct thorough background checks to ensure that younger players aren’t able to slip through by lying about their age. The player-driven institutionalization of age requirements reflects a recurring and well-documented phenomenon within MMOGs and other virtual worlds (Martey & Stromer-Galley, 2007; Williams et al., 2006), wherein group norms come to operate as “systems of social control that work to discipline, exclude, or otherwise classify players and behaviours” (Grimes & Feenberg, 2009, p.115).

When these informal “rules of play” include practices of exclusion, however, there is a potential for normative levels of social disciplining to turn into more aggressive forms of ostracism. Although children’s (unsanctioned) gameplay experiences within teen and adult-themed MMOGs have not yet been studied in any depth, examples of more serious enactments of age segregation have been observed within Xbox Live (a network of online game communities focused in and around online-enabled Xbox videogames). In 2007, feminist gamer blog *WomenGamers.Com* (Atari, 2007) posted a controversial story about an after-school Xbox Live gaming club for children aged 8 to 16 years (called

²⁴ Within its Privacy Policy for *MapleStory*, NEXON outlines the following disclaimer: “We want to let you know that it currently is our policy not to collect personally identifiable information from any person under 13 because such children are not permitted to use the Site or Service, and we request that children under the age of 13 not submit any personal information to us via the Site.”

The GR8 Clan) whose members were subjected to frequent insults and verbal harassment at the hands of adult players who disapproved of their participation in certain online game competitions, particularly those involving “M-rated” games such as *Tom Clancy’s Rainbow Six Vegas* and *Gears of War*. What each of these examples suggests is that online games and virtual worlds are not only providing an important venue for communities of interest to (re)negotiate, reproduce and collaboratively institutionalize social norms and relationships, but that they are also acting as important sites of struggle in which children’s already liminal cultural status is being actively debated and challenged.

A more recent example of the ongoing struggle around children’s participation in virtual worlds can be found in the browser-based MMORPG *RuneScape*²⁵ (Gower & Jagex Ltd., 2001-2010). For many years, *RuneScape* was an “off limits” favourite, attracting a significant number of child players despite a longstanding “13 years and over” minimum age requirement. It is estimated that in the UK, children under the age of 12 years make up approximately 16% of the game’s player base, and ranks among the most frequented game sites by children online (Nielsen Online UK, 2008). *RuneScape* is also listed among Canadian children’s reported “favourite” online destinations (Valerie Steeves, 2005). In 2008, the site responded to its growing population of child players by introducing a “safe” chat feature (called “Quick Chat,” in which communication between players is limited and censored) and establishing a child membership program. These new features enable children to participate legitimately in the *RuneScape* community, while ensuring that the site itself remains COPPA compliant. Representatives of Jagex, Inc. maintain that the game is still designed and targeted primarily to players aged 13 years and over, but with a “child friendly” approach that better responds to the needs of the many children who played the game in defiance of the previous age restriction. The struggle to define and delineate the virtual world environment remains, however, in the form of a lingering resistance to the new features, as exhibited in numerous forum threads and fansite postings accusing “little kids” of “ruining” *RuneScape*.

Of course, children aren’t always innocent victims in their altercations with adults and other players. As Giddings (2007) describes, children’s gameplay (digital and otherwise) is not only about discovering and mastering a game’s rules but is often also about breaking them, bending them, playing with and against them. Children’s play is frequently characterized by elements of transgression and even aggression, as described in the Bakhtinian scholarship on children’s play conducted by Sutton-Smith (1997), Schwartzman (1978), Lamb (2001) and others. Within the digital context, these tendencies surface in a number of practices that transgress social norms and antagonize other users, including engaging in “flame wars” and “nuking,” online bullying, posing as adults, “griefing” and “stealing,” and other forms of purposeful disruption (Fields & Kafai, 2007; Livingstone, 2008).

²⁵ Although predominantly marketed to and played by teens between the ages of 13 and 17 years, *RuneScape* provides a limited membership option for younger players. According to a feature story on *RuneScape* that appeared in the May 19, 2008 online edition of *Develop* magazine, the playerbase is comprised primarily (60%) of 13 to 17 year olds.

While some studies have identified these practices as potential “risk factors,” there is also a large amount of research suggesting that they are in fact a crucial part of children’s online experience, providing valuable opportunities for experimentation, creative expression and identity work. Donovan and Katz (2009) argue that the so-called “disruptive” and “deviant” activities that some children engage in online, such as circumventing web filters or falsifying personal information, should be seen as “a site of invention and discovery as well as resistance to various technological fetters” that helps children to better “understand and control their environments (technological or otherwise)” (p.198) through demystification and appropriation. On the other hand, flaming and disruptive practices can lend support to age stratification and other exclusionary tactics by giving players the impression that these practices are more characteristic of child players than they actually are—disregarding the fact that flaming, grieving and most other forms of virtual deviance are commonly engaged in (perhaps even more so) by teens and adults (Bakioglu, 2009; Consalvo, 2007).

The Children’s Virtual Worlds Market

The *RuneScape* decision to alter its age restrictions to include child players represents an important divergence from established trends within the virtual worlds environment, which has otherwise intensified its movement toward age stratification. Since 2007, the digital cultural landscape has changed dramatically, following an influx of new virtual worlds and MMOGs designed and marketed specifically to children under the age of 12 years. These new entries onto the virtual worlds market are not only highly differentiated in terms of the age groups they target, but most of them have abandoned previous emphases on educational and quasi-educational content in order to focus more intently on entertainment, games and play. While a growing number of children’s virtual worlds continue to feature educational themes and goals, a much larger proportion of the children’s market is now dedicated to MMOGs and other gaming genres.

The children’s virtual worlds market was initiated by the sudden and well-publicized success of two child-specific virtual worlds, Ganz’s *Webkinz World* and the then independently-produced *Club Penguin* (Club Penguin Entertainment, 2005-2010). Both were virtual worlds designed specifically for children under the age of 13 years, and both had become wildly popular among their target audience shortly following their respective launches in 2005. With player populations estimated at around 6 million each (Ingram, 2007), the sites quickly established themselves as the newest cultural phenomenon among the elementary school demographic. By the end of 2007, *Club Penguin* had been sold to Disney for a potential \$700 million (USD), and *Webkinz* tie-in plush toys (which come with a “secret code” required to enter *Webkinz World*) were among the top-selling toys of the year (Peterson, 2008). Both sites had succeeded in doing what very few online properties for children had ever done before: transform users into paying customers, and translate online play into significant real world profits. Within a year, key players from across the children’s industries had launched their own virtual worlds and MMOGs, with many more still in development. This included offerings from all the major US toy companies (Mattel, Hasbro and MGA Entertainment), the children’s

television networks (Nickelodeon, Cartoon Network), large media conglomerates (Disney), and even public broadcasters (such as CBBC and PBS)²⁶. A number of additional toy and media-based MMOG projects, such as the Lego-themed *Lego Universe*, are still in development.

By April 2008, industry analyst eMarketer (2008a) had identified 105 virtual worlds and MMOGs for children, including sites that had already launched as well as those still in development²⁷. Four months later, the number of child-specific virtual worlds had reportedly grown to 150 (eMarketer, 2008b), and by early 2009 *Virtual Worlds News* claimed that over 200 youth-oriented virtual worlds were either live or in active development. Meanwhile, market analysts estimated that 24% of US child and teen internet users visited virtual worlds at least once a month in 2007, a number they expected to climb to 53% by 2011 (eMarketer, 2007). Virtual Worlds Management estimated that approximately \$1.4 billion (USD) was invested in virtual worlds and MMOGs during the 2007 fiscal year, including start-up, design, development and operation costs. Finally, although investment in virtual worlds generally fell in 2008, a result of both the global economic downturn²⁸ as well as the inevitable passing of the initial enthusiasm that builds around any new fad, children's MMOGs nonetheless attracted the bulk of the \$594 million that was ultimately invested in virtual worlds that year (Virtual Worlds Management, 2009).

The expansion of the children's industries into MMOGs is not all that surprising given children's continued and widespread proclivity for digital gaming. Current research reveals that nearly all North American children now play digital games of some kind (Kaiser Family Foundation, 2005). Children represent approximately 25% of the global digital games audience, a market that generated \$41.9 billion in sales in 2007 (PricewaterhouseCoopers, 2008) and is expected to surpass \$68 billion by 2012 (Bond, 2008). On any given day 63% of boys and 40% of girls aged 8 to 18 play digital games of some kind, including console, handheld and computer games (Kaiser Family Foundation, 2005). Furthermore, children today engage in digital gaming at increasingly younger ages. Children aged 8 to 11 years are on average more likely to play digital games and to play for longer periods of time than older children and teens (Kaiser Family Foundation, 2005), while nearly half of children aged 0 to 6 years own a video game console (Rideout, Vandewater & Wartella, 2003). In 2007, children aged 6 to 8 years played 75% more digital games than previously, adding nearly 3 hours a week to

²⁶ These projects include a multi-brand MMOG produced by the Cartoon Network called *Fusion Fall* (which launched in early 2009) ('Cartoon Network's Massively,' 2007), and a stalled collaboration between CBS and DIC Entertainment called *Kewlopolis* ('DIC To Rebrand,' 2007). Meanwhile, public broadcasters PBS (in the US) and BBCKids (in the UK) launched educational-themed children's MMOGs called *PBS Kids Play* and *Adventure Rock*.

²⁷ A more tempered estimate was given by Gibson (2008) who counted 50 live virtual worlds for children and 45 in development in June 2008, around the same time the *Virtual Worlds News* announced the market had grown to 150. As this study will demonstrate, however, far fewer of these sites can ultimately be categorized as "virtual worlds," and even fewer actually target children under the age of 13 years.

²⁸ It is important to note that although virtual worlds and other forms of advertising and entertainment were early victims of the 2008 economic downturn, children's virtual worlds have nonetheless continued to attract investment.

their digital playtime (“Amount of Time,” 2007). Among elementary school aged children, the most popular form of digital gaming is online games. Approximately 90 per cent of North American youth play games online (Young Canadians in a Wired World, 2005; Greenspan 2003), and research continues to find that children spend more time playing online games than on any other online activity²⁹ (Kaiser Family Foundation, 2005).

Another possible reason for the continued investment in this area is the vast new opportunities for advertising, marketing and micro-transaction based business models that are present within virtual worlds technologies. As described above, many of the most popular (i.e. highly frequented and listed as “favourite”) children’s websites, games and other online applications contain exceptionally high levels of cross-promotion and advertising. Despite the special status and protections accorded to child audiences within governmental media policies and advertising regulation, children’s digital culture is frequently used by the children’s industries to pioneer new forms of product placement, cross-media integration, transmedia intertextuality, branding and market research. Many of the same companies and web developers that already dominate much of children’s digital culture are now directly involved in the construction of a children’s virtual worlds market. It seems likely that their interest in this new cultural form is at least in part founded by a profit-driven desire to expand existing cross-promotional strategies, while opening up new avenues of access to their key audience.

What is particularly notable about the recent influx of child-targeted virtual worlds is how seamlessly they appear to fit within existing industry and marketing discourses. Although public interest in the educational and democratic potential of virtual worlds for children continues to gain momentum, both in terms of media coverage and funding initiatives (both within universities, such as the various projects funded by the MacArthur Foundation digital media and learning initiative, and through large government grants), the underlying economic imperatives of child-specific virtual worlds remain, for the most part, an immensely powerful and largely unquestioned influence in the establishment and social shaping of this emerging digital cultural form³⁰. It is here that questions about the social construction (or social shaping), the underlying political dimensions, and the role of commercial priorities in determining the design and development of children’s virtual worlds begin to take shape. The remainder of this chapter will begin to answer these questions by delineating a selection of case studies for an in-depth, comparative, critical exploration of the themes and issues outlined above. Following a comprehensive overview of the case study selection process, I will provide a brief mapping of the current children’s virtual worlds landscape, before shifting the discussion to some preliminary findings and patterns that emerged out of my initial survey of this burgeoning—but also surprisingly familiar—cultural form.

²⁹ Computers are the preferred gaming system for 58% of children and teens (aged 2 to 17 years), while internet ‘access’ (broadly defined) is nearly universal among children in Canada and the US.

³⁰ A few notable exceptions, however, can be found within the popular press and among child advocacy groups, which have initiated occasional, short-lived coverage of these issues.

Case Study Selection

The Virtual Worlds Management (2008) *Youth Worlds Analysis* report was used as a starting off point for delineating a small selection of child-specific MMOGs for in-depth, case study analysis. The original list comprised 105 virtual worlds for youth, broadly defined as users under the age of 18 years, and included projects still in development as well as those that were live and operational at the time of the study. In order to gage the accuracy and comprehensiveness of the Virtual Worlds Management report, the list was contrasted with news stories, trade press coverage and corporate press releases containing the keywords “children” (or “child” or “kid”) and either “virtual world” or “multiplayer online game.” Only three additional sites were subsequently added to the list, while two existing items (which repeated information included elsewhere on the list) were either removed or amalgamated. A brief content analysis of the remaining 106 virtual worlds was conducted in order to identify potential case studies that were both relevant to the current study and available for analysis between April and November 2008.

In order to be selected as a case study, a site had to meet the following criteria: it had to be “live” (online); it had to explicitly target children between the ages of 6 and 12 years; it had to originate from within North America, or at least be partially based in North America; its contents had to be available in English; it had to be “open to the public” (free or partially free) and therefore part of the public domain; and it had to exhibit characteristics commonly associated with MMOGs. Virtual worlds that failed to meet these criteria were omitted. Notably, surprisingly few of the virtual worlds listed in the *Youth Worlds Analysis* successfully met all of the selection criteria, and as a result the final analysis included fewer case studies sample than I had initially anticipated. However, this also allowed for a deeper and more detailed exploration of virtual world included in the analysis.

The first selection criterion was that the virtual world had to be “live,” meaning that it had to operational and at least predominantly functional during at least half of the initial data collection period (which ran from August, 2008 to November, 2008). As the selection process began, it became immediately apparent that despite the large amount of industry “hype” around child-specific virtual worlds in the popular press and trade publications published at this time, only a small number of child-specific virtual worlds were actually up and running in 2008. Of the 106 sites identified in the *Youth Worlds Analysis* report and the surrounding media coverage, 45 were still in development or undergoing closed beta testing during the period of study, while 4 sites closed shortly after the list was compiled. This meant that only 57 virtual worlds were “live” and available to be included in the study. A number of additional sites went “live” during the period of the study but after the window for data collection had passed. Some of these were briefly analyzed for comparison and in order to keep track of evolving trends, and as a result occasionally appear in the analysis and discussion (for example, *RuneScape* did not introduce its child members program in time to be included, but serves as a comparison case that adds further context to the discussion). Concurrently, it was

observed that over the course of the study a number of projects listed in the *Youth Worlds Analysis* report as “in development” ultimately failed to launch.

Once it was determined that a site was available, a brief content analysis of its contents was conducted in order to ascertain whether or not the site met the remaining criterion for inclusion in the current study. The Virtual Worlds Management list, which included basic information about each site’s target demographic, was additionally used in this process as a reference point. The analysis included an inventory of each site’s front page or “Welcome page,” the “About Us” page, and any introductory text providing a description of the site’s contents. Portions of the Privacy Policy and Terms of Use (TOU) contracts were also reviewed in order to identify any age restrictions, as well as to determine site ownership and place of origin. In addition to eliminating sites that failed to meet the selection criteria, I also took note of the site ownership, origin, whether the site’s publicity materials described the site’s overall purpose as “entertainment” or “educational,” whether or not the site’s front page featured third-party advertising (and if so the types of product(s) or services advertised), and whether the site cross-promoted a tie-in product or media brand.

The second criterion was that the virtual world had to explicitly target children between the ages of 6 and 12 years as the primary users of the site. The targeted age of each site was determined by cross-referencing a number of sources, including the written contents of the sites themselves (homepage, FAQs and “About Us” pages), industry publications such as the *Virtual Worlds Analysis* report and *KidScreen* magazine, as well as additional corporate communications such as press releases, promotional materials, website privacy policies and terms of use agreements. Of the 57 “live” sites identified through the *Youth Worlds Analysis* report, only 33 actually targeted users between the ages of 6 and 12 years. Another eight reported to be aimed at “tweens” over the age of 10 years and were therefore deemed not to be sufficiently inclusive of the desired age range to include in the final analysis. Only one site was aimed at children younger than the intended elementary school age range, and targeted preschoolers under the age of six years. An additional 15 sites listed in the report were aimed at “teens” aged 13 years and over, contained formal age restrictions and did not explicitly target children in their site descriptions. Although this does not necessarily mean that children were not “targeted” by these sites in other ways and in other venues, or that children could not be counted among the sites’ player populations, the lack of “explicit” targeting discourses provided adequate justification for excluding these sites from the final analysis, as one of the goals of this study is to examine how child-specific MMOGs configure the “child user” within their designs, scripts and technical codes.

In order to be accessible for reliable and consistent analysis, the bulk of the virtual world’s contents had to be available in English. In addition, because regulatory policies and cultural norms differ significantly across countries, particularly in regards to children, it was decided that the virtual worlds had to originate from within North America. By including sites originating from within both Canada and the US, I was able to include a larger number of the most highly populated children’s virtual worlds (most of which are based in the US). Focusing on North American titles also allows for a certain

amount of cross-cultural comparison between Canada and the US, which not only share a significant amount of media production and content, but also have significant regulatory parallels and historical transference. Of the 33 sites remaining on the list at this point, five consisted to virtual worlds based outside of North America (two in the UK, one in Germany, one in China and one in Sweden) and were therefore excluded. It is worth noting, however, that only two of the virtual worlds situated outside of North America featured a predominant amount of content in a language other than English (for example, the full contents of the Swedish paper doll virtual world *Stardoll* are available in English and sixteen other languages).

The final criterion was that the virtual worlds included in the final analysis had to display characteristics commonly associated with MMOGs. For the purposes of this study, a MMOG was defined as a virtual world that revolved at least partially around play activities (both organized and spontaneous). The decision to limit the analysis to MMOGs (more generally described as game-themed virtual worlds) was based on several factors, many of which are suggested in the literature review and summary of the previous research that has been conducted in this area. Primarily, the continued emphasis on functional, purposive and pro-social dimensions of children's interactions with digital technologies has resulted in a significant gap within the literature around questions of play—and the changing roles, forms and spaces for children's non-purposive play within the online context. As described above, although many studies have addressed questions of educational outcomes, learning and informal learning within children's gaming and other digital practices, considerably fewer studies have really focused the analysis onto play itself. Because child-specific MMOGs are above all spaces for play and playing, a concerted examination of their contents, features and affordances would represent a unique opportunity to emphasize issues and questions of play within a discussion of children's digital media technologies.

Furthermore, because "edugames" and educational software are understood to involve a very specific set of issues and considerations that extend far beyond the questions and implications of play—much of which falls outside of the scope of the current study—it was determined that the MMOGs selected for study should not be defined and oriented by explicitly educational goals and materials. Additionally, as they are generally understood within the literature and within popular discourse, MMOGs do not usually contain an explicitly educational agenda, but instead emphasize the "immense intrinsic value" of "play, fantasy, myth, and saga" (Castronova, 2004, p.185). It was therefore decided that an exploration and identification of the play opportunities (and play practices) afforded by virtual worlds that have been explicitly designed for this purpose represents a necessary and timely intervention into the emerging body of research in this area. Only five of the remaining sites were determined to focus predominantly on "educational" activities and content (or at least claimed to feature predominantly "educational" content), and were consequently excluded.

In order to meet the criterion of displaying the characteristics of a MMOG, each site had to additionally contain five features that were determined to be key characteristics of game-themed virtual worlds that have been described within the

literature and media as a MMOG. Drawing upon a number of sources, both academic (Bogost, 2007; Castronova, 2005; Taylor, 2006c) and popular, as well as my own stated premises about the nature of play (described in Chapter 1), the five characteristics were defined as follows:

- The virtual world must contain features and activities that unfold in a real-time persistent environment;
- Multiple players are present and visually represented within a shared GUI space;
- Multiple players are able to interact with one another and the environment simultaneously;
- Play activities are available and undertaken by users; and
- The organizing themes and narrative of the virtual world operate as components of a “game.”

In order to determine whether each of these five characteristics were present, a cursory analysis of the contents and gameplay of the remaining 23 virtual worlds on the list was conducted. This included an overview of any gameplay instructions or tutorials made available by the site’s operators, as well as a review of player-generated videos of gameplay posted on *Youtube.com*. Through this analysis, it was determined that only 13 of the remaining virtual worlds fit the criteria outlined above and could therefore be classified as MMOGs.

In deciding whether or not the virtual world could be understood as a “game,” a number of previous definitions of games and play were considered. Foundational play theorists such as Huizinga and Caillois emphasize the crucial function of rules in separating ordered games from free-form play. For instance, Huizinga (1955) argues that the value of play comes out of the fact that play brings a limited, temporary perfection into the imperfect confusion of everyday life through the voluntary submission to a made up set of rules which “demands order absolute and supreme. The least deviation from it ‘spoils the game,’ robs it of its character and makes it worthless” (p.10). For Caillois (2001), game rules are evidence of advanced civilization, as the progression “from turbulence to rules,” within a society’s play practices results a concomitant transformation of play “into an instrument of fecund and decisive culture” (p. 29). Both provide a formal definition of play that highlights the importance of rules, as well as the temporal, spatial, experiential and ethical isolation of games from everyday life.

However, as Sutton-Smith (1997) describes, within much of the play literature rules are also deeply intertwined with notions of *play as progress*. This ideology highlights the “rational” qualities of organized games, including formal rules and parameters, while espousing a largely functionalist or purposive understanding of play. Similarly, a feminist critique might highlight the gender bias exhibited by traditional definitions of games, wherein defining characteristics are drawn primarily from a narrow consideration (and occasional privileging) of games and sports historically associated with male leisure. On the other hand, while in recent years the emphasis in play studies has shifted away from the purposive and rational qualities of games toward the complex, shifting and often ambiguous dimensions of play, rules remain a central part of the discussion. For some, it is within the dialectical relationship that exists between game

rules and gameplay, “between socially structured possibilities and human agency” (Gruneau, 1999, p. 27), that play becomes a form of social practice. For others, it is in the transgression of game rules, and the subversion of the underlying social order that rules often represent, that the transformative potential of play is realized (Bakhtin, 1984; Schwartzman, 1978). In each case, rules fill an enormously important role within theories of games and play. Within the context of digital games the relationship between games and rules gain a new significance (Grimes & Feenberg, 2009). Here, certain rules become standardized as program codes, which also contain and delineate player agency to at least some extent. Concurrently, the system can be programmed to exclude certain forms of deviation and rule-breaking (sometimes simply by omission).

While any formal definition of games (or play for that matter) runs the risk of constructing an incomplete, and potentially exclusionary, category, for the purposes of the current study the presence of a rule system that organizes and focuses play on a particular goal or set of relationships became a key criterion for determining whether or not a virtual world could be considered game-themed. Once this had been determined, it became clear that a more detailed “operationalization” of the relationship between games and rules (and play) would be required. Referring to Salen and Zimmerman’s (2004) definition of games, which is itself based out of a considered synthesis of existing definitions provided by foundational play theorists (including Huizinga, Caillois, and Sutton-Smith, among others), it was decided that in order to qualify as a game, the virtual world would have to contain the following features³¹:

- Rules: A structure delimiting what a player can and can’t do—broadly defined to include formal and informal rule systems, including those constructed by the players themselves, as well as transitory rules emerging out of particular play practices.
- A system: A “context for interaction” which, according to Salen and Zimmerman, can include “spaces, objects, and behaviors that players explore, manipulate, and inhabit” (p.80).
- Players: One or more participants that were engaged in “interacting with the system of a game in order to experience the play of the game” (p.80).
- Artificiality: Artificial boundaries and features that made the “game” separate, on some level, from everyday life.
- Conflict: Broadly defined by Salen and Zimmerman as a “contest of powers,” which can arise in a variety of forms, including cooperation, competition, solo conflict and social conflict.

The final criterion was that the virtual worlds selected for study had to be “open to the public.” This condition was established for two reasons. First, the research shows that children spend more time on free gaming sites than on subscription or pay-to-play site. For example, in a 2007 survey of children’s gaming habits, market research firm NDP Group found that a vast majority (91 percent) of the online gaming engaged in by children and teens (between the ages of 2 to 17 years) occurred on free sites (“Amount

³¹ While Salen and Zimmerman (2004) also include in their definition the characteristic of “quantifiable outcomes,” I elected not to carry this particular criterion over to my definition.

Of Time Kids Spend Playing Video Games Is On The Rise," 2007). Second, ethics approval for this research project was granted by the Simon Fraser University Research Ethics Office under the condition that the materials and communications examined fall within the public domain. It was decided that those virtual worlds that can only be accessed by personal invitation or by purchasing a specific product are in essence password protected, and therefore should be considered to be privatized spaces. These types of virtual worlds were thus deemed to be outside of the "public domain" and therefore ineligible for inclusion in the study. However, virtual worlds that offered free membership to the public at large, or offered private membership in conjunction with a free or open member option (where non-paying members could also access the site in some way), were considered to be public (or at the very least quasi-public) and therefore eligible for study as part of the "public domain." A total of seven virtual worlds were excluded as a result of this criterion, because they could only be accessed by private members who had registered to the site using a special code that was included with the purchase of a particular product. It is noteworthy that in all seven of these cases, the product required to obtain private membership and access to the site consisted of a collectible toy³².

Once the selection process and preliminary content analysis were complete, six virtual worlds were identified as suitable sites of analysis: *Club Penguin*, *BarbieGirls*, *GalaXseeds*, *Magi-Nation*, *Nicktropolis* and *Toontown*. This included three of the most heavily populated children's virtual worlds available on the market during the period of study (*Club Penguin*, *Nicktropolis* and *Barbie Girls*), according to data released by industry analyst and audience measurements firms. It was thus possible to conduct a comparative multi-case case study analysis of all six of the live MMOGs targeted to children between the ages of 6 and 12 years available at the time of study (discussed in detail in Chapter 3). A descriptive summary of each of the six case studies included in the final analysis is provided in Appendix A, which includes a brief introduction to the game's narrative and thematic elements, contents, history and business model.

Surveying the Landscape

In reviewing the sites on the amended *Youth Worlds Analysis* list over the course of the case study selection process, I identified a number of relevant findings and patterns that warrant some discussion before moving on to the case study analysis. Foremost among these is the discovery that while children's virtual worlds—as a new cultural and technological form—are clearly in a much earlier stage of development than reported in the popular press, they already display many of the same characteristics found throughout the commercial children's culture. Even the most cursory glance at the

³² In six of the seven cases that a toy required for entry into the site, the toy in question consisted of a collectible plush toy (or "stuffed animal"). This included virtual worlds *Beanie Babies 2.0* (by Ty, Inc.), *Build-A-Bearville* (owned by Build-a-Bear Workshop Inc.), *Littlest Pet Shop* (Hasbro, Inc.), *MyEPets* (MGA Entertainment), *Shining Stars* (owned by Russ Berrie & Company, Inc.) and *Webkinz* (Ganz, Inc.). The seventh, *UBFunkeys* (owned by Mattel, Inc.), required the purchase of a Hub into which collectible toy figurines (each sold separately in a series of over 105 variants) could be inserted.

ownership and thematic contents suggests that many of the sites included in the *Virtual Worlds News* list are at least in part designed to cross-promote ancillary products, media or related services. This trend is particularly apparent once the list is narrowed down to those sites specifically targeted to children under the age of 13 years. Not only are the vast majority (23 out of 28) of children's virtual worlds corporately owned and entertainment-driven, but they also reproduce the same patterns of commercialization that currently dominate the traditional children's media (including television, film, books and toys) (Kapur, 1999; Kinder, 1991; Wasko, 2008).

A more detailed overview of the ownership trends found within the children's virtual worlds market is useful in constructing this argument. Of the 28 children's virtual worlds that were both live and originating from within North America examined during the study period, 20 were owned and operated by large corporate conglomerates, such as Disney, Mattel, Nickelodeon, Ty, Inc., Hasbro and MGA Entertainment, all of which have an established presence and significant market shares across the children's industries. Nine of the sites are owned by children's media producers, including The Cartoon Network (*Big Fat Awesome House Party*), 4Kids Entertainment (*Chaotic*), the NFL (*NFLRush*), Corus Entertainment (*GalaXseeds*), Cookie Jar Entertainment (*Magi-Nation: Battle for the Moon lands*), Disney (*Toontown* and *Club Penguin*), and Nickelodeon (*Nicktropolis* and *Neopets*). Thirteen are owned by toy manufacturers MGA Entertainment (*Be-Bratz*, *MyEPets*), Ty Inc. (*Ty Girlz*, *Beanie Babies 2.0*), Mattel (*Barbie Girls*, *UB Funkeys*), Build-a-Bear Workshop, Inc. (*Build-A-Bearville*), Hasbro (*Littlest Pet Shop*), Russ (*Shining Stars*), Ganz, Inc. (*Webkinz*) and Bandai America Inc. (*Tamagotchi's Tama & Earth*), while another is owned by collectible card game producers Hidden City Gems (*Bella Sara*). Only four of the sites are owned and operated by companies whose operations consist either solely or primarily of digital content development, including Circle 1 Network's *KidsCom*, Numedeon Inc.'s *Whyville*, Handipoints Inc.'s *Handipoints* and ElectricMethod's *Xivio*. In addition, four of the sites are run by companies that produce educational toys or "edutainment"-driven content, including Numedeon and Circle 1 Network, as well as Globio (makers of *WebWilds*) and Minyanville (creators of *MinyanLand*). Notably, none of the virtual worlds examined are owned or operated by digital game developers.

These trends are significant because they suggest that children's virtual worlds likely contain many of the same underlying political and economic processes that these same companies have effectively introduced into so many other areas children's commercial culture—through strategies that include transmedia intertextuality, cross-promotional "consumption webs" (Kapur, 1999) and a narrow emphasis on the maximization of "commodity flow" (McAllister & Giglio, 2005) within and among cultural texts. As Mosco (2004) argues, the tendency within corporate culture generally is that "Digitization takes place in the context of powerful commercial forces and also serves to advance the overall process of commodification worldwide. In other words, commercial forces deepen and extend the process of digitization because it enables them to expand the commodity form in communication" (p.156). Winner's (1986) framework, which outlines two types of decisions within technological development that can reveal the

political dimensions of technological artifacts, is especially useful in this respect. According to Winner, a key starting point for this form of inquiry is to examine the initial choice to develop the technology or not. In particular, Winner (1986) highlights the need to question the arrival of technological artifacts or systems that seem to either require or to be strongly compatible with “specific” and existing “ways of organizing power and authority” (p.13). In this regard, Winner’s approach is remarkably in line with the underlying principles of the political economy of communication tradition as articulated by Mosco (1996).

In relation to ownership patterns and provenance, children’s virtual worlds do very little to disrupt the existing “ways of organizing power” within the children’s cultural landscape. This is particularly true of the predominant roles assumed by toy and media companies in setting the tone and the agenda for cultural production and contents. As described in previous chapters, for the past four decades a primary characteristics of the “children’s commercial culture” (Cross, 2004) has been the ongoing merger of toys and media (particularly television³³) and a concurrent concentration of corporate ownership and partnerships within and across the children’s industries (Hendershot, 1998). This has resulted in a proliferation of children’s media and cultural products, but also a homogenization of their themes and contents, as transmedia intertextuality and multi-modal branding synergies are now the industry norm. For instance, a study conducted by McAllister and Giglio (2005) found that “Virtually all Saturday morning programming involve licensing to some degree,” and that “Nearly 80% of programs aired or promoted during the period sampled were based upon characters with strong ties to other media or commodities” (p.35).

Similar trends are found within the toy market, where licensed toys represent nearly a third of all sales (Rusak, 2008), and a handful of companies control a substantial share of the industry. As Fleming (2008) describes, within the toy industry “A few major global brands (Bandai, Hasbro, Mattel, etc.) dominate a toy market that is now inextricably linked to the media, and they rely on manipulating a cycle of demand peaks for specific, heavily marketed toys” (p.56). For instance, NPD Group reports that in 2008 nine of the top ten best selling toy licenses were based on media properties (four of which were produced by Disney). Meanwhile, the best selling toy license of 2008, Mattel’s Barbie, also generates a wide variety of profile spin-off media products, including direct-to-DVD titles, storybooks, and computer games (Hetherington, 2007). That these same patterns of ownership (and of ownership concentration) are currently being reproduced within children’s virtual worlds is important because of the strong tendency among these companies to integrate new cultural forms into existing cross-promotional and intertextual strategies. As scholars such as Meehan (1991) argue, for large conglomerate companies like Disney and Hasbro, the perceived potential for tie-in merchandise and brand synergy is often the key determining factor influencing production decisions. In terms of Winner’s first question about intention, wherein technology scholars are invited to consider the intended purpose or reason for

³³ Culminating most recently in Hasbro’s announcement that it plans to launch its own television network, with the cooperation of Discovery Communications, based around its toy brands.

introducing the new artifact or system, the positioning of virtual worlds as yet another forum for cross-promotional synergy seems likely.

Indeed, even a cursory examination of the children's virtual worlds environment indicates that this is at least partially the case. Within children's virtual worlds promotional content is clearly prevalent. Nearly all (27) of the 28 children's virtual worlds reviewed (that were live during the study period and originating from within North America) feature advertising or cross-promotional content of some kind, which is displayed either on the site's "home page" or within the first few pages of navigation. Thirteen of the virtual worlds contain third-party advertisements, which are featured on the site homepages, appear as banner ads surrounding the game window, or are integrated directly into the game environment (as "in-game advertising"). Twenty-four of the virtual worlds feature cross-promotional content in the form of characters, themes and brands that are also found in ancillary media and tie-in product lines.

In particular, a large proportion (22) of the sites feature characters and in-game items that are also available in licensed toy form (predominantly stuffed animals, but also electronic "plug-in" toys and collectible card games). Twelve of these sites require the purchase of a tie-toy in order to access the site at all, and grant players with additional features and privileges with every additional toy purchased. Another seven are "free-to-play" but reward players with access to additional "special" features with the purchase of a tie-in toy or other product. Among the 22 virtual worlds that feature characters or in-game items that are concurrently available as "real-world" toys, 19 incorporate these toys into a "micro-transaction" revenue model that translates real world purchases into in-game privileges (access, extended access or special features) and virtual assets (in-game items and currency). One additional site, The Cartoon Network's *Big Fat Awesome House Party*, awards special in-game items to players who watch the game's associated television program (by entering a "secret code" that is flashed on the screen during broadcast), while two others transform online purchases (of either real world, third-party products or of in-game currency) into virtual assets.

Within the children's virtual worlds market, subscription models appear to be quite rare as only five of the sites reviewed contain a monthly subscription option. Furthermore, in each of these cases the monthly subscription operates as a supplementary or "premium" membership alternative to the standard "free-to-play" membership. Premium (or paid-subscription) members are granted a variety of special privileges and access to additional features and areas of the site, whereas basic or "free-to-play" members (also called "non-members") have only limited access to features, in-game items and other aspects of the virtual world environment. Three of the premium subscription model sites concurrently support a micro-transactions model, all of which involve toys, and two of which involve both toys and a collectible card game. Of the remaining four children's virtual worlds included in the analysis (not counted as subscription or micro-transaction), three feature third-party advertising thereby indicating an ad-based revenue model. Only one of the sites reviewed, *Xivio*, does not appear to contain either promotional material or a clearly discernible revenue model.

Overall, 20 of the sites reviewed contained a micro-transaction revenue model, representing just over 70% of the remaining 28 children's virtual worlds. This percentage is much larger than the current industry estimates, such as Gibson's (2008) recent report that approximately 40% of children's virtual worlds feature micro-transactions, mostly geared around virtual items and avatar customization. One possible reason for this discrepancy is the broad and as yet ambiguous nature of "micro-transactions" as a model for generating revenue online, as well as the blurring of traditional boundaries that arises when the purchase of "real-world" products (in this case primarily toys and cards) translates into "virtual" assets within an ancillary online space. As a result, the types of "real-to-virtual" micro-transactions that are found within many children's virtual worlds might not always be counted as "virtual transactions." For example, membership to *Webkinz* can only be obtained through the purchase of a tie-in toy, but these transactions are more likely to be counted toward the growth of the traditional toy market than toward the virtual world market.

These nuances present additional challenges when attempting to interpret industry-produced market analysis, such as a recent joint study conducted by the Toy Industry Association and NPD Group (2008), which found that 28% of kids aged 2 to 14 who use social gaming and entertainment sites have "purchased either a physical item or digital content *from these sites*" (emphasis mine). The industry's current emphasis on "virtual-to-real" transactions means that more traditional models, which are often used in conjunction with e-business models and which remain surprisingly prevalent within the children's virtual world environment, appear to be left out of the equation too often to get an accurate sense of the size and effectiveness of this emerging market sector. Thus, while Gibson (2008) estimates that "subscriptions and micropayments in children's MMOGs and virtual worlds alone generated over \$300m in 2007 and will grow over 30 per cent this year," the actual market share of this industry could be much larger once real-world purchases of web-associated toys and revenues generated from in-game advertising are included as well³⁴.

More importantly, however, is the way in which this blurring of real-world and virtual exchange deviates from established conventions within North American virtual worlds culture. Although micro-transactions, in-game advertising and virtual-to-real world exchange are prevalent within some virtual worlds targeted to teens and adults, such as *Second Life* and *There.com*, these sites do not tend to be centred around a particular game or theme, but rather on providing individual and corporate users with a digital context for building social relationships, producing, trading and selling virtual items, as well as constructing virtual subsidiaries of "real world" organizations, systems and events (Herman, Coombe, & Kaye, 2006). Conversely, until now western MMOGs and other game-themed virtual worlds have predominantly relied on monthly subscription fees, along with periodic purchases of the game software and upgrades, to generate the bulk of their revenues. Although similarly propelled by the quest for profits, successful teen

³⁴ Unfortunately, because so few private corporations release reliable or comprehensive figures about their products, consumers or market reach to the public, industry analysis remains one of the only sources available for finding user statistics and gauging the market impact of commercialization.

and adult-oriented MMOGs are predominantly designed as either stand-alone cultural products (such as *EverQuest*) or as highly open-ended companion pieces to established media brands (such as *Age of Conan*), rather than as integral components of larger cross-media (and cross-promotional) initiatives. While cross-promotional content and third-party advertising can sometimes be found within T-rated MMOGs, the development of in-game advertising as a viable revenue source has thus far unfolded in a highly subtle and disorganized way, much to the chagrin of the marketing industry (Bogost, 2006). Of course, there are always exceptions, such as *Maple Story*, which features a micro-transactions model for purchasing avatar and gameplay enhancements, and *Runescape*, which contains third-party advertising. It is interesting to note, however, that among the top ten most profitable MMOGs worldwide, the only western MMOGs to feature micro-transactions or third-party advertising are those built for and played by a younger demographic of players (DFC Intelligence, 2009).

Furthermore, teen and adult-oriented MMOGs have been the subject of an ongoing debate about the role and impact of “real money transactions” (RMT) on play itself. The legal conflicts that have surfaced around issues of virtual property ownership (of in-game items and avatars) has led a number of theorists to question whether a formal institutionalization of real-world market exchange and legal relationships within digital game environments might result the deterioration of the play potential currently available within these spaces. For instance, Castronova (2003) warns that the more real-world meaning and consequences permeate online play spaces, the more likely it is that their status as “games” will erode and that they will be opened to the laws, expectations and norms of capitalist society. He explains, “Whatever is happening, if it really matters in an ethical or moral sense, it cannot be a game. Rather, games are place[s] where we only act as if something matters” (p. 2). Yet, within children’s virtual worlds, there is little if any distinction between genres in terms of the business models applied, as 10 of 13 children’s virtual worlds that ultimately qualified as MMOGs contained real-to-virtual micro-transaction models, while the remaining three featured explicit cross-promotional content for real-world, ancillary products. Children’s MMOGs thus enter into this debate on the side of unquestioned commercialization, with little consideration of the impact of RMT on play.

Case Study Overview

All six of the case study MMOGs reproduce the trends identified above, in that they are all owned and operated by major corporate conglomerates that already enjoy a strong presence within the children’s industries. As summarized in Table 1 (below), each of the MMOGs is owned by a corporate entity with heavy involvement in both children’s media production and toy licensing. Three of the site owners, Disney (*Club Penguin* and *Toontown*), Mattel (*Barbie Girls*) and Nickelodeon (*Nicktropolis*), are widely recognized for their prominent roles in various children’s media, licensing and merchandising initiatives. Similarly, Corus Entertainment (*GalaXseeds*) and Cookie Jar Entertainment (*Magi-Nation*) are both highly established in the field of television animation, and together produce much of the programming content shown on US (including

Nickelodeon, The Cartoon Network and CBS) and Canadian (including YTV and Treehouse) children’s networks and Saturday morning cartoon blocks. These games are thus run by companies that are entering into the burgeoning children’s MMOG market with a ready arsenal of existing properties and cross-promotional interests, including previous experience with a variety of digital game formats.

Name	Launch Date	Population Size³⁵	Corporate Owner	Market Sector
<i>BarbieGirls</i>	Apr. 2007	1 million	Mattel	Toys, media
<i>Club Penguin</i>	Oct. 2005	4 million	Disney	Toys, media
<i>GalaXseeds</i>	Feb. 2007	Over 60,000	Corus Entertainment	Media/TV
<i>Magi-Nation</i>	Feb. 2008	Unknown	Cookie Jar Group	Toy, CCG,TV
<i>Nicktropolis</i>	Jan. 2007	4 million	Nickelodeon	Media/TV, toys
<i>Toontown</i>	Jun. 2003	1.2 million ³⁶	Disney	Theme park, media

Table 1: Case study size and ownership overview

Tellingly, four of the MMOGs are centred on themes or characters drawn from one of the corporate owner’s existing children’s properties. The *Barbie Girls* (Mattel Inc., 2007-2010) game revolves around Mattel’s enduring Barbie doll brand and successful series of fairy-tale themed Barbie direct-to-DVD films (Bynum, 2009). The *Magi-Nation* (Cookie Jar Entertainment, 2008-2010) game is based on the Magi-Nation Duel collectible card game and tie-in television series by Cookie Jar, as well as an RPG console game published in 2001 for the Nintendo Gameboy. *Nicktropolis* (Nickelodeon, MTV Networks, & Viacom Inc., 2007-2010) features characters and themed areas based on a variety of popular Nickelodeon television programs. While the remaining two case studies were initially comprised solely of “original content,” meaning that the meta-narrative and dominant themes are not based on a previously existing license, Disney’s *Club Penguin* has already spawned a number of spin-off media and product lines, including a tie-in console game (for the Nintendo DS), a trading card game and a growing assortment of collectible toys and merchandise. In each case, ancillary and tie-in products are promoted within the games, either explicitly (e.g. *Barbie Girls* features in-game ads for Barbie-themed DVDs) or indirectly through transmedia intertextuality and branding.

Although all six of the games can be played for free, *Toontown*, *Club Penguin* and *Barbie Girls* also offer premium memberships through a monthly subscription. In addition, *Barbie Girls*, *Club Penguin* and *Magi-Nation* each contain some form of micro-

³⁵ Data on population sizes was drawn from a number of industry sources, including CrunchBase (last consulted January 30, 2009, <http://www.crunchbase.com/company/>), company press releases and player rankings on the virtual worlds’ websites.

³⁶ Estimate for paying members. However, Disney recently announced that since its launch in 2003, over 20 million avatars have been created within Toontown (Nakashima, 2008).

transaction system as part of their revenue model. In *Barbie Girls* and *Club Penguin*, the micro-transactions are mediated through the purchase of “real world” products—toys, accessories, and trading card games that come with “special codes” that activate in-game benefits. In *Magi-Nation*, the micro-transaction model used is much more direct. Players are invited to purchase items using a special currency that is only available through RMT. The two MMOGs that do not contain either subscriptions or micro-transactions, *Nicktropolis* and *GalaXseeds* (Frima Studio, 2007-2010), are also the games that contain the most prevalent and frequent third-party advertisements. However, both *Magi-Nation* and *Barbie Girls* also feature non-integrated forms of third-party advertising (such as banner ads and in-game ads that are somewhat separate from the gameplay).

What this preliminary overview of the games’ thematic contents and ownership patterns demonstrates is that like most non-educational children’s virtual worlds, the selected case studies reproduce many of the trends found throughout children’s commercial culture. These MMOGs are dominated by same corporate entities and feature many of the same themes and cross-promotional strategies as previous forms of children’s media and digital culture. While establishing corporate ownership and business patterns within the children’s virtual world market provides us with preliminary coordinates with which to begin a more thorough consideration of the political and economic dimensions of this new cultural form, they tell us very little (if anything) about the games themselves. By suggesting that “that we pay attention to the characteristics of technical objects and the meaning of those characteristics” (Winner, 1986, p.22), however, critical theory of technology provides a way of grounding these discussions of the social dimensions (and social construction) of technologies by extending the analysis to the technologies themselves. A key contribution of the critical theory of technology framework is that it allows us to explore how features of the design and arrangement of a particular technological device can be the means through which power relations are established and maintained, as well as challenged and subverted. Because technologies, just like other cultural forms, are understood as having a “range of flexibility” they can be more or less politically significant depending on the specific features and arrangements of their implementation and use.

The question now becomes whether the specific features and affordances contained within the games’ designs reflect a “pattern imposed independently by a governing body, ruling class, or some other social or cultural institution to further its own purposes?” (Winner, 1986, p.13). This phase of the analysis corresponds with Feenberg’s theory of instrumentalization, as well as Winner’s second “category of decisions” involved in the politicization of technologies, both of which seek to understand how the “social, cultural and political conditions” (Feenberg, 1999) that provide the context, rules and norms under which design choices are made manifest within the design and practice of the artifact itself. Thus, while our discussion begins with an exploration of the organizational and structural conditions from which children’s virtual worlds emerged, the next step (and the subject of subsequent chapters) is to consider how these conditions become institutionalized as “rules” of the game and as features of

the design within the six case study MMOGs. Primarily, what is now needed is a focused examination of the design features and action opportunities found within the games themselves. The next chapter thus provides a thorough review of the case study MMOGs' designs and affordances, along with a preliminary typology of the major trends and patterns that characterize the six case studies.

Methodology

My research methodology draws on the two-level approach outlined by Feenberg (2006), examining both "the level of the basic rationalizing operations and the level of the power relations or socio-cultural conditions that specify definite designs" within the case study MMOGs. My research design follows a methodology first established within the traditions of SCOT and STS research, which were subsequently re-interpreted and expanded upon within critical theories of technology—including Feenberg's (1999) instrumentalization theory, Winner's (1986; 1993) framework for studying the politics of technologies, and Wajcman's (1991) social shaping of technology approach. These works use socio-historical case studies as a way of situating the study of technology onto one or more specific artifacts (or systems), in order to reveal how the "social and cultural impacts of a technology correspond to decisions made during its development stage" (Brey, 1997, p.3), as well as how "particular technologies, designed for use within a particular use environment, come to embody a particular politics or particular social effects" (p.8). The approach emphasizes the use of analytic categories such as "interpretive flexibility," stabilization and closure (Pinch & Bijker, 1987), relevant social groups (Schwartz Cowan, 2001), and the principle of symmetry (Brey, 1997) as tools for understanding how these processes unfold. As a methodology, SCOT and its subsequent reiterations (particularly those proposed with critical theories of technology) offer a flexible model for studying the various social factors, ideologies and biases that are reflected and reproduced in technological innovation (Brey, 1997).

In the current study, the use of case studies provides a way of identifying specific sites of inquiry for an interpretive research methodology that combines elements of critical analysis with design analysis, qualitative content analysis, discourse analysis, semiotic analysis and ideological criticism (Berger, 2000), in order to apply relevant concepts drawn from social constructivist and critical technology theories, supplemented by political economy of communication theory, to the phenomenon of child-specific MMOGs (Schroder, Drotner, Kline, & Murray, 2003). This is accomplished by approaching MMOG technologies as a "particular configuration of patterns of actual stuff, an engineering design, a project, a budget, planners, users, a series of decisions, location, cultural milieu, and so on" (Arisaka, 2001). In the context of the current study, wherein the analysis is focused on the digital artifact itself rather than on design processes or user practices, the "actual stuff" being considered includes the vast assortment of texts, features, discourses and relations that go into the design and implementation of a MMOG. This includes:

- The "material" features of the virtual worlds' GUI designs, gameplay mechanics, action opportunities, affordances and limitations;

- The thematic and semiotic contents contained in the virtual worlds' environments, as well as in their narrative structures;
- The legal documents, terms of use, privacy policies and ground rules that serve as overt articulations of the virtual worlds' governance and the management strategies of the worlds' owners and operators;
- The "packaging," promotional content and marketing discourses that both surround and permeate the virtual worlds.

These sources are located and analyzed by entering into and playing the case study MMOGs, observing and noting the contents and features of the virtual worlds (as described in Chapter 3), reading any associated documentation, policies and other texts, locating data on corporate ownership, business processes and revenue models, reading industry publications and corporate communications (including press releases and annual reports), following media coverage of the virtual worlds, and reviewing governmental policies, legislation and industry self-regulatory guidelines that were understood to be relevant to the operation and governance of virtual worlds.

The data is then interpreted according to a number of theories and concepts used in critical technology studies in order to uncover some of the underlying political, social, cultural, economic and ideological dimensions of the artifacts in question. Feenberg's (1999) "theory of instrumentalization" is used to understand how MMOGs operate on two levels: the primary instrumentalization, which describes how "functions are separated from the continuum of everyday life and subjects positioned to relate to them" (p.202), and the secondary instrumentalization, which enables a discussion of the realization of technological systems (and its components) within specific socio-cultural contexts. The two instrumentalizations are analytic categories that are helpful in understanding the two-sidedness of technical artifacts, which are both technically rational and socio-culturally meaningful. Feenberg's theory is also used to discuss the data in terms of an embedded technical code, which highlights "those features of technologies that reflect the hegemonic values and beliefs that prevail in the design process" (Feenberg, 1995, p.4), which form a "background of unexamined cultural assumptions literally designed into technology itself" (p.87). Here, the emphasis is placed on decoding the ways in which features of a technology's design, implementation and delegations work to reproduce hegemonic interests, existing power relations and cultural assumptions.

The sources and data are furthermore interpreted according to Akrich's (1992) notion of scripts, wherein technical objects are understood to be inscribed with a defined framework of action. As Oudshorn and Pinch (2005) describe, this concept "tries to capture how technological objects enable or constrain human relations as well as relationships between people and things" (p.9). Within technology studies, the notion of scripts is often used to explore questions about the "gendering" of technological artifacts. For instance, van Oost (2005) examines how traditional notions of gender become re-inscribed within the marketing, packaging and design of consumer products such as electric shavers. Just as gender scripts can become transformed into "design specifications" which operate at the level of technological, aesthetic and marketing

design, I will explore how dominant scripts about play and children might become encoded in the design, narrative and management strategies of MMOGs. The notion of scripts is furthermore related to a third key concept that will guide the interpretation, how technological designs and the discourses surrounding a particular artifact work together in configuring the user (Oudshorn & Pinch, 2005). In this portion of the analysis, I will adopt a semiotic approach to studying the player or “user” as a representation that is constructed and addressed within the MMOGs’ design, marketing, quasi-legal texts, and other features.

In addition, I will attempt to supplement concepts drawn from critical theories of technology with the methodological framework delineated by Mosco (1996) as part of the political economy of communication tradition. Critical theories of technology posit that in order to truly understand the function of technology within modern societies, researchers must consider the technologies themselves, as well as larger social, ideological and political implications. Winner (1986) argues that specific features within the design or arrangement of a technological device can provide a means of establishing (and maintaining) power relations, and that analyzing the design features of specific artifacts allows us to uncover its political and social dimension. Political economy, on the other hand, provides a framework for analyzing the relationships between material constituents and the wider social totality (particularly power relations) (Mosco, 1996). The overlap between the two suggests that a critical theory approach to technology studies can also be used to extend the cultural industry critique emphasized within political economy of communication, and vice versa. For instance, Mosco identifies three entry points that provide a “map” of political economic theory that are of particular interest to the current discussion: *commodification*, which he defines as “the process of transforming use value into exchange value” (p.138); *spatialization*, or “the transformation of space with time, or the process of institutional extension” (p.138); and *structuration*, which is the process through which structures are constituted with social agency. Furthermore, amalgamating these two approaches results in a necessary expansion of conventional definitions of “relevant social groups” By placing greater emphasis on the role of institutions, markets and legislation in the social shaping of technological artifacts, political economy broadens enables a more comprehensive discussion of the ways in which these artifacts reflect and reproduce the social order.

Lastly, throughout the SCOT and critical theory of technology scholarship, significant emphasis placed on the role and importance of the user in the social shaping of technological artifacts and forms. Here, the social construction of technology is not merely seen as a process that unfolds during the early stages of design and development, but as a process that extends as the artifacts are used and implemented within specific socio-cultural contexts, as the technologies are realized through interaction with the users’ interests, needs and practices. Feenberg (1999) stresses the complex ways in which technological artifacts serve as “sites of struggle,” wherein users also have a potentially transformative role to play in the negotiation of technological systems. Accordingly, Feenberg’s (2006) two-level approach invites us to consider both the “social, cultural and political conditions” which provide the context, rules and norms

under which technological design choices must be made, as well as the types of rational practice within which these systems *are engaged*.

The current study thus addresses the user in a variety of ways. First, the virtual worlds are approached from the perspective of use or of “the player,” in that they are played and experienced firsthand (as described in the next chapter). The user is furthermore addressed as a semiotic, discursive and political actor throughout the discussion. However, a more direct engagement with users and use practices is needed—not only to ensure that questions of user innovation, unanticipated uses, and the margin of manoeuvre are introduced into the discussion, but also as a way of challenging the privileging of structure and rule systems that might otherwise ensue. Thus, while a comprehensive investigation of the user and user practices is beyond the purview of the current study, a preliminary attempt to draw attention to the role of the user within the social shaping of children’s MMOGs has been included in the research design.

Over a period of three months, July to November 2008, a series of informal observations were conducted *in situ* (within the virtual worlds environments) within two of the case studies, *Barbie Girls* and *Club Penguin*. Given that the programmed limitations in the MMOGs’ designs made it virtually impossible to identify myself, ask for consent or solicit any personal information from players encountered within the virtual world environment, the ethical clearance secured for this study was for non-invasive observation only. Ethical clearance to conduct this research was given, despite the fact that parental consent and informed consent would not be secured, under the explicit condition that the players would not be approached directly or solicited for information. It is important to note, however, that the other players were aware of my presence throughout the study. I was at all times represented within the virtual world environment through my avatar. During these observations, I placed my avatar in a corner of the room and tried to be as non-invasive as possible. If a player addressed me directly, in a way that failing to respond might come across as a form of antagonism or slight, my strategy was to reply as politely and briefly as I could. For the most part, these interactions were limited to friend requests and invitations to play. In both cases, a simple “No thank you” was my standard reply, as well as a response that I found to be quite common across both MMOG communities. In addition to written notes taken during these observations, in which I identified events and interactions of interest, a small number of sessions were recorded using Camstasia, a screen capture program. These video recordings enabled subsequent revisiting of the sessions, and were used to produce transcripts of user chat and interactions.

The observational stage of the study was focused rather than truly open-ended, by which I mean that my observations were aimed at identifying specific types of interaction, especially signs of tension, conflict or resistance between the rule systems and the players. For this and other reasons, the depth of my observations was most likely limited researcher bias, as I brought to the process a certain amount of subjectivity, as well as an acknowledged agenda. Both my observations and my analysis of the recorded sessions were furthermore informed by the general impressions I had

developed over the course of the two years I spent playing the MMOGs, as well as my prior experiences researching children's online games, and my knowledge of the literature on children's culture, play and digital technology use. The findings are thus anecdotal at best. That said, they nonetheless provide a compelling contextualization and necessary counterargument in terms of the study's other sections and findings, which ultimately strengthens the relevance of the study as a whole.

Chapter 3: MMOG Design and Typology

Like many artifacts of childhood, children's digital games are predominantly discussed in terms of social outcomes, such as the types of behaviours (both good and bad) they are seen to enable and the cognitive skills they are seen to produce (or inhibit). Only rarely is the analysis turned to what the artifacts are actually made of—how they are designed and developed, what their material characteristics are, and what action opportunities they present to their users. As suggested in previous chapters, however, the design and arrangement of technological artifacts are not only determined by cultural norms, power relations and the political ideologies of their makers, but they can also reflect and reproduce them. As Feenberg (1999) argues, "If technology is political and its design a kind of legislation, then surely it must represent interests much as do ordinary political decisions and laws" (p.137). As such, technological design demands the same critical attention and consideration given to any other social institution. Within the context of digital games and MMOGs, this "legislation" operates as a sort of "rule system" that is programmed into the virtual world's software code and articulated to users through the game's design features and affordances.

As with any game, the rule systems found in MMOGs are significant because they represent the central organizing factor shaping—although never fully determining—the scope and nature of gameplay. A game's rules establish the parameters for the players and supply them with a particular set of objectives. To a significant extent, the rules also determine which actions or "moves" are positioned as acceptable and unacceptable within the framework of the game. While some of these rules are explicit, others must be discovered through gameplay as players encounter the various affordances and limitations of the game's design. In order to uncover the implicit rule systems contained within children's MMOGs and to begin to determine the particular set of "interests" they represent, a more concerted and focused analysis of the artifacts themselves is clearly required. This approach not only enables a much more comprehensive analysis of the underlying political and social dimensions of children's MMOGs, but it also responds to a palpable need for "more focused empirical concern with the materiality of artifacts in contexts of social interaction" within children's technology studies (Hutchby and Moran-Ellis, 2000, p.3).

When the artifact in question is a virtual world, exploring "materiality" presents a unique set of challenges. MMOGs are produced out of a complex network of computer programs, game engines, databases and player input, all of which are interacting continuously and in real time through a multileveled exchange of data. This data is stored in a distributed computing system that includes multiple servers and countless personal computers. Without specialized computer programming skills, analyzing software code and deciphering the system's architecture is akin to trying to read an

unfamiliar foreign language. Then again, a computer program's code is also inaccessible to the vast majority of its users, for whom code operates as an invisible and often personally irrelevant component of digital culture. In today's WYSIWYG ("what you see is what you get") computing environment, software code is largely hidden behind a graphical user interface (GUI) that enables and mediates interactions between the user and the operating system, while another system "behind the screen" translates the user's desired actions to a parser that then reads them as a series of "if-then" commands (Kirkpatrick, 2004; Stallabrass, 1996). As with other programs, once a player learns a digital game's physics and emergent qualities, they become internalized as part of the "physical" reality of the game environment. Thus, from the perspective of most players, the GUI, the interface, the game mechanics and affordances, in essence *are* the material features of the technological artifact. By approaching digital games from the perspective of use (or the user), by interacting with the design through its GUI and exploring the artifact and its contents through gameplay, the material features of MMOGs can thereby reveal themselves to researchers much in the same way that they reveal themselves to users.

Further support for this conclusion is found in Feenberg's (1999) instrumentalization theory, which attempts to embrace "the wide variety of ways in which technology engages with its objects, its subjects and its environment" (p.17). A key premise of instrumentalization theory is that technology is a dual level process, which occurs both at the level of the basic rationalizing operations of the technological artifact or system, as well as at the level of the power relations and socio-cultural conditions that specify designs and usages, activities and behaviours (Feenberg, 2006). Technological design, Feenberg (1999) describes, is "not determined by a general criterion such as efficiency, but by a social process which differentiates technical alternatives according to a variety of case-specific criteria" (p.83). Technology is thus understood as a practice as well as a process, a site of struggle in which the interests of designers, marketers, users, politicians and multiple others compete and intersect to determine the technology's eventual function and meaning within society. This is particularly true of MMOGs and other digital cultural forms that are dependent upon users' interactions and engagement in order to "come into being" as a subjectively experienced, temporally situated and spatially organized series of affordances, achievements, action opportunities and narrative elements.

A sufficient level of user participation is not only a crucial component of multiplayer game mechanics, but players' individual contributions to the shared gameplay experience have an enormous influence on the cultural meanings that emerge out of specific MMOGs. Players' contributions include playing the game, of course, along with various forms of ludic engagement such as competitiveness, playing fair, assisting teammates, trying to win, or at the very least trying to avoid "dying." But within MMOGs, players also engage in more elaborate forms of participation, such as collaborative storytelling, role-play and performativity, the formation of social relationships, and the production of game content such as virtual items. In addition, the digital game industry frequently diverges from traditional industrial development cycles by directly and

indirectly enlisting users in various aspects of design and development³⁷. In addition to providing substantive examples of how design continues to evolve as a social process or “struggle” to define the technological form well beyond initial studio production, the added layers of user engagement present within mainstream MMOG design make adopting a “user perspective” all the more relevant and compelling as an entry point for examining the technological design of these particular artifacts.

Play as a Mode of Analysis

A growing trend within the digital games development is the notion of iterative design, in which design decisions are made in continuous dialogue with the player—either in the form of direct feedback or by otherwise adopting a “player perspective” throughout the design process (Fullerton, Jenova et al., 2006). Players are frequently invited to contribute to online discussions about game features (or flaws) within developer forums, and are sometimes asked to participate in usability tests. Players also contribute to game development through “playtesting,” both in formal venues (e.g. organized by a game design studio and in the context of a controlled research scenario) and informally through open beta testing³⁸. As development cycles are increasingly expanded beyond a game’s official launch or publication date—in the form of software updates, add-ons and patches—player feedback cycles are similarly extended and used to guide improvements and additions to the game design’s ongoing evolution. More and more playtesting also occurs in-house, as development teams are asked to engage in processes that rely heavily on the continuous playtesting of prototypes, which are increasingly created at various stages of the design rather than solely near the end. Throughout this process, members of the design teams are asked to adopt a “user perspective” and to experience the games not merely as designers but as players also.

According to Fullerton, Swain and Hoffman (2004), playtesting is, the “single most important activity a designer engages in.” While other user-centred industry practices such as usability testing and market research mostly focus on the user’s interactions, interpretations and feelings towards the finished (or nearly finished) product, playtesting is instead conducted “throughout the entire design process to gain an insight into how players experience the game.” As a key component of iterative design—or as Fullerton (2008) calls it “playcentric” game design—playtesting enables designers to identify issues and opportunities within a game’s playability and to adapt or develop the design accordingly. As Fullerton, Swain and Hoffman maintain, playtesting is the primary means through which the designer sustains a “relationship with the players’ needs and perspective.” It is also a uniquely effective way of ensuring that the game functions “as

³⁷ An extreme example of this is corporate incorporations of “modding,” a practice that initially emerged as a player-driven appropriation or “modification” (from which the term “modding” derives) of the proprietary digital game source code. Some game companies now reappropriate these practices by releasing parts of the source code for players to modify, thereby tapping into a vast pool of amateur talent (Postigo, 2003).

³⁸ In the digital game industry, game prototypes commonly go through three stages before finalization: pre-alpha, alpha and beta. Traditionally, players have been brought in at the beta stage to perform usability testing and, increasingly, play testing. Within iterative design processes, however, playtesting is conducted at each stage of development, using multiple prototypes of various stages of completion.

intended” in terms of the gameplay (and player) experience—not only in terms of game mechanics or accessibility of the interface, but equally in terms of non-technical aspects such as “clarity of rules, game balance, [and] overall premise” (Fullerton, 2008, p.44). Niedenthal (2007) suggests that playtesting furthermore enables a deeper consideration of the “complexity of designing for the emergent properties of games,” while simultaneously revealing the attitudes of the designers towards “the player” (both real and imagined).

Within the current study, playtesting provided inspiration for the approach that I adopted while conducting the comparative case study analysis. First, I believe that the playtesting framework provides supplementary justification for approaching game design from a use(r) perspective that focuses on the GUI and on the features of gameplay (narrative, aesthetic themes, affordances and limitations) as a way to examine the “material features” of games as technological artifacts and systems. Additionally, the emerging academic discussion around the role and function of playtesting within game design, such as the influential contributions of Salen and Zimmerman (2004; 2006) as well as more recent work by Niedenthal (2007), suggests that it can indeed serve as a new entry point for uncovering the scripts contained within gameplay design and for examining how these artifacts “configure the user” in ways that reflect particular ideas and assumptions about their players. Both of these points strongly suggest that a similar approach can be applied within critical analysis of digital games, which seeks to assess and investigate many of the same dimensions of the games’ designs—albeit from a different theoretical framework that poses a very different set of questions. Although conducting this form of analysis firsthand reveals nothing about the *actual* players’ experiences or interpretations of the games, it does allow for a reorientation of design analysis that emphasizes *gameplay* rather than game production.

Another important source of inspiration and support for this type of approach is found in in-depth close readings of digital games, in which the sequences of a game are analyzed in detail “in order to illustrate and interpret how the various components of a game can come together to create a fulfilling playing experience unique to [digital gaming]” (Davidson, 2009). Davidson (2008) proposes a particularly well-articulated approach to close reading, which he defines as a “dual approach of analyzing the narrative plot and interactive levels” (p.383). By considering both narrative (story development) and gameplay (the rhythms and interactivity of playing the game), his approach enables an identification of the precise moments in a game where the features best work together in engaging the player. Conversely, it also provides a way of exploring moments that “did not work as well as they could have” (p.383). Another of Davidson’s key contributions is his discussion of interactivity, suggesting that the interactive experience of playing a game has three stages. The stages are described as involvement (“being initially introduced into the game”), immersion (“becoming engaged with the game play and the game world”), and investment (“feeling compelled to successfully complete the game”) (p.356). The strength of Davidson’s approach is that it enables the researcher to consistently compare and ground their analysis of the stages of interactivity with a concurrent consideration of the game’s narrative. This, he argues,

“helps illustrate the relationship between the game’s story and its game play and how they can fit together to create a satisfying interactive experience” (p.356-7).

Different versions of both approaches are found throughout digital games research, which frequently incorporates firsthand play as a mode of analysis (Chen, 2009; Consalvo, 2007; Crowe & Bradford, 2006; Malone, 2009; Martey & Stromer-Galley, 2007; Taylor, 2006c; Weber & Dixon, 2007). Furthermore, recent works by Kennedy and Giddings (2007), Giddings (2009), Simon, Boudreau and Silverman (2009), each discuss the implications of using gameplay as a primary method of conducting research. However, Fullerton's (2004) articulation of playtesting remains uniquely well suited to the study at hand, not only for its in-depth discussion of the methodological particularities of using gameplay to perform critical analysis, but also for its emphasis on play as a way of revealing and evaluating aspects of the underlying game design³⁹.

In applying a play-centric approach to the current investigation of children’s MMOGs, a few additional considerations are necessary. Namely, attention must be given to the particularities of both child-specific design—the goals, assumptions and standards that go into designing and targeting artifacts for children—and of the child user. Within design contexts where access to real children is limited, Antle (2006) describes, defining child-users presents a number of unique challenges. Many of these challenges emerge out of the complex roles that are occupied by children and childhood, both at the social level as well as the level of the personal. This includes the need to “avoid the common temptations of conceiving of child-users in ways that [are] self-referential (e.g. when I was a child...), distorted (i.e., short adults rather than developmentally situated children), elastic (i.e., change from design decision to design decision) and unrealistic (e.g., flat or two-dimensional)” (pp.22-3). In order to successfully avoid such “misconstructions,” Antle proposes a number of strategies that development teams can take, including the creation of “child-personas” (2006) and engaging in “team immersion” (Antle, 2004).

The notion of child-personas refers to an informed, deliberate approach to constructing the child user from a pre-established set of hypothetical, archetypical users, with divergent characteristics, behavioural patterns, attitudes, favourite things and “developmentally based needs” (Antle, 2006, p.23). Team immersion involves submerging the designers in a multifaceted and on-going discussion about “children’s lives, experiences, preferences, needs and goals,” that includes extensive reviews of published research reports on children, firsthand explorations of children’s material culture (toys, media, websites, etc.), and “reconnaissance trips” to different spaces of childhood (children’s museums, shopping malls, playgrounds) (Antle, 2004, p.98). Although Antle (2006) maintains that these methods should be supplemented by qualitative interviews and other audience research directly involving child participants,

³⁹ This approach significantly diverges from “ludology,” which examines the formal elements of game designs but often overlooks the narrative, experiential and discursive aspects of gameplay.

these strategies nonetheless serve as a “way to bring the wealth of information available about children’s development to the design process” (p.28).

When applied to a critical rather than design-oriented inquiry, Antle’s notion of team immersion evokes the type of researcher immersion described by cultural and media ethnographers. My own process of immersion in the literature and cultures of childhood has involved extensive reviews of the vast reservoir of research into children’s play and development, children’s ICT use and gaming behaviours, as well as studies into children’s preferences, computing literacy, and cultures of practice. Added to this, I have spent the past several years establishing a deep familiarity with children’s material culture, both prior to and during my current examination of children’s MMOGs. This has involved undertaking an informal yet systematic role as participant observer within a vast number of children’s websites, online communities and digital games—including many of the highest rated and most frequently played games among elementary school age children, as well as a number of atypical, alternative and niche market examples.

In order to get a sense of the norms and design standards circulating within children’s gaming culture during the period of study, I placed a special emphasis on familiarizing myself with children’s games released during or directly preceding the study period. I focused on games that had a particularly high success rate among child players (in terms of sales and user ratings), as well as games that had received a large amount of critical acclaim within mainstream games culture. As a result, I was able to identify the particular “look and feel” that is characteristic of children’s games, as well as get a sense of the widely varying industry standards around accessibility, usability and complexity found within children’s game design⁴⁰. These discoveries are similar to those uncovered in Antle’s (2004) team immersion exercises, through which the design team “realized that children’s media has a look and feel all its own that uniquely identifies it to both adults and children as child-targeted” (p. 98). Through this process, I have established a play-based research program that is child-*cognisant*, if not purely child-centric, in its approach and design.

Adopting this play-centric research design during the case study, the games’ contents, structures and design features were located and analyzed primarily through direct participant observation in which I approached each game as a player-researcher. The various themes, activities, features and action opportunities that I encountered throughout the course of my play research were explored, identified and recorded for analysis. The following section provides a description of the findings discovered over the course of this process, providing a sort of traveller’s log through the gameplay experience and a summary of the features and elements encountered during my play-based analysis of the games’ designs and contents. Each game was played extensively and ‘mapped’ out in its entirety, although some of the case studies took much longer to

⁴⁰ In this context, children’s games were defined games that were both “E” rated and explicitly targeted to children. My sample included *Super Mario Galaxy*, *Wii Sport*, *Mario Party 8*, *Lego Star Wars*, *Lego Indiana Jones*, *Pokemon Diamond* (DS), *Mario Kart*, *Super Mario Bros.*, *Imagine Babyz*, *Super Princess Peach*, *Viva Pinata* and *Boom Blox*. In addition, I also played many of the overall top ranking games as well as award-winning titles in the areas of innovation and design, in order to identify larger standards and trends circulating within mainstream and independent digital games design during this same period.

'play through' than others due to the size and complexity of the game design. From these findings, a number of patterns emerged, from which a preliminary typology of child-specific MMOGs was then constructed. While perhaps not generalizable to all children's MMOGs, these findings nonetheless provide key analytical constructs that can serve as anchors for subsequent analysis and discussion of this emerging phenomenon.

Game Installation

The first significant trend to emerge from the analysis is that whereas most MMOGs require an initial installation of a fairly large web-enabled software program on the user's computer, five of the six case studies consist of self-contained, flash-based, web-browser games. In every example other than *Toontown* (which requires an initial software installation just like any other MMOG), the only software that users are asked to install are the regular updates and browser plug-ins required to view any form of advanced media online (for example, the most recent version of Flash). Without the additional support of the user's own computer (including memory and processing speed), and given the current limitations on most residential broadband speeds, these games cannot sustain the type of rich graphic environments and complex player interactions found in titles like *LOTRO* and *The Sims Online*. It is likely that most the broadband speed required to run these games is predominantly dedicated to enabling real-time, text-based multiplayer interaction (including chat and player movement). As a result, other features such as graphics, sound, and even action opportunities (in terms of the variety of movements and actions made available to the players) have been minimized. Additional features and play activities can often be accessed on demand by clicking a link that activates the appearance of a separate window or "mini-game."

In addition, because they are browser-based, the games themselves are contained within a window (of the web browser) on the user's desktop, rather than filling the entire screen (or "full-screen") as is the default setting of most installed game software programs. The game window not only operates in conjunction with other open windows (as well as game-related pop-up windows for messages and extra features), but the space *within* the game's window is also oftentimes shared with other types of web content. The majority of the case studies appear on pages framed by online advertisements, including banner ads (that either promote the game itself and its associated tie-ins, or promote the products and services of third-party advertisers), self-promotional and cross-promotional text-based advertorials (which sometimes appear as 'news items'), as well as embedded video advertisements. All of these factors lead to significant 'lag periods'⁴¹ during gameplay, both in terms of the time it takes for content to load within a single window (when travelling to a new "room," for instance, or when a banner ad refreshes), as well as the time it takes for new windows to open and load. The number of players present in the same room at the same time also contributes to lag, as does the frequency with which players attempt to engage in simultaneous actions and

⁴¹ Lag is a term used to describe moments when the server is slow to respond, either during loading or during gameplay, causing the screen to freeze, in-game actions to be delayed, or the loading of a new window or content to take an unusually long time to complete.

interactions. In some cases, the game systems can become so overloaded that players are ejected from the game altogether, and forced to repeat the login process before they can re-enter.

Of course, these issues are more prevalent in some of the case studies than in others. *Nickropolis* and *Barbie Girls* are by far the most marked by technical glitches, lag periods, extended loading times and seemingly random player ejections. On the other hand, *Club Penguin* only rarely exhibits evidence of any underlying technical issues, which typically only seem to occur when the game (and its servers) is experiencing a particularly high volume of players. Among the case studies MMOGs that are available both in free-to-play mode and in a paid membership mode (including *Club Penguin*, *Barbie Girls* and *Toontown*), the free-to-play versions are found to contain a greater number and frequency of technical problems than the paid-membership versions. However, this discrepancy might also be due to a higher number of players that utilize the free-to-play servers. Surprisingly, it is not the case that games with a broader range of features, areas and action opportunities suffer from a higher incidence of technical problems. In fact, from my observations, it is just the opposite. Disney's *Toontown* and *Club Penguin* both provide players with a significantly wider range of action opportunities and supply them with a much more expansive and varied game environments than any of the other case studies. Yet these games are also considerably less riddled with technical glitches and server problems than the other MMOGs examined.

Population size, server distribution and density (in terms of the number of players sharing the same server or present concurrently within a particular area of the game) are also key factors influencing how smoothly a MMOG will run⁴². *Magi-Nation* and *GalaXseeds* rarely exhibit technical issues of the kind described above, but both of these games also have the smallest population sizes. Instead of extended lag periods, other issues arise within these games as the result of a systematic lack of population density. The presence and participation of other players is crucial for the socializing and community-building activities of MMOGs to occur. In addition, a number of the games' features rely upon "reciprocity of action" among players to regulate the dynamics and logistics of gameplay. When a MMOG's population base is too small, it can be difficult or even impossible to engage with these features, which creates a frustrating gameplay experience. In *GalaXseeds* a number of the mini-games, which players must frequently play in order to 'level up' and earn Seeds (the in-game currency), are multiplayer and require either 2 or 4 players. When there is no one around to play with, these multiplayer mini-games are inaccessible, and players must confine their play to the few single-player games that are interspersed across the various planets (which in itself can become a significant obstacle since transporting from one planet to the next also costs Seeds). An adequately sized population and sustainable player density are thus not only crucial in terms of the social play opportunities that they provide, but also in terms of the

⁴² Population size, distribution across servers and player density within specific areas and levels are all crucial components of any web-enabled game, but particularly MMOGs. The MMOG developer and player communities are currently debating the shift from a multiple server (or "shard") model to a single-server model, recently attempted with some degree of success in CCP Games' *Eve Online* (Drain, 2008).

significant impact they can have on individual players' ability to progress through the game.

Exploration & Navigation in Fragments

This points to another key feature of the case study MMOGs, which is the fragmentation of the game environments. Rather than feature the kind of expansive, scrolling 3-D landscapes found in MMOGs and various other digital games, the case studies are predominantly broken up into two-dimensional, "single-screen"⁴³ rooms. The rooms function as a series of interconnected yet distinct sections of the larger (segmented) game environment. The environments lack geographical contiguousness, a feature identified in Pearce's (Pearce & Artemesia, 2009)(2009) synthesis of key works within game studies that have put forth a definition of virtual worlds, as one of the principle characteristics of this techno-cultural form. Again, the one exception is *Toontown*, which features limited scrolling within its (much larger than single screen) rooms as well as a 3-D environment that takes up the entire screen during play. In all cases, moving from one "area" to the next requires that the player momentarily exit the game and re-enter once the next room has been loaded. Only one room can be loaded (onto the browser) at a time, and each room has a limited capacity in terms of how many players it can host simultaneously. Once this capacity is reached, additional players are unable to enter the room and instead receive a pop-up warning that the "room is full."

Within all five of the games that follow this design structure, the result is a diminished sense of movement during gameplay. The fragmentation of player mobility within the game world is further aggravated by the "point and click" control system used within these same five games, in which players move around the screen by clicking on their desired destination and waiting for the avatar to move itself across the space. When considered in relation to other digital games, which Jenkins (1999) describes as evoking a "complete freedom of movement" (p.265), these virtual worlds enable a remarkably non-kinetic form of interaction. In addition to losing the sense of movement, the fragmentation of space within these games has a negative impact on the geographical logic of the games. Without the usual visual cues with which to orient our movement from one space to the next, the game environments can appear maze-like and inconsistent. Although many of the games provide players with a map of some kind, not all of the maps are accurate representations of the spatial layout of the game environment, but rather figurative maps linked to the game's storyline or narrative.

It is therefore perhaps surprising that so many of the games feature movement and exploration of the game environment as key aspects of gameplay. For example, at one time or another during the study period, all six of the games featured a treasure hunt game of some sort that sent players on an extensive search of the various rooms and areas of the game in search of specific hidden (or purchasable) items. Within *Magi-Nation*, searching and exploring the spaces of the Moonlands is a key component of

⁴³ The very first digital games were single-screen games, meaning that the background remains static and that all moves occur within the fixed space of a single computer or television screen.

most missions, while Nickropolis requires players to explore the space in order to find and gather the in-game currency (Nick Points). Furthermore, the interruption of movement caused by the games' designs is more noticeable in some games than others. Within *Club Penguin*, for instance, the different areas of the world are separated into rooms but the rooms remain coherently linked, which to some extent obscures the underlying disjuncture while facilitating a sense of 'walking around' the world.

These examples hint at another important form of exploration that is available within these worlds, which is the exploration of game rules, features and action opportunities. This includes everything from discovering the rules and features in the first place, to locating interaction opportunities and items within the game environment, to testing the limits of the various objects and features encountered. Many of the games encourage a certain amount of 'experimentation,' for example by including clickable (interactive) objects in the background scenery that react when a player clicks them, or that do something different depending on when or how many times they are clicked (as found in *Club Penguin*, *Toontown* and *Nickropolis*). Exploration also extends to *certain forms* of emergent play, such as cheating, finding (and possibly exploiting) unintentional glitches in the programming⁴⁴, discovering (intentionally) hidden areas or 'Easter Eggs', or attempting to bypass chat restrictions (a practice that I examine in greater detail below). Within both *Club Penguin* and *Toontown*, these kinds of unexpected features and opportunities for user innovation are frequent, with new instances being introduced all the time. Thus within at least some of the games, the design and environment contain opportunities for playful exploration of the games' programs, systems, and even rules.

Social Interaction

In all six MMOGs, a large portion of the world is designed for social interaction between players. Each of the games has a chat feature that players can use for communicating either with the group (whoever else is in the room at the time) or one-on-one (either in private chat mode, also called 'whisper', or by finding an otherwise empty room). When players use the public chat features, the text is displayed in a speech bubble that appears over each player's head to indicate what each player is 'saying' (or more accurately, typing). The speech bubbles have limited characters, and so longer sentences are broken up into a series of consecutive speech bubbles. Within the games designs, inter-player chat is a predominant feature, with entire rooms devoid of any action opportunities other than inter-player chat and whatever moves the avatars have been programmed to make (e.g. walking, standing, sitting, waving, dancing, etc.). Of course, these spaces are therefore also amenable to the various collaborative play activities that chat enables, such as role-play and other forms of 'make believe' play. The

⁴⁴ For example, during the period of study, a glitch in one of the mini-games in Club Penguin allowed players to multiply their winnings indefinitely. By clicking on the button to navigate home immediately after opening the "Bean Counters" mini-game, a glitch occurred that prevented the game from closing properly once a session had ended. Instead, the player got stuck on the final step in the program, wherein currency was awarded for points accrued during play. The button players had to press to accept winnings could be pressed repeatedly instead of just once, each time awarding currency to the player's bank.

rooms are furthermore designed to provide a visual backdrop for these types of play scenarios, creating different *mise-en-scène* consistent with the overarching theme(s) of the MMOG. For instance, the *Club Penguin* pizzeria frequently becomes the site of various restaurant-based play scenarios, with some players adopting the role of waiter/waitress and others adopting the roles of customers (such as a lonely millionaire, an incognito movie star, or two Penguins on a first date). The chat features are also at the centre of the various incarnations of dress-up play that are found throughout these worlds, as well as a way negotiating the importance and value of different virtual items that players commonly acquire, collect and display. Within these games, chat is thus used to enact “performative play,” which draws on the notion of “performatives” defined by Austin (1962) as utterances and other speech acts that are themselves actions, or that serve as a key component of action. As Hall (2000) describes, “statements such as ‘I now pronounce you husband and wife’...are performative, not constative, because it is by the utterance of the words that the act is performed” (when they are uttered” (p.184).

Chat also provides a crucial forum for the construction of in-game friendships. In all but one of the games (*Magi-Nation*), players can furthermore assign other players with a special “Friend” status that enables them to see when and where that player is within the game world. Within each of these worlds, a certain number of players make a further game out of building up their “Friends” list by convincing as many other players as possible to accept their Friend request. In all but one of the games (again, *Magi-Nation* is the one exception) players frequently throw parties, inviting large groups of Friends or other players to congregate in a specific area (usually the player’s in-game home or bedroom, but public areas as well) to form a large social gathering or event. These parties involve various activities that are also present within the larger game, including role-play and group chatting, with one or more players acting as host.

Players also have the option of interacting through movement, using avatar moves to communicate and coordinate in a myriad of creative ways. An example of how avatar moves are used in social interaction is in the staging of simultaneous group activities or virtual ‘flash mobs.’ These can happen spontaneously or as the result of premeditated planning, and can produce a number of different outcomes. For instance, in *GalaXseeds*, an impromptu dance party instigated by one or two players can either inspire others to join in the creation of a group event or be ignored altogether. A sudden “Ninja attack” within the world of *Club Penguin* can initiate retaliation from the non-Ninjas (or from rival Ninja factions), or merely be met by annoyance or amusement from the other players present. Some of these group events are staged in protest, while others are staged as playful interventions into the game world. In most cases, however, the game’s mechanics and programmed avatar moves are regularly foreground in some way. In addition to these examples of informal (or player generated) group play, each of the MMOGs also contain multiplayer games, both in the form of mini-games (as discussed below) and as integrated activities that can be performed within the game environment (such as snowball fights or fashion shows).

Since social interaction is such an integral part of MMOG play, the extent to which the game’s design facilitates the players’ ability to form and sustain an in-game

community is an issue of particular interest. As I will discuss in detail in the next chapter, because the games are targeted specifically to children under the age of 13 years, any opportunities for social interaction contained within them are subject to intense public scrutiny, special laws and regulations (around children's privacy, etc.), as well as social expectations that the interactions will be "safe" (a term that is often used within discussion of children's internet use, but rarely defined). As a result of this particular convergence of political and social conditions, the chat features and other forms of social interaction contained within all six of the case studies are heavily restricted and monitored. Although players do manage to build communities within and around these restrictions, the social dimensions of these worlds are undeniably impacted by their presence. In addition to placing strict regulations on inter-player chat, some of the case studies also contain other important barriers to social interaction. For example, a design decision made within both *Barbie Girls* and *Nickropolis* in relation to server distribution has made it extremely difficult for players to build longer-term relationships with specific players.

Because of the (potentially) high volume of players accessing the game concurrently, MMOGs are dispersed over several servers. This means that there are several "mirror" copies of the game, each of which exists on its own server. The number of total servers available depends greatly on the anticipated (and actual) size of the player population. In some of the case studies the number of different servers available is quite small, such as *Magi-Nation*, which has only three servers, and *GalaXseeds*, which has five. In others, the number of servers is quite large, such as *Club Penguin*, which is spread across 109 servers, and *Toontown*, which has 47 servers. In most MMOGs, players are asked to select a server upon the creation of a new avatar (or character). In games such as *WoW*, the initial server selected becomes the player's regular or designated server (or "Realm"), to the extent that at one time the company charged a fee for changing servers mid-game. In other MMOGs, server selection is much more flexible, allowing players to make select a server (same or different) every time they log in.

Of course, without a designated server, players are not guaranteed space within any one particular server. This can be a problem for players planning to meet up inside a game to play together, since the players must be on the same server in order to interact. Notably, none of the six case studies have designated servers. Instead, players are either assigned to a server upon login according to the needs of the server distribution system (as in *Nickropolis*, *Toontown* and *Barbie Girls*), or they are asked to select a server of their choosing from among those available (i.e. those that are not already filled to capacity). Although *Toontown* allows players to select a different server from the one they have been automatically assigned to by the system, *Barbie Girls* and *Nickropolis* do not give players any control over what server they play on from one session to the next. Forming consistent communities or enduring friendships within these games is therefore extremely difficult. This particular design choice, while likely made to facilitate server distribution and perhaps justified as a way of promoting player anonymity (and thus "safety" in some definition of the term), thus conflicts with the concurrent choice that

each of these games has made to feature social interaction as a key component of gameplay.

Mini-Games & Missions

Within mainstream MMOGs, missions and quests are a significant component of a player's progress and success within the game. It is by completing missions that players are able to build experience points, collect items, earn in-game currency and advance through a game's levelling system. The player's avatar or character is often improved as a result of completing missions, through increases in skills or status. Conversely, failure to complete missions can result in levelling plateaus (inability to progress to the next level), a lack of currency and items, and a general inability to advance through the game. Missions are thus linked to progression in a number of ways, and within many games successful completion of missions and quests is almost synonymous with "successful" gameplay. For instance, especially difficult quests such as group missions (termed 'elite' quests or 'instance dungeons') often yield the greatest rewards (in terms of item and currency), whilst providing proof of superior skill within the player community. Accordingly, the achievements that a player attains through the completion of quests, such as reaching a "high level" or obtaining a particularly rare item, can translate into social capital among the player community.

Within the case study MMOGs, however, missions are not always used in the same way. Only three of the games, *Magi-Nation*, *Toontown* and *GalaXseeds*, contain missions in the traditional sense of the term, wherein players must travel to specific areas of the game environment in order to complete increasingly difficult tasks through which they are able level up, gain currency and discover new skills and items. Within the other games, *Club Penguin*, *Nicktropolis* and *Barbie Girls*, missions have been largely replaced by mini-games. Mini-games are also a very important and unavoidable supplement to missions within both *Toontown* and *GalaXseeds*. These mini-games are distinct from the larger game environment and usually require the player to exit the world and enter into a designated mini-game room or window. Most often, the mini-games are reproductions of existing games⁴⁵, such as *Tetris* or *Memory*, redesigned to reflect the themes or characters of the MMOGs. Some are fun and well designed (such as those found in *Club Penguin* and *Toontown*), while some are overly repetitive and contain serious glitches (such as those found in *Barbie Girls* and *Nicktropolis*), but all are extremely limited in terms of variation and inconsistent in terms of how the level of difficulty increases through play⁴⁶. Despite the inconsistent quality and re-playability of these mini-games, they nonetheless demand frequent and repeated play from the players, as they often represent the easiest and sometimes only way of earning in-game currency. There are some notable exceptions. Both *Club Penguin* and *GalaXseeds* have

⁴⁵ Many of the mini-games found within children's MMOGs are revamped replicas of either classic digital games, such as *Pong* or *Tetris*, or of casual games commonly available for free online.

⁴⁶ As the player progresses through the levels of these mini-games, the games usually change very little apart from becoming faster and harder (filled with more obstacles, etc.). In the majority of cases observed, there is a sudden and significant jump in the difficulty level after the third level.

at various times featured some form of integrated mission, usually as part of a special event (in the case of *Club Penguin*) or promotional feature (as with the Honeycombs themed “Hive and Seek” game featured in *GalaXseeds* during the summer of 2007). For the most part, however, the functions that are normally filled within MMOGs by missions or quests have been shifted onto the mini-games.

A notable dimension of the case studies’ reliance on mini-games, both as the primary way for players to earn currency and as an added “playable” feature made available to players within MMOG environment, is that the vast majority of the games are single player. These mini-games thus cause an interruption in the social dynamics of gameplay, as well as a temporary retreat from the MMOG environment. When multi-player mini-games are included, they primarily consist of two-player or four-player games of competition, where in order to win each player must individually attempt to finish first or collect the most points. These games rarely, if ever, involve the type of collaboration so often celebrated as a key defining characteristic of MMOG play. Furthermore, within most of the case studies that contain this feature, finding other players willing and available to compete in the multi-player mini-games becomes a challenge in itself. Achieving the right balance in terms of population size, player skill and experience level, and server distribution is a factor that all MMOGs must consider, and the case study MMOGs display widely varying success rates in this regard.

Within the games with smaller (arguably inadequate) population sizes, such as *GalaXseeds* and *Magi-Nation*, the issue is one of availability. Since these worlds are often sparsely inhabited, locating another player is often difficult. Even once another player is located, there is no guarantee that she or he will be interested in playing mini-games. The lack of other players was particularly problematic within *GalaXseeds*, as this world contained an exceptional predominance of multi-player (rather than single-player) mini-games. Within *Barbie Girls* and *Nicktropolis*, the problem is the reverse in that these worlds are notably lacking in the scope and number of multi-player games provided. Among the six cases examined, only *Toontown* and *Club Penguin* can claim to have achieved something of a balance between single player and multiplayer activities, in that no matter how many other players are around, there is always something for players to do (alone and with others) and several options on hand through which players are able to earn currency.

Virtual (and real) consumerism

A dominant theme within all six of the case studies, as well as an integral component of their gameplay, is virtual consumerism. It is through virtual consumerism that the mini-games are reintegrated into the MMOG gameplay, and through which players are able to enact many of the social play opportunities provided within the game designs. As described above, in each game the players earn some type of virtual currency for completing mini-games, gaining experience and accomplishing various

other achievements⁴⁷. Invariably, this currency can then be used to purchase virtual items and customization features, such as avatar clothing, furniture, virtual pets, and various other tools and accessories. Unlike most digital games (especially games designed for broad accessibility, such as children's games), where at least some of the virtual items that players interact with can either be found or "made"⁴⁸ during gameplay, the vast majority of the items featured in these MMOGs are for sale only. They are therefore only available by "purchasing" them from an in-game shop (rather than bartered with other players). Each of the case studies furthermore contains relatively elaborate shopping features, including continuously expanding catalogues of items, multiple points of purchase (several stores or "shop owners," and in some cases home shopping systems), as well as an assortment of "rare" and special items that are only accessible to a specific category of players (e.g. paid-subscription members).

Items are designed to fulfil a variety of functions, many of which are aesthetic, performative or both. Within the games' player guides and catalogue descriptions, items are largely promoted as collectibles and display pieces. Items are positioned as a way for players to show off their accomplishments and their expertise as players. For instance, both *Club Penguin* and *Barbie Girls* contain items that are only available for a limited period of time, which produces artificial rarity and bestows upon the owners of these items a special sign of their participation and presence. In *Nicktropolis*, *Toontown* and *GalaXseeds*, different areas have their own shops and exclusive items, which provide proof of the player's familiarity with the various regions of the game world. Other items are relatively quite expensive, requiring a much higher price than most players can afford. As with real world luxury goods, ownership of these items communicates a high level of "wealth" and mobility (or, in this case, experience points). In *Toontown* and *Magi-Nation*, single-use items are also used during missions, as health boosters or weapons for attacking enemies. In *Magi-Nation* and *Club Penguin*, on the other hand, players are able to "equip" various "wearable" items in order to gain a particular advantage within missions, mini-games and two-player competitions. In each case, mastery of the game environment is greatly facilitated through an active engagement with its virtual economy.

Using items and customization tools, many of which must also be purchased as gameplay progresses, is furthermore encouraged throughout each of the games as a form of creative self-expression, as well as a way for players to show their commitment to the game and player community. A primary example of this is the role of virtual items in avatar customization. Each game comes with its own set and range of trait options that players can select and combine in order to "create" an avatar that will represent them inside the game world. The games provide varying levels of freedom when it

⁴⁷ The in-game currencies vary in "value" and in theme: *Club Penguin* operates on coins, *Toontown* on Jellybeans, *Barbie Girls* has B Bucks, *GalaXseeds* uses Botanickles, and *Nicktropolis* has NickPoints. *Magi-Nation* has two forms of currency, Moons and Gems (which must be purchased in RMT).

⁴⁸ The level of player input that goes into the "creation" of in-game items varies dramatically within MMOGs. Within *World of Warcraft*, for instance, players are able to "learn" and level up specific craft skills, through which they can "produce" increasingly specialized items as their skills increase. The products follow a template or recipe, and require an assortment of other items (provided by the game or other players) as components or ingredients. In other virtual worlds, such as *Second Life*, players are able to exert much more control over the shape and function of the items they design.

comes to avatar “customization.” For example, in *Club Penguin*, the only initial customization available is the colour of your Penguin (which are otherwise all identical), whereas in *Magi-Nation* players are given 32 different avatar options, which they can further customize by varying the skin tone. Nonetheless, the level of avatar customization available within these games is significantly lower than that found in other current MMOGs (Martey & Stromer-Galley, 2007).

As the initial customization features provided are relatively limited, most avatars start the game looking fairly similar to one another, with only minimal variation in terms of skin tone and hair colour. Once gameplay has commenced, however, players are able to significantly expand their avatar customization through the addition of clothing items, wigs, shoes and accessories. By purchasing clothing items, players are able to differentiate themselves in ways that are not otherwise available, to engage in forms of aesthetic individualization and self-expression that the default avatars alone do not provide. Players can also use clothing items to play dress up, an activity that is facilitated within many of the games (*Barbie Girls*, *Club Penguin*, *GalaXseeds* and *Nicktropolis*) by the inclusion of various themed clothing items (costumes, uniforms, etc.), along with the aforementioned themed spaces. Additionally, within *Club Penguin* a limited number of clothing items, especially hats and accessories, enable players to perform “special” actions that are not otherwise available as action opportunities within the gameplay design.

The significant emphasis that is placed on the accumulation of virtual goods within the games suggests a need for a space where players can display and store the many items they acquire over the course of gameplay. Accordingly, five of the six case studies analyzed⁴⁹ provide players with their own personal “home base,” a designated room or area within the game environment that is specific to each individual player. The home base feature provides players with a space to display and arrange their items, an opportunity to customize small component of the game environment (through customization features and decorative items), as well as a place to socialize with other players. Players control who can access their home base, either making it a private or “locked” space, a semi-private space that other players can only access if invited, or a public space open to anyone. The shape and size of the home base differs from one game to the next, in keeping with the design limitations and narrative themes of the larger game environment. *Barbie Girls* players each have their own bedroom, and the *Toontown* Toons are each given a two-room “house” (with living room and bedroom). In keeping with the *GalaXseeds* storyline of interplanetary travel, Seedizens are each assigned a “pod” that includes both an open concept living area and a (balcony) garden. Players of *Club Penguin* each have their own igloo.

As with avatar customization, home base customization is heavily dependent on the purchase of virtual items using virtual currency. Only one of the games (*Toontown*)

⁴⁹ Once again, the sole exception is *Magi-Nation*, wherein players must carry their items in bags. As the bags come with limited slots, players must continuously make choices about which items to keep and which items to sell. Bigger bags (with a higher number of slots) are also available for purchase using in-game currency.

provides players with some basic preliminary furnishings. Otherwise, players start out with a noticeably barren space, a sort of blank canvas upon which they are encouraged to make their own, quasi-unique mark. Since the home base also serves as a venue for social interaction, a certain impetus is placed on customizing one's space in order to attract and impress guests. At the same time, decorating and customizing one's home base is itself a compelling part of gameplay, wherein the home base acts as a sort of virtual dollhouse as well as an opportunity to impact upon the look and shape of the surrounding game space. The home base can also provide players with a place to house virtual pets. The same five games that contain the home base feature also provide players the option of purchasing (using in-game currency) a virtual pet, which the player is then responsible for. Unlike the players' avatars, these pets usually require some sort of ongoing maintenance in the form of food and playthings, which the player must continue to buy for as long as they wish to keep the pet "active." The pets in these games don't "die," but they do get sick or disappear if not properly maintained. The virtual pets thus serve the function of providing players with an extra incentive for frequent visits to the virtual world, as well as an additional reason for engaging in the virtual market system.

In the four games that operate on some form of optional pay-to-play model (i.e. monthly subscriptions or micro-transactions alongside the free-to-play alternative), virtual items are strategically used to construct a social hierarchy among players that both distinguishes and greatly rewards pay-to-play players from non-paying (free-to-play) players. In *Toontown*, *Club Penguin*, *Barbie Girl* and *Magi-Nation*, real world money translates into a significantly expanded access to the game's virtual items, areas and features. For example, in *Barbie Girl*, *Club Penguin*, *Toontown* most of the in-game items and customization features (for both the players' avatars and the players' home bases) are only available to players who pay the games' monthly subscription fee. Pay-to-play members of all three worlds are furthermore given access to special items and a broader range of play opportunities, including "Members Only" parties, exclusive mini-games and the ability to engage in select multiplayer activities. In each case, entire areas of the world are closed off to non-paying players, greatly limiting the extent to which these players are able to explore and participate in the virtual world environment. For instance, the newest and most existing areas of *Barbie Girls World* are initially made exclusive to the "V.I.P.s" (paid subscription members). Meanwhile, free-to-play *Toontown* players find themselves shut out of the vast majority of the features they encounter beyond Toontown Central (the first level of play)—players can venture out into other areas and wander around them, but aren't able to engage in any of the activities or buy any of the items contained within them.

In *Magi-Nation*, an RMT micro-transactions based marketplace is featured alongside a much more limited "free-to-play" version. The two systems operate on a different currency system, wherein players can either purchase Moon Items using the in-game currency ("Moons") earned by completing missions and selling found items, or else purchase "Gem Items" using "Gems." As described above, the only way to accumulate Gems is by purchasing them with real-world money via the game's website. The game's

shopkeepers all sell a much larger variety of Gem Items than Moon Items. The Moon Items cost more than the Gem Items (in terms of relative in-game currency comparisons), but they are also much less effective in terms of what they can do and what advantages they bestow upon the player. As with the subscription-model MMOGs, the game greatly advantages and prioritizes pay-to-play players, closing off a whole range of experiences and features to players attempting to play the game without purchasing Gems. After several months attempting to reach the level cap without success, it became apparent that making progress without (paid) the use of Gem Items is designed to be extremely difficult. While *Magi-Nation* is the only game that directly incorporates RMT into the gameplay, less explicit micro-transaction models are also present within both *Barbie Girls* and *Club Penguin*. Within these games, the RMT occurs through the purchase of real-world toys and accessories that come with a special code, which then translates into in-game assets (currency and virtual items). In both cases, the games promote these tie-in products in a variety of ways, through in-game advertisements and by making some areas or features of the site exclusive to the product owners.

In all four of the MMOGs that combine free-to-play and pay-to-play features, the games are designed to continuously remind non-paying players of all the advantages, features and “fun” they *could* have if only they too paid to play. As non-paying players attempt to navigate these worlds, they will inevitably (and in some cases quite frequently) encounter features and areas that are not available to them, at which time a pop-up window is programmed to appear and announce that the feature is for paying members only. In each case, the pop-up window also contains a direct link to the subscription registration page or micro-transactions store where the player’s plight might be easily remedied by a real-world charge to a parent’s credit card. In this way, the free-to-play option often functions as a giant advertisement for the pay-to-play. Even among the two games that do not feature a pay-to-play, a strong emphasis is placed across the case studies on tying in gameplay with real-world business models through the integration of self-promotional material for the many ancillary products and tie-in media that surround the MMOGs, as well as third-party advertising exposure. Both *Nickropolis* and *GalaXseeds* encourage players to spend time interacting with promotional features, by framing them as missions for which they will be amply rewarded, or by hiding items and other features within the promotional space as incentive. Similar examples can be found in *Barbie Girls*, where players are rewarded a significant sum of B Bucks for watching trailers for Barbie direct-to-DVD movies in the Barbie Cinema.

Special Events

With the exception of *Magi-Nation*, each of the MMOG worlds hosted some form of “special event” at some point over the course of the study period. Within *Barbie Girls*, a number of special events were staged around avatar clothing, wherein players were asked to participate in a particular “theme” by wearing certain clothing items, colours or accessories. For instance, during one such event players were asked to promote the new line of handbags by equipping their avatar with handbag, while in late October

players were invited to wear (and purchase) Halloween costumes. Within *Club Penguin*, special events are quite frequent, and the study period included several weeklong theme parties, in-game observances of real-world holidays, and an online celebration that coincided with a real-world event that Disney held in Times Square to commemorate the game's third anniversary (broadcast live on the *Club Penguin* website). Nicktropolis held several special events around Nickelodeon programming and real-world holidays, including an Earth Day campaign to raise awareness of environmental issues, various temporary sponsorships of different areas that tied into real world media events (e.g. film releases or television specials), as well as pre-show and tie-in celebrations constructed around Nickelodeon's annual *Kids' Choice Awards* (including an online voting feature). Within *GalaXseeds*, where special events are much less common, there was an observance of the game's re-launch and introduction of a new plot development in the narrative (the arrival of the Spaceticides). In addition to various tie-in celebrations around Disney anniversaries and real world holidays, *Toontown* enables players to throw their own organized party events within a designated "Party" area inside of Toontown Central. Players can sign up to host the events, which are advertised across the virtual world. These parties are different from the players' house parties in that they contain a variety of special games and features that are provided and coordinated by the game's design. Generally, special events within these worlds are widely promoted and in many cases well attended by the players.

Meta-Participation

In conducting the background research for the case studies, it was discovered that each game is at the centre of numerous ancillary texts created and distributed by the players themselves. These include fan sites, informal "guilds" and teams, machinima, player-made maps, screenshots, and various other forms of what Tolino (2009) terms "player-created content"—texts and objects that are "inspired by video games and posted on the internet," but which are "generated or used outside the confines of the game itself." The MMOGs are also the topic of innumerable online discussions, which take place within both official and unofficial forums, chatrooms and discussion boards dedicated to various aspects, features and themes of the games and player communities. This type of "meta-participation" within gaming culture has been well documented both within previous games research (Consalvo, 2007; Taylor, 2006), as well as industry analysis (Tolino, 2009). In addition to extending gameplay beyond the confines of the game environment or context, these materials also function as "paratexts" which help "shape the reader's experience of a text" and "give meaning to the act of reading" (Consalvo, 2007, p.9).

Although extensive analysis of these texts was beyond the scope of the current project, their presence is nonetheless a noteworthy aspect of the gameplay, representing both the transcendent capabilities of play cultures as well as the unanticipated uses to which the games can be applied. For one, many of the practices and products of meta-participation are reminiscent of the types of creative re-appropriations described by Willis (1991), Götz et al. (2005), and Jenkins (2008) as

crucial examples of how children retain interpretive and transformative power in their interactions with corporately-produced cultural artifacts. The emergence of player-created content is of particular relevance to questions of children's cultural and participatory rights in the online environment, where children's oft-ignored role as contributors of content is finally being acknowledged and, in some cases, facilitated. The introduction of tools and forums that enable children to not only engage, modify, and reinterpret transmedia intertexts, and share them among communities of interest, but also to publish them in the public domain could enable an important reconfiguration of existing power relations within children's culture. Meta-participation in and around virtual worlds could therefore represent an important step in cultivating an online culture where children's rights as cultural producers, as authors and as collaborators, are more adequately accounted for.

Excluding these elements from the present study highlights what is certainly a key limitation of the research design, or of any investigation of children's culture that focuses the analysis onto one specific media or technological form. Just as the children's industries have expanded their strategies and transmedia intertexts across multiple media forms and artifacts, children too experience much of their culture in terms of a multi-modal flow. Concentrating the analysis onto one small component of this overall experience may reveal important details about the form itself, but the ensuing discussion and conclusions are necessarily limited as a result. The presence, contents and scope of emerging forms of meta-participation thus represent a key area of inquiry, that demands concerted attention and further investigation. In particular, I would be interested in exploring the relationship between meta-participation and in-game rule systems, the migrations and practices of the player communities involved, as well as the problems these practices raise in terms of questions of authorship, copyright and fair dealing.

A Typology of Children's MMOGs

In reviewing the scope and form of action opportunities, gameplay features and design choices present within each of the case study MMOGs, we can begin to identify some preliminary patterns. These patterns allow for a cautious categorisation of the games into four broadly defined types, which seek to describe key similarities and differences that exist between what is otherwise a relatively homogenous collection of play spaces. Although all of the case studies exhibit the full range of characteristics and action opportunities described above, as well as many of the characteristics typically found in games described as MMOGs (as outlined in Chapter 2), the overall gameplay experience within each tends to be dominated by one of these characteristics above all others. By identifying which MMOG (or MMOGs) exemplifies each of these types, we can begin to construct a preliminary typology of children's MMOGs, as follows.

Conventional MMOG

Of the six MMOGs examined, *Toontown Online* is most consistent with previous T and M rated (which will forthwith be called "mainstream") MMOG design. The

gameplay, themes and features are all shaped by an overarching narrative, which the players interact with and contribute to through the completion of integrated missions. *Toontown* contains a levelling system that players must progress through by completing missions, engaging with game features, and gaining experience. Many of the in-game items are used during players' interactions with adversaries, with better items becoming available as the players' skills are developed. The Toons have a health status that players must maintain, which is directly impacted by players' interactions with adversaries, participation in missions and various according to the level achieved. The dominant characteristics within *Toontown* are the incorporation of the gameplay within the game world, and the consistent integration of multiplayer collaboration throughout the game design. For one, the game design enables a certain amount of continuity and persistence across the various action opportunities and affordances that make up the gameplay. The action opportunities are also consistently integrated with the game's larger narrative and thematic elements. More importantly, perhaps, is the way in which multiplayer interaction is enabled at almost every level of gameplay. From the mini-games that players can complete to earn Jellybeans, to the missions players are sent on to disrupt the Corporate Cogs, to the less purposive interactions available within the many shared areas of the game environment, opportunities for social interaction and multiplayer collaboration (or competition) are integrated at every juncture. Players can also "Gift" one another with in-game items, which allows for a certain amount of direct player participation in the game's virtual market, while opening up opportunities for more deliberately subversive forms of emergent play (such as the establishment of unsanctioned trade systems).

Parallel Multiplayer RPG

In many respects, *Magi-Nation: Battle for the Moonlands* shares many of the same characteristics as *Toontown* and a number of other MMOGs. It contains a consistent overarching storyline, which integrates the player's progress and missions as part of a larger fantasy-themed quest. Players are divided up into different factions and must develop a particular set of skills based on their experiences and choices made through the course of gameplay. Players progress through a levelling system, and items (even clothing items) are integrated into the storyline and gameplay as useful tools for combating enemies, boosting health and acquiring new talents. Where *Magi-Nation* differs significantly from a conventional MMOG, however, is in its lack of integration of and opportunities for multiplayer interaction. *Magi-Nation* limits multiplayer interaction to common areas and designated PvP areas, but otherwise functions as a single-player game the majority of the time. Missions, while integrated thematically, essentially take place within single-player 'dungeons,' against NPC adversaries and without the possibility of multiplayer collaboration. Trade and exchange between players is not available, while opportunities and designated spaces for social interaction are not apparent within the design of the shared areas of the game environment.

MMO Playgrounds

In both *GalaXseeds* and *Club Penguin*, the emphasis is on exploration and experimentation. Gameplay is focused on discovery of new areas and items, of new movements to make with an avatar (such as dancing, producing strange sounds, and making funny faces), and the designs are such that the games allow for a certain amount of user innovation and subversive iterations of emergent play. For instance, in *GalaXseeds* different body parts move differently, encouraging players to experiment with new and unusual combinations in the creation (and recreation, as each part can be changed at any time during play with an appropriate amount of Botanickles) of their avatars. In *Club Penguin*, wearing a different hat might result in an unexpected new avatar movement, while theme parties introduce new and unusual interactive features to the game environment. The dominant theme within both games is the exploration of the various dimensions of the game design, from avatars to items to the space itself. However, exploration within both games remains relatively fragmented, particularly in terms of the sporadic relationship that exists between player exploration and the overarching narrative.

Within each game, most of the available opportunities for exploration do not link up with the larger game. Those that do tend to appear in the form of guided exploratory events, which not only tie into the game narrative but into the game's cross-promotional initiatives as well. For instance, during the summer of 2007, several of the NPCs in *GalaXseeds* began inviting Seedizens to help out in the exploration a "strange new planet" that had suddenly appeared in the galaxy. The planet, which was named "Lego Mars Mission," turned out to be sponsored by the toy company as a form of immersive advertising, and featured missions and "advergames" focused on the Lego Mars Mission toyline. Similar events have taken place within *Club Penguin*, wherein players are sometimes enrolled in a series of activities spanning a period of several weeks that ultimately lead to the promotion of a Club Penguin toy tie-in or cross-media initiative (e.g. the Club Penguin trading card game or the *Club Penguin* Nintendo DS game). These games thus function in part as "sandbox" games, but without allowing for an integrated interaction between the game environment, players' creativity and instances subversive emergence.

Social Arcades

Within both *Barbie Girls* and *Nicktropolis*, the dominant feature of the gameplay is social interaction, particularly chatting. Each of these games contains very few designed play opportunities and only limited interactive features. The mini-games found in both of these MMOGs are repetitive and disconnected from the larger environment (apart from the currency or experience points they bestow). Neither game is designed for fluid exploration and very few options are available in terms of interacting with the environment. Even avatar movement within these worlds is surprisingly stunted, and players are restricted to standing, walking and sometimes sitting as the only integrated action opportunities available. The most marked difference between these games and

the other MMOGs examined is the absence of any overarching “game” or narrative continuity. Each of these worlds is positioned as a branded environment, exhibiting close links to the associated media brand (or toylines). Participation in both *Barbie Girls* and *Nicktropolis* is framed as a sort of extension of the brand experience, a place for performing and developing fandom or appreciation for the brand and its products. But otherwise, the games fail to construct a storyline or game-based purpose to player participation. Instead, players are given a diverse assortment of thematic spaces for chat-based social interaction, that includes virtual reproductions of many of the social spaces that currently play a prominent role in children’s leisure lives, including coffee shops, malls, comic book stores, amusement parks and, of course, the domestic space of the bedroom or home.

Design as Rule System

More than merely providing a way to group together MMOGs with the same dominant characteristics, formulating a typology also allows for a more focused discussion of the role of affordances within the games’ designs. Within each of the ‘types’ identified, the characteristics and action opportunities that are not only available within the game design, but that are also privileged and prioritized to some extent, can be understood as affordances. As described above, a design affordance does not simply refer to what is available, but rather that which presents itself as the appropriate or most natural action to take when interacting with a particular technology. To reiterate Mateas and Stern’s (2006) definition, “There should be a naturalness to the afforded action that makes it the obvious thing to do” (p.653). The obvious thing to do when playing a game that has established rules and objectives is to try to win, to accumulate points, and to achieve the game goals. In digital games, these aspects of gameplay are translated into code and become part of the underlying system upon which the game world operates. Because the game rules are part of the program, certain pre-established player moves and activities are automatically rewarded (in points or currency) by the system. Although other action opportunities or emergent features might still be available within the game’s design, they aren’t recognized by the system as part of the ludic logic of the game. Traditionally, there is a clear link within digital games between affordance and ludic structure. The affordances that are present within a game’s design therefore shape the gameplay to a significant extent—by suggesting (both discursively and within the design) what the game “is” and how it is “intended” to be played.

Within the various children’s MMOG types identified above, affordances set the parameters for gameplay in different ways. For example, in the one conventional MMOG, *Toontown*, the design presents a set of affordances that encourage players to participate in the game’s overarching narrative and underlying ludic system by completing multiplayer missions aimed at battling the Corporate Cogs. Completing Cog missions is not only the most efficient way to level up but numerous features of the game environment are designed to invite and remind players of the importance of these quests. This includes the many NPC characters who invite and remind players to participate in Cog missions, the pop-up windows that appear if a player delays too long

in accomplishing a particular mission, and the way that players are automatically transported to the “Gag Store” (where the Gags needed to defeat the Cogs must be purchased) upon completion of a mini-game. Since it is by playing mini-games that players earn the Jellybeans required to buy Gags and other virtual items, the direct link back to the Gag Store is highly suggestive, hinting to the player that the Jellybeans earned are primarily meant to be spent on Gags. In the parallel multiplayer RPG, *Magi-Nation*, where the only way to get ahead or earn currency is by completing the dungeon-based battle missions, and where all items and clothing items are geared toward supplementing battle skills, the affordances are also clearly driven by the game’s ludic logic and objectives.

On the other hand, within both the MMO playground games and the Social Arcade games the affordances are instead geared toward unstructured play and social interaction. In these games, the ludic features (winning, competing, attaining a goal) fulfil a supporting role within a game environment designed to afford make-believe, exploratory and performative play. The affordances in these games include the open spaces designed for social interaction (and often little else), as well as the spaces and opportunities for displaying the virtual items through which spontaneous fantasy play scenarios can be enacted and communicated among groups of players. What is perhaps most striking about the games in these two categories is the marginal role assigned to the “game” itself. Although these games fit the criteria of a MMOG, enabling multiuser play activities within a game-oriented framework, the actual features and affordances contained within their designs fail to prioritize the ludic logic of the game system. For example, the ludic objectives within *Barbie Girls* and *Nicktropolis* are to achieve high scores in the mini-games and to earn points and currency, which can then be used to purchase items. However, the bulk of the game space and many of the action opportunities are dedicated to non-purposive social interaction. The relationship between the ludic and social dimensions of the MMOG, between the game system (which accords points and sets objectives) and the gameplay, is surprisingly limited. Instead, the ludic features perform the relatively utilitarian function of providing a fun way to earn currency. As a result, the game systems appear to play a supporting role to the MMOGs more obvious affordances, which position the worlds as predominantly social spaces.

At the same time, despite differences in orientation, all six of the MMOGs contain affordances that strongly emphasize the accumulation and display of virtual items. Within each of these worlds, virtual items represent a central organizing theme of the gameplay. Players are rewarded in virtual items, or in coins with which they can use to purchase virtual items. They are encouraged to use their avatars and home bases as forums for creativity and self-expression, but the only way to do this is by acquiring and using virtual items. Each MMOG provides players with multiple places to obtain virtual items, and many of the games have built revenue models around access to special or exclusive virtual items. Even in cases such as *Toontown*, *Club Penguin* and *Nicktropolis*, where exploration is rewarded by the discovery of new features and areas, virtual items are often involved in some way. For instance, *Club Penguin* often rewards players for attending special events and exploring the game environment with special “rare” items.

As described above, in the vast majority of cases, the items themselves serve a primarily aesthetic function. Many of the items, particularly avatar clothing and home base furnishings, can be displayed but not utilized for formal ludic (or game-oriented) purposes. Notable exceptions include the items found within *Magi-Nation*, where all items serve a ludic purpose, the *Toontown* Gags used to defeat the Cogs, and the special move-enabling accessories that occasionally surface in *Club Penguin*. Otherwise, virtual items fulfil a predominantly symbolic function, for instance as performative props or scenery pieces to support bouts of make-believe play. Because of the central and fixed quality of their appearance, access to variety of different virtual items becomes a key facet of their use. The games' affordances thus not only include virtual item acquisition, but collection as well.

In determining how game design affordances come to structure gameplay, it is also important to consider the role of design limitations. I have already discussed some of the limitations present within the games' designs, in terms of the range of action opportunities available to players, the technical limitations of browser-based flash games, as well as the fragmentation and lack of social cohesion produced by the game's environmental and population distribution. In each case, these limitations place parameters on what can and cannot be accomplished within these worlds, while simultaneously reinforcing the emphasis placed on the design affordances. So, for example, while MMO playground games afford exploration and experimentation, they also limit the extent to which players are able to engage with their discoveries. Within the Social Arcade games, the design affords social interaction and chat, but also place strict limitations on inter-player communication in terms of the words and forms of expression that are made available within the chat feature design. Within *Magi-Nation*, players are not obliged to complete the dungeon battle-missions, but will find the world provides very few alternatives, both in terms of action opportunities and in terms of forums for social interaction.

Furthermore, despite the large emphasis that is placed within many of these games on make-believe play and creativity, none of the games provide players with any tools to create or exchange in-game content, and there are very few real opportunities for players to have any direct impact on the game environment. Despite the heavy focus on virtual items contained within all six of the MMOGs, none of the games enable players to design or 'produce' their own items. The customization tools are for the most part quite limited, including those for the avatars and home bases that lie at the centre of so many of the games' affordances. For the most part, engaging in creative self-expression revolves entirely the around purchase and arrangement of 'pre-fabricated' items. These limitations produce obvious tensions in terms of the underlying contradiction of a game design that appears to afford and encourage player-driven play and make-believe, but fails to enable any form of player-created content (UGC). Nonetheless, the lack of such action opportunities also works to accentuate the primacy of the virtual items and affordances that *are* available.

Overall, the decision to move back and forth between the worlds proved to be a remarkably effective way of conducting a comparative analysis. Each time I revisited one

the MMOGs, I was forced to readjust to the particular set of design affordances and game mechanics that it possessed. Since learning the rules and parameters of play is a significant part of entering into a new MMOG, or of taking up any new game for that matter, jumping from one game to the next demanded a constant appreciation of the similarities (in terms of the specific types of knowledge and skills that could be brought over from one game to the next) and differences (in terms of knowledge and practices that had to be replaced and relearned within each new gaming context) that exist between and among the case studies. In particular, the constant shifting between games enabled me to repeatedly relive the sense of disorientation and strangeness that usually only surfaces during the initial stages of a new gameplay experience. This was enormously useful in maintaining a critical awareness of those formal aspects of games that tend to fade into the background during gameplay, such as the action opportunities, game mechanics, rules of play and player objectives.

At the same time, however, analyzing the games in juxtaposition with one another also introduces a risk of homogenization, in that the specificities and uniqueness of each case study can become lost in the overarching experience of 'multimodal' gameplay. Indeed, despite their many differences, the games did share a large number of similarities and consistencies, which produced a clear sense of continuity or "flow" over the course of the study period. For instance, although distinct in their application of colours and aesthetic elements, the worlds all contained colourful graphic interfaces stylized to reflect the visual conventions found in Western and Japanese animated children's television programs. The overall impression was that of being inside a Saturday morning cartoon block. Another example of a potentially misleading source of continuity was the high accessibility of all six games. The games are all relatively easy to join and understand, and new players are guided through the games (from registration to in-game tutorials to "help" features available throughout gameplay) by a series of clear step-by-step instructions, interspersed with hints and words of encouragement. The games' instructions, help documents, programmed prompts and simple rule systems produce their own form of discourse. However, because this discourse was very similar from one game to the next (in terms of language used, issues addressed, etc.), it might have had a heavier influence on my impressions of the games' "playability" than realized during the analysis.

This last point highlights an important aspect of technological design studies, in that the "rules" of a particular artifact are not articulated through design features and affordances alone. Within a MMOG, as in any social forum, gameplay and player behaviours are never governed solely by the material features of the design. Rather, the spatial design and affordances are but one among many components that contribute to the shaping of the technology's use and implementation. As argued in previous chapters, these components include a variety of intersecting and oppositional forces, such as formal and informal rule systems, corporate priorities, regulatory requirements, cultural norms and family dynamics. In order to uncover the technical code of the children's MMOGs examined in this study, a more thorough exploration of these points of intersection between design and discourse is now required. The following chapter

takes up this discussion, delving deeper into the social and political implications of children's MMOG design by reflecting on how the rules contained within the design of the six case studies are both supplemented and contradicted by the various other "rule systems" that concurrently aim to shape and structure children's use of these digital play spaces.

Chapter 4: Rules of Play as Technical Code

There are a number of ways in which the features and affordances encountered during gameplay both guide and constrain what is possible—as well as what is emphasized—when playing the case study MMOGs. Accordingly, the findings outlined in the previous chapter reveal the key role of design in establishing the games' rule systems. However, establishing a typology of children's MMOG design is just the first step in conducting the type of critical analysis required to determine the social and political implications of these rule systems, and how they fit in with the existing mechanisms that drive so much of children's commercial culture. For instance, the mere fact that five of the MMOGs are browser-based tells us nothing about the “technical regime⁵⁰” (Feenberg, 1999) within which this particular arrangement of MMOG technologies—among the many available—is emerging as the norm. While it is perhaps likely that the games are designed this way in order to increase accessibility and therefore extend market reach (which is clearly a corporate concern), this possibility is only speculative—an entry point that *disrupts* assumptions about design, but that does not reveal any actual decision processes.

Indeed, the vast majority of design decisions are not only beyond the purview of the user and of the public at large, but they are also obscured by the “illusion of technical necessity” (Feenberg, 1999, p.87) that emerges once a technology begins to achieve closure. This does not mean, however, that the “cultural-political” horizon of children's MMOG design is beyond critical inquiry. As Noble (1984) suggests, design “mirrors back the social order” (cited in Feenberg, 1999, p.87). This social order is communicated to users in multiple ways, which include design affordances (Winner, 1986) as well as the forms of use and types of users that are either not afforded or outright excluded by the design (Wajcman, 1991) (see also Schwartz Cowan, 2001; Berg, 1995; Wyatt, 2005). It is also communicated in the scripts that are embedded or “inscribed” within the design and positioning of the artifact, for example through its marketing and packaging (van Oost, 2005; Akrich 1992, 1995).

Moreover, social order and ideologies are expressed in the institutional frameworks (legal, social, and bureaucratic) within which the artifacts are implemented and through which their use is promoted, monitored and regulated (Feenberg, 1999). These dimensions of technology design and use can be addressed using a broad interpretation of Feenberg's (1995) notion of the technical code. As described above, the technical code refers to “those features of technologies that reflect the hegemonic values and beliefs that prevail in the design process” (p.4), which form a “background of unexamined cultural assumptions literally designed into technology itself” (p.87).

⁵⁰ Technical regime, also described as “technological frames” or “paradigms” (Bijker, 1987; Rip & Kemp, 1998), describes the professional norms and standards that arise within particular technical disciplines which establish “standard ways of looking at problems and solutions” (Feenberg, 1999, p.87).

The term can also be used to explore how design becomes “normatively biased through delegations that favour the hegemonic interests” (p.87). These decisions might appear self-evident (e.g. as the most “efficient” choice), but in fact mask the underlying assumptions, cultural politics, socio-economic conditions, and power relations that shape design processes and to some extent use practices as well. This is what Feenberg is referring to when he describes how under capitalism the technical code has traditionally biased toward centralized and hierarchical technical designs—which are easier to commodify and control—while diminishing opportunities for agency and open access. Taking a cue from Feenberg, as well as Winner (1986, 1991), this section will attempt to “decode” and deconstruct some of the ideological, political and social underpinnings of children’s MMOGs. By uncovering the visible remnants of the technical code through which these games were constructed, we can begin to contextualize the design features examined in the previous chapter with the other types of ‘rule systems’ present within these digital spaces.

The remainder of this chapter will thus examine some of the texts that are used within the six case study MMOGs to delineate and articulate the socially and politically embedded rule systems described above. In many ways, these texts can be understood as artifactual evidence of the games’ underlying technical code, documents through which the games’ owners attempt to define appropriate player behaviour, address regulatory requirements, and configure players (and their parents) in particular subject positions. As illustrative examples, these texts can be used to deconstruct the various ways in which the social order is reflected not only within the designs of children’s MMOGs but also through their management and governance. First, I will provide a brief discussion of the role and function of game rules within MMOG gameplay, as well as corporate governance and market positioning. I will then review the contents of the games’ terms of service contracts, which have served as a key site of study of the rule systems of MMOGs within previous research in this area, and the games’ privacy policies. Since these documents function as much as ‘position statements’ on regulatory issues and debates as they serve as quasi-legal contracts, their contents can be used to uncover the political implications of various features of the games’ designs and implementations.

In a similar vein, I will examine the games’ safety features, which contain a heavy emphasis on in-game chat restrictions. In addition to enabling an exploration of the games’ mobilization and construction of ‘safety’ as a key design feature of commercial children’s MMOGs, this aspect of the games also creates a bridge between regulatory responses and game rules that warrants concerted analysis and discussion. Finally, I will conduct a critical analysis of the official game rules (variably termed rules of play, ground rules or codes of conduct), in order to determine how notions of play are constructed, represented and to a certain extent idealized within the case study MMOGs. Whenever possible, I will discuss these rule systems within the context of the design features and typology of children’s MMOGs outlined in the previous chapter, as well as the larger trends currently shaping children’s commercial culture. This will allow for a deeper consideration of the technical code of children’s MMOG design, as well as an exploration

of the ways in which technological design is used to formalize (at the level of code) certain rules and rule systems, but not others. In so doing, I hope to establish a nuanced and comprehensive answer to one of the main research questions outlined at the outset of this study and determine the scope and nature of the rules of play that are contained within child-specific MMOGs.

Game Rules

Like any game, the case study MMOGs contain a set of rules that more-or-less delineate how the game should be played. Whether they are ultimately obeyed, negotiated, bent or broken, rules provide players with a shared toolset for measuring success and for distinguishing between “strategic and nonstrategic action” (Grimes & Feenberg, 2009, p.105). In their traditional form, a game’s rules and other rational qualities (such as point systems, standardized equipment or governing bodies) shape, but never fully determine, gameplay. This begins to change, however, once a game is institutionalized on a large scale. With the addition of technical mediation, profit margins and bureaucracies, games become the basis for the production of a form of “institutional order” or “social rationality” (Grimes & Feenberg, 2009). As a game starts to operate as a system of social rationality, its rational qualities are privileged and control of its parameters is shifted away from the players (Weber, 1958; Henricks, 2006). This is particularly true of digital games, where players and player moves become standardized through action opportunities made available in the program code, and where rules can not only be formalized within the game’s design but strictly enforced by it as well (Grimes & Feenberg, 2009). Within digital games the primacy of the rule system is intensified by its technical mediation, bringing new qualities of precision and standardization into gameplay and altering the parameters within which acts of agency and divergence from the rules is even possible.

The interplay between game rules, game design and gameplay is thus a key topic of inquiry within digital games research. Recent work in this area is particularly concerned with the points of disjuncture that nonetheless exist between rules and design, and the space that this provides for players to engage in unintended uses and unanticipated actions, such as various forms of cheating (Consalvo, 2007), creative appropriations, and expressions of player creativity and innovation. That these acts of agency remain possible within the fully constructed context of a technologically mediated, digitally encoded and corporately controlled game environment is indeed a phenomenon warranting further investigation. This fascination with the dialectics of game and play has trickled over to the game industry as well, where current trends include designing games that foster feelings of player agency and enable the creation of player-driven (rather than system-driven) game rules and objectives (or lack thereof), while obscuring the linearity, parameters and design limitations of the underlying game

code⁵¹ (Breslin, 2009; Carless, 2009; Fullerton, Chen et al., 2006; Tolino, 2009; Vanden Bossche, 2009).

As explored briefly above, there are now a number of game genres centred on muddying the relationship between rules and gameplay, including sandbox games such as *Spore* and *Assassin's Creed* (Breslin, 2009), open-ended game environments such as *Cloud* and *Myst*, and UGC-based games such as *The Sims* and *LittleBigPlanet*. Another example can be found in the various MMOGs designed to enable collaborative storytelling and role-playing, non-linear exploration, as well as player-driven communities and social norms. Within these games, players are sufficiently isolated from the limitations and parameters of the game design to develop a sense of freedom of movement and independence in their choices. In reality, however, these games have been designed to allow for such a broad spectrum of action opportunities and options (in terms of customization, available paths and storylines, specializations, etc.) that a semblance of freedom becomes possible, while the potential for subversive forms of emergent play is significantly increased. What all of these examples demonstrate is the depth of the relationship that exists between game rules and game design, in that even games with open-ended and flexible rule systems, with seemingly free choice and space for imaginative play, must first be supported and contained within the highly rational system of a computer program.

Within the case study MMOGs, the relationship between game rules and game design is much more explicit. Although some of the games carry elements of sandbox and emergent game design, the case studies are generally characterized by restrictive design parameters and limited action opportunities. As a result, the players are never completely isolated from the underlying rule system, but rather encounter it at every turn. From the narrow range of player moves available, to the limited customization features, to the lack of player-driven content and the overall scarcity of interactive items available, the games' design limitations are a constant component of gameplay. That these limitations are concurrently offset by relatively clear design affordances, which aim to guide and contain the players' play in fairly specific ways, only places a stronger emphasis on the prevalence of the design as a type of rule system. To draw on the typology outlined in the previous chapter, this is particularly evident in the Social Arcade games (*Barbie Girls* and *Nicktropolis*) and the Parallel Multiplayer RPG (*Magi-Nation*), where negotiation or deviation from the rules of play is made almost impossible (short of hacking the program) by the limited, repetitive and contained nature of the games' designs. The relationship between game design and game rules is also apparent within those games identified as promoting some degree of player innovation and emergent play, namely the MMO Playground games (*Club Penguin* and *GalaXseeds*) and the Conventional MMOG (*Toontown*). However, even these opportunities mostly involve uncovering hidden (design) limitations and action opportunities, playing with and against the rules to discover new ways of engaging the game system. Although some of these

⁵¹ Not that this trend is limited to digital games. As various scholars, practitioners and users have pointed out in recent years, the shift toward user agency—or at least the semblance of user agency—is found throughout the “web 2.0” inspired culture, from music to movies (Shefrin, 2004) to books and news media.

activities might be experienced as emergent play, the vast majority are in fact pre-programmed and anticipated by the game design.

Furthermore, it is precisely at the points where the potential for player choice and creative freedom are finally afforded by the design that other rule systems begin delimiting player action. As noted previously, MMOG play often incorporates forms of chat-enabled peer play and various other types of social interaction, including imaginative role-play, performative play (Austin, 1962), the formation of communities, and the construction of virtual personas (Crowe & Bradford, 2006). Although these activities are usually given a fair amount of leeway within MMOGs (and other virtual worlds) to evolve as the community of players sees fit, they are nonetheless subject to a number of rules and regulations implemented by game owners as a way of “managing” player experience” in the game world (Taylor, 2006). In addition to various informal sources of self-regulation that emerge within player communities and social groupings (Chen, 2009; Taylor, 2006b), formal rule systems are used to place parameters on player behaviour. These corporately defined rule systems are expressed in various ways—as particular configurations of design affordances and limitations, as official ‘ground rules’ and ‘rules of play’ that players are asked to read and follow while inside the game environment, as well as within the various policies, EULAs and terms of use contracts that players are required to agree to in order to access these games in the first place. The regulations themselves largely pertain to the social, economic and legal relationships that emerge out of the player-driven activities enabled by MMOG technologies, including inter-player communication, players’ in-game behaviours, and their contribution to (or customization of) virtual items and other game contents. The remainder of this chapter provides an overview of some of the primary sources and manifestations of game rules found in the case study MMOGs.

Legal Rules and Terms of Use

A significant amount of the previous research investigating rule systems in MMOGs has focused on the quasi-legal contracts that dictate the terms of use (TOU) and terms of service (TOS) for access to the game worlds, along with the end-user license agreements (EULAs) that all players are required to agree to before commencing gameplay. These seemingly legal contracts, which players voluntarily agree to before entering a game, seek to establish authority and a certain amount of control over players’ in-game communications and activities. Non-compliance on the behalf of a player could result in his/her banishment from the game and the possibility of becoming the target of all-too-real legal action. In these cases, the rules of the game have become intertwined with the rules of business, as well as national and international law, turning an unanticipated transgression of acceptable gameplay (through actions made possible by the game code itself) into an illegal act, punishable within a real world court of law. These documents are currently included in more or less every program downloaded or purchased, and seek to set the economic and legal terms of the complex relationships that form between the players (or users) and the game (or other software) owners.

Studies of the contents of TOS contracts and EULAs within MMOGs have found that these artifacts not only reproduce existing power relations, but also work to expand the highly monopolistic trajectory adopted in the later half of the twentieth century by the US-based, global cultural industries (Gillespie, 2007; Herman et al., 2006; Lastowka & Hunter, 2004; Sotamaa, 2007). As scholars such as Rifkin (2000) and Mosco (2004) note, this trajectory has led to a reframing of cultural practice as a form of market exchange, in which the corporate owners of the tools of production, distribution and copyright regimes are given sole and increasing control over the terms, contexts and nature of our shared cultural experiences. Within MMOGs, nowhere is this expressed more clearly than within the terms and conditions involving copyright and intellectual property. As such, one of the most widely discussed issues to date has been the sweeping copyright and intellectual property claims made by the game owners within their TOS and EULAs, which seek to encompass every interaction, expression or item that is even marginally associated with the game's designed environment and contents (Castronova, 2003; Herman et al., 2006; Lastowka & Hunter, 2004; Taylor, 2002).

This particular, and still very much contested, state of affairs derives in large part from the unique nature of MMOGs. As combinations of technological commodities, forms of cultural expression, and social spaces, MMOGs are potentially subject to various different laws and existing regulation. However, questions around governance, rights and responsibilities of both the players and the developers of MMOGs have yet to be fully determined. For example, as Gillespie (2007) argues on the issue of copyright within MMOGs and other digital forums, "The emergence of new technologies tends to disrupt the balances within" copyright law, while making "visible ambiguities that [the] law had not had to deal with before (p.14). In the meantime, the games industry has orchestrated a concerted attempt to address many of these questions itself, the results of which are reflected in components of TOS contracts and EULAs. The situation is further complicated by the fact that the game companies must also comply with the demands of powerful lobby groups and industry associations. For instance, some of the copyright rules contained within EULAs reproduce wider industry trends and international trade agreements around intellectual property and patent protection (as outlined in the Digital Millennium Copyright Act, for instance). Others reflect the corporate mandates of parent companies, which frequently impose a "one size fits all" approach to digital culture as dictated by boards of trustees and the perceived need to expand existing revenue models no matter the context.

This is not to say that the documents are devoid of government-imposed regulation. Where applicable, their contents are also deeply shaped by federal, provincial and state policy and law. They must comply with a myriad of laws, governmental policies and industry standards concerning their mass media contents, their business practices, their approach to player governance and various other facets of the daily operation of a quasi-public/quasi-private space. For example, embedded advertisements found within MMOGs must conform to industry and governmental standards about truthfulness and accuracy in advertising. Since the games enable and record users' personal information, as well as their interactions, they must conform to

privacy laws involving to the collection and storage of user data. Similarly, the players themselves must abide by multiple real world laws directed at policing social relations (interpersonal, public, economic). A number of these rules emerge out of valid concerns about corporate liability in the event that players are discovered using the game to engage in illegal activities. Thus, some rules are included in order to *build* higher consistency between the game world and the real world. For instance, many MMOGs include rules that reflect fundamental human rights and freedoms, such as the rules against discrimination and prohibitions against hate speech. These interests overlap in interesting ways, while highlighting the plurality of visions and considerations that go into the establishment of rule systems within MMOGs.

Many of the 'rules' contained within TOS and EULAs thus seek to extend real-world laws, regulatory policies and social norms into the virtual world context. Others are aimed at ensuring that gameplay unfolds in ways that are conducive to both consumer satisfaction and corporate priorities. In each case, however, the main function of these rules is to discursively and legally establish the game owners' absolute veto control over the MMOG world. This control is enforced by the game owners' discretionary power to enact changes to the MMOG contents and regulatory systems, as well as banish non-compliant players. Concurrently, it has become standard practice to use the TOS and EULAs to attempt to disavow any corporate accountability or liability. Clearly, the relationship articulated within these documents is grossly imbalanced, as the interests of corporate owners have taken an unfair precedence over those of the players. This position is substantiated by Castronova (2003) and Balkin (2004), who furthermore argue that through their failure to acknowledge players' rights, the game companies have made themselves vulnerable to stricter governmental regulation and the intrusion of real-world laws. As Jankowich (2005) describes:

Contracts, like EULAs or TOSs, are insufficient to regulate the various and complex long-term relationships between participants and proprietors. As a form of click-wrap agreement, EULAs and TOSs provide little consideration of participants' needs, and ad hoc rulemaking by proprietors outside of these agreements will likely be unsatisfyingly arbitrary. (p.178)

However, in the years since these discussions first started, very little power has been shifted into the hands of the players. Despite a few high profile intellectual property disputes, the TOS and EULAs found on the vast majority of MMOGs reproduce the same tendencies of emphasizing copyright and corporate authority, while suppressing issues of governance, player/consumer rights, and corporate responsibility. These tendencies have become their own rule system within MMOG, wherein deeply problematic and undemocratic decisions about governance, ownership and rights are presented as simply part of the rules of play. This is arguably facilitated by the fact that the vast majority of the time, the vast majority of players are isolated from the full implications of the rule systems contained within TOSs and EULAs. It is often only when a rule has been breached, and a player has been reprimanded, that restrictions are experienced as such.

On the other hand, although many of the ‘legal rules’ are buried deep within lengthy, jargon-laden documents that very few people read in full, they nonetheless shape gameplay in important and systematic ways. Taylor (2006) identifies four dominant trends commonly found within the rule systems of MMOGs that “formulate” or configure the players in ways that serve to “limit full participation.” Through corporate policies, TOS contracts and game rules, she argues, players are envisioned as “consumers,” as “(potential) disruptors,” as “unskilled” or “unknowledgeable users,” and as “rational” or “selfish actors.” It is important to note that Taylor does not argue that players themselves fit these categories, merely that they are reflective of dominant trends in the ways in which the design and management of MMOGs “configure” their users from the outset. While Taylor (2006) warns that even though rule systems must be understood as part of a complex “co-construction of technologies that occurs between designers, users, and the artifacts themselves,” they nonetheless play a “powerful role in how the space is circumscribed for the eventual user in terms of what is deemed not only legitimate use, but more fundamentally, what identities are sanctioned and inscribed within the artifact.” The ways in which players are positioned within these rule systems shapes the way the game is designed, how their interactions are moderated, and the types of behaviours and creations that are deemed acceptable contributions to the game environment.

Within the MMOGs and other artifacts designed for children, additional consideration must also be given to the ways in which the articulation and management of ‘legal rules’ address the special needs and vulnerabilities of children. For instance, any online content that is targeted to or primarily used by children under the age of 13 years must comply with a number of special laws and ethical requirements designed to protect children from online harm and commercial exploitation. This includes federal policies involving the collection of children’s personal information without verifiable parental consent (such as COPPA), industry guidelines for advertising and marketing to children online (such as the Canadian Broadcast Code for Advertising to Children), and media regulations prohibiting the inclusion of mature themes and other restricted content in content that is targeted to children.

In addition, there are certain social and ethical concerns that the creators of children’s digital content are expected to address—including public anxieties about bullying, child predators, and other online risks (both perceived and real). On the other hand, it has also become common practice within the children’s digital cultural industries to attempt to use legal documents such as TOS contracts and privacy policies to delimit corporate responsibility and liability in regards to those very same concerns. For instance, many online games and websites designed for children include indemnity provisions within their terms of use, and require players to assume total responsibility for “any and all risks” associated with the use of the service and its contents (Grimes, 2007).

In reviewing the TOS contracts found within the six case study MMOGs, it is clear that the industry standards already apparent within much of the commercial digital culture have also made their way into children’s virtual worlds. While an exhaustive analysis of the contents of these documents is beyond the purview of the current study,

a cursory inventory of their major components provides sufficient basis for comparison with previous research findings. As Russo (2001) describes, and as my own prior studies of EULAs within T-rated MMOGs (Grimes, 2005) and TOS contracts within children's online games (Grimes, 2007) reveals, the terms outlined in these documents tend to follow a highly rigid format, following a set of standards initially established in the PC software industry in the late 1990s.

Indeed, even a brief overview of the TOS contracts contained within the case study MMOGs provides sufficient evidence to confirm their conformity with established strategies⁵². For instance, all six of the case studies have TOS agreements that contain the "fifteen significant points" identified by Russo (2001) as among the most common terms of use associated with software and other digital applications. This is particularly noteworthy, as many of these stipulations were originally articulated and intended only for adults, and furthermore cannot be legally extended to users who are minors. However, even here the case studies are merely reproducing the dominant trend within children's digital culture, wherein questionable contractual relationships have become a pervasive and highly over-looked feature of children's digital experience (Grimes, 2007, 2008).

That the TOS contracts found within the case study MMOGs are heavily based on documents originally constructed to manage market-based relationships between consenting adults is both immediately apparent and immediately problematic. Arguably, the very fact that the TOS are even presented as mandatory contractual agreements is in itself a questionable move on the behalf of the game owners. A contract made with a child would be deemed void if ever challenged in a Canadian or US court. Furthermore, just like the vast majority of children's websites and online games (Valerie Steeves, 2006; Turow, 2001), the case study MMOGs make very little effort to ensure that the TOSs are ever read by the players, let alone understood. Despite the fact that in each game the user's agreement to the terms is compulsory (as stated in the terms themselves), none of them contain mechanisms or steps in the registration process that explicitly encourage players to read the TOSs. Instead, agreement or consent to the terms is 'assumed'—or rather implied—through the mere act of playing the game. For example, as the TOS contained within *Magi-Nation* describes: "By playing [our] games, you signify your agreement to these terms of use, which constitute a binding legal agreement." Additionally, the length, language and terminology used in these TOSs make them inaccessible to many adults, let alone young children.

As a makeshift solution, some of the case studies begin their TOS contracts with a vague stipulation that in cases where the user is under the age of 18 years, the terms and implied agreement thereof are automatically extended to the user's "parent" or guardian as well. This is a highly dubious proposition, especially given the fragile legal standing of minors' contracts. Not only is this strategy an attempt to bypass children's

⁵² In fact, in the case of *Toontown*, the TOS document is not only similar to those used in other children's games and websites, but identical to one analyzed in a previous study (Grimes, 2007).

special legal status⁵³ when it comes to contractual agreements, a status conferred upon them in order to protect them from being exploited by adults, but it also endeavours to confuse the identity, and the ensuing rights and responsibilities, of the agreeing party. The language used in these documents obscures their invalid standing by ambiguously defining the agreeing party as the “child” and/or “parent. Although parents are often held responsible for their children’s actions, parents and children are nonetheless separate entities within the eyes of the law⁵⁴. Parents cannot legally bind their children to contractual agreements, especially when the agreement gives an unfair advantage to another adult. Furthermore, even if the parent *could* agree to the terms, none of the case study MMOGs make any real effort to ensure that the users’ parents are in fact reading, understanding or explicitly agreeing to these documents anyway. Additionally, there is no coherent framework for informing parents or obtaining their consent in regards to children’s participation in these virtual worlds, aside from the standard request for a parent’s email address during the registration process (which is discussed in further detail below).

Although it is unlikely that the contracts could withstand challenge in a court of law⁵⁵, they nonetheless provide a unique insight into an important facet of the technical code of children’s MMOGs. The TOS contracts reveal that while child-specific MMOGs may be designed and targeted to children, the special and needs and vulnerabilities of child users are not always adequately taken into account within the legal structures and associated economic processes that underlie the game design. The fact that TOS documents are for the most part left out of discussions of children’s online experience is a key part of this dynamic, as it suggests that what we are seeing here is how game owners address children outside of the scrutiny of public attention. Within these documents, children are addressed as though they were adequately informed and fully consenting adults. They, and their parents, are implicated in a series of complex and unfair terms, which include the forfeiting of numerous rights, including consumer rights, moral rights and jurisdictional rights. Concurrently, the terms include very little (if any) delineation of the rights that users do have within this exchange, nor do the contracts establish any real corporate responsibilities in their role as service provider. Instead, the TOS contracts are predominantly focused on delimiting corporate accountability, and on diminishing the rights of the user.

⁵³ The special status of minors’ contracts ties into a broader set of special laws and exceptions around children’s ownership rights, which reflect contemporary understandings of children’s diminished capacity to fully understand the full implications of complex economic relationships, and the acknowledgement that children need to be protected from exploitation and manipulation by adults.

⁵⁴ A distinction that recognizes the fact that not all parents act in their child’s best interest, and that children are dependent but also autonomous people who often act against their parents’ wishes and control. The cultural industries are currently attempting to efface some of the legal distinctions between parents and children. For instance in the RIAA’s multiple lawsuits launched against the parents of minors who have allegedly downloaded or shared music files online.

⁵⁵ This unlikelihood was recently strengthened by a decision made by the BC Supreme Court establishing that parents are not able to legally waive their children’s right (or future right) to litigate. In October, 2009, BC Supreme Court Justice Peter Willcock ruled that under the Infants Act of B.C., a parent cannot sign away a child’s right to sue for negligence: *Wong v. Lok’s Martial Arts Centre Inc.*, 2009 BCSC 1385.

Among of the most compelling, as well as troubling, examples are those terms that address the game owners' copyright and intellectual property (IP) claims. Invariably, these terms express the very same notions (and rules) about copyright and IP found in most teen and adult-oriented MMOGs. Although these terms remain contentious and are highly contested by both adult player communities and by legal experts, the corporate owners of the case study MMOGs have failed to make any alterations or adaptations to account for the additional considerations that would seem to be required when minors are involved. On the one hand, many of the MMOGs are designed to encourage the creative play and cultural participation of child players. On the other hand, the TOS contracts contain the sweeping copyright and IP claims said to cover any and all user contributions and in-game communication. Little to no accommodation is made within these documents for children's burgeoning authorship rights, nor do they in any way acknowledge the special legal status of children's ownership rights and transfer of ownership exceptions. Furthermore, these documents fail to acknowledge both the predominance of transmedia intertextuality within children's play cultures (Götz, 2005; Kinder, 1991), and the paradoxes produced by policing copyright infringement within a space that otherwise operates primarily as a branded environment.

While it is clear that the introduction of child-generated content presents a unique new problematic to the existing IP debates within MMOGs and virtual worlds, the case studies fail to allow for any of the additional rights or responsibilities implied by this development. In failing to adapt they are also acting to pre-emptively resolve an issue that has not yet been addressed—let alone decided—within the public sphere. In implementing this type of commercially biased, passive response, however, they could very well establish a quasi-legal status quo that might eventually present a real barrier to children's cultural participation rights. It also calls into question the games' ability and interest in fostering the very types of user participation and contribution they both claim and appear to be designed for. That an overly strict regulation of in-game (or meta-participation) copyright infringement by players (by incorporating brands or character names into their avatar names, for instance) could place undue restrictions on player creativity is just one of the issues that is raised by this contradiction. The implications for children's creative autonomy and the potential for commercial exploitation of children's affective bonds and relationships are further concerns that demand concerted attention.

Privacy Policies

Another category of legal rules found within children's MMOGs are privacy policies. While little attention has been given to privacy policies within the previous literature on teen and adult-oriented MMOGs, these documents are often featured within studies of children's digital culture. The significance of privacy policies as an area of inquiry relates to the increasing prevalence of corporate surveillance and user data collection within children's commercial online culture. Many of the most popular websites for children function primarily as forms of interactive advertising, branding, and market research—wherein the unique levels of access enabled by the Internet are used to gather hitherto unimaginable amounts of personal information, thoughts and opinions

from child users (Kapur, 1999; Montgomery, 2000; Steeves, 2006). From surveys and polls disguised as “personality quizzes,” to behind-the-screen surveillance of online activities and communications (Chung & Grimes 2005), children’s websites and online games frequently contain features that enable the compilation of vast databases of user information. Information such as behavioural patterns, usage habits, even conversations among users, can all be analyzed and utilized for a variety of marketing and product development purposes. In some cases, aggregated user data is data-mined and packaged as “youth trend” reports that can then be sold to other companies (Grimes & Shade, 2005). The data gathered can thus be highly valuable to those involved in the production and promotion of children’s consumer goods.

Studies of children’s digital culture have tracked the growth of these practices since their early emergence in the mid-1990s (Kapur, 1999; Klein, 2000; Montgomery, 2000; Linn, 2004; Seiter, 2004; Rushkoff, 2006; Nairn, 2006). A common theme within this body of work is an emphasis on policy issues and a critical assessment of how these processes unfold within existing regulatory frameworks. With the introduction of governmental legislation establishing nationally enforced restrictions on the online collection of minors’ personally-identifiable information (such as name, address, postal code) in both Canada and the US at the turn of the millennium, much of the discussion has shifted onto privacy policies as a key locus for debate and possible policy development. Research in this area pays special attention to the ways in which the children’s industries have adapted their strategies to comply with the requirements outlined in the Children’s Online Privacy Protection Act (COPPA) in the US, and in the Personal Information Protection and Electronic Documents Act⁵⁶ (PIPEDA) in Canada (Valerie Steeves, 2006; Turow, 2001). It is worth noting that since a large proportion of popular children’s websites and users are US-based, as well as because PIPEDA does not provide any specific guidelines for data collection involving minors, online applications targeted to North American children are likely to feature privacy policies that conform to COPPA requirements no matter their point of origin. As a result, COPPA is arguably the primary source of influence within corporate responses to children’s privacy⁵⁷.

As online artifacts, the case study MMOGS are subject to these regulatory requirements and therefore must abide by governmentally imposed restrictions on the collection and display of children’s personal information. These requirements inform both

⁵⁶ One of the only mentions of minors with PIPEDA is a vague warning that securing consent for data collection “may be impossible or inappropriate when the individual is a minor” (Clause 4.3 Principle 3).

⁵⁷ Although online advertisers and children’s media producers are subject to self-regulatory systems, current industry guidelines do not provide significant supplementary protection. The Canadian Marketing Association’s (CMA) recently updated *Code of Ethics and Standards of Practice*, for example, requires that “all marketing interactions directed to children that include the collection, transfer and requests for personal information require the express consent of the child’s parent or guardian” (Section K3) for participants under the age of 13 years. The American Marketing Research Association and Interactive Marketing Research Organization merely require that members comply with COPPA. Additional restrictions might arise out of provincial and state regulation. For example, Quebec’s *Loi sur la protection de la consommateur* introduces a number of restrictions on activities such as using information from contests for marketing research, while Maine’s recently introduced Predatory Marketing Law requires parental consent for the collection of data from minors under the age of 18 years.

the registration processes and the designs of the games themselves. For instance, COPPA requires online operators to secure parental consent before collecting data from children under the age of 13 years. Details about the game's data collection and privacy protection practices must furthermore be divulged in full within a published privacy policy. In all six of the case studies, the privacy policies describe an extensive array of data collection practices, including the type of personal information requested during sign-up, the behavioural data gathered using online tracking technologies, the data collected through the use of Cookies, as well as the data collected through user submissions and chat. As in the TOS contracts, the scope of user data encompassed within these processes is staggering. While many of the privacy policies examined make a point of suggesting that the data is primarily collected in the goal of improving the game for its users, all six allow that the data may also be used for marketing and product development. For example, as stated in the *Club Penguin* privacy policy, "We also may use information in the aggregate to analyze site usage, as well as to offer products, programs, or services." The policies also include additional stipulations to describe the type of information that is shared with third parties and what (if any) limits that have been placed on how this data can then be used. For instance, the *GalaXseeds* privacy policy describes, "Sometimes we may share aggregate, non-personal information with our partners or advertisers (i.e. 20% of our members are girls from Chicago), however specific members are never identified." Among the six case study MMOGs, only *Club Penguin* claims not to share any user data with third parties.

All of the case studies specify that the vast majority of the information collected from users is "non-personally identifiable" and that personal information is only collected where necessary for effective operation of the game and services. The privacy policy stipulations about personal information (real names, addresses, birthday, etc.) are furthermore articulated as explicit rules of play through the bans and prohibitions that each game places on its players preventing them from divulging any personal information to other players while inside the game world. These bans are articulated in the games' rulebooks and codes of conduct. They are enforced through the safety mechanisms contained within the games' designs and by the in-game moderation teams (as explored below). In some cases, the players themselves are asked to report any other player seen divulging (or attempting to divulge) personal information within the game environment. Combinations of prohibitions and enforcement mechanisms are described within the privacy policies as evidence that the games' owners and their data collection practices are respectful of the users' privacy rights. Indeed, while it is clear that the games are engaged in sweeping corporate surveillance that most likely contravenes established social expectations of privacy, these practices are nonetheless in accordance with existing privacy laws.

A deeper exploration of the limited scope of COPPA itself might help to clarify this last point. The primary emphasis within COPPA is the protection of children's "personal information," defined as any identifier that permits identification or physical contacting of a specific individual, and "personally-identifiable information," which includes any information gathered from the child when combined with a "personal

information” identifier (Section 1302, p. 8). This significantly limits the scope of the COPPA (and PIPEDA) regulations to data such as names, addresses, and telephone numbers. Children’s non-personally identifiable content does not receive any special protection unless it is directly linked to personal identifiers.

As a result of these conditions, most of the information that market researchers often find most useful, including children’s personal interests, opinions, dreams, fears, online habits and behaviours, preferences, social relationships, is not covered by COPPA or by the games’ privacy policies (Smith & Clurman 1997; Sutherland & Thompson 2001; Lindström 2003). The focus on “direct links” is problematic, given the indirect ways in which digital processes function. A child does not have to give a real name or address in order for their data to be information to be useful to marketers. Given the massive amounts of user data now available and shared among companies, a parent’s email or credit card number is sufficient to make all the connections necessary for detailed and specific data analysis (Smith & Moore, 2008). Meanwhile, children’s unprotected information and content are currently encompassed within the IP ownership claims outlined in the games’ TOS contracts.

Numerous scholars conducting research in this area argue that the regulatory regimes currently in place to protect children’s online privacy rights are inadequate (Livingstone, 2005; Valerie Steeves & Webster, 2008; Turow, 2001). In addition to the regulatory oversights described above, researchers highlight that the very processes through which parental “consent” and informed consent to the terms and relationships outlined in privacy policies and TOS contracts are obtained remain undefined and poorly enforced. Some of these criticisms can also be applied to the case study MMOGs, where neither parental consent nor informed consent is fully ensured during the initial registration process, but nonetheless assumed in the wording of the documents and their implementation as rules of play. This is particularly the case in the free-to-play games (or in the free-to-play versions of subscription games), where all that is required for a membership is an email address, which may or may not in fact belong to the child’s parent. Nonetheless, since younger children are less likely to use email than other Internet users (for instance, a recent study found that less than 30% of children aged 6 to 12 years have their own email), this measure may actually be much more effective than it appears (Kelly & Ellwanger, 2007).

Some of the case studies (*Barbie Girls*, *Nicktropolis*, *Club Penguin*) further support parental involvement and informed consent through the inclusion of webpages and features targeted directly to parents. In each case, these pages include instructions and a link to the game’s privacy policy. Furthermore, in all but one of the games (*Magi-Nation*), the privacy policies are featured quite explicitly during the registration process and are written using child-friendly language. This is particularly the case in *Club Penguin*, which incorporates portions of the privacy policy into the sign-up process, and *GalaXseeds*, which provides a “Children’s Privacy Policy” that is aimed at children and parents and written using clear, accessible language. The trend is noteworthy as it represents a divergence from norms previously established within children’s digital culture, wherein privacy policies are often buried at the bottom of the page (Turow,

2001) and only rarely accessed by child users (Sandvig, 2000). Additionally, since the vast majority of the subscription memberships and micro-transactions featured in the games can only be purchased with a credit card, the explicit consent of the user's parent or guardian is more likely among players who engage in these features. However, it is important to note that in the vast majority of the features designed to facilitate parental involvement (or purchases), privacy policies are primarily described in terms of "safety" and "protection," rather than children's rights and government-enforced regulation.

Safety Mechanisms

Although the games' privacy policies are not always prominently featured within the case study MMOGs, their influence on the design and management of the games themselves is undeniable. In each of the games, COPPA compliance has translated into a number of prominent design features, which are presented to players (and their parents) as safety mechanisms. Admittedly, the incorporation of privacy policies into the design and management of children's MMOGs can in many ways be read as a responsive, user-centred approach. By putting their COPPA compliance into practice, these games are enabling children to participate in an online social experience consistent with legislation put in place to protect their interests. On the other hand, while the safety mechanisms featured in these games are partly reflective of COPPA requirements and the games' own privacy policies, they also exhibit a certain ideological bias. By framing children's privacy rights as predominantly a matter of online "safety," the games obscure the very important fact that COPPA is primarily designed to protect children from commercial exploitation arising out of online marketing practices. Instead of openly positioning themselves as COPPA-compliant collectors of children's digital information, the game owners use safety mechanisms to depict COPPA compliance as a form of public service.

While the confluence of privacy rights and protection from online predators produces very real advantages and positive benefits for children's safety and enjoyment of digital spaces, it nonetheless distracts users from the commercial relationships and market research practices that the privacy policies are principally there to address. For example, the games frequently describe that their rules aimed at restricting players from sharing their real names, ages, hometowns or phone numbers are there to protect child users from potential harm at the hands of other players. They neglect to mention that this particular "safety feature" is required by a piece of legislation that was introduced in order to put an end to then common practice within the children's industries of soliciting children's names and contact information online for use in direct marketing campaigns.

The association of personal information with "stranger danger" thus obfuscates the much more prevalent role that the children's industries themselves play in the infringement of children's privacy rights. It also polarizes the otherwise ambiguous distinctions within COPPA and other privacy legislation when it comes to personal information, personally identifiable information and other types of user data. The fact that children's MMOGs and other online applications are used to gather extensive amounts

of information about child users becomes sidelined when privacy is equivocated with safety. The mundane and largely obscure nature of the relationships that are currently forming between children’s play and commercial processes within virtual world environments cannot compete with the immediate, reactionary gravity associated with hot button issues as “online risk.”

Game	Live Moderator	“Safe” Servers	Chat Restrictions	Peer Monitoring	Set/Block Peer Access Levels
<i>Barbie Girls</i>		X	X	X	X
<i>Club Penguin</i>	X	X	X	X	X
<i>GalaXseeds</i>	X		X		X
<i>Magi-Nation</i>			X		
<i>Nicktropolis</i>	X		X		X
<i>Toontown</i>	X	X	X	X	X

Table 2: Safety mechanisms included in each case study

In all six of the case study MMOGs, the term “safety mechanism” is further linked to the privacy policies by the fact that out of all the different safety features provided (see Table 2 for details), the most prominent and prevalent involve the pre-programmed restrictions that are placed on inter-player communication. Each of the games has limited the in-game, text-based chat system in order to prevent players from introducing inappropriate words, themes or content into the game environment. Notably, the majority of MMOGs censor players to some extent as part of their self-proclaimed governance of the game environment, as well as in the interest of maintaining customer satisfaction. For example, Blizzard prohibits the use of certain terms, such as vulgar language or hate speech, within in-game chat and character names in *World of Warcraft*, and reserves the right to delete or expel offenders at their discretion. Usually, in-game chat begins as an open access system, upon which filters designed to exclude certain words are then added. However, the case study games have taken the reverse approach by applying a closed system that is built from the ground up—only those words or phrases that have been programmed into the chat system by the design team are recognized by the system as legitimate. Players therefore only have access to words and terms that have been pre-approved and actively included by the game designers.

Within the case study MMOGs, this approach has produced two main categories of limited chat system design. The first category consists of “Dictionary Chat,” which consists of chat systems that allow players to write their own text, but that only display words already included in its vocabulary or “dictionary.” If the player attempts to input words that are *not* contained in the pre-approved dictionary, they appear as gibberish or as blank spaces in the displayed text. For example, if a *Barbie Girls* player wants to tell everyone that they like “zebras,” but this particular word is not included in the chat

system dictionary (which during the period of study was not), their statement will appear as “I like #####.” Although it was not possible to conduct a full inventory of the contents of the dictionary chat systems contained within the case study MMOGs, in-game observations provided sufficient evidence that the dictionary chat is remarkably effective in restricting inter-player communication. What remains unclear, however, is the nature and scope of the communications that are actually being restricted. In at least some cases (as with the word “zebra”), the restrictions come across as arbitrary and disruptive to gameplay.

By using the Dictionary Chat systems, forbidden words are indeed formally excluded from the game world, along with the ideas that they represent. Players must not only discover the right words but must also make their ideas fit within a very limited selection of words deemed “appropriate” by the game design or moderation team. These words in turn emerge out of the choices made by a group of adults in response to a very specific and ideologically charged set of socio-political (not to mention economic) demands and constraints. These systems thus represent a very tangible manifestation of how design features can be used to enforce not only game rules but ideological decisions about what words children should and should not be allowed to use. For example, players of *Barbie Girls* are told during sign up that they must “always be super nice” and that “anything unkind or naughty will be blocked” (“Barbie Girls Rules,” 2008). The Dictionary Chat in this game reinforces this rule by preventing players from using most (possibly all) derogatory terms, insults and curse words. However, the chat system takes this rule one step further by the fact that its dictionary is strictly limited to “positive” and cheerful words, preventing players from expressing any form of dissatisfaction or disapproval beyond a simple statement of “No.”

Given that the ludic dimensions of *Barbie Girls* revolve entirely around social interaction and make-believe play, these restrictions have a significantly limiting impact on gameplay, community building and opportunities for negotiation and consensus building. Here, the ideological decision to equivocate any form of dissent with being “naughty” (and therefore unacceptable) has important implications for children’s rights to express themselves. Within the specific example of *Barbie Girls*, a highly gendered MMOG to begin with, this decision also raises troubling questions about the continued tradition of placing excessive restrictions on girls and girls’ play (Formanek-Brunell, 1998; Lamb, 2001; Strange, 1995).

A fascinating outcome of the use of Dictionary Chat as a safety mechanism is that it inherently compels players to develop skills that will allow them to not only “work” the system but to “workaround” the system as well. In their communications with others, players must engage in frequent trial and error sessions in order to find the “right” (i.e. pre-programmed and correctly spelled) words that will allow them to express themselves. There is no real guidance given in any of the six case study MMOGs as to what the range of accepted words will encompass and players are expected to figure this out for themselves during gameplay. This feature of the game design affords that players experiment with the chat system itself, which enables players to not only discover its contents but also its loopholes. The development of “workarounds” is well

documented within game studies and other ICT research, and refers to the “‘Legal’ ways of working around game structures” (Salen & Zimmerman, 2004) that players and users use to subvert certain design limitations and programmed restrictions. This phenomenon is discussed in further depth in Chapter 8, but it suffices to say that the emergence of workarounds as a form of “cheating” the rules of play is itself evidence of the ways in which Dictionary Chat operates as an embedded rule system within the game environment.

The second major type of restricted chat system used within the case study MMOGs can be labelled “Pre-Determined Chat.” Within this chat system, in-game communication is limited to a sort of *bricolage*, wherein players must choose a pre-formed phrase from the selection provided in a series of scroll-down menus. The scroll-down menus are organized thematically, grouping together chat phrases that share a similar function (e.g. Greetings, Likes) or ludic theme (e.g., phrases addressing a particular area of the game may be grouped together, while phrases addressing a specific mini-game or activity may appear in the same sub-menu). During the period of study, five of the case study MMOGs provided the option of setting chat restrictions to either Dictionary Chat or Pre-Determined Chat (once again *Magi-Nation* was the sole exception). In all but one of these cases (*Barbie Girls*), Pre-Determined Chat was set as the default chat system, which all new players were given upon initial registration to the MMOG⁵⁸.

In each case, the setting is presented as an additional safety mechanism that encourages parental involvement in determining the level of access that child users will have when it comes to inter-player communication. Players are required to enter a parent’s email, upon receipt of which the “parent” is asked to approve the child’s request for access to the Dictionary Chat system. Within games that contain more than one category of chat (such as *Club Penguin* and *BarbieGirls*), different categories of chat are separated onto different servers, wherein each player’s server access is directly linked to the level of “chat” access the player has secured. For instance, in *Club Penguin*, players who are only authorized to use the “Pre-Determined Chat” system can visit any one of the game’s 109 available servers, but will only be able to see and engage in chat on the 11 servers that are designated for “Ultimate Safe Chat.”

⁵⁸ During the data collection, the *Barbie Girls* was in open Beta and its chat system went through multiple changes. By the end of the study period, *Barbie Girls* had implemented a system similar to the other four case study MMOGs, with Pre-Determined Chat set as the default.

Game	Total Number of Pre-Determined Chat Phrases Available	Closed	Customizable
<i>Barbie Girls</i>	323	323	0
<i>Club Penguin</i>	322	322	0
<i>GalaXseeds</i>	8,200	177	25 (x options)
<i>Toontown</i>	228	228	0
<i>Nicktropolis</i>	634	633	1
<i>Magi-Nation</i>	n/a	n/a	n/a

Table 3: Total number of pre-determined chat phrases available by game

In conducting an inventory of the chat phrases available within each of the five games containing a Pre-Determined Chat system option, it becomes immediately apparent that this type of system runs the risk of dramatically limiting player interaction and opportunities for self-expression. Although chatting with other players is presented as a primary feature of the gameplay afforded by the games' design, particularly within the MMO Playground games and Social Arcade games, players are highly limited in the scope of sentences, and therefore the range of topic, they are ultimately able to chat about (See Table 3). Although many of the games supplement their chat systems with "emoticons" (e.g. *Club Penguin*, *Nicktropolis*, *GalaXseeds*, *Toontown*) or player moves designed to express emotion (e.g. *Toontown*, *GalaXseeds*, *Club Penguin*), even these features become significantly limited by the lack of variety or customizability available to players. Furthermore, the ways in which the Pre-Determined Chat systems are organized has additionally important consequences for the amount of freedom and variety players have in their peer interactions. For instance, games with chat systems predominated by "closed" chat phrase options (contained sentences that cannot be modified or customized in any way by the players), such as *Nicktropolis*, *Barbie Girls* and *Club Penguin*, produce a much more limited selection of phrases. Through the inclusion of just a small number of customisable sentences (where players could mix and match phrase portions to create several different combinations), *GalaXseeds* was able to provide players with nearly 8,200 chat options⁵⁹.

Even more significant, however, is the nature and contents of the phrases themselves. Although *GalaXseeds* provides a much larger scope of chat phrase options through the inclusion of customizable sentences, the vast majority of these refer to in-game items and areas and thereby represent a nonetheless limited range of topics. Among all five of the MMOGs featuring this type of system, the majority of Pre-Determined Chat phrases addressed topics that directly relate to features and contents contained within the games' designs. Of the 634 chat phrases available in *Nicktropolis*,

⁵⁹ The *GalaXseeds* system eventually switched over to a hybrid of dictionary chat and pre-determined chat, wherein pre-determined chat sentences could be completed with a typed word (as long as the word appeared in the Dictionary). This significantly enhanced the flexibility of the chat system, while exponentially increasing the number of chat phrases available.

237 contain explicit references to a Nickelodeon property (including TV programs, films and branded areas of *Nicktropolis*). The only customizable phrase, “TurbNick needs to add more episodes of,” required players to complete the phrase by selecting from a list of Nickelodeon television shows, as found in market research surveys. In fact, most of the games with Pre-Determined Chat systems include a number of “branded” phrases, enabling players to discuss the branded areas of the games themselves, as well as tie-in products and pay-to-play services. The vast majority of the sentences containing brand references are positive or even celebratory in tone. None of the Pre-Determined Chat systems enable players to criticize or say anything remotely negative about the media brands and third-party advertisers contained within the MMOGs. The presence and nature of the cross-promotional messages within the Pre-Determined Chat systems of the case study MMOGs point to the need for a more focused analysis of how notions of “safety” are made synonymous with brand management practices within commercial children’s MMOGs.

When comparing the chat system rules with the design features and affordances described in previous chapters, the underlying contradictions are inescapable. While the design and narrative of these games appear to emphasize imaginative play and social interaction, these activities are not facilitated by the chat systems and opportunities for interaction provided. While it is possible that players can and do work around some of these restrictions, there remain too few opportunities for creative input or collaboration within the games’ designs for this to have significant impact the shape and contents of the game world. Although the restrictions contained within both the Dictionary Chat and the Pre-Determined Chat systems are depicted as safety mechanisms, the words and ideas that they omit from the game are often arbitrary. The energy that these systems demand of players, who are asked to dedicate a significant amount of time to finding the right words or chat options to communicate with others, very likely has a limiting effect of its own. Whether the game becomes one of finding the workarounds, or of merely limiting self-expression to those words or phrases known to be accepted by the in-game chat system, the impact of these particular safety mechanisms is much larger than the mere exclusion of unsafe or inappropriate player interactions.

Considering the broad variations in literacy and typing abilities found among the age group that is being targeted by the case study MMOGs, the application of child-centred design strategies within the construction and management of the in-game chat system is clearly warranted. The inclusion of a Pre-Determined Chat system could very well function as an important mechanism for increasing the games’ overall accessibility to younger children. Yet, none of the games describe the simplified chat system in these terms. Rather than focus on the supplementary uses that players might derive from these chat systems, the emphasis is instead placed on how the corporate owners of the games can use the systems to extend the reach of their promotional interests into further aspects of the gameplay.

As outlined in Table 2 above, additional “safety” features are included in all but one of the games (*Magi-Nation*). For the most part, these features are in fact quite common within mainstream (teen- and adult-targeted) virtual worlds and MMOGs. Many

virtual worlds and chat rooms feature live moderation, just as many provide players with a way of blocking other players from communicating with them. Furthermore, most MMOGs have some sort of procedure for reporting disruptive players or illegal activities witnessed within the game world. These functions are required for the effective management of the games and their players, although not all games will follow up or implement them to the same extent. For instance, live moderation (which is not often called moderation, but rather in-game support or “Game Master” assistance) within mainstream MMOGs tends to be sporadic and not necessarily focused on regulating in-game behaviours. Rather, it is more frequently used for responding to reported violations and tracking potential problem players. Nonetheless, within the children’s MMOGs, each of these features is represented as a safety feature within the games’ privacy policies and parents’ pages. As such, they contribute to an overarching discursive representation of children’s MMOGs as “safe havens” among the “chaos” of the internet.

As safety mechanisms, features that provide players with the ability to block or report another player rely on the users to assume a certain amount of responsibility for ensuring a “safe” game environment. These features, and the particular rules of play that they seek to extend, must therefore be seen as systems of self-regulation. Among the case study MMOGs, the most developed example of self-surveillance is found in *Club Penguin*. While both *Toontown* and *Barbie Girls* include a feature or button that players can use to report bad behaviour, bullying or other suspicious activities, *Club Penguin* has integrated the feature into the very fabric of the game world. While anyone can report another player by clicking a large, gold “Moderator” badge on the top right corner of the screen, Penguins can also apply to become “Secret Agents.” For a salary of 250 Coins a month, Secret Agents are asked to be vigilant observers of the speech and behaviours of other players, to “help be our eyes and ears throughout the Club Penguin world.”

While the Secret Agent designation is a fun method of involving and rewarding players for their role in the management of the player community, it also highlights the ways in which these games utilize rule systems to delimit corporate liability and accountability. The only real “responsibilities” that the game owners assume within the design and management of the in-game safety mechanisms are in relation to children’s privacy rights. Notably, these are also the only responsibilities that the game owners are legally required to assume by government-enforced regulation. The only game that does not place excessively sweeping restrictions on player interaction, *Magi-Nation*, tellingly contains almost no features that would necessitate or even encourage such interaction to take place. Other responsibilities, such as ensuring children’s right to express themselves or to participate in emerging forms of cultural production and online community-building, are not only unaccounted for by the safety mechanisms and rule systems provided, but oftentimes excluded in the name of increased “safety.” The full costs of this trade-off are not fully explained, but from the analysis above it seems clear that in many cases safety is mobilized as justification for diminished opportunities for interaction and creativity on the one hand, alongside increased opportunities for promotion and branding on the other.

Interestingly, although the games are discursively positioned as designed for safety and as representing “safe havens” within the safety mechanisms and promotional features of the site, ultimate responsibility for ensuring children’s safety consistently falls onto the individual player and her/his family. From relying on child players to enter a parent’s email, rather than their own, in determining chat access (in Toontown, Club Penguin, Nickropolis and Barbie Girls), to enlisting players in informal (and formal, in the case of *Club Penguin’s* Secret Agents) systems of self-monitoring and surveillance, a significant share of the games’ safety mechanisms are fully dependent on individual responsibility, honesty and compliance. This facet of the case study MMOGs, which notably reflects larger trends found throughout the design and management of children’s online culture (Livingstone & Bober, 2006; Shade et al., 2005), surfaces again in the last type of rule system to be discussed in this chapter, which is found in the games’ official codes of conduct, ground rules and rulebooks.

Rulebooks

Within the case study MMOGs, manifestations of the game owners’ strategies for “managing” players’ in-game behaviour are made even more explicit by the inclusion of distinct texts⁶⁰ that outline the ‘rules of play’ or ‘codes of conduct.’ These texts appear in addition to TOS and privacy policies, and often act to supplement the rules while concurrently providing players with a child-friendly iteration of the major terms. The rulebooks introduce players to some of the basic conventions of multiplayer gaming and caution them about the kinds of behaviours that are considered inappropriate or unacceptable (by the game’s designers or developers). As with the other rule systems described above, the rulebooks contained in the case studies both describe and supplement the embedded rules of play encountered in the design by outlining parameters for those dimensions of gameplay that occur within the game environment but that are nonetheless somewhat independent of the design itself.

For instance, the design might suggest or afford enable make-believe play through the inclusion of open spaces and chat features, but the contents and extent of the activity itself is produced through the players’ imaginations. Make-believe play may be communicated primarily through typed chat statements, but it also unfolds in the myriad of activities and exchanges that make up gameplay. This includes in-game actions and moves, behavioural patterns and workarounds, as well as the various forms of meta-participation that predominantly occur beyond the confines of the MMOGs (and thus largely beyond the control of the game owners). While player chat is tightly regulated and heavily restricted by the “safety” chat systems described above, chat and

⁶⁰ These texts are not to be confused with the “game guides” that are published to assist players in their interactions with a particular game, nor with the instruction manuals that are often included with purchase of a game. Game guides are in-depth texts that provide detailed “walkthroughs,” cheats, the locations of hidden rooms and items, and other tips that help players to complete the game. Instruction manuals provide information about the game controls – which buttons to push to perform player moves and engage action opportunities—and details about weapons, items, character profiles or background stories.

other forms of player participation, interaction and creativity are further regulated and prohibited through the restrictions outlined in the rulebooks.

Within *Club Penguin*, where limited forms of experimental play are encouraged by the design affordances, the rulebook includes various prohibitions on cheating and exploiting design glitches. In *Barbie Girls* and *Nicktropolis*, where a significant amount of the design relies on inter-player communication, the rulebooks include detailed rules about social interaction. For instance, as described above, in *Barbie Girls* not only are inappropriate and offensive words excluded by the programming of the in-game chat feature, but players are furthermore warned that they must never “say anything naughty or mean” and “always be super nice” when chatting with other players (“Barbie Girls Rules,” 2008). In addition to the restrictions placed on player chat, the Barbie Girls rulebook further establishes this rule through the warning that players who are naughty or disruptive “could be banned from the site!”

Thus, just as the MMOGs themselves encompass numerous features and action opportunities that are more-or-less distinct from the overarching ‘game’ themes and narrative, the rulebooks cover much more than mere rules of play. In fact, very few of the rules outlined in the case study rulebooks relate to gameplay at all. As outlined in Appendix B, of the thirty-four different rule categories recorded across the six case study MMOG rulebooks, only seven can be described as relating directly to gameplay. Even here, however, an overlap with non-game categories is apparent. For example, four of the rulebooks include a rule prohibiting players from disrupting other players’ chat or play, including the use of spam. While this rule certainly applies to what is considered acceptable gameplay behaviour, it extends beyond the ‘game’ dimensions of the MMOG environment and into non-ludic forms of social interaction as well.

Instead, the majority of the rule categories recorded (twenty-seven out of thirty-four) directly address one or more of the various relationships that players enter into upon joining a MMOG community. Combined, the rulebooks contain ten rule categories that seek to place parameters on the player’s relationships and interactions with other players, many of which deal specifically with the types of “disruptive behaviours” described by Taylor (2006), including harassment, bullying, soliciting personal information or introducing inappropriate topics of discussion. All six of the MMOGs contain explicit rules prohibiting players from “bullying” or “being mean,” as well as rules restricting players from engaging in foul language or “inappropriate” talk. Four of the MMOGs include rules that aim to restrict the player’s access and relationship to underlying technological structures, forbidding direct engagements such as hacking or exploiting bugs and glitches, and prohibiting the use of third-party programs and modifications to intervene with the game’s programming. In some instances, even workarounds are formally prohibited in the rulebooks.

Another trend is the predominance of rules aimed at defining and delimiting the complex legal, economic and social relationships that exist between the games’ players and corporate owners. The majority of the rulebooks examined include rules that repeat elements of the games’ privacy policies. For instance, all six of the games restrict players from giving out their passwords within both the privacy policy and as one of the

rules of play outlined in the rulebook. Most also repeat the privacy policy prohibition on divulging personal information to other players. Furthermore, three of the rulebooks (found in *Magi-Nation*, *GalaXseeds*, *Toontown*) contain rules that delimit the players' relationship with the game's contents and environment. In all three cases, the rulebooks are used to position players as passive consumers, rather than as active co-producers or creative contributors, of the games' themes and contents. Reiterating terms that are already outlined in the MMOGs' TOS contracts, these rules assert the game owners' claims of intellectual property rights over in-game items (e.g. players can't sell or trade in-game items), prohibit players from engaging in any form of "copyright infringement" either within or outside of the game world, and restrict players from using the game environment for personal business purposes (e.g. advertisements, commercial services). These rules seek to make compliance to the quasi-legal documents through which the game owners address important (and often as yet resolved) legal and political issues an integral part of the "rules of play."

Concurrently, the rulebooks serve as an additional forum through which a certain amount of responsibility and liability becomes delegated onto the players. Together, the rulebooks contain nine rule categories that deal specifically with issues of governance, corporate liability and accountability. As in the privacy policies and TOS contracts, these rules contribute to the establishment of a limited form of corporate governance, wherein the game owners claim full discretionary rights to banish or suspend players for breaking the rules, but also demand that players assume a certain amount of responsibility for ensuring that the rules are upheld. However, rather than formulate this relationship as one of reciprocity and collaboration, the rulebooks depict an imbalanced exchange wherein players are expected to assume a variety of responsibilities yet are granted very few (if any) rights. For instance, all but one of the games (*Nicktropolis*) has a rule about reporting rule-breakers, while three of the games require players to report anyone who bullies or is otherwise mean to them.

Together, the rulebooks contain eight rule categories that address aspects of personal liability and self-regulation, most of which outline actions that the players are expected to take in order to protect themselves from harm (such as blocking players, reporting rule-breakers, or telling their parents). In one case, *Toontown*, one of the "House Rules" outlined in the game's rulebook is that players must assume risk of exposure to offensive or obscene content. As with the safety mechanisms explored above, the implication here is that players are expected to share the responsibility for ensuring the effective regulation of the game space. However, these types of claims must also be understood as operating within a larger context in which personal liability is used to diminish and delimit corporate liability. The more responsibility the players are required to assume in their interactions with the game and its player community, the less accountability is expected from the games' owners.

From Rules of Play to Technical Code

When analyzed as interconnected components of a set of artifacts emerging out of specific socio-political conditions and institutional frameworks, the rule systems suggest a technical code that clearly privileges corporate interests. These systems seek to not only reproduce the existing power relations found within children's commercial culture, but to extend these relationships into increasingly intimate facets of children's play. One of the main ways this privileging of commercial priorities reveals itself is in the inherent contradiction that emerges when the games' various rule systems are juxtaposed.

According to the rules established in the TOS contracts, the games' owners claim full and sweeping rights over any and all contents that appear within the game environment, including the interactions and behaviours of the players. The claims attempt to extend corporate ownership of children's culture into actual children's play habits, ideas and peer interactions. This is accomplished by reducing the products of children's digital play, which are created out of imagination, interaction and navigation of the games' designs, into units of data that are then reconfigured as intellectual property. However, the rules also delegate the majority of the responsibility for the contents of this data onto the players themselves, as well as onto the technological design (e.g. programmed chat restrictions). While claiming full ownership rights over player communication and interactions would seem to necessitate an avowal of accountability for its contents, the rules are delineated in such a way to suggest that this is not the case. Thus, the game owners claim excessive rights with very limited responsibility, whilst placing undue responsibility onto the very child players (and their parents) whose rights are being contravened by these rule systems in the first place.

This is not to say that the delegation of responsibility onto users and an emphasis on personal liability are in conflict with current laws or governmental policy. Governments in both Canada and the US (as well as elsewhere in the world) have opted to leave many aspects of the internet unregulated. With a few exceptions, users are indeed expected to accept and manage the risks associated with online interactions. Apart from the COPPA requirements and some regulations about online advertising to children, the corporate owners of children's MMOGs are not legally responsible for providing a child-appropriate let alone "safe" environment. It is in the lack of reciprocity and the misleading representation of the games' safety mechanisms that the game owners' claims of rights and responsibilities become contradictory.

The responsibilities that are delegated onto child players within the games' rule systems are myriad. They include various forms of self-regulation, the surveillance of other players and management of rule-breakers (by either blocking them or reporting them). They must respect corporate copyright, abide by privacy policy rules, and secure their own parental consent. In exchange, they are promised safety and fun, but neither of which is assumed as the responsibility of the games' owners. While live moderation is provided in some of the games, each contains rule systems that delimit corporate accountability and liability in a way that offloads, albeit discursively, the bulk of the

responsibility for ensuring the safety mechanisms are effective onto the players. The games' owners each state that they will do what they can to promote safety and privacy within the rubric of the game environment, but that the ultimate responsibility for the games' contents rests with the players themselves.

Along with these responsibilities, players are required to forfeit many of their rights, including potential ownership rights and moral rights over the various forms of content they contribute to the games. Although opportunities for UGC are limited within the case study MMOGs, players are nonetheless able and encouraged to contribute content through the chat systems and through their creative appropriations of the game designs. Once they do, however, their authorship and ownership of the content is usurped. Ironically, although existing regulatory regimes do not require corporations to provide "safe" or even child-appropriate online environments, children's property rights are well protected from exploitation. The technical code of commercial children's MMOGs thus reflects regulatory requirements where it is convenient, but follows the industry standard of disregarding legislation when it comes to minors' contracts and property laws. Concurrently, the restrictions placed on chat within these games highlights the lack of consideration given to children's rights to free expression and cultural participation.

Overall, very few of the *rights* that are accorded to child players within the case study MMOGs are included voluntarily. This includes children's privacy rights, which as described above are required by government-enforced legislation. However, even here, children's rights are undermined by the associated trade-off required by the rule systems. For although the "safety mechanisms" contained within these games may well be in compliance with COPPA requirements, the restrictions they impose on children's ability to communicate extend far beyond the protection of their privacy. Within these mechanisms, privacy is conflated with vaguely defined notions of safety, which is in turn presented as a key selling point of the games and used as justification for a number of the design limitations contained within. Even here, the lack of reciprocity between the games' owners and child players is striking. In the one area where children's digital rights within the game environments are actually protected by legislation, corporate responsibility towards children's privacy and personally-identifiable information is effectively obscured behind a broad and ambiguous veil of "safety."

While notions of "safety" may indeed represent a key selling feature for parents and concerned children, they do not account for the range of restrictions that have been embedded within the games' designs and chat systems. Rather, it is used as a rhetorical mechanism, as well as yet another opportunity to limit corporate accountability. Throughout this process, the underlying relationships between players and game owners are depicted in a misleading way. While it is certainly worthwhile for game owners and players to eliminate bullying and online predators from children's online experience, there are much more prevalent and systematic forms of exploitation at work within these games, which remain for the most part unaddressed within the rule systems. The entire process through which the games' owners claim full rights over player content is obscured by the discursive strategies used in both the games' articulated and underlying

rule systems. Meanwhile, copyright issues are predominantly presented in terms of traditional consumer/producer relationships. For instance, none of the rulebooks refer to the games' shared TOS claims over user-produced content and submissions. However, three of the rulebooks do include at least one rule prohibiting players from infringing upon corporate copyright.

Overall, the rulebooks contained within the case study MMOGs place a significant emphasis on restricting player interaction and in-game activities, while concurrently limiting corporate accountability and liability. In this way they reproduce many of the same patterns identified in the other three rule systems explored above, including the safety mechanisms, privacy policies and TOS contracts. They also extend the trends established by the games' designs, which supply a significant amount of space for make-believe and role play, but do not adequately support these play forms through the action opportunities provided. In each case, the rules of play do not quite align with the larger emphasis that is placed on social interaction and collaborative play. Rather, the type of play that is promoted and constructed by the games' underlying rule systems is characterised by containment, and undermined by the political and economic relationships the games establish between the players and the games' owners.

However, although these findings provide a valuable toolset for contextualizing the design features reviewed in the previous chapter, and therefore represent a crucial stepping stone in a critical exploration the underlying "rules" or technical code of children's MMOGs, there is something missing from the above analysis. While evidence that corporate priorities and commercial mechanisms are driving multiple aspects of the design and rules of children's MMOGs, a more concerted examination of the role played by promotional discourses and corporate priorities within the social construction of the games as technological and cultural artifacts is still required. The next chapter will seek to address this oversight by focusing specifically on the recurring theme of commercialization, through a critical exploration of the promotional and intertextual dimensions of the six case study MMOGs. Specifically, I will explore the ways in which commercialization, corporate priorities, and promotional interests operate within these games as implicit rules of play.

Chapter 5: Commercialization as Rule System

The breadth of overlapping rule systems contained in the case studies reinforces the notion of MMOGs as hybrid artifacts, which simultaneously operate as games, as technologies, as media formats, and as (potential) sites of social interaction and cultural practice. Yet, as revealed by the design trends and ownership patterns found within children's MMOGs, these artifacts must also be seen as promotional venues through which established media brands and transmedia strategies that are already dominant within children's commercial culture are now being expanded into new modes of children's digital play. While this is made apparent by the heavy emphasis placed on virtual consumerism within the games' thematic features and narrative elements, evidence that the case study MMOGs function as promotional vehicles can also be found within the gameplay design. Together, these features combine to produce an additional, informal rule system that links successful gameplay with real world market exchange.

As players move through the virtual world environments they encounter commercial messages and promotional priorities at almost every level of the games' design and implementation. While these commercial features are most often presented as optional, they are nonetheless heavily promoted and privileged by their close association with advanced features and areas of gameplay, with exclusive items and areas, as well as the special status and expertise that is accorded to those who consume them. Many of the games also contain frequent insinuations and even explicit reminders that the pay-to-play features enable better, more comprehensive and more effective participation in the game and in the surrounding player community. Although the commercial features primarily operate as an informal rule system in that it does not directly intervene with players' in-game actions and behaviours, it is nonetheless one that is formally supported by a highly visible schema of benefits, rewards and special treatment. It is also constructed to fulfil a set of formal corporate functions, including the promotion of the games' pay-to-play services, tie-in products and transmedia intertexts, the orchestration of detailed market research on player preferences, and the ongoing fostering of brand awareness and loyalty among the player population. A thorough consideration of the technical code of children's MMOGs must thus include the ways in which these informal commercial rule systems create links between gameplay and real world market processes.

Commercial "rules of play" can be understood as an integral component of the games' marketing or "packaging." Within this dynamic, packaging is envisioned as a broad category that encompasses the textual, discursive and aesthetic elements that surround the games and their players, from simple marketing ploys, to the promotion of the games as "safe havens," to the articulation of preconceived notions about how the

artifact should be used and by whom. In examining the importance of packaging and consumer relations within the construction and configuration of the games and their users, we can draw upon the works of Schwartz Cowan (2001), van Oost (2005), Akrich (1992), Nye (1998), Berg (1995), as well as Schot and de la Bruheze (2005). These scholars envision a reorientation within technology studies away from production toward the crucial role consumption in the social shaping of technological use, and highlight the key role that is played by advertising and marketing in the construction of technological artifacts, users and usage. The theory thus enables a concerted analysis of some of the cultural dimensions of technical code, in addition to providing a crucial entry point for understanding political economic implications.

The notion of gender scripts, as described by Rommes (2002), van Oost (2005), and Akrich (1992) provides a key resource for understanding the role of packaging in the technological and cultural shaping of MMOG gameplay. As van Oost (2005) describes, technologies carry scripts about their intended users and usages. In her analysis, van Oost focuses on the ways in which these scripts can function as “gender scripts,” wherein notions of gender become transformed into “design specifications” that operate on multiple levels of technological, aesthetic and marketing design. Within this dynamic, advertising provides an “important locus for linking an object to a specific consumer group” (p.194). The packaging found within and surrounding children’s MMOGs likely performs a similar function, linking the games to children’s culture on the one hand, and on the other hand promoting and privileging gameplay that involves direct market exchange.

By expanding the concept of gender script to include other subject positions that might concurrently apply to child players—who are defined not only in gender terms but also in terms of age, perceived abilities (and lack thereof), notions of “appropriate” play, as well as a range of assumptions about children’s needs and vulnerabilities—it is possible to decode how certain scripts about players and gameplay are embedded within the marketing specifications and packaging of the case study MMOGs. In turn, these scripts eventually come to function as yet another system of rules imposing a type of social order onto the players and their gameplay, albeit one that is much less overtly articulated than the ones provided in the rulebooks and legal documents.

This chapter will begin by providing a cultural context for the ensuing in-depth discussion of scripts and packaging, by briefly comparing the business models found within the case study MMOGs (and within children’s MMOGs more generally) with those found and proven viable within the mainstream MMOG market. This will enable a point of contrast with which key continuities and differences within the emerging niche market for children’s MMOGs can be identified and critically analyzed. Focusing solely on features and contents contained within the games themselves, I will analyze the packaging and marketing features found within the six case study MMOGs, in order to reveal the presence and contents of informal rule systems contained therein, as well as identify the particular set of scripts that it suggests.

From Virtual to Real Economies

In thinking about the commercial dimensions of the six case study MMOGs, it is important to begin by noting the significance of their chosen business models. As described in previous chapters, although portions of all six of the games can be played for free, each is also supported by at least one revenue model. Three of the games offer premium memberships through monthly subscription (*Toontown*, *Club Penguin* and *Barbie Girls*), three contain a micro-transaction system through which in-game items can be purchased either via real money transaction (RMT) or via “real world” toys and collectibles (*Barbie Girls*, *Club Penguin* and *Magi-Nation*), and two sell space to third-party advertisers (*Nicktropolis* and *GalaXseeds*). This hybrid approach to monetizing gameplay diverges from previous standards established by the mainstream MMOG market, which has hitherto derived the vast majority of its revenues from one-time game software purchases and ongoing monthly subscription fees. For example, *World of Warcraft*, the most successful virtual world in North America in terms of profits earned and one of the most successful in terms of population size and loyalty, has generated the bulk of its revenues (estimated to be as much as \$600 million USD annually) from monthly subscription fees, along with periodic purchases of the game software and upgrades (Vella, 2008).

Although RMT and micro-transactions have had a much longer history in Asian MMOG markets, the establishment of these types of revenue models within the North American market is still in the early stages. Following the rise and spread of player-driven black markets for game items, many MMOG developers began exploring ways to control and monetize emerging player practices by establishing official, corporately endorsed auction sites and purchasing opportunities (enabling players to purchase a pre-levelled character, for example). The market potential of RMT and micro-transactions was further highlighted with the introduction of virtual worlds such as *Second Life* and *Habbo Hotel*, which centre around social interaction rather than games, and which incorporate micro-transactions directly into the fabric of the environment and item acquisition system.

Yet, it was really only after the sudden success of *Webkinz* and *Club Penguin* in 2005 that the micro-transactions model began appearing in earnest within game-themed virtual worlds and MMOGs designed for teens and adults. Initially, this occurred through the successful expansion of existing, foreign-based, micro-transaction driven titles into the North American MMOG market. Examples include *Maple Story* (Lastowka, forthcoming), a free-to-play South Korean MMORPG that features an RMT “Cash Shop” where players can buy items and pets, as well as *Eve Online*, an Icelandic MMORPG with an open, player-driven RMT economy. More recently, North American developers have begun to incorporate micro-transaction systems into existing and up-and-coming titles. For example, Blizzard Entertainment recently announced the introduction of a RMT pet store within *World of Warcraft* (Fletcher, 2009). Thus, even though the children’s MMOG market is itself still an emerging market, its dominant business strategies have nonetheless already had a significant impact on the economic restructuring of MMOGs.

By providing a risk-reduced testing ground for micro-transactions within the North American context (in that cross-promotional, free-to-play, flash games are significantly less expensive to make and market than mainstream MMOGs), these games have contributed to a significant acceleration in the ongoing commodification of MMOGs (Castronova, 2003).

However, as Hunter and Lastowka (2004) argue, most MMOGs already privilege commercial and economic relations through the prominent role these themes are given within the games' designs. The virtual consumerism that is characteristic of the six case studies (as examined in Chapter 3) is also common among mainstream MMOGs, which for the most part revolve around some iteration of property-based economics. Even games set in the most fantastical of settings, such as the medieval worlds of *EverQuest* and *World of Warcraft*, feature in-game economies that faithfully reproduce the Western capitalist system (Castronova, 2005; Lastowka & Hunter, 2004). These virtual economies are integral to the games' levelling systems and narrative arcs, wherein activities involving the acquisition, collection, fabrication and trade of items are all more or less required for effective and timely progression through the game's increasingly challenging quests and level areas.

Players are rewarded with in-game currency for completing missions and quests, which they then use to "purchase" increasingly powerful items and abilities. In many of the leading MMOGs, players are also able to earn currency independently of missions by selling "fabricated" and used items back onto the in-game market. Many of these systems were also designed to enable direct forms of trade to take place between players, either in the form of "gifting" (where items are given freely as "gifts" or as part of a player negotiated barter) or in the form of in-game auctions and player-to-player markets. The key point here is that much of the infrastructure required to engage in real-world commercial transactions is already present within the games' designs. Virtual economic exchange is pre-written into the game code and fully integrated into the narrative motifs of gameplay. Since participating in this exchange is already key component of gameplay, the transition into RMT requires little modification other than player buy-in and a slight shift in the in-game reward system. The "basic rationalizing operations" of commodification are already in place within the technical code of the game design and structure.

In this way, MMOGs promote a paradigm of acquisition and exchange that is surprisingly similar to collectible toys and trading cards, both of which consist of staples of the commercial children's culture and key components of a large number of successful children's media brands (from Pokémon to Barbie dolls). Scholars such as Cook (2001), Bianchi (1997), Buckingham and Sefton-Green (2003) argue that children's games and toys built around on-going accumulation construct a "pedagogy of consumption," through which players (in this case, child players) are inducted into the "habits and competencies required by our commercially based media culture" (p.394). Bianchi (1997) proposes that "collection set" toys and games offer children a way of organizing and understanding consumer society, while teaching them to select and control commodities. Within these dynamics, play and consumerism are clearly deeply

intertwined. Although virtual rather than tangible, the in-game items at the centre of so many aspects of player progress and participation within MMOGs serve a similar function. Even before RMT is introduced into gameplay, MMOG players are already embedded in a virtual reproduction of consumer capitalism.

As Bianchi describes, collectible toys and trading cards emphasize novelty through the continued introduction of new accessories, editions, and additions to the collection set. Within MMOGs, novelty is produced through the logic of progress that links 'more and better' in-game items with the new areas, more challenging quests, and increasingly impressive powers and abilities that the items enable players to access and master. While Bianchi argues that collectible toys create "a frame of reference, for managing and producing novelty" (p.281), this description could easily apply to the programmed (and highly item dependent) levelling systems of MMOGs. Cook (2001) supports Bianchi's argument, describing collectible games and toys as representative of an emerging ethos in the commercial construction of childhood that "privileges the realization of economic exchange value as the goal or point" (p.82) of play.

Lastowka and Hunter (2004) identify a number of additional features and practices found within mainstream MMOGs that further support the notion that MMOGs are inherently embroiled in real world economic relations. These practices might operate behind the scenes, but they nonetheless feed directly into commercial processes. This includes in-house and third party data-mining of players' personal information and behavioural data, either for profit or for improving target marketing strategies. It also includes the game developers' now common attempts to nullify many of the consumer rights to which the players are normally entitled as paying customers of game software and services. Additionally, it includes the expansion of corporate copyright into potentially ineligible areas of cultural practice. Here too, evidence of the hidden economic dimensions of MMOGs is located in the games' TOS and EULA contracts, where IP ownership claims reveal corporate mechanisms that are otherwise obscured. Thus, while players of mainstream MMOGs may indeed have access to expanded opportunities for "distributed agency" and emerging forms of co-authorship of in-game features and narrative elements, these opportunities very rarely occur outside of a larger framework of corporately-controlled commercialization.

Since the general trend within the game industry is to pre-emptively defuse any rising questions about player authorship (or ownership) through stringent IP claims and the ever-ready threat of player expulsion, litigation or worse (e.g. charges of criminal copyright infringement), distributed agency is most frequently subsumed within existing market relations. Through this process, distributed agency is transformed into a sort of unpaid labour, in that the players are actively involved in shaping a game world that is alienated from them in a proprietary sense through its seemingly incontestable status as a corporately-owned commodity. The game designers' real-world claim over full copyright ownership (through EULAs and TOS contracts) in turn further commodifies the game contents, which must qualify as "assets" in order to be legally "owned." Thus, the economic implications of MMOGs and gameplay extend far beyond the compatibilities and overlaps that exist between real-world commercial processes and in-game markets.

Within many MMOGs, the player population itself represents a key selling features of the games. In MMOGs with a monthly subscription fee, it is not only sustained access to a well-developed character and expansive game world that make continued payments and upgrades a worthwhile expenditure. A significant amount of value is also derived out of the social relationships that arise within MMOGs, which can lead to the development of personal and emotional commitments to a Guild, for instance, or a sense of belonging to a particular player community (Taylor, 2006c). Even for those players for whom social play and community are unimportant, the presence and participation of other players remains a crucial component of gameplay. Most MMOGs are designed in such a way that multi-player involvement is not merely facilitated but in fact required in order for optimal game dynamics and balance to occur (Manovich, 2001; Stallabrass, 1996). The presence (or absence) of an adequately sized and sufficiently active player base can therefore be a key determinant of a MMOG's ultimate fiscal and cultural success. Within MMOGs that feature third-party advertising or other marketing activities, the player population furthermore represents the "audience commodity"—potential consumers whose exposure to in-game advertising messages or whose personal information is bought and sold by the game owners (Smythe, 1981).

In each of the case studies examined, players are positioned as both consumers and producers of its content—relying on user participation to provide the most appealing components (social interaction, peer play) of a site that ultimately functions as a promotional tool. Within this conflation of production and consumption, and the bridge that it constructs between practices of distributed agency and commercial imperatives, players can be seen as generating a new form of immaterial labour. As Côté and Pybus (2007) describe, within the new information economy "[C]ommunication and...cultural practices are not only constitutive of social relations but are also a new form of labour increasingly integral to capital relations" (p.89). The term immaterial labour, Pybus (2007) explains, describes the type of labour that utilizes information and "produces the cultural content of commodities. It also signifies the affective component of labour—ranging from the caring and well-being, traditionally the realm of 'women's work', to the social relations" that so often form the cultural centre of web 2.0 applications.

The role of affect within this process is paradoxical, for it is not only produced within the conflation of social and economic relations, but it is also what "causes them to coalesce in the first place" (Côté and Pybus, 2007, p. 95). According to Côté and Pybus, "It is this affective trajectory that...passes through the heart of what is immaterial labour—a modality of work that diffuses production (in subjectivity and consumption) throughout the extremities of the social factory" (p.95). The notion of an affective dimension of immaterial labour is particularly useful when attempting to understand cases such as children's MMOGs, where opportunities for distributed agency are fairly limited, but where social relations and peer dynamics generate an enormous amount of surplus value. It also provides a framework for understanding why the mobilization of the "peer dimension of play" has become such a central feature of the children's industries' online approach. Through the mobilization of social interaction, and of the affect that this

interaction produces, children's MMOGs are transformed into important sites of culture and meaning for their users.

Along with the clear political and economic implications of these processes for questions of internet governance and user rights, Castronova suggests that the deepening links between virtual worlds and real world economics are detrimental to the quality and nature of play within MMOGs. He draws on Huizinga's (1938/1950) proposal that in order for an activity to be considered a game it must have no moral consequence. Castronova (2003) explains, "Whatever is happening, if it really matters in an ethical or moral sense, it cannot be a game. Rather, games are [places] where we only act as if something matters" (p.2). Castronova warns that the more real-world meaning permeates online play spaces, the more likely it is that their status as games will erode as these virtual spaces become subject to the laws, expectations and norms of capitalist society. By allowing economic imperatives to encroach upon the newly formed play spaces of MMOGs and other game-themed virtual worlds, there is a very real risk that players' rights to enjoyment, leisure, and an escape from the widespread commercialization of the outside world will be compromised.

Designing Commercial Interests

The commercialization of virtual worlds also has numerous design implications that, although often overlooked within the existing literature, could have significant repercussions for the shape and contents of MMOG play. Central to this argument is the idea that when a player becomes a commodity (or part of a larger commodity), they also become subject to much higher levels of management and corporate control. When users are positioned within a game system not merely as players and consumers of a finished product (or service), but also as brand representatives (in their function as a key selling feature) and producers of content, their behaviours begin to merge with business priorities in unexpected ways. The more emphasis that is placed on these latter functions within a game's business model, the more impetus there will be for the game's owners to implement design features and rules on player behaviour aimed at harmonizing player input with corporate priorities. Conversely, rules and design features may also be put in place in order to prevent players from devaluing the brand through misbehaviour or from failing to fulfil their commercialized "duties" as members of the player population. The aims and "brand image" of each specific MMOG, the business and revenue models that it uses, along with the perceived needs and vulnerabilities associated with the targeted demographic or consumer market, are all factors likely to influence how and to what extent this relationship will ultimately manifest as part of the game design.

Not all game developers would benefit equally from a technically afforded alignment of player behaviours with corporate priorities, just as not all player populations would willingly accept their role in driving many of the underlying economic processes of

MMOGs were this role made more explicit within the design⁶¹. How much an MMOG owner will try to control and manipulate player behaviour in accordance with corporate priorities will depend on the function assigned to the player community, as well as how “play” itself is envisioned by the developers. In fact, apart from the occasional strict enforcement of EULA terms, mainstream (teen and adult) MMOG players have thus far been predominantly left to their own devices in determining in-game social norms and expectations (Martey & Stromer-Galley, 2007; Taylor, 2006b). As Castronova (2005) describes, “The typical governance model in [virtual] worlds consists of isolated moments of oppressive tyranny embedded in widespread anarchy” (p.207). Within teen and adult-oriented fantasy games such as *WoW* or *EverQuest*, displays of aggressiveness, raunchy conversations, or hyper-masculine posturing are not usually seen as all that problematic (Taylor, 2006a). Rather, if these characteristics are understood to be within the realm of what the player population deems (at least for the most part) acceptable, these elements of play become aligned with ideological notions about free speech and player sovereignty⁶². While dedicated servers are sometimes used to cater to the needs of particular interest groups, or to create a designated space for the types of play that best reflect the vision of the design team or the conventions of a particular game genre (as found in the example of dedicated “Role-Play Servers” within many MMOGs), even here the tasks of determining and enforcing social norms are largely left to the player community.

This type of *laissez faire* approach was much more feasible in the early years of North American MMOGs than it is now. For one, until quite recently, MMOG player populations were relatively homogeneous. Although scholars such as Yee (2003) and Taylor (2006) maintain that the player demographics are more diverse than initially assumed, the fact remains that the vast majority of the people who play mainstream MMOGs are young men under the age of 35 years⁶³. According to Yee’s (2003) own research on popular titles such as *World of Warcraft* and *EverQuest*, MMOG players predominantly consist of young adult males who describe themselves as “avid gamers” and long-time members of the digital gaming culture. This is significant because it demonstrates that previous MMOG conventions emerged out of a market comprised of a very specific subculture, catering to a specific demographic group within which social norms evolved in a way that was likely also highly consistent with the larger gaming culture and industry.

The player sovereignty approach is not so easily employed when the targeted player population consists of children under the age of 13 years. Child players come with their own unique assortment of special needs (in terms of literacy, financial dependence,

⁶¹ The varying levels of tolerance for corporate control over player activities found among MMOG communities is revealed in the IP conflicts that occasionally arise over ownership of virtual game items (Grimes, 2006; Lastowka & Hunter, 2004)

⁶² This phenomenon also helps explain the rise and spread of player-driven initiatives to enforce age requirements, as examined in Chapter 2.

⁶³ Based on the results of a survey conducted in 2003, Yee found that 84% of *EverQuest* players were male. The majority of male players, 87%, were under the age of 35 years. Furthermore, most described themselves as “avid gamers” prior to participating in MMOGs, with 40% claiming to have played “a lot” and 46% claiming to have played “a great deal.”

etc.), social considerations and regulatory requirements, many of which demand the ongoing attention of the game's developers. In addition, commercial products aimed at children tend to position themselves in ways that simultaneously appeal to children (through the promotion of fun, empowerment, fantasy, etc.) and to parents (addressing safety concerns, etc.). In order to ensure the game world conforms to corporate and hegemonic definitions of "child friendly" and "safe," a more hands on approach to player community management is seemingly inevitable. As discussed in the previous chapter, this can lead to the establishment of various control mechanisms or "safety features," along with other, variously implemented rule systems aimed at managing the player community in specific ways. As years of research and observation of chatrooms, virtual worlds and multiuser forums have repeatedly proven, even with diligent moderation and management, online communities almost invariably contain elements that society deems unsuitable (or even dangerous) for children (Castronova, 2005; Livingstone, 2005, 2008b). The need for increased management within player communities involving children also aligns itself quite opportunely with market-driven imperatives to manage brand image and promotional interests. This intersection of social concerns and corporate interests has obviously not gone unnoticed by children's MMOG developers.

The laissez faire attitude toward community norms and player behaviours that originally emerged within mainstream MMOGs must also be understood as a direct corollary of the early standardization of the paid subscription revenue model within North America. When the bulk of profits are derived from monthly subscription fees, corporate priorities centre on building and maintaining consumer loyalty by fostering players' affective investment in the game world. Enabling players to contribute to a vibrant community of interest not only enhances the value of the game for other players, but it also increases the player's own commitment and "buy-in." As long as the player community is sustainable and adding to the game's perceived use value, outside (corporate) interference can be seen as unnecessary or even detrimental. However, with the introduction of context specific revenue models into MMOGs, such as in-game advertising and micro-transactions, this relegation of authority can begin to conflict with the game's underlying business interests.

As seen in various other media, from television and magazines to film and journalism, advertisers exert an increasing amount of control over entertainment and news content (Matthew P. McAllister, 1996; McChesney, 1999; Meehan, 1991). Industry trends such as the minimization of risk and the maximization of brand management have converged to create a media environment in which commercial interests often result in subtle forms of corporate censorship. The integration of third-party advertisements, RMT, cross-promotion and branding initiatives within virtual worlds thus carries important implications for in-game content and the players' role in its shaping. Foremost among these is the increased risk that the potential or perceived conflict between player autonomy and commercial interests will be resolved through increased censorship and corporate control. This resolution would necessarily involve a much stricter approach to virtual world governance. This is already the case in *Second Life*, where the rise and spread of corporate branding initiatives, property disputes (over virtual items and

member accounts), and alleged instances of copyright infringement, have led to a considerable number of real-world lawsuits (Lastowka, forthcoming). The legal repercussions, negative financial impact, and damaging publicity suffered by the game developers in both these cases may well provide the industry with adequate justification for the adoption of pre-emptive strategies for regulating (and restricting) player activities that might have a direct impact on corporate and market processes. The move toward tighter corporate control over the player population is therefore consistent with the broader shift in revenue models seen first within commercial children's MMOGs, and more recently within the mainstream MMOG market.

What this discussion suggests is that the presence of virtual economies within MMOGs and the increasingly close links with real world economics functions as much more than a mere "pedagogy of consumption." Although the potential impact of commercial features on children's informal learning within MMOGs should not be ignored, a deeper exploration of how these features also shape the design and management of virtual worlds is crucial for understanding the fundamental role that commercial interests have assumed in the shaping of children's digital play. Within the case study MMOGs, the prominence of RMT and emphasis on promotional interests has resulted in a number of important divergences from established MMOG conventions. A key example can be found in the way in which the case studies have reconfigured the standard capitalist-based virtual MMOG economies to narrowly privilege consumption. This is particularly the case in the four games containing concurrent free-to-play and pay-to-play membership options (*Club Penguin*, *Barbie Girls*, *Toontown*, and *Magi-Nation*). In each instance, players are able to "purchase" items from the in-game market but not from other players. None of these games allows players to engage in "trade" with other players⁶⁴, and only one (*Toontown*) enables players to "fabricate" items to sell (players can catch exotic fish which can then be sold to the in-game Pet Store). Otherwise, the virtual economies and pedagogical lessons are highly one-sided, with player participation restricted to forms of corporately controlled consumption.

This is notable because although mainstream MMOGs, collectible toy sets and trading card games are all focused on exchange and consumption cycles, they also usually present players with multiple opportunities to intervene in the underlying market processes that drive gameplay. Examples include player-to-player trade, the ability to barter (and a chat system that allows such negotiations to take place), as well as opportunities to invest and build assets by acquiring items with potential resell value. Although these interventions are more-or-less contained by each games' design, copyright policies, corporate governance and market manipulations, they nonetheless increasingly enable players to adopt the role of "prosumer"—enabling instances of "distributed agency" that often manifest through a "hybrid joinder of the positions of producer and consumer" (Lister, Dovey, & Giddings, 2003, p. 34). Within the four case study MMOGs listed above, however, all such opportunities have been omitted. Within these games, participation in the virtual economy is limited to shopping and collecting.

⁶⁴ Although in an early stage of the *Barbie Girls* Beta, players had the ability to "gift" each other certain items, this feature was later removed.

Much of this is likely related to the fact that these games are also designed to promote real-world purchases. Access to in-game items is often mobilized as a way of driving players (or their parents) to engage in micro-transactions, or of enticing free-to-play players into a paid subscription membership. For example, while *Club Penguin*, *Barbie Girls* and *Toontown* each provide players with their own “homebase” and allow all players to view catalogues of furniture items, only paid-subscription members can buy the furniture and otherwise customize their homebases through virtually-purchased décor items and upgrades. Enabling players to bypass this system could significantly diminish the exclusivity and appeal of acquiring a paid membership status. Limiting access to items to those willing to pay for them (either through subscription or micro-transaction), while simultaneously promoting these items as markers of uniqueness, status and creative expression, produces the key tension through which the games in effect promote themselves to players.

It is thus not likely a coincidence that among the six case study MMOGs examined, the only one designed to enable player-to-player trade is *GalaXseeds*, a game that also draws its revenues from advertisers rather than from players. Within a year of its launch, a player-driven market for virtual items had materialized, first as a “black market” example of a subversive type of emergent play, and later as an integrated component of the gameplay design. In all six cases, furthermore, the developers’ underlying interest in maintaining full control and authority over the in-game items market is not only reinforced by claims and terms hidden in the games’ TOS contracts, but are also explicitly articulated within the rulebooks and game designs. Within the games that already feature RMT (through micro-transactions and paid subscriptions), this translates to an all out ban on any exchange of items, characters or passwords among players, as well as a complete absence of design features that would even enable player-to-player trade to occur. Within *GalaXseeds*, the restrictions are instead focused on preventing players from bringing RMT into the game world themselves.

What is perhaps equally striking about the commercial features contained within the case study MMOGs is not merely what they omit but rather what they afford. Within each of the six games examined, commercial priorities manifest as design choices and narrative elements that privilege commercial and cross-promotional interests, presenting them as synonymous with successful gameplay. Participation and exposure to these promotional elements is therefore not only rewarded, but subtly afforded at multiple levels of the gameplay design. Overall, I have identified four main ways in which commercial interests have been integrated into gameplay in this manner, as listed and described in Table 4 below. The following section provides an overview of each of these four categories, illustrated with examples drawn from the case studies. Although not all of the games exhibit all four of these types of commercial features, they nonetheless perform a shared function as a form of rule system. As these commercial rules of play also appear and are reinforced by most of the other rule systems examined above, this section will conclude with a discussion of their unique significance in relation to the underlying technical code contained in children’s MMOGs.

Type of Advertising	Description	Found in
Velvet Rope Self-Promotion	Features that promote the pay-to-play areas, features or membership option, by displaying them to non-paying players in order to create demand.	<i>Barbie Girls, Toontown, Magi-Nation, Club Penguin</i>
Cross-Promotion and Branding	Features that promote the overarching brand, characters or tie-in products upon which the game is based.	<i>Nicktropolis, Barbie Girls, Club Penguin, Magi-Nation, Toontown</i>
Third-Party Advertising	Advertising space (features, in-game ads) promoting products or services external to those owned by the game developer/brand.	<i>GalaXseeds, Nicktropolis, Magi-Nation</i>
Chat as Marketing	Pre-Determined Chat options that relate directly to an in-game promotional feature.	<i>Nicktropolis, Barbie Girls, Toontown,</i>

Table 4: Types of promotional content identified in the case study MMOGs

Velvet Rope Self-Promotion

A key method used within the case study MMOGs to construct a rule system aimed at advancing commercial priorities consists of a promotional strategy the marketing industry calls the “freemium” or “velvet rope model” (Snider & Molina, 2009). These terms are used to describe sites, games and other services that lure in users with free content, but then restrict access to certain features and areas to paying members only. The idea is that over time, non-paying users will see or even just imagine a sufficient amount of benefits associated with paying for the “premium content” that they will switch over to a paid-subscription account. For non-paying users, this model translates into limited affordances, limited access, and frequent exposure to promotional messages about the premium content. The model is found in each of the four games that contain either RMT (*Magi-Nation, Club Penguin*) or paid-subscription membership options (*Club Penguin, Toontown, Barbie Girls*).

An example of how the velvet rope model operates can be found in the way that in-game currency is used to promote paid subscriptions within the three MMOGs that contain both a free-to-play and a pay-to-play membership option. For example, although all players of *Barbie Girls* can earn “B Bucks,” the ability to spend B Bucks is only granted to V.I.P. members. Thus, while non-paying or “regular” members can accumulate vast amounts of virtual currency, browse the shops for items, and even “try on” sale items (such as clothing and accessories), they are ultimately barred from “purchasing” the items. As non-subscribers navigate through the *Barbie Girls* environment, they continuously encounter features and services that are only available to V.I.P. members, at which point a pop-window is activated that encourages them to upgrade to the subscription service⁶⁵ (by following the direct link provided). The same

⁶⁵ Because a significant portion of the analysis of this case study unfolded during the beta stage, it was possible to track the development of the site and the various changes it went through. After the introduction of the V.I.P. membership option, many features that had originally been offered as free-to-play were made exclusive to paid-subscription members.

strategy appears in both *Toontown* and *Club Penguin*, where players can accumulate the currency required to “purchase” items and are given a space to display items (a “homebase”), but are unable to purchase the vast majority of items until they become pay-to-play members. Furthermore, in both *Club Penguin* and *Barbie Girls*, pay-to-play members whose subscriptions have expired have their previously “purchased” items removed from their inventories or home bases and placed in “storage” (players of *Toontown*, on the other hand, keep their previously purchased items). The items can be viewed but they are no longer accessible or manipulatable. The items can only be restored through renewal of the player’s paid subscription to the game. In *Barbie Girls*, “purchased” items disappear permanently if the paid subscription membership is not renewed within six months.

The velvet rope model is clearly designed to serve as a promotional tool for stimulating desire and demand among non-paying players for the games’ premium features and paid-subscription membership options. In terms of how this concurrently functions as part of a larger rule system promoting commercial priorities, however, we need look no further than the integral role that items play in the games’ “levelling” structures and reward systems. In each of the six case studies, successful gameplay is acknowledged and rewarded with in-game currency. The currency itself is worthless until it is spent on items, which serve a variety of functions (aesthetic, strategic, social, etc.) within the game environment, as explored in Chapter 3. Acquiring the right items (or sufficient number of items) is almost always an integral part of successful and effective gameplay. However, within the case study MMOGs, access to items, along with access to the means of acquiring items, are areas prone to monetization and corporate control. In these games, unlimited access to in-game items is oftentimes only available through the real world purchase of “premium” features and paid memberships. The prominence of items and virtual economies within the gameplay design is thus in itself an important indication of an underlying rule system privileging commercial processes. Items are presented within the games’ designs and discourses as mandatory components of ideal or optimal gameplay, but items are also embedded in commercial transactions. Here, the rules of play dictate that certain activities and affordances should only be available to those who pay for them. They also imply that fair play includes placing non-paying members at a distinct disadvantage, by restricting their actions and access to the game field.

While the pay-to-play features are publicly promoted as “supplementary” or “premium,” which implies that they are somehow superfluous to a standard or regular form of gameplay, they are in actuality much more deeply embedded in the gameplay design than they initially appear. In fact, it is often only after a player has surpassed the initial levels or areas of the game world that the true significance of the premium features is revealed. For example, in both *Club Penguin* and *Barbie Girls* there are no “levels” for players to achieve, which in turn limits the players’ ability to demonstrate their mastery of the game. In both cases, the games instead promote the accumulation and display of items as a key way of exhibiting mastery, and use the items to reward player loyalty and financial commitment. Items are emphasized throughout the game environment (in catalogs and competitions), and they are frequently described in in-game texts and

announcements. Even non-paying players are intermittently given special items for attending special events, giving them an occasional glimpse into the “premium” experience of avatar customization and enhancement. Certain items have only been released once, which bestows additional status onto those players who have been playing long enough to own one. Since the majority of items are exclusive to paying members, a paid subscription becomes an important way of marking oneself as a “high status” player, one who has attended exclusive events, explored secret members-only areas, and collected rare items.

In the two games that contain both pay-to-play options and a levelling system, the premium features serve a different but no less important role in the players’ efforts to establish mastery and successfully progress through gameplay. In *Toontown*, for example, key quests and substantial areas of the game environment are only available to paid-subscription members. While non-paying members can achieve a certain level on the free service, the highest levels are only available to pay-to-play members. This means that in order to successfully “finish” the game (or in this case attain the highest levels of gameplay), switching to the paid-subscription is mandatory. A similar situation occurs in *Magi-Nation*, where the items required to successfully progress through the higher levels of gameplay are only available through RMT micro-transaction. While it is *possible* to play these games without engaging in RMT, the gameplay experience is limited at the structural level for those who refuse to pay. The items purchased through RMT within *Magi-Nation* are more-or-less mandatory for players to achieve the higher levels and have a fair shot at competing in player-versus-player competitions.

As with the games discussed above, however, the centrality of the paid-subscription membership (in the case of *Toontown*) and of the “premium” items (in the case of *Magi-Nation*) is not immediately apparent. It is only after the player has surpassed the initial levels of the game, and committed a fair amount of their time and energy to gameplay, that the true limitations of the free-to-play option are revealed. In *Magi-Nation*, the difficulty level peaks quite suddenly and disproportionately once the player accedes to the third area of mini-games.⁶⁶ In *Toontown*, once players move beyond the first introductory area, they find themselves unable to enter any of the buildings or join in on the more challenging quests. The velvet rope strategy thus becomes a form of bait and switch. While free-to-play is possible at first, it becomes increasingly difficult if not outright impossible to continue the game without the items and access that are granted to pay-to-play members. Rather than functioning as superfluous benefits, these items and access instead serve as key affordances and integral components of the gameplay design. They can also perform a vital function in balancing the game’s mechanics and difficulty progress, as seen in the case of *Magi-Nation*. Without them, the game serves primarily as an advertisement for itself—a sort of prolonged demo in which players can become invested in the game and its player

⁶⁶ The area contains monsters that are disproportionately stronger than the free-to-play avatar’s protective gear and defensive attacks. The monsters also greatly outnumber the amount and strength of the items players can “purchase” using the free-to-play currency. As the gameplay in *Magi-Nation* is designed so that players are completely dependent on the use of items in order to win (or even just survive) in combat, the free-to-play players’ progression is significantly impeded by this imbalance.

community, but are prevented from engaging fully in gameplay and from developing a sense of mastery and achievement as these are commonly understood to function within gameplay processes (Csikszentmihalyi, 1991; Koster, 2005; Salen & Zimmerman, 2004).

As described above, as well as in Chapter 3, within the case study MMOGs and other virtual worlds that use the velvet rope model, the resulting distinctions that arise between free-to-play and pay-to-play members are thus also used to establish a social hierarchy within the player population. This hierarchy is based on access to in-game content, and operates in conjunction with the site-specific, player-driven hierarchies that often surface within individual MMOGs, and sometimes within individual servers (Taylor, 2006a, 2006b). Within this hierarchy, pay-to-play members are consistently rewarded for their financial investment in ways that are immediately comprehensible to the rest of the virtual world community.

Paid-subscription members of *Toontown* have access to shops, items and quests in seven different theme areas, whereas free-to-play members only have access to the ones contained in the first (and easiest) area of the game world. The avatar clothing, virtual pets and other items acquired from these exclusive areas are visible to other players whenever they are used or displayed. A V.I.P membership in *Barbie Girls* translates into access to a large selection of clothing, accessories and furniture items, whilst regular members are limited to the few free items given to every member upon initial sign-up. Once again, the benefits of pay-to-play are exhibited to free-to-play members whenever they run into a paying member wearing these exclusive items or get invited to visit one of the highly customized and well-decorated rooms that invariably belong to a V.I.P. Paying members of *Club Penguin* are granted access to exclusive parties, secret areas and rare (free) items, which are not only promoted through the players' subsequent display of members-only items when they return to the common areas, but are also promoted heavily in featured articles published in the game's weekly newspaper (the *CP Times*) and on the developer blog. Similarly, *Magi-Nation* players who purchase items using RMT have access to better and more aesthetically pleasing "gear" than non-paying players.

In each case, the player's status as a paying member is communicated to the rest of the community, largely through features of the GUI. While players themselves may discuss issues of status on their own terms in in-game and real-world conversations, the deep links between status and items that are constructed within the game design means that status and social hierarchies also come to be communicated visually. They are communicated through each avatar's appearance (presence and/or variety of clothing items, customization of hair and accessories, etc.), through the appearance of the player's homebase, through the number of virtual pets the player owns, as well as through the possession of items that can only be obtained by accessing exclusive areas of the game world. On one level, these marks of distinction generate the added value of the games' pay-to-play features, providing paying customers with additional benefits and services that would justify the ongoing financial investment required to maintain a monthly paid subscription, or to engage in repeated micro-

transactions. On another level, they serve to remind both paying and non-paying players alike that the pay-to-play features are exclusive in every sense of the term.

Yet, while pay-to-play members may enjoy the prestige and exclusivity that comes with their special status within the social order promoted by the velvet rope model, this enjoyment can itself be understood as a key component of the affective labour the players generate for the games' owners and its underlying commercial processes. As in mainstream MMOGs, the inhabitants of children's virtual worlds serve as a key selling feature of the worlds, simply by supplying the social and peer dimensions that are so vital to multiplayer environments. In the four case study MMOGs that adopt the velvet rope approach, the paying members supply an additional form of labour by acting as brand ambassadors for the pay-to-play features or paid-subscription option. By interacting with non-paying members and demonstrating to them the visual and experiential benefits of the games' "premium" features, paying members serve as living, breathing promotional vehicles for the games' premium features. It is here that the games' commercial and legal rule systems begin to overlap in troubling ways. As the players' role as brand ambassadors for a game's premium features increases, so does the game owner's incentive to manage and direct the players' in-game behaviours in ways that will maximize their promotional appeal. In this context, rules that require players to "always be nice" or to respect corporate copyright carry an added insinuation, one that extends far beyond ensuring consumer satisfaction or perpetuating idealized notions of children's play.

Cross-Promotion and Branding

A second way that commercial priorities come to function as implicit rules of play is through the concerted emphasis that is placed on cross-promotional messages within the gameplay design and narrative of branded MMOGs. As described in Chapter 2, four of the case studies promote themes or characters drawn from one or more of the game owners' existing children's media properties. Within each of these games, cross-promotional initiatives shape gameplay through their integration as affordances within the game designs, which clearly prioritize and maximize the players' exposure to and engagement with featured cross-promotional content. This is primarily accomplished by linking cross-promotional content and commodities with in-game rewards, new plot developments and special status within the social order of the game world. This argument is well illustrated by a specific example found in *Barbie Girls*. While the main way to earn B Bucks in *Barbie Girls* is to play mini-games, the easiest and quickest way is to visit the Cinema. Here, players are "paid" a significant sum of B Bucks to watch trailers for upcoming Barbie direct-to-DVD movies and other Barbie-related media products⁶⁷. *Barbie Girls* also features a number of mini-games and items based on characters and themes drawn from its various Barbie-related toy lines. These line-specific features are emphasized in in-game announcements, sent to player's virtual "cell

⁶⁷ This was also a key selling point of the now defunct *BarbieGirls* USB system, wherein purchasing accessory packs for the device unlocked additional B Bucks and exclusive items.

phones” and displayed in the “Buzz and Goss” area (an airborne surveillance “blimp” where players can get updates on world events and noteworthy players). Another example is the use of scavenger hunts in *Nicktropolis* as a way of ensuring that players are exposed to specific promotional initiatives appearing within the game world. Players are rewarded for completing the scavenger hunt, in which they must visit different branded areas of the world, viewing ads and webisodes for Nickelodeon television shows along the way.

The branded or cross-promotional MMOGs examined thus operate (at least in part) as promotional vehicles for ancillary media and tie-in products. These products in turn often refer back to the MMOGs, which are promoted in toy ads, interstitials, DVD trailers, and so on. Kapur (1999) likens the multi-modal approach adopted by the children’s industries to Baudrillard’s concept of “consumption nets or webs” (p.127). Rather than focus on a single product or media text, Kapur describes, cross-promotional strategies now emerge as a whole collection of objects, services and activities, which only construct their full meaning when positioned (i.e. owned) in concert with one another. The resulting media “supersystem,” a term coined by Kinder (1992) to describe the interconnected systems that emerge out of transmedia intertextuality, “provides an entrance into a system of reading narrative...a means of structuring characters, genres, voices and visual conventions into paradigms, and models for interpreting and generating new combinations,” that both privilege and extend consumerism as the primary organizing system (p.35). As Kinder describes, popular children’s media such as Saturday morning cartoons and videogames often have “intertextual connections with movies, commercials, and toys, [that] help prepare young players for full participation in this new age of interactive multimedia—specifically by linking interactivity with consumerism” (p.6).

This last aspect of Kinder’s media supersystem is reminiscent of Buckingham and Sefton-Green’s (2003) proposal that collectible toys and other cross-promotional transmedia texts work in consort to generate a “pedagogy of consumption.” Among the four “branded” MMOGs, consumerism is clearly being promoted as an integral aspect of play. In each game, successful gameplay requires that players first learn and master the virtual economics of the game worlds. Rather than emphasize the acquisition of collectibles and material goods (although this is certainly part of it), this particular pedagogy emphasizes the use value of consuming and accumulating virtual goods, which in a sense represent the ultimate fetishized commodity. Virtual consumption is furthermore directly linked to real world consumption through the various forms of micro-transaction—from RMT to web-enabled toys and TCG packs—promoted throughout the games and the gameplay design. The games thus also teach players that in-game items carry real world exchange value.

Together, these elements combine to promote the notion that entry into these worlds is only fully attainable through a perpetual cycle of consumption (both real and virtual). As Langer (2004) describes, “Each act of consumption is a beginning rather than an end, the first or next step in an endless series for which each particular toy is an advertisement: first, because its package is also a catalogue; and, second, because it is

part of a tantalizing universe without which the one just purchased is somehow incomplete” (p.255). As an integral part of gameplay, this process introduces a number of implied rules that once again support the idea of buying in-game advantages, whilst legitimizing the infiltration of corporately-controlled market processes within the virtual world environment and within children’s play culture.

According to Kinder (1991), the transmedia intertextuality extends far beyond the promotion of specific goods and services. It also offers “new meanings and new cognitive pleasures” (p.44) associated with the recognition of the “specific allusions” and “sliding signifiers” that move across the various different texts and modes of spectatorship involved in the media supersystem. Becoming literate in transmedia intertextuality means learning to consume narratives across texts, but it also means learning to approach an ever-expanding diversity of cultural experiences and practices as components of an interconnected, self-referential and fluid, yet necessarily fragmented (across media, products, etc.) whole. Kinder argues that in many texts, particularly those featuring flexible narratives and liminal characters⁶⁸, this in turn “presents identification with the sliding signifier as a means of empowerment for the consuming subject” (p.36). Another important factor in making the experience appear “empowering” and “interactive” is the fact that media supersystems frequently combine consumption practices—such as watching television and buying products—with playing. The relationship is accentuated even further within digital games and virtual worlds, wherein consumption is not only combined and associated with play but is actually knit into the fabric of the game. The affective investment, creative engagement and intellectual stimulation that children devote to their play can easily seep into the commoditized dimensions of the game world, transforming play itself into a type of consumer practice.

In many ways, Kinder’s descriptions of transmedia intertextuality share important characteristics with industry notions of building of brand “equity” and “loyalty” (Montgomery, 2006). Branding initiatives are often described as attempts to build and subsequently mobilize emotional bonds with consumers. Children are often encouraged by adults to develop emotional bonds with toys and media characters (Varney, 2002), a tradition that has been at the basis of innumerable branding initiatives and transmedia strategies. For instance, sites like *Neopets* and electronic toys such as Tamagotchi are built around the premise that players will build emotional attachments to virtual pets, which emote happiness when properly fed and cared for, but become despondent and sad when neglected (Grimes & Shade, 2005). Within *Neopets*, which adopts a virtual economic structure and micro-transaction model similar to those identified in the case study MMOGs, children’s emotional bonds with their virtual pets are manipulated in order to encourage desired consumer behaviour, both within the context of the game and through the purchase of associated real-world products.

⁶⁸ While beyond the scope of the current discussion, liminal, unfixed creatures are quite common within children’s media culture, which is populated by monsters, talking animals, and magical beings. Themes of transformation, mutation and change are dominant features in most forms of children’s culture, from fairy tales to Saturday morning cartoons to videogames.

Research into children's commercial culture demonstrates that children can also form emotional relationships with brands and corporations, developing "brand loyalty" (Montgomery, 2006) or "Lovemarks" (Pybus, 2007) that stretch from one product or experience to the next. Clearly, the branded MMOGs examined in the current study have adopted many of these tactics in their own mobilization of children's emotional investment in their in-game avatars, virtual pets, player communities and digital assets (including their homebase, collections of virtual goods, rare items, etc.). Furthermore, we can conclude from this discussion that affective labour is not solely produced through social relations but by intertextual ones as well, as players come to learn and reproduce commercial processes that are largely driven by emotional investment in the cross-promotional, transmedia supersystem.

Third-Party Advertising

Although third-party advertising is prevalent within children's online culture, most of the marketing contained within the case study MMOGs is dedicated to self-promotion, such as velvet rope marketing strategies and cross-promotional tactics. Three of the games (*Barbie Girls*, *Club Penguin* and *Toontown*) furthermore claim to be "free of advertising" or "ad-free" within their corporate and promotional materials, and in fact do not contain any advertising for products or services other than those directly linked with the associated media brand. However, for the remaining three games (*GalaXseeds*, *Magi-Nation* and *Nickropolis*), third party ads appear in a variety of different formats. All three games feature banner ads, which surround the game application window throughout gameplay and contain links to external websites. Furthermore, the two games that feature the largest quantity of ads as well as the most deeply integrated forms of third-party advertising, *GalaXseeds* and *Nickropolis*, are also the two games with no other discernible revenue source. Much like children's television, these games are ad-supported, operating on a revenue model driven by the game owners' ability to package and sell the players to advertisers as a digitized "audience commodity" (Smythe, 1981). In both cases, in order to maximize player exposure and engagement, the third-party ad content has been integrated directly into the gameplay design through a strategy called "immersive advertising."

More than merely including a static advertisement as part of the virtual world environment (a practice commonly known as "in-game" advertising), immersive advertising consists an interactive, and deeply embedded, form of product placement that allows players to engage with and even inhabit the advertising content. For example, during the study period, players of *GalaXseeds* were invited to participate in a game of "Hive n' Seek," sponsored by Post Honeycomb cereal⁶⁹. The game was prominently advertised in the GUI through an ever-present "button" (in the shape of a Honeycomb) that, when clicked, would transport players to a special, Honeycomb area of *GalaXseeds*. This area was heavily branded with the colours and logos of Honeycomb cereal, as illustrated in Figure 1 (below). Players could then go inside the Hive to sign up

⁶⁹ The feature has since been replaced by a simplified, non-sponsored version, called "Hide'n'Seed."

for a game of team based hide and seek, in which players would form two teams and spread out across the various *GalaXseeds* planets to evade capture while tracking down and tagging members of the opposing team. This game was particularly notable at this stage of *GalaXseed's* development, it represented the only multiplayer activity that players could engage in together that took place inside the virtual world environment (instead of the more common, separate window format of the multiplayer mini-games).

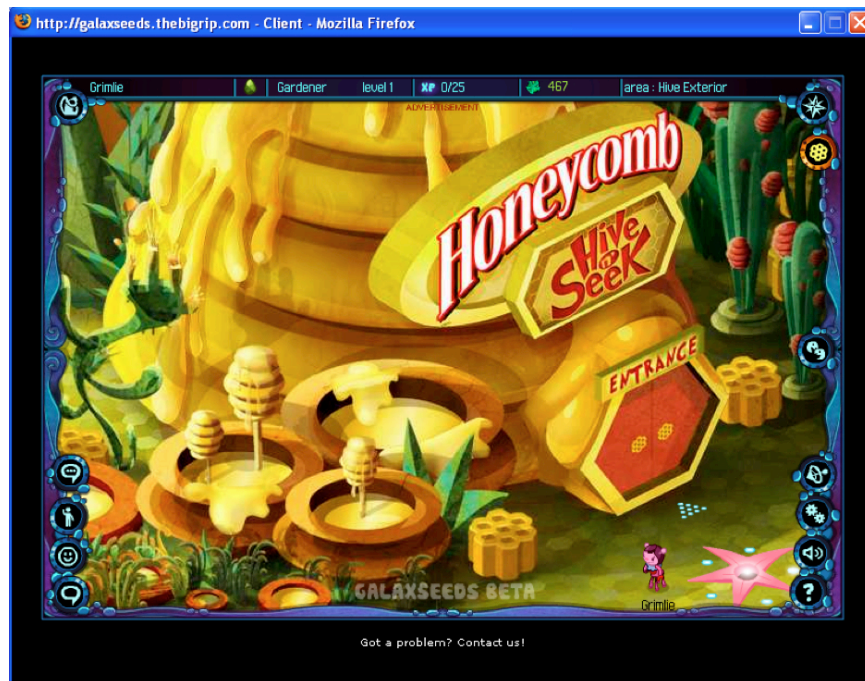


Figure 1: © 2008 Frima Studio: “Hive’n’Seek” Honeycomb immersive advertising in *GalaXseeds*

Admittedly, immersive advertising, sponsored areas and advergames only make up a small portion of the overall content of the children’s MMOGs examined. However, when considered alongside the much more widespread emphasis that is placed on cross-promotion, branding and velvet rope marketing, the presence of these ads can nonetheless be seen as making an important contribution to the games’ overarching rhetoric or “paradigm of consumption.” It is also noteworthy that the vast majority of the third-party advertisements featured in the case study MMOGs promote the same products that appear during Saturday morning cartoon programming blocks and throughout other areas of children’s commercial culture. This includes media and entertainment products (e.g. banner ads for the film *Coraline* appeared in *Magi-Nation*, while a theme room for the most recent *Harry Potter* film was featured in *Nicktropolis*); candy, sugar cereals and junk food (e.g. *GalaXseeds* featured an alternate virtual world built around the Skittles candy brand, and *Nicktropolis* has featured various food-themed rooms, including a “Lucky Charms” room, a “Goldfish Zone” and a “Kraft Lunchables” advergame); and toys (e.g. *GalaXseeds* included a Lego world for a period of several months, whereas *Nicktropolis* featured a “Transformers” area and a “Nintendo World”).

The predominance of snack foods, candy and sugar cereal is especially important, as most manufacturers of these foods (including the ones found advertising in the case study MMOGs) have recently agreed to cease advertising to children in traditional media. Their current migration into the largely unregulated digital realm may well represent an attempt to compensate for diminishing opportunities elsewhere.

The seamless integration of third-party advertisements within digital world environments recalls the comparable “flow” of advertisements, product placement, ancillary licensing, and branding that unfolds within traditional children’s media forms, particularly television. McAllister and Giglio (2005) describe children’s television in terms of a “commodity flow” wherein multiple content forms, including “promoted programs *and* advertised products *and* cross-promoted/cross-mediated characters” are used to “create a flow of licensed programming icons” (p.36). This description is particularly well suited to the example of immersive advertising, which not only reproduces a commodity flow very similar to that found on television, but extends it to encompass elements of play as well. Within this new, interactive commodity flow, children’s play becomes just another content form, operating in conjunction with features of the games’ designs and GUIs, and in close juxtaposition with the games’ many promotional contents.

Chat as (Viral) Marketing

The last category comprises the way in which some of the games use the safety features as a forum for commercial interests. As described in Chapter 4, each of the games featuring a Pre-Determined Chat system has incorporated some type of reference to product and brand names into a portion of the phrase options provided. The promotional implications of these “branded” phrases are often quite subtle. The “branded” phrases are not always in the form of overt advertising slogans, but rather appear as somewhat mundane conversational statements about a particular branded area, cross-promotional feature or third-party immersive advertisement. Although not always explicitly promotional in terms of content and language used, however, the branded phrases identified in the case study MMOGs are nonetheless invariably positive or even celebratory in tone. The games rarely enable players to say anything critical or negative about the brands, pay-to-play features or third-party advertisers. In fact, among all the Pre-Determined Chat phrases in this study, only one enables players to communicate dislike about a branded feature (players of *GalaXseeds* are able to say that “I don’t like Hive’n’Seek”). Thus, whenever brands and promotional features are mentioned, it is very nearly always in a positive way (allowing that subversion of the promotional intention may be possible depending on the specific contexts and actions surrounding the communicative exchange).

Game	Total Number of Phrases	Cross-Promotional	Third-Party Ads
<i>Barbie Girls</i>	323	45	30
<i>Club Penguin</i>	322	0	0
<i>GalaXseeds</i>	8,200	0	17
<i>Nicktropolis</i>	634	237	0
<i>Toontown</i>	228	0	0
<i>Magi-Nation</i>	n/a	n/a	n/a

Table 5: Pre-Determined Chat options and promotional content

A full overview of the frequencies and types of “branded” chat options used in each of the five case study MMOGs featuring a Pre-Determined Chat system is provided in Table 5. Out of this inventory a number of significant findings emerge. First, it is clear that in each case, the way in which branded chat options are used is reflective of the larger marketing strategies and revenue model adopted by that particular game. Games containing third-party advertisements feature more references to third-party products and advertising features, whereas games driven by cross-promotional strategies emphasize tie-in media and transmedia intertextuality. This suggests that branded chat is used to extend existing strategies rather than to introduce an additional form of promotional content into the game world. Second, branded chat phrases only appeared in worlds that already contain a high volume of commercialized content throughout the game design, namely *Nicktropolis* and *Barbie Girls*. In contrast, *Club Penguin* and *Toontown*, which both emphasize velvet rope promotional content above other forms of cross-promotion, and neither of which features any third-party advertising whatsoever, contain only limited forms of self-promotional branding within their chat systems⁷⁰. Third, the overall proportion of phrases dedicated to brands and product references, as well as nature of the messages that they contain, are both important considerations in analyzing the overall significance of this particular strategy. This is especially true given the generally limited range of chat phrases, themes and ideas that are made available to players through the Pre-Determined Chat system. The presence and consistently positive character of branded phrases suggests a problematic new development within children’s digital culture, wherein not only are notions of “safety” made synonymous with promotional interests, but children’s interactions are co-opted into viral marketing campaigns.

This relationship is particularly explicit in *Nicktropolis*, which cross-promotes its television shows, films and web properties through explicitly promotional chat phrase options. The game’s “Pre-Written Messages” safe chat system includes phrases such as

⁷⁰ This remained the case even after cross-promotional tie-ins were introduced into the *Club Penguin* game world, for instance through the launch of “Card-Jitsu” TCG and the Club Penguin “Secret Agents” mini-games and Nintendo DS cross-over. Although both initiatives have been frequently promoted in the *Club Penguin Times* and featured as noteworthy events within the game world and gameplay design, there are no references to these features within the Pre-Determined Chat system.

“Wahoo! There’s a new ‘Zoey’ in TurboNick!” and “‘Unfabulous’ is my favorite show! [sic],” which refer directly to Nickelodeon television programs (in this case, *Zoey 101* and *Unfabulous*) using highly celebratory language. Nicktropolis also gives players the option of communicating by reiterating well-known catch phrases from actual television series (e.g. “It’s time to Jo-ordinate!,” a phrase used by one the characters in the television series *Just Jordan*), along with phrases about specific characters and plotlines (e.g. “My bending skills are unparalleled!,” in reference to the magical abilities possessed by characters of *Avatar: The Last Airbender*). Similarly, *GalaXseeds* provides 17 phrase options that address third-party “immersive advertising” features, including references to the Honeycomb Hive’n’Seek game and several options enabling players to announce and coordinate plans to visit the external (branded) world of “Skittilization.”

Other games utilize branded chat options to afford discussions of tie-in products and toys. For example, during the study period, 20 of the Pre-Determined Chat phrases available in *Barbie Girls* contained positive descriptions and questions relating to the Barbie mp3 device, while 18 of the chat phrases included trademarked brand names, complete with a TM indicator. Within this vein, we might also consider references to areas and activities that are reserved for paid-subscription members as a sort of extension of the velvet rope marketing strategies found elsewhere within these same games. Among the three MMOGs that feature a paid-subscription membership option (*Barbie Girls*, *Club Penguin* and *Toontown*), a significant portion of the branded chat phrases do indeed refer to pay-to-play features. Like other instances of velvet rope marketing, these phrases are ambiguously promotional, in that they may only be experienced as such by those players who do not have a paid-subscription membership (and therefore do not have access to those areas and features). Nonetheless, for non-paying players, velvet rope chat phrases provide a constant reminder of those features that are off limits, and of the social hierarchy they help to construct.

Within the mobilization of “branded” chat phrases, which themselves impose a commercially-driven rule system on player communication, there is also evidence of the deeper commercial mechanisms that are clearly at work within these games. Branded chat phrases can be used to extend transmedia intertextuality (Kinder, 1991), to transform players into brand ambassadors, to substitute spontaneous peer interaction with corporately contrived, promotional speech. In each case, it is the game’s primary “safety mechanism” that is ultimately being used as a vehicle for commercial interests. Safety concerns and safety discourses are not only being mobilized as a way of selling the games to parents and children as “safe havens” and child-appropriate spaces, but they are furthermore being addressed by design features that concurrently function as a Trojan horse for the game owners’ ever-expanding marketing strategies. As a result of these features, every player using the Pre-Determined Chat system is presented with the tools required to sustain a viral marketing campaign, made all the more deceptive by the fact that the players experience this particular mode of cross-promotion as a form of social, peer group interaction.

Market Rules

The case study MMOGs have clearly been built for commercial purposes, and as such reflect a wide range of business interests, including attempts to foster brand loyalty, promote tie-in products and generate transmedia intertextuality. As commodities, the games themselves are embedded in marketing texts, ads and imagery that strive to position the games within a specific niche market in which children are the primary consumers. As such, the games can be understood as following many of the trends and strategies already established within children's digital culture, and within children's commercial culture more generally. Although the vast majority of the scholarship on mainstream MMOGs emphasizes the open-ended, player-driven, collaborative and social nature of MMOG gameplay, these qualities do not surface as readily within the design affordances, rule systems and commercial structures that characterise the children's MMOGs examined herein.

There is a clear tension between what is promised on the one hand, and what is allowed on the other, by the games' design and management. Within the Social Arcade games, very few tools or action opportunities for multiplayer interaction or collaboration are available. Within the MMO playgrounds, free-play is not adequately re-integrated into the larger game world, nor does it extend beyond fragmented opportunities for exploration and experimentation within a relatively limited landscape. Within *Magi-Nation* and *Toontown*, subversive forms of emergent play and free-play are tightly contained within an overarching narrative that links and limits player access in accordance with commercial priorities. In each case the result is similar, in that the promise of a massively, multiplayer gameplay experience is not adequately sustained by the shape (affordances, action opportunities, rules of play) or the contents (narrative structures, cross-promotion, commercial emphasis) of the games' designs. When considered alongside the many formal and informal rule systems that are mobilized by the games' owners as tools for extending corporate control over the positioning and management of the games and their players, this tension begins to look more and more like an outright contradiction. Additional contradictions surface within *Toontown* and *GalaXseeds*, which both contain themes of resistance and counter-hegemonic subversion at the level of the narrative, and yet are structured in a way that privileges corporate interests.

A brief return to the games' political economic underpinnings might be useful in understanding the source of this tension. Each of these games is owned and operated by a major player with a long reach and established history of success within the children's industries. These companies each come with their own collection of direct and indirect links to various aspects of children's media, toys and culture, and are well versed in cross-promotion and media synergy. The games' ownership patterns are important in terms of what it reveals about the games' lineage within the digital games market itself. Although none of the case study MMOGs are produced by game companies, most of the corporate owners of these sites have relatively extensive experience in children's game development. For example, Mattel has been designing enormously profitable and popular computer games, websites and interactive software for children, especially

young girls, since the mid-1990s⁷¹. Children's media giants Nickelodeon and Disney have similar backgrounds when it comes to children's game design, and each have been involved in the development of a variety of best-selling titles in various formats (from console to online to mobile). That at least four of the case studies can be seen as merely the latest in a much longer series of digital game initiatives (or tie-ins) produced by a small but highly powerful group of corporations highlights the need for critical questioning of their shared decision to produce substandard game designs. This in turn raises important questions about "internal" differences of opinion and conflicting priorities among the various departments and teams involved in the design and development of the worlds. The discussion would be greatly enriched by a better understanding of the organizational relationships and tensions within which these artifacts initially emerge, and how these relationships are in turn reflected in the technology design. For instance, do virtual worlds contain deeper contradictions in cases where design teams and marketers are at odds about the role of promotional content?

Given that all six of the games are owned by corporations with heavy links to children's television, it is significant that the games themselves reproduce the "look and feel" of television cartoons—the very cultural form that has served as centrepiece for most of the children's industries' cross-promotional strategies since the 1980s. Indeed, in the games that feature characters and themes that are simultaneously being cross-promoted by the games' owners across a range of media and merchandise, such as *Barbie Girls*, *Magi-Nation*, *Toontown Nicktropolis* and even *Club Penguin*, the social milieu of the virtual space itself, along with the game environment and meta-narrative, functions very well as a branded space. Only one of the case studies, *GalaXseeds*, is devoid of the type of transmedia intertextuality identified by Kinder (1991) as a key component of children's commercial culture. In this case, however, commercialization is fostered through a commodity flow that marries gameplay with third-party advertisements.

Another contributing factor to the tensions that arise from the emphasis that is placed within the case study MMOGs on commercial interests relates to the dominant design features identified in Chapter 3. This includes the lack of stand-alone narrative elements, the limited design affordances, as well as the heavy restrictions placed on social interaction. Although some of the games (such as *Toontown* and *GalaXseeds*) are more "ludic" than others, and some (such as *Club Penguin*) enable a comparatively larger amount of player collaboration and creativity, the case studies are generally characterised by their lack of playable features and action opportunities. The notion that action opportunities have been "removed" (Breslin, 2009) from these games, albeit not in a literal sense, is significantly strengthened once comparisons are made to the mainstream MMOGs described above. Furthermore, action opportunities have not been "removed" (Beslin, 2009) in order to allow for a free-play or player-driven framework, but rather to make more room for a framework aimed at extending transmedia intertextuality and commodity flow. For example, within *Nicktropolis*, several of the "empty" rooms that

⁷¹ In 1996, Mattel broke the record for fastest selling computer game of all time with its CD-ROM game *Barbie Fashion Designer*.

fail to provide any real action opportunities (beyond walking, chatting and standing) do feature screens that play trailers and webisodes of Nickelodeon television programs. Since these rooms contain very few other activities which might detract from the goal of stimulating cross-promotional flow among members of Nickelodeon's core audience, it is likely that the underlying purpose of the room is to expose players to the promotional materials being transmitted on the screen. Social interaction in the form of text-based chat is available and encouraged, but the overarching promotional framework both situates and orients these interactions within the specific commodity flow generated by the game environment and trailers. Similar examples can be identified in each one of the MMOGs, wherein the unfilled or "empty" spaces produced as a result of limited action opportunities and interactive features are frequently reallocated to promotional content.

In unpacking the complex relationships between the game rules, design rules and other rule systems present within children's MMOGs, it is important to remember that a game's rules are not usually limited to prohibitions alone. In most formal games, operational rules such as those contained in the rulebooks also include instructions and "affordances"—rules that outline how to determine the winner, how points should be accorded, and what constitutes as a 'move' or a 'goal.' Rules of play are not defined solely by what you can't do, but also by what you can and are encouraged to do. Within the case studies, however, these types of 'positive' rules are few and far between. Rather than use the rulebooks to describe how to play the game, or introduce new players to some of the basic norms and etiquette of participating in an online player community, the rulebooks are primarily used to summarize legal rules and corporate policies.

One of the most compelling findings that arise when the market rules are contrasted with the other rule systems examined in previous chapters involves the ways in which "positive" rules are mobilized. Within the TOS contracts, privacy policies, and rulebooks positive rules of play are rare. However, just because the rule systems contained within the case study MMOGs fail to emphasize instructions and affordances does not mean that these types of rules do not exist. As seen in the discussion of design affordances in the previous chapter, and as described by Salen and Zimmerman (2004), games also contain "implicit" rules. This term includes all the various unwritten rules that shape the way in which a game is played, such as "etiquette, good sportsmanship, and other implied rules of proper game behavior" (p. 130). Indeed, the informal market rule systems contained within each of the case study MMOGs not only imply a number of "positive rules" about proper in-game behaviour, but also contribute to a vision of "ideal play" that is almost interchangeable with transmedia consumption.

If informal rule systems can have affordances (cognitive or perceived), the ones contained within these games consistently encourage consumerism—both real and virtual—as integral to an optimal or "complete" gameplay experience. The lack of technical action opportunities made available in the games' designs is thus offset by an implicit rule system that advances brand loyalty, viral marketing, and consumerism as their own forms of action opportunity. As some of the games' only "positive" rules of play, they occupy a unique and significant role in the construction of children's MMOGs as

commercialized spaces, and the configuration of the child player as apprentice prosumer (Herman et al., 2006; Lister et al., 2003). It is here that we can draw upon an adapted version of Akrich's notion of "gender scripts" to describe the process through which implied rules or affordances of play become embedded within the fabric of the game design, its narrative and its discursive elements, where they live on in the technological artifact as "scripts" that tell users about the preferred or ideal way to play the game.

What this discussion reveals is that while the case study MMOGs should first and foremost be approached as artifacts, it is only by situating them within the specific contexts and conditions of their design, development and usage that the full political and social dimensions of their designs and implementations can be uncovered. Together, the games' ownership patterns, rule systems and commercial mechanisms reveal a number of key aspects of the underlying technical code of commercial children's MMOG, which is characterised by a complex corporate framework with a long, far-reaching history of intertextuality, homogenization and profit maximization (Meehan, 1991). This contextualization adds a further nuance to the above discussion of how to make sense of the limited designs and affordances found among the case studies MMOGs, by introducing the very real and highly likely possibility that these tensions are deliberately designed to produce new forms of consumer desire—for virtual goods, for a pay-to-play experience, for affective relationships, for communities of interest, and for everything else that is promised but never quite attained through gameplay. If the technical code is the cultural horizon within which a technological artifact or system emerges, the technical code of children's MMOGs is profoundly influenced by the socio-historical underpinnings of the children's industries. In many ways, it both reflects and is plagued by the same inherent contradictions of capitalism that have long marked children's commercial culture as a site of heated controversy, of inflated hope and of irrational fear.

Chapter 6: Digital Children at Play

As with so many areas of children's culture, children's MMOGs are already constituted by a variety of implicit and explicit negotiations about childhood and about children's relationships with some of the most influential systems of social order of our time—the market and information technology. While these negotiations emerge as (and are at times resolved by) institutionally determined “rules of play,” they also surface within the very process of gameplay. In this way, the rules remain under constant negotiation, as the players and game owners struggle to define the MMOG space and their relationship within it. Within this struggle, however, the game owners are at a clear advantage. Unlike players, game owners (producers, designers, developers, etc.) are able to translate and “inscript” their version of the rules into the design itself. Much of the work of advancing and protecting corporate interests is thus delegated to the game's design and player management systems. Within the case study MMOGs, these delegations are largely expressed as design features and in the quasi-legal policy documents. As described in previous chapters, corporate interests are furthermore afforded by commercial strategies and “market scripts,” which seem to permeate the game worlds at every juncture. The notion of “play scripts” (Kline, 1993) takes on an added palpability within this context, one that not only accounts for the importance and power of the unmanageable “contexts of play,” but that actively works to contain, diminish and subjugate them to commercial impetuses at every turn.

This is not to say that technical delegations have the power to moot the child users' role in these negotiations or even to effectively determine the contents of their play. Children retain the ability to exert power by simply electing not to play and can quit the game at any time. Like any users of technological artifacts, child players also hold a high level of situated knowledge and their engagements with MMOG technology will necessarily include unanticipated uses and appropriations (Grimes & Feenberg, 2009; McPherson, 2007). These will in turn produce unexpected outcomes, such as subversive forms of emergent play, which have not been pre-emptively addressed by the games' designs and rule systems. Subversive emergence may result in more deliberate forms of resistance and transformation, as is implied by the already subversive character of play. The next step is to explore the idea of unanticipated uses, and to contrast and contextualize observed manifestations of children's situated knowledge with the major findings gathered so far. A related point of interest at this stage is to examine how the technical code, design features and rule systems of children's MMOGs might indeed function as technologically enforced “play scripts.” Concurrently, it is crucial to revisit the key criticisms of this concept, which might equally apply in a virtual world context.

This chapter seeks to answer some of these questions by examining how “digital children” negotiate the rules, conditions and possible play scripts contained within two of

the case study MMOGs, *Club Penguin* and *Barbie Girls*. As the observations were conducted *in situ*, meaning within the context of the virtual world environment, the subjects of the study really were “digital children”—in-game avatars presumably controlled by child users. As these spaces are designed for and understood to be mainly populated by child users, the player population also serves a larger representational function, performing and representing themselves as “digital children” within a game world of children. The discussion begins with a reinterpretation of play scripts, from its original articulation as a prescriptive account of the commercialization of children’s play (Kline, 1993), to a flexible analytic tool for examining the technical code of children’s MMOGs and other play technologies. This section provides a brief introduction of how “play scripts” as an analytic category might be adapted to enable a better understanding of the underlying and mutually reinforcing rule systems contained within MMOGs.

The focus will then turn to a series of case studies of players’ in-game encounters with various rule systems (design rules, legal rules, market rules), that together provide a glimpse into the strengths and weaknesses of the proposed, adapted approach. These encounters have been selected from a series of passive observations conducted within the virtual world environments of two of the case studies, *Barbie Girls* and *Club Penguin*. As described in more detail in Chapter 2, this portion of the analysis is merely intended to provide a series of preliminary snapshots into the role of the user in the social construction virtual worlds technologies, and as such represents an initial and incomplete exploration of the relationship between the rule systems examined herein and actual players. Special attention was placed on players’ interactions with the rules and conditions governing digital game technologies. Any discernible signs of tension, frustration, compliance, resistance, appropriation, or subversion among players vis-à-vis the rule systems were noted. This stage of the analysis provided the contextual framework within which the dominant patterns and trends identified in the comparative case study could be better situated and understood, while enabling a deeper consideration of virtual worlds technology as a situated practice.

The aim of the ensuing discussion is to construct the argument that the rule systems found within commercial children’s MMOGs converge to produce a new form of play script, one that is predominantly followed by the player community. Despite the prominence of user appropriations, workarounds and resistance within children’s MMOGs, I will argue that play scripts infiltrate the gameplay in a myriad of important ways. The findings drawn from the observational case studies will be contrasted with the previous research and debates on play scripts and branded play technologies. In particular, I will focus on the complex relationship between play scripts, narrative and make-believe play, and consider how these relationships are (re)constructed within the specific context of a commercial digital play environment, such as the ones contained in the case study MMOGs. In so doing, this chapter seeks to address one of the final research questions put forth at the start of this study: How do children negotiate the rules and conditions of digital game play?

Play Scripts Revisited

Discussions about the commercialization of children's culture often include questions about whether and to what extent branding, mediatization and intertextuality have a prescriptive influence on children's play. As discussed in Chapter 2, one of the major themes of this discussion is articulated in the notion of "play scripts," a term used by Kline (1993) to describe how themes, plotlines and characters circulated within transmedia intertexts do not merely construct a narrative scaffolding around tie-in toys, but in fact determine key aspects of their use. Play scripts, he argues, assign toys with a highly specialized set of "rules" which confine the "possibilities for pretending" to those that conform to the thematic conventions and character traits established in the toy's associated media texts and advertisements (Kline, 1993, p.327).

The concept of play scripts is deeply contested within the literature on children's play cultures, especially in terms of the deterministic relationship that it constructs between mediatization and play. The causality implied in this relationship has been challenged by an extensive body of research demonstrating that play is shaped by multiple factors, not least among which are the actions and interpretations of the players themselves. Scholars such as Gussin Paley (2004) and Sutton-Smith (1986) demonstrate that even when faced with powerful narrative associations, children retain their ability to diverge from and even subvert the "play scripts" embedded in toys and games, both through active appropriations and through negotiated reinterpretations of the meanings and motives assigned to cultural artifacts. Other contributing factors include the specific narrative elements of the texts in question (Fleming, 1996; Kinder, 1991; Zipes, 1997), features and affordances of the individual toy's design (Antle, 2004; Hendershot, 1996; Pearson & Mullins, 1999; Plowman, 2004), whether or not peers are present (Bergen, 2004; Robinson & Delahooke, 2000), as well as individual differences in the children's own personalities, temperaments and literacy levels. Each of these factors adds to an ongoing process of filtering, interpreting and challenging of the transitional meanings and functions that players bestow upon their toys, both during play and during the undifferentiated action of the everyday lifeworld.

This does not mean, however, that the concept of play scripts must be rejected altogether. While critics of the play script approach highlight the importance of considering both *text* and *context* when attempting to understand the role of transmedia intertextuality within children's play, many also acknowledge that some toys and texts are potentially more prescriptive than others (Fleming, 1996). Similarly, studies of toy design emphasize that certain design features afford higher levels of creativity, appropriation and interaction than others (Plowman, 2004). A more flexible and nuanced interpretation of play scripts would enable analysis of those features that not only reproduce a particular plotline, brand identity or rule system, but that also concretize them in ways that afford congruent types of play while restricting others.

For instance, when the synergistic associations that are required to produce cross-promotional tie-ins, or to generate transmedia intertextuality, are implemented within the fully mediated context of a virtual world or digital game, opportunities for

divergence can be tightly controlled by what is included and excluded from the program code. As discovered in the previous chapter, when design and narrative are devised to operate in concert with branding and cross-promotional strategies, the prominence and weight of the underlying “commercial rule system” (itself a type of script) increases. As with most of the rule systems examined herein, when a particular rule or script or corporate interest is supported at various levels of the game’s design and implementation (or governance), its power to shape the parameters of gameplay increases substantially. In short, when “play scripts” become technologically embedded or otherwise enforced (e.g. through governance systems, legal systems, etc.), their significance in setting the terms of play becomes much more apparent.

Rather than limit our notion of play scripts to narrative and promotional discourses that surround a particular toy or game, I propose that the term is better applied as a way of addressing the underlying “social order” that is inscribed within the design, arrangement and management of transmedia intertexts. Here, I draw inspiration from the approach developed in recent applications of Akrich’s (1992) gender script theory. For instance, van Oost’s (2005) examination of the gender scripts contained in electric shavers argues that traditional notions of gender—and of the relationship between gender and technology—become re-inscribed within the marketing and packaging of the shavers, as well as within the material features of the technology design. van Oost’s work is important because it reminds us that the strongest scripts often have very little to do with mundane specifics of use, but rather with abstract (and arguably much more potent) ideological notions about users (and non-users) and social relations. This emphasis on ideology and power is also found in the works of Winner (1986) and Feenberg (1999), who highlight the many ways in which technological artifacts and systems are both shaped by and work to reproduce hegemonic social processes.

While this discussion may seem far removed from original articulations of play scripts, which by Kline’s description operate at a fairly literal level, it may in fact provide precisely the right type of framework for thinking through the complex, negotiated relationships that actually unfold during play. Rather than revisit previous debates and definitions, which posited the “play script” as a type of step-by-step instruction manual for how to play with a particular branded toy or media character, this approach allows us to re-imagine play scripts as the much more ambiguous and oftentimes conflicting ideological assumptions and expectations. These assumptions span across the formal and informal rule systems contained within children’s playthings, and ultimately become embedded within the artifacts themselves through the multi-faceted “social shaping of technology” process. This reorientation of play scripts as an analytic tool for uncovering the ways in which the design and arrangement of a technological artifact can provide a means of establishing (and maintaining) ideological assumptions and power relations finds further support in Fleming’s (1996) and Kinder’s (1992) respective arguments about the use of narrative in transmedia supersystems. Just as van Oost (2005), Feenberg (1999), Winner (1986) and Akrich (1992) argue that power relations are reflected and reproduced within features of the technological design, Kinder (1992) and Fleming

(1996) describe how power relations (specifically market relations) are reflected and reproduced within features of the specific narrative structures used to generate transmedia intertextuality. For instance, as Kinder describes, flexible narratives and liminal characters are more likely to evoke feelings of empowerment and active engagement among players, even as they enter into cycles of consumption driven chiefly by corporate interests and profit motives.

The parallels between Fleming's approach and that of the technology scholars explored above provides a fascinating entry point for constructing a broader approach to play scripts, one which combines a deeper consideration of ideologies and power relations with a method for addressing some of the overlapping roles shared by design and narrative within digital games. Fleming (1996) argues that effective transmedia intertexts such as *Star Wars* are characterised by "metonymic" narratives, which allow "for difference, for messier forms of identity, unravelled by fantasy, to take hold" (p.164). Unlike *metaphor*, the standard rhetorical strategy of clumping "meanings together into static, authoritative objects while laying claim to being the meaning in some idealised way" (p.162), *metonymy* "disperses the meanings into fluid, more provisional and open-ended connections, with no single object claiming to encapsulate it all" (p.162). In this way, the narrative format reproduces both the children's industries' ideological repositioning of identity, imagination and meaning making as commercially-mediated processes, as well as the underlying market relations (and consumption patterns) out of which transmedia intertextuality is constructed in the first place.

Snapshots of Play

The two MMOGs selected for focused, passive observation, *Club Penguin* and *Barbie Girls*, were chosen in large part due to the vibrancy and consistency of their respective player communities. Unlike the other four case studies, these two titles were almost always populated by an ample number of players, and instances of player-to-player communication and group interaction occurred on a near continuous basis. Coincidentally, the games were also drawn from two different categories of children's MMOG, as outlined in the typology presented in Chapter 3. While not intentional, this enabled a very preliminary cross-comparison between the gameplay that unfolds within an MMO Playground (*Club Penguin*) and that which occurs within a virtual world geared specifically toward Social Arcades (*Barbie Girls*). It also required that the observations for each of the two sites be geared toward slightly different activities. The differences between *Club Penguin* and *Barbie Girls* include not only thematic and aesthetic motifs, but key features of the design as well. *Club Penguin* allows for a wider range of action opportunities and enables more varied forms of creativity than *Barbie Girls*. A wider range of possibilities means that a greater scope of in-game actions and interactions had to be considered in the quest to identify key encounters. On the other hand, the limited affordances available in *Barbie Girls* not only meant that encounters between play and rules were likely to occur with much greater frequency, but it also meant that key encounters would be harder to distinguish and would likely occur in more subtle ways than in *Club Penguin*.

For instance, a substantial component of *Barbie Girls* gameplay revolves around chatting with other players. While some of the areas (such as the beauty parlour, Club Beauty, and a two-player Roller Coaster game) and in-game items (primarily clothing and accessories) facilitate collaborative play, the majority of interactions consist of text-based communication and limited movement (walking, standing and sitting in the confined space of a room). Although several instances of make-believe and role-play were observed over the data collection period, the majority of the interactions observed and recorded consisted of group chat sessions, as players gathered together in the B Café, Park and various shops to role-play and discuss various topics⁷². The action opportunities and affordances made available by the game design are significantly more limited than those found in *Club Penguin*, where players are able to dance, wave, make sounds, emote, walk their Puffles, discover and perform hidden actions (including playing musical instruments, operating a jackhammer, and various others), dress in thematically diverse costumes, and throw snowballs. As *Club Penguin* is also regularly updated with new features that revolve around experimentation and discovery, the world is designed to present a greater number of opportunities for innovation than *Barbie Girls* or, for that matter, any of the other MMOGs analyzed.

As the main objective in this stage of the study was to observe how players negotiate the various rule systems contained within the case study MMOGS, emphasis was placed on identifying instances where the interactions between players and rules—which are a part of every game—were in some way revealed or made manifest within the players' chat, in-game actions or both. Special attention was placed on isolated instances where play appeared most consistent with the scripts embedded in the games designs and narratives (for example, reflecting both game affordances as well as promotional priorities), as well as instances where play and rules came into conflict. Evidence that children's virtual worlds are sites of struggle and negotiation between the various actors involved was of particular interest. That said, however, much of the gameplay observed during the data collection period did not reveal conflict so much as reveal that for the most part gameplay within these worlds conforms to the rules, parameters and thematic motifs provided by design features, packing and transmedia intertextuality.

Within both games, players generally used the game spaces and features in expected ways. Players interacted with other players through chat, as well as through the full range of action opportunities made available to them. For instance, *Barbie Girls* players used what limited moves were available to contextualize and emphasize their text-based chat, to indicate which of the players present was being addressed, as well as to role-play a variety of scenarios. In both games, players spent a great deal of time discussing relationships (both with other players as well as “real world” friends and

⁷² It is important to note that many players also engage in private and semi-private interactions in their personalized “bedrooms” and over the in-game text messaging service, particularly with other players they have designated as “friends” according to the game's internal social networking system. In order to respect the players' privacy as well as uphold the conditions under which ethical clearance for this study was granted, bedroom gatherings were not observed or recorded. In terms of private text messages, these exchanges are not open to the public and were not available for observation.

family), aspects and areas of the game world, and various “real world” topics. Within *Barbie Girls*, the primacy of “relationships” as a conversational topic was especially marked. An enormous proportion of the public conversations that unfolded in this virtual world focused on the players’ relationships with each another. Within *Club Penguin*, a significant amount of inter-player chat, particularly group chat, involved features and aspects of the game—items, mini-games, *Club Penguin Times* articles and world events.

Yet even within these tightly enforced (and obeyed) parameters, subtle signs of tension were consistently revealed, along with evidence of player agency and spontaneity. As in other examples of peer play and make-believe play, players spent a significant amount of time negotiating the parameters of play and otherwise coordinating the contents, strategies, time and place of their interactions. Through these negotiations, “scripts” that might otherwise guide the gameplay often became subsumed in communicative chaos, as players resisted “playing along,” demanded different roles from those assigned, or otherwise subverted the play scenario. Additionally, players regularly encountered barriers in the chat systems that they would have to then “work around” by finding alternative words, breaking up their sentences, or switching topics altogether. The following examples are just a handful of the scenarios observed over the course of the study. Nevertheless, they represent a typical assortment of the type of events, encounters, enactments and collaborations found within each of the two games analyzed. As such, these examples give preliminary insight into child players’ *in-game* and publicly performed negotiations of the underlying rules of play.

Can I Make You Over?

After almost a year of operation in live beta, *Barbie Girls* formalized its V.I.P. membership service and introduced a number of features and in-game activities reserved for pay-to-play members. One of these exclusive features was a collaborative Makeover game located in the “Club Beauty” area, a room decorated in the theme of a hair salon or beauty parlour. The game allowed one player to give another player a “makeover,” through a separate “Stylist Interface” pop-up window that appeared once a player’s Makeover request had been made to and accepted by another player. Players could either request to be “made over” or to act as stylist. Through the Makeover interface, the player acting as the “Stylist” could make changes to the other player’s hairstyle, hair colour, skin tone and makeup. Later on, “manicure” and “pedicure” versions were also added. Significantly, the feature allowed access to a variety of “exclusive” hairstyles and make-up options not available in any other area of the game. The player acting as “Customer” watched the changes as they were being made on a slightly different version of the Stylist Interface. There were also a small number of actions that players could enact during the Makeover session that had no impact on the finished look, but reproduced aspects of a real world visit to the beauty parlour (e.g. a shampoo). After the Stylist was finished, the Customer could either accept the changes and adopt the new look (for a modest sum of B Bucks), or reject the changes and revert to her original state.

The game was an immediate success on the servers visited during the study period, and soon attracted a dedicated following. As one of the only multiplayer games afforded by the game design, and the only multiplayer feature that linked back to the larger game world, Club Beauty Makeover allowed players to engage in a level of ludic interaction not available otherwise. Now, players could not only interact with their own avatar's look and clothing, but with other players' avatars as well. Additionally, players who accepted another player's "makeover" did so in full view of the other players. The game thus carried performative implications, which soon resulted in the emergence of 'star' stylists. Players who were particularly gifted at designing an appealing look soon became regular staples of Club Beauty, and other players would patiently wait their turns to be "made over" by one specific stylist. While waiting, these players would either play the Makeover game amongst themselves, chat or role-play (via the chat system). Once a player had received a makeover, they would often stick around to keep playing and show off their new look to the others in the room. While the role-play scenario in this context was fairly porous, allowing for topics to spill over traditional divisions between the ritual and the everyday (much as they would in a real world beauty parlour), most of the players maintained the shared pretence of being customers and employees (or both customer and employee) at a beauty salon.

Over time, some of these star Stylists began to cultivate their own signature looks. For example, a player named AnnaFabulous27⁷³ who appeared to be quite popular⁷⁴ during the fall of 2008, sported a "reverse gothic" look which she reproduced in many of her makeovers as well. While the all-black look commonly associated with the goth subculture conflicts with other norms and design trends established in *Barbie Girls* (some of which are explored below), the all-white aesthetic of the "ice goth" or reverse goth incarnation can be reproduced by customizing the colour palette and making the right, jarringly juxtaposed clothing, hairstyle and makeup combinations. AnnaFabulous27 had a special knack for evoking the reverse goth aesthetic, as illustrated in her own predilection for the palest white skin tone available, which she often paired with magenta red eyes, light purple streaks and an assortment of frilly white outfits. Her creations became particularly widespread leading up to Halloween, and by October 18th Club Beauty and various other "shops" around *Barbie Girls* were regularly frequented by small clusters of AnnaFabulous27 disciples—customers or simply copycats who displayed her striking signature style.

The emergence of star stylists among the regular participants in the Club Beauty Makeover game is consistent with the game's design affordances, its broader

⁷³ All game names (or "handles") have been changed to protect the identities of the players.

⁷⁴ As in other areas of inquiry, determining the nature and extent of this "popularity" is very difficult. This particular conclusion was drawn from players' conversations while waiting in Club Beauty for their turn to play makeover with AnnaFabulous27. However, given the fluidity with which players can shift in and out of role play, it is quite possible that the players were pretending that AnnaFabulous27 was a stylist that they had purposefully sought out, or even that she was merely "popular" at that very moment of gameplay. These possibilities do not significantly undermine the discussion of the spread of her particular aesthetic, which was indeed observed in other areas and at other times, although it may have been a style shared and reproduced by other players as well. It also doesn't diminish the challenge that the idea of "star stylists" presents to the technological design of the *Barbie Girls* world and server system.

promotional goals, as well as the particular form of transmedia intertextuality that is generated by the Barbie brand. The game reproduces the same themes that are found across Barbie toys and media texts, which have long emphasized fashion, beauty and shopping (or market exchange) as key tenets of girls' leisure culture (Carrington, 2003; Matthew P. McAllister, 2007; Reid-Walsh & Mitchell, 2000). In this respect, Barbie's transmedia intertextuality revolves around the reproduction and negotiation of "femininity" as a social construct, more specifically as it relates to notions of "domesticity." Here, domesticity is understood as "a host of shifting historical assumptions about labor [sic], structure, sexuality, materialism, and private and public space" (Pearson & Mullins, 1999, p. 229). Traditional associations between consumption, the domestic sphere and feminine beauty ideals become repositioned in the quasi-public, vicarious space of the virtual beauty salon, where they are not only reproduced within the game's design but also re-enacted by its players. The players' engagement with the game and its products—the exclusive hairdos and accessories that can only be worn by VIPs—thus performs a double function. On the one hand, players' participation contributes to a pedagogy of consumption that embeds make-believe play within virtual and real market exchange. On the other, by displaying the products of the Makeover game to the larger virtual world population, which most do once they leave Club Beauty to visit other areas, the participants also fill the crucial role of promoting the VIP service to other players.

Yet, alongside these predictable outcomes, there is also something unexpected and perhaps even subversive about AnnaFabulous27 and her "goth girl" followers. While the emergence of star stylists is enabled by the game design in a cursory way, the world contains technical features that discourage the formation of strong, lasting social ties between players. Players cannot select their server, which makes it extremely difficult to reconnect with specific other players from one gaming session to the next. Initially, this was included as a way to encourage "real world" friends to purchase the Barbie Girls USB device and make a physical connection (by plugging the device into the friend's home computer) that would allow them to play together more consistently (although not to bypass the random server assignment). Players on different servers can meet up in a player's "room," but the problem of how to meet up within the shared areas of the game world remains. If players are truly intent on tracking down a specific player, such as a star stylist, their only recourse is to resort to logging off and back on again until (if ever) they have found the one that player is on. The notion of star stylists thus defies a key technical feature of the overall game design, thereby opening up the possibility of player initiative (for how else could the phenomenon exist) and an opportunity for a democratic rationalization of the system.

The gothic aesthetic propagated by AnnaFabulous27 and other players can also be seen as transgressing essential elements of Barbie's brand image. The jarring, edgy styles that AnnaFabulous27 creates often clash with the clean-cut, bubble gum aesthetic embodied by Barbie (the transmedia character) and the rest of the *Barbie Girls* world, including the clothing styles that are more commonly selected by the majority of its players. In some ways this version of the goth girl aesthetic is reminiscent of its real

world forms, such as the “dark” subculture communities described by Schilt (2007). Schilt’s study of young women and girls belonging to goth communities in Los Angeles and Austin found that dramatic, ghoulish makeup (including white face makeup, conspicuous black eyeliner, and dark blue or red lipstick) is often used by members of the subculture to exaggerate and thereby transgress dominant cultural norms about makeup and beauty. She writes, “The total effect of such gothic makeup serve[s] to challenge and almost to parody what a “beautiful” woman looks like” (p.69). The contrast that AnnaFabulous27 creates is immediately noticeable, and the disjuncture between the avatars and their surroundings places a new and slightly skewed emphasis on both.

In a very small, very transitional way, is AnnaFabulous27 momentarily extending the “makeover” to the entire *Barbie Girls* world? The potential for transgression in a beauty-themed Barbie game, which would otherwise seem to be the perfect embodiment of both “play scripts” (Kline, 1993) and “gender scripts” (Akrich, 1992), highlights the performative dimension of dress-up play and of identity more generally (Butler, 1990). It also evokes Doane’s (1987) and Lury’s (1996) notion of the “‘masquerade’ of femininity,” suggesting that even in the most programmed and feminized of spaces, there is potential for gendered subjectivities to function as “roles that can be assumed, played with and then discarded” (cited in Carrington, 2003, p.92). Within children’s play, Schwartzman (1978) describes, role-play provides a key forum for both shaping and indicating gender differences. On the other hand, the masquerade of femininity is not in itself subversive, and in fact is often seen as complicit with traditional gender norms and the social practices through which these are circulated, made sense of and ultimately re-inscribed. The implied mutability found within representations of femininity as an unstable subject position is also consistent with Kinder’s (1992) and Fleming’s (1995) descriptions of transmedia intertextuality, wherein flexibility and amorphous subject positions are systematically contained within an overarching cycle of cross-promotion and consumption.

Boys Dress All in Black

The idea that players are engaged in a microcosmic “masquerade of femininity” and gender negotiation is supported by another widespread phenomenon found within *Barbie Girls*, wherein players reassign female avatars (the only option available) as male through clothing and self-identification. As mentioned previously, players in *Barbie Girls* dedicate a significant amount of their group chat to discussing, negotiating and role-playing social relationships. Much of this discussion revolves around the themes of friendship and romantic relations. Despite the fact that every avatar in *Barbie Girls* is “female,” despite the wide ranging restrictions placed on player chat, and despite the fact that the demographic figures released by Mattell indicate that 85% of players are “girls between the ages of 8 and 15 years” (“BarbieGirls.com Parents,” 2008), dating and sexually suggestive themes crop up quite frequently.

While this has obvious implications for ongoing discussions about the potential risks associated with children’s participation in virtual worlds and online forums

(Livingstone, 2009), the mere presence of these themes is not all that surprising. As Lamb (2001) describes, although this aspect of girls' play is often suppressed within popular and academic discourses, dating and sexual themes are common features of girls' doll play and make-believe play scenarios. Additionally, Sutton-Smith (1997), Jenkins (1998) and Schwartzman (1978) describe that "sex play" and "gender play" are central themes within children's culture, through which children explore, mock and sometimes subvert socially established sex roles and gender expectations. Within the context of the current study, what is particularly striking about the transportation of these activities into the *Barbie Girls* game environment is the way in which the female avatar default functions as an inherent challenge to the heteronormativity that is otherwise promoted across Barbie products and media texts (as well as throughout children's culture). For the players, this challenge is mediated through the construction of gendered "workarounds," through which "male players" are afforded entry into the game world. Among the exchanges observed, this was primarily accomplished through self-identification. For example, a number of players would either immediately identify themselves as "guys" or "boys" upon entering a room, or else ask if there were any "girls" in the room (thereby implying difference). Others would wait until another player inquired about gender. Players searching for a member of the "opposite" sex commonly went from room to room asking other players if there were "any guys" among them. The following excerpt, of a conversation that took place in the B Café in August 2008, is typical of the type of exchange that normally precedes the identification of a male player:

DGHouston: ARE YOU A GUY
StarSeer9: ANY BOYS
StephanieBlue88: OK IM BACK
StephanieBlue88: HUH
KCSunshine: WHO LIKES MY OUTFIT
DGHouston: YA ANY
StarSeer9: NOT ME
StephanieBlue88: WHAT?
KCSunshine: ## EVER SAYS YES [Note: ## indicates that the word has been censored by the chat system]
DGHouston: ANY BOYS
StephanieBlue88: HOLD ON
DGHouston: THAT I CAN DATE
StarSeer9: OK

Up to this point, the conversation unfolding in the B Café had largely consisted of players greeting one another (e.g. "Hi" and "Welcome") and establishing some preliminary conversation topics (e.g. "What's your fav color"). StephanieBlue88 had commented on someone's outfit and complained several times that there was nothing to do and she was bored. With the arrival of DGHouston, StarSeer9 and their quest to find a "guy," StephanieBlue88's complaints of boredom were replaced by what might be interpreted as signs of discomfort. Her obvious confusion about DGHouston's repeated questions about whether there were any "guys" in the room, as indicated in her responses ("Huh," "What" and later on "Why") represents a fairly common player response, as throughout the study period there remained many players (especially new

players) who were not familiar with these particular practices. The sudden introduction of gender play into the conversation, along with its implied suggestion that some of the players present may not be female as assumed, but rather male, often created rupture or disruption. This disruption of gendered assumptions, so heavily implied by the femaleness of the avatars and the hyper-feminine encoding of the game space, also raises other questions about player identity and online anonymity, age and experience.

DGHouston and StarSeer9's entrance also highlights the necessarily negotiated nature of a game space that is heavily dependent on social interaction. While DGHouston's persistent search for a "guy" was unsuccessful, she did succeed in co-opting the conversation and reorienting it toward her own interests. In addition to disrupting the conversational flow, she thereby was able to momentarily impose a particular interpretation of the game space, redefining the room as a site for romantic role-play despite the obvious resistance of the other players present.

DGHouston: YOU ARE A ##
StarSeer9: NO
KCSunshine: IS THERE A #####
DGHouston: ARE YOU BOYS
StarSeer9: NO!
KCSunshine: NO
DGHouston: ANY OTHERS

At this point, DGHOUSTON walked away from the table and began circling around the room, pausing in front of each avatar in order "address" them specifically. Each time she paused she repeated "You," and then waited a few seconds for an answer. Upon reaching StephanieBlue88, who had not yet directly answered DGHouston's query, she stopped and waited for several minutes.

StephanieBlue88: OK IM BACK
KCSunshine: ## ##### OUTFIT
DGHouston: ARE YOU A BOYS
StephanieBlue88: WHAT
StephanieBlue88: NO IM NOT
StephanieBlue88: WHY
StephanieBlue88: CUZ IM A GIRL SORRY
KCSunshine: JUST SAY YES SOMEONE
StephanieBlue88: WAIT GOT MAIL
DGHouston: YOU ARE A BOYS
DGHouston: I KNOW IT
KCSunshine: BE ## AS YOU LIKE!

StephanieBlue88's response confirms her lack of familiarity with the presence of boys—real or imagined—within the *Barbie Girls* game world. The other players do not address her repeated inquiries into the motives or reasoning for DGHouston's tedious questioning. However, KCSunshine's comments provide some insight into the practice. Her statements, "Just say yes someone" and "Be...as you like!" denote that for at least some players, the identification of guys and "male players" is just part of the role-play. While it is possible, and perhaps even likely, that some of the self-identified "male" avatars represent actual male players, there is an overarching instability associated with

the category that significantly impacts its discursive and ludic function within the game space. When juxtaposed with DGHouston's persistence, there is a strong indication the quest for a "guy" to participate in a dating role-play scenario can be just as easily satisfied (perhaps even more so) by a female player. As long as the other player agrees to engage in the cross-gender identification that is required to re-inscribe the activity as heteronormative, the "masquerade of femininity" can proceed unthreatened.

During the early months of the study period, the *Barbie Girls* players devised another workaround to distinguish gender, by designating specific clothing styles and colours as "male." For the most part, an avatar dressed all in black, wearing long sleeves and long pants, was understood to be a "guy." Later, the shortest hairstyle available for avatar customization also became associated with "male players." Players who were not familiar with these emerging conventions, and who made the innocent mistake of wearing too much black clothing would find themselves bombarded with questions (e.g. "Are you a guy") and requests for dates. The notion that dressing "all in black" indicated a masculine player identity spread like wildfire through the player community. Notably, it was never assumed to be the only way of identifying as male. Some players would use blue instead of black, or simply continue on with self-identifying as male through the chat system. This subversive use of avatar clothing was by far the most innovative user appropriation of the game design affordances observed during the study period.

On the other hand, the use of more elaborate workarounds and user appropriations is also greatly facilitated, possibly even afforded, by the everyday workarounds that players are required to master in order to communicate at all. The snippets of conversation included above manifestly reveal the challenges that players face in attempting to use the highly limited and limiting in-game dictionary chat system. Many of the misspellings, grammatical errors and choppy sentences that appear in the chat transcript are the result of necessity. For instance, players cannot type the phrase "are you a boy" and so they instead use the words "boys" and "guy." Additionally, the ## symbols that frequently appear in the chat transcript represent words that have been "censored" by the system. This includes words that were deliberately omitted from the dictionary (e.g. swear words), along with the plethora of words that were simply not included (e.g. pants, lion). Because the development of workarounds, shorthand, and secret codes become such an integral part of social interaction within *Barbie Girls*, it is not surprising that other types of workarounds have emerged as well.

The chat excerpts thus illustrate both the innovation and the frustration involved in using the dictionary chat system. Entire topics have been excluded, including many of the themes and issues that are found to be the most meaningful to children, such as the environment and problems at school. Players spend a significant amount of time struggling to communicate and to understand one another. Concurrently, the very behaviours that the chat system (the game's primary safety mechanism) is allegedly designed to prevent are rampant, including bullying, sex play and sexually suggestive talk. The sweeping limitations on player chat, which exclude even the most basic conversational topics, also produces an over-reliance on private chat and "bedroom" encounters where players can chat one-on-one and, with "parental" permission (usually

just a confirmation sent from the email provided as the parent's email), can upgrade their chat status to a less censored system. When players succeed in finding ways to work around the design barriers, facilitate communication, and engage in "forbidden" activities, however, they step out of the tenuous "safety zone" provided by the game's safety mechanisms. Attempts to engage in social interaction, which is after all the primary form of activity afforded by the game design, can thus result in an increased risk of harm, as players are left to deal with uncomfortable and potentially dangerous encounters on their own.

Hipsters, Copycats and Going Green

In both *Barbie Girls* and *Club Penguin*, players work to find and exploit the margin of manoeuvre, the space or potential for unanticipated uses and outcomes that is contained within all technological artifacts (Feenberg, 1999). In the children's MMOGs examined, this margin of manoeuvre appears to be quite narrow, as opportunities for players to engage with the games' technological designs, contents and even other players are highly limited. The GUI, safe chat systems and Flash-based format of the games each function to isolate the player from the game as *artifact*, both in terms of its thematic and ludic contents, as well as in terms of its underlying program code. Nonetheless, direct observation of the gameplay that unfolds within these worlds reveals that players are still able to find ways to engage in unexpected modes of technological appropriation, such as the workarounds described above, along with various instances of subversive forms of emergent play.

As mentioned previously, subversive or resistant forms of emergent play can sometimes include activities that appear to defy or diverge from the programmed game rules, but in fact reveal a "special disconnect between the rules of the system and the ways those rules play out" (Salen & Zimmerman, 2004, p.160). Within both *Barbie Girls* and *Club Penguin* these types of emergent play abound, as players make use of the highly limited action opportunities available to them to generate new, playful and sometimes subversive forms of social play and interaction. One form of emergent play frequently observed within these worlds is the expression of personal bonds and group affinities through playful manipulations of avatar clothing options. The "goth girls" phenomenon described above is just one among many such examples of players using clothing and style to identify with other players, to mark themselves as belonging to player-driven groups or "subcultures," and to participate in formal and informal game world events. Avatar clothing and other customizations are also used to antagonize others and enact forms of social exclusion, as well as to stage various types of "flash mobs" and even public protests.

A handful of brief examples will best illustrate this point. In *Club Penguin*, where avatars are quite uniform in appearance, players often coordinate with one another to assume the same (or similar) clothing and skin colour. A popular site for engaging in these activities is the Iceberg, a small ice floe that has long been the subject of rumours and speculation (much of it fuelled by hints dropped in the *Club Penguin Times* and

other official texts) that if a sufficient number of Penguins gather together on one side, the Iceberg will tip. Players cram together, usually on the left side of the Iceberg, dancing or drilling in an attempt to stimulate the purported event. This notion of acting as a group spills into other activities as well. For instance, one day, a group of seven “hipsters” could be found dancing together on the Iceberg, each wearing sunglasses and other clothing items considered to be trendy in the real world (large scarves, leather jackets, etc.). As they danced they called out “Cool people over here!” “All hipsters come here” and “Cool people only.” Soon, two other Penguins wearing sunglasses and black clothing joined them. The other, non-participating Penguins in the room stood back and watched, but refrained from breaking the group’s self-imposed “hipsters” only rule.

A second example, as well as an extremely common phenomenon within *Club Penguin*, is colour coordinating avatar skin tones. Usually, this begins with one player yelling out a proposed colour, such as “Everyone red.” Sometimes, the colour selected has some sort of reasoning behind it. For instance, a number of avatars may have appeared already wearing the same colour coincidentally. In other cases, colour coordinating is enacted in order to mark a particular occasion or in-game event (e.g. “To celebrate Rockhopper,” a red NPC that occasionally appears in the game world). Players also colour coordinate for “real world” social, political and cultural reasons. A key example of this is turning green in order to “stop global warming,” as one player described it, or to promote environmental awareness (e.g. “Turn green for the environment”). Associations between turning green and environmentalism, as well as the occurrence of group displays of green accompanied by explicit references to the climate or the environment, were frequently observed over the study period. The phenomenon represents a particularly important insight into the digital play worlds of children, which shift fluidly between play and non-play, between make-believe and “real world,” between informal socializing and formal gameplay.

The political significance of turning green “for the environment” warrants further consideration. Although framed and performed within a play space, these small acts of social demonstration provide a glimpse into the potential for virtual worlds and other shared digital spaces to function as “public” forums, in which children might practice exercising their right to assemble, as well as experience (albeit virtually) the political possibilities of democratic action and space. By dressing the same or simultaneously performing the same movements, the players’ interactions combine and come to function as a sort of group performance—a virtual “flash mob” (Wasik, March 2006) or “smart mob” (Rheingold, 2002) that generates meaning from collaboration itself. The practices of colour coordinating and enacting flash mob games also have a clear aesthetic dimension. The lack of variation available in the game’s design becomes a tool for a new type of creativity, that which comes out of performing (in) simultaneity, a bizarre reinterpretation of the mass spectacle that is produced in political pageantry, “stadium stunts”⁷⁵ and other types of “mass ornament” (Kracauer, 1995).

⁷⁵ The term “stadium stunts” is used in marketing to describe the phenomenon of choreographing crowds at sporting events and other mega-events, for instance getting the audience to hold up cards that together create an (oftentimes branded or promotional) image.

Another important way in which the margin of manoeuvre reveals itself is in the players' use of action opportunities and avatar customization tools to annoy and aggravate one another. One of the ways this is expressed is through a digital reinvention of the "copycat" game. In its original form, the copycat game is an informal playground game in which one person repeats back everything the other person says, and sometimes mimics everything the other person does (often to their mounting frustration). Within children's MMOGs, the copycat game is enacted through chat, with one player re-typing everything another player types (or selecting the same pre-determined chat phrase). Players have also adapted the game in order to take fuller advantage of the game's design affordances, which encourage avatar customization but significantly restrict users' ability to deviate from a relatively limited selection of clothing options and colour pallets. While the resulting aesthetic homogeneity may be used to create bonds and identify sub-groups, as described above, it can also cause frustration for players attempting to construct a unique style or appearance. One player's quest for uniqueness can be easily usurped by the ease with which other players can replicate each other's "customized" selections. In the case of "copycats," this disruption is clearly intentional.

An illustrative example is found in an interaction that took place in the "Paw Pawlooza" area of *Barbie Girls* during the study period, between Miss_Sunshine and Cookie9. Cookie9 was sitting and chatting with another player when Miss_Sunshine suddenly re-appeared in the room wearing the exact same outfit, hairstyle and accessories. Cookie9 expressed immediate annoyance with Miss_Sunshine, who responded by reproducing Cookie9's shoes, thus becoming her perfect doppelganger.

Cookie9: U CANT B LIKE ME
Cookie9: U CANT BE LIKE ME
Miss_Sunshine: [Response obscured by another player]
AmeliaWales: HI
Cookie9: U CANT COPY ME
Cookie9: THATS IT
Cookie9: U WANT TO COPY
Cookie9: THEN COPY THIS

At this point Cookie9 disappeared momentarily in order to change her outfit, selecting a particularly "expensive" (and therefore more difficult to obtain) party dress.

Cookie9: HAHA
Cookie9: COPY ##
Cookie9: THAT

Unable to mimic the new dress and thus continue with the antagonism, Miss_Sunshine elected to shift her approach by asking Cookie9 to voluntarily give her the dress ("Can I have that dress?"). With this, Cookie9 left the room permanently. During the latter part of this exchange a new player, GirlPower, had entered the room and walked over to the sitting area where Miss_Sunshine and Cookie9 were positioned. Once Cookie9 had left, Miss_Sunshine turned her attention to the newcomer.

Miss_Sunshine: DO U HAVE THIS DRESS
GirlPower: YES

Miss_Sunshine: WERE IT
GirlPower: OK [Disappears momentarily and reappears]
Miss_Sunshine: SWEET

At this, GirlPower reappeared wearing the same outfit as Miss_Sunshine; the very dress that had originally been worn by Cookie9, and that had started the copycat game in the first place. Had Cookie9 reappeared at this point, she would have seen not one but two players copying her “look.” Despite the fact that GirlPower arrived too late in the exchange to know what she was actually getting involved in, she would now become an accomplice to Miss_Sunshine’s antagonism of Cookie9.

Exchanges such as these are compelling for a number of reasons. First, they illustrate how action opportunities can be used for purposes beyond those intended or afforded by the design. They also reveal how so-called disruptive behaviours can occur almost anywhere, and manifest in ways that cannot be viably prevented by technical features or chat filters. Although many of the safety mechanisms and ground rules contained within *Barbie Girls* are aimed at preventing “bullying” and “meanness,” players nonetheless find a wide variety of ways to antagonize and annoy one another, many of which involve subtle recontextualizations of activities that may otherwise appear quite conducive of “pro-social” activity (such as the group identification behaviours identified above). These play forms are not only common within virtual worlds, but also reproduce patterns and trends found throughout children’s play cultures. As Schwartzman (1978) describes, girls especially engage quite frequently in “social testing” games that focus on themes of inclusion and exclusion. Children often manipulate, antagonize or attempt to control one another during (and through) play, by promising inclusion or threatening exclusion, by ganging up against one player, and by sucking up to the group or team “leader.” The copycat game found in *Barbie Girls* and *Club Penguin* is merely one incarnation of this tendency, albeit one that is not well accounted for in the various rule systems examined in the current study. The example described above thus reveals both the ineffectiveness of an automated system designed to prevent subversive and disruptive behaviours, as well as the inadequate way in which these behaviours have been defined as “problematic” to begin with.

Fractured Fairy Tales

Among the most overt examples of “play scripts” contained within the case study MMOGs was found in “The Stage” room of *Club Penguin*, which provided players with all the necessary tools required to perform a short play. A new play was introduced every month, complete with thematically appropriate costumes (available for purchase to paid-subscription members only), stage scenery, props, special effects and even actual scripts. Players could enact the “official” script by using a special Pre-Determined Chat book, which designates specific lines to the appropriate role or character. Players were free to use their own lines as well (depending on their level of chat access), to say lines out of order, to switch characters and perform roles that were already taken. In short, players were free to conform to the script, just as they were free to re-create, re-interpret and re-design the play as they saw fit. During several weeks of the study period, The

Stage was designed for a play entitled “Fairy Fables,” a postmodern fairy tale themed story in the spirit of *Fractured Fairy Tales* (Zipes, 2002).

The Stage contains a number of tools and activities designed to support putting on a structured play activity. As such, it promotes a pre-determined “play script” in the most literal sense of the term. However, as observations of the players’ ongoing efforts to perform these scripted plays reveals, deliberate attempts to adhere to a script invariably produces disorganized cacophony. One attempt that was observed and recorded during the study period included several players concurrently performing the same role, players diverging from the script while others rewrote it to account for the divergences, players enacting different sections of the play simultaneously, players repeating the same lines over and over, players engaged in text-based role-playing, and players participating as characters from other plays. The following is just one example of the type of playful disjuncture that regularly unfolds within this space:

Icefish102: You need to distract the sheep, of course! [Line]
Aquamarine45: prince
Ries9: CRY
Icefish102: A unicorn flying through the sky? BAA-zaa! [Line]
Ries9: NO THIS ISNT HAPPENING
Aquamarine45: sits on balcony
Jojo107: saves
Sebypony4: Ive just ben in the forest some
LilyDust77: Don't interrupt! I said he was dressed in RED! [Line]
Tffn3523: Hello
Ries9: ARE U ALIVE
Oreo_41: now
Mini_pro: ok
GlindaGirl: comes up grasps for air
Elves_4_Real: shes out cold
Aqua6378: woof
Ruben: that looks safe
Pokey78: <3
Ries9: NO
Oreo_41: fool
Mini_pro: lol
Ries9: SAVES SISTER
Aquamarine45: looks for a prince

As indicated above (as “[Line]”), only three of the player chat entries were drawn from the provided “Fairy Fables” script. Instead of utilizing the script, the majority of the players’ chat was dedicated to improvisation, role-play oriented performatives, semi-private conversations between two or more players, and general silliness. If this example is at all representative of what happens when child players attempt to follow a script verbatim, the ongoing concerns about the limiting effects of transmedia scripting and branding would appear to be largely overblown. These findings are furthermore supported by research conducted by Gussin Paley (2004) and Grugeon (2004), which similarly shows that when children deliberately attempt to re-enact plotlines from media texts or otherwise follow the informal “rules” of branded toys, they are often unable to do

so. Rather than the faithful reproduction of a script, what emerges is almost always a deeply negotiated, creative reinterpretation of the source material. Even within the limited parameters of the *Club Penguin* game design, not least of which includes the programmed restrictions that are placed on player chat, play unfolds in unexpected and polymorphous ways. As players strive to reflect, revise or rewrite the scripts and themes provided by the game design (or media text), they enter into a process of negotiation both with the scripted contents as well as with other players. Evidence of this “negotiated” dimension of peer play was apparent throughout both of the games observed, as players debated the plotlines, roles and meanings of the various components of the game worlds.

Concurrently, however, it is important to remember that play scripts, like other informal rule systems, rarely appear as fully articulated, linear and prescriptive storylines. As Kinder (1991), Fleming (1996), Buckingham and Sefton-Green (2002) argue, it is through the flexibility, mutability, non-linearity of contemporary transmedia intertexts that the children’s industries have built the complex cycles of consumption that currently fuel the children’s commercial culture and its many offshoots. Thus, while the players’ negotiated readings of the Stage scripts are significant, the implications of these readings can only be extended to a relatively minor and superficial facet of the intricate relationship between games, players and technical codes or “play scripts.” Namely, this facet is limited to only the most literal understandings of scripts, one that has been effectively challenged and largely rejected for its overly deterministic approach to users (or players or audiences). The more pervasive and subtle dimensions of the relationship are obscured by the apparent agency that is being exerted by the players in their interactions with tools that at first appear to be designed to impose structure. Upon closer examination, however, it becomes evident that although these interactions are indeed negotiated and self-driven on one level, at another level they are also consistent with the game’s underlying affordances and broader “play script” narratives.



Figure 2: © 2008 Disney: A snapshot of Fairy Fables at the *Club Penguin* Stage

As described previously, *Club Penguin* is designed to encourage quasi-subversive forms of emergent play and experimentation. The Stage scripts are made available to players, but deviation is anticipated and fully enabled by both the chat system and the surrounding narrative features. For instance, the *Club Penguin Times* often describes the monthly plays as collaborative creations, and there are no programmed restrictions on bringing in different costumes, ideas and scenarios. Furthermore, many of the plays are written in such a way that non-linearity, improvisation and reflexivity are not only possible but afforded. The “Fairy Fables” play exemplifies the underlying themes of playful transgression that permeate The Stage as a site of “spontaneous” performative play. For instance, the script features lines in which characters interrupt and question the narrator:

Twee (narrator): Once upon a time a prince dressed all in red....
 Redhood: Red?! Are you sure? It’s not really my color.
 Twee: Don’t interrupt! I said he was dressed in RED!
 Redhood: Oh. All right, then. What a lovely day!

Additionally, many of the characters consist of subversive inversions of well-known fairy tale conventions. For example, the play’s main antagonist is a “Big Bad Wool” (sheep) rather than a “big bad wolf,” and the lead female role is a grumpy princess who rejects and belittles the prince protagonist. The play ends with the prince and the Big Bad Wool setting aside their differences over a nice plate of croissants, while the narrator breaks convention by entering into the world of the play to show the audience around the set. Within the context, the players’ chaotic “re-enactment” (and reinterpretation) of the Fairy Fables script can be understood as a surprisingly faithful performance of the subtly subversive forms of play that are promoted by the design and narrative of the game world.

Snow-in at the Dojo

The notion that part of the creativity and spontaneity that arises during gameplay is anticipated and even afforded by the game design is of no surprise. After all, this relationship is a key intended outcome of the “meaningful play” experience that many games are designed to support. As Salen and Zimmerman (2004) describe, “The play of pleasure may seem free and spontaneous, the farthest thing from a careful, conscious design process, but creating a game...is always a matter of sensitive and detailed game design” (p.344). Examples such as the Fairy Fables performance demonstrate how this relationship can manifest as a sort of *designed emergence*, wherein features of the game environment and narrative are designed to evoke some of the same feelings of freedom and transgression that are usually associated with subversive or “disconnect” forms of “emergent play” (Salen & Zimmerman, 2004), but without the unpredictability and innovation that results from more unanticipated levels of emergence. Within the example above, these feelings are further facilitated by the contrast that is created between the structure of the “official” script (the text of the stage play) and the unstructured nature of the players’ performance. That this lack of structure is itself part of an underlying play script that posits the *Club Penguin* environment as the site of “free,” “collaborative” and “subversive” play becomes easily obscured in the process. Over the course of the study, it became clear that *Club Penguin*’s design team is unusually proficient in generating *designed emergence*, examples of which were observed in a number of the game’s events and activities. Not only have they managed to construct a world where playful experimentation can be identified as a determining feature of the gameplay, but on several occasions they have also succeeded in channelling this otherwise elusive mode of play towards commercial ends.

A particularly notable example of how designed emergence is mobilized within *Club Penguin* is found in an event that occurred in the fall of 2008, known as the Snow-in at the Dojo. In actuality, the Snow-in consisted of a series of ludic and narrative developments that unfolded over a period of several months, and which were ultimately revealed to be a cleverly disguised viral marketing campaign. The campaign combined designed emergence, hints, Easter Eggs and timed upgrades to the game environment to construct an interactive plotline that came across as being heavily player-driven. From the outset, however, the Snow-in at the Dojo, the events leading up to it, and even the players’ involvement, were all deliberate components of an intricate plan to introduce players to a new *Club Penguin* tie-in collectible card game called “Card-Jitsu.” Not only did the campaign generate an impressive amount of “buzz” within the player community, it also motivated a large proportion of players to actively participate in the “co-construction” of a game feature that would ultimately function as a cross-promotional transmedia intertext.

In many ways, the success of the campaign hinged upon a seamless piggybacking of designed emergence onto an existing example of player-driven, subversive emergent play, one that had been circulating within the MMOG community long before the Snow-in campaign was initiated. As described above, gossip about hidden Easter Eggs and hints of things to come are habitually spread among *Club*

Penguin players, and rumours occupy a prominent role within group discussions and other community building activities. The Dojo itself had been the source of much speculation over the years, and as such already contained a lot of potential for user innovation. The Dojo was originally introduced as a “secret room.” It did not appear on the world map and players could only access it by clicking on a specific part of the mountain range that covers the far side of the Club Penguin Island. In keeping with the thematic conventions and general air of secrecy that surrounded the Dojo, “ninja sightings” soon became a recurring topic of discussion. A number of players claimed to have spotted a dark figure resembling a ninja somewhere in the world, and before long “ninja sightings” were infrequently mentioned in the *Club Penguin* developer blog (maintained by “Billybob”) and in the *Club Penguin Times*.

By visiting fan sites and analyzing the user comments submitted to the developer blog, it was discovered that the ninja rumour had been in circulation for some time. The rumour was furthermore fuelled by intermittent, cryptic comments posted by Billybob himself. For example, as early as November 1 2005, in reply to a player’s query about ninjas in *Club Penguin*, Billybob wrote, “[M]ore ninja stuff will come in the future” but “not for a while still” (Billybob, 2005). In fact, hints that a ninja theme would eventually appear in *Club Penguin* preceded the launch of the MMOG itself, in that the discussion was carried over from the game’s predecessor *Penguin Chat 3*, a GUI chat room where many of the initial ideas and imagery for the *Club Penguin* MMOG first took root. The current iteration of player interest in ninjas was also fuelled by the periodic introduction of ninja-themed items and aesthetic features within the *Club Penguin* game environment. Ninja imagery was included in a number of the game’s parties and special events. For example, during the 2008 Easter celebrations, an in-game Easter Egg hunt included an egg decorated to look like a ninja, complete with its own black belt, which could be found hidden in the Dojo. It is worth noting, however, that the most overt design references to Ninjas, as well as the vast majority of the events that took place in and around the Dojo, only emerged after Disney’s acquisition of *Club Penguin* in 2007.

Supported by these ludic interjections, ninjas became the source of numerous innovative and collaborative play practices. A number of players devised makeshift ninja costumes out of the items and customization features available to them. For instance, the “Superhero Mask,” an in-game item originally featured as part of a superhero costume, could be easily transformed into a “ninja mask.” A number of players made a game out of “painting” their penguins black, wearing the black superhero mask and hiding (as a secret ninja might do) in various locations throughout the world. By creating makeshift ninja outfits, and introducing various forms of ninja role-play into the different areas of the game world, these players contributed significantly to the evolution of the ninja mythology. Fans began posting screenshots and Youtube videos of their ninja sightings, describing the makeshift ninjas as “photographic evidence” that a secret ninja faction had infiltrated the game world. This analysis was extended to the GUI as well, which as it turned out contained a number of ambiguous “shadows” that *could* be interpreted as “ninja-esque” in shape. These texts in turn became the objects of intense debate about the authenticity and deeper meaning of the purported ninja sightings, as

well as various discussions about the alleged timeline of the sightings and the authenticity of the images themselves. For instance, accusations that the images had been “photo shopped” were quite common.

The players’ growing interest in the Dojo thus initially seemed no different from any other example of subversive emergent play or communal make-believe found within the *Club Penguin* game world. It shared many similarities with the Iceberg tipping game, for example, in that it appeared to derive out of a largely player-driven reaction to playful suggestions supplied by the design team in order to encourage experimentation. While the design team was clearly actively fuelling the ninja rumours, their actions came across as responsive to the needs and ideas of the player community. By September 2008, however, the frequency with which ninja sightings featured as a topic of discussion (both in-game and on the external fan sites) began to increase significantly. While this sudden increase provided an early indication that some sort of shift was occurring, it wasn’t until Halloween that the depth of the design team’s involvement was made public. During the weeklong Halloween celebrations, ninja “mania” was fuelled into frenzy by the introduction of a temporary design feature or “decoration” at the Dojo. Every few minutes, as lightning flashed across the sky, a shadowy outline of a ninja Penguin appeared to be standing outside the Dojo’s shoji exterior walls. The phenomenon was mentioned in Billybob’s developer blog post for October 31, 2008, which read: “And speaking of lightning, there sure seems to be a lot of it in the area of The Dojo...”

A few days later, the front page of the *Club Penguin Times* (issue #160, November 6th, 2008) bore the headline “Shocking Surprise.” The cover story explained that the Dojo was struck by lightning shortly after the conclusion of the Halloween celebrations, leading to a roof collapse and structural damage, as well as a major “Snow-in” above the building. As the article went on to explain:

“Construction crews estimate that the damage is extensive. Penguins have begun digging the building, which has always been a bit mysterious, out from under the snow. Anyone interested in lending a flipper should head up right away.”

No longer a secret room, the Dojo was reinvented as a construction site, complete with scaffolding placed in the centre of the room that lead to the roof, where Penguins were invited to put on hard hats (made available as a free item) and join in the efforts to save the Dojo. The Dojo itself was still open and accessible, albeit littered with pylons, warning signs and tape that bracketed off the “damage” as indicated by piles of roof rubble and loose boards propped up against the ceiling. The rooftop area (or room) consisted of an entirely new addition to the game world. It was initially depicted as nothing more than a big pile of snow, with mountains and sky in the background, and a ledge in the foreground that was framed by a wooden Japanese gate structure sporting a sign that read “Dig Out the Dojo.” Beneath the sign, a mysterious figure (a NPC whose name was listed as “??????”) wearing a Japanese monk hat soon appeared, and began digging diligently at the snow with a shovel. The players soon discovered that by wearing the hard hats and dancing, a jackhammer would suddenly appear in their hands. During

the first few days of the dig, the rooftop room on nearly every server was constantly filled with Penguins drilling into the mountain with jackhammers, despite the lack of any indication of impact or change.



Figure 3: © 2008 Disney: The *Club Penguin* players participate in digging out the Dojo

Over a period of several days, the player community's interest in the Snow-In continued unabated. The rooftop room was almost always full or near full, even on servers that were otherwise under-populated. The campaign unfolded suspensefully, as new developments were only introduced every few days, with each one providing only a small amount of new information. During this period, a substantial proportion of group discussion was dedicated to ongoing analysis and speculation about what new game or activity would ultimately emerge from the Snow-in, whether or not the Dojo would expand or change, and whether or not their digging efforts were working. The players were fascinated by the mysterious figure in the monk hat. Several players attempted to address him directly, while a few pretended that they had spoken to him earlier (e.g. "I know who he is, he told me" or "He's Rockhopper" or "He's a good guy, a ninja"). A few days after the cover story, a shovel was made available for purchase (by paid-subscription members only) through the in-game item catalogue, with which players could join in the Monk's incessant shovelling. Soon thereafter, a small portion of the Dojo's exterior was exposed and a banner, announcing that "Training: Coming November 17th," appeared in a far corner of the Dojo itself. On November 11th, Dojo underwent further transformation. Big sections of the exterior had been unearthed, revealing an ornate Shinto roof, a waterfall in the distance, part of an entryway into the dojo, a paper lantern and a blossoming tree. In the November 13th issue of the *Club Penguin Times*, the re-opening of the Dojo was finally announced, along with an official confirmation of existence of Ninjas⁷⁶. By the time the new Dojo was completely revealed and "launched" on November 17th, player interest was at its peak. Most of the MMOG's

⁷⁶ The confirmation was so anticipated by some of the *Club Penguin* fan sites, such as the *Club Penguin Wiki*, that November 13th was later termed "Ninja Thursday."

109 servers were full or nearly full, and the Dojo itself remained at maximum capacity for several hours⁷⁷.

It was only at this late point in the campaign that the true purpose of the Dojo was revealed. The mysterious figure in the monk hat was identified as “Sensei” while the Dojo was revealed to be a “training gym” for players to practice and compete in a new two-player game called “Card-Jitsu.” The game itself consisted of an elemental based “card game” featuring imagery and motifs from the *Club Penguin* game world, re-imagined to fit the magical “Ninja” theme. By competing against others, players would advance through a series of “belts” much like the ones used in martial arts such as Karate and Ju-Jitsu. Once the players reached black belt, they were given the opportunity to challenge the Sensei. Players who succeeded in defeating Sensei were then given the rank of ninja and allowed access to an additional, exclusive room adjacent the Dojo. However, “Card-Jitsu” was also the name of a new, *real-world* collectible card game that was launched the same day as the Dojo’s grand opening, available for purchase in decks or packs at most North American Disney Stores and Toys “R” Us outlets, as well as through *Club Penguin*’s own online store. This tangible CCG not only reproduced the in-game version, but also provided players with a code enabling them to “activate” exclusive virtual cards that they could then use in their in-game Card-Jitsu battles. It soon became clear that these exclusive cards gave players an enormous advantage over those who were using only the “free” or default cards. The exclusive cards were invariably among the strongest cards available, and having them made winning much more likely (although not guaranteed by any means). Furthermore, there was no way to obtain the exclusive cards other than purchasing a real-world CCG pack. Players with the exclusive cards were able to attain ninja status significantly quicker and easier than other players.

While other viral marketing strategies were observed over the course of the study period, the Snow-In at the Dojo campaign was atypical in terms of the depth and extensiveness of the intimacy that it fostered between corporate priorities and play. The cross-promotional culmination of the campaign also reveals some of the more troubling ways in which play scripts can be mobilized to produce commercially-driven events and deliberately crafted interactions, that may nonetheless *appear* as player-driven, spontaneous, or even subversive. In retrospect, it is impossible to say for sure that the ninja myths and sightings were ever anything other than a strategically embedded marketing campaign. Conversely, the incorporation of ninjas in the CCG design may also have derived out of a commercial co-optation of player creativity, a successful example of how virtual worlds can function as covert forums for corporate research and development. No matter how it began, the point is that the Snow-in “Card-Jitsu” campaign was successful primarily because it embedded itself so thoroughly in aspects of play and cultural practice generally understood to be beyond the reach of commercial mechanisms.

⁷⁷Accessing the room for data collection on November 17th was not possible until 2am the following morning, at which point I was finally able to enter the new and improved Dojo for the first time, only to find that the room remained heavily occupied well into the early hours of the morning.

Here, we see the very same dimensions of play that are usually understood to be fundamental and unshakable barriers against the alleged prescriptive effects of branded toys and transmedia tie-in (Fleming, 1996; Kinder, 1991; Willis, 1991) actually being mobilized to foster commercialization. Most players were unaware of their complicity in a viral marketing campaign, and participated in the Snow-in with the same playful and experimental engagement displayed in the previous examples explored above. However, as with so many of the rule systems contained within these MMOGs, the relationship need not be explicit to be effective. Lack of awareness of the underlying purpose of the event did not diminish the extent to which players were manipulated by it. Quite the opposite occurred in fact. The campaign was effective in raising awareness because it was *implicit*; because it approximated emergence and spontaneous collaboration, rather than explicitly promote a specific user role or action.

Some *Club Penguin* players were aware of the tie-in much earlier on in the process than others. The real-world CCG was advertised on the online store page for several weeks before the Card-Jitsu launch, and its existence was even mentioned briefly in a developer blog post. However, neither of these subtle announcements revealed the furtive relationship between the CCG and the Snow-in, and neither was supplemented by overtly promotional content. At no point during the data collection did any of the players observed mention the CCG or even discuss the possibility that the Snow-in or Dojo might have a promotional facet. Awareness of the *Club Penguin* CCG was predominantly built through the viral marketing campaign, through the participation and curiosity of the player community, and through the feelings of emergence and collaboration that these events noticeably generated. It was only once player interest had been adequately built up and the in-game version had already launched that the real-world CCG was even mentioned within the *Club Penguin* environment. At this point, even if players were not impressed by the transmedia intertextuality of the real-world CCG, purchase of the product was afforded by the game design. The virtual Card-Jitsu game was programmed from the outset to give enormous advantages to players with the exclusive cards that came with purchase of the real-world CCG packs. The players were quick to identify this connection, as exclusive cards started appearing in an increasing number of battles.

Game Rules as Play Scripts

The tendencies toward divergence, transgression and subversion that are found throughout children's traditional play cultures have clearly carried over to the digital realm. As the examples above indicate, even in the most tightly structured and rule bound spaces, pockets of innovation and creativity can still be found. It is not always in ways that one might expect or even necessarily encourage (as in the "dating games" observed within *Barbie Girls*), but its presence is nonetheless notable in terms of what it says about the negotiated relationship between game rules and gameplay. As the current study confirms, children display a significant amount of agency and situated knowledge in their engagements with virtual worlds technologies. This conclusion is supported by similar arguments made by Giddings (2007) Fields and Kafai (2007),

Gauntlett and Jackson (2008) and various others, that players' action choices, emergent play, deviant behaviours and technological appropriations each fulfil a crucial role in the social shaping of children's MMOGs and other digital games. Accordingly, the examples outlined above are also consistent with many of the arguments set forth by Willis (1991), Kinder (1991), Fleming (1996, 2008), and Sutton-Smith (1986).

At the same time, however, the indelibly *programmed* nature of the virtual world environment, in combination with a virtual world governance system aimed at constraining player behaviour, are surprisingly effective in limiting gameplay to activities anticipated and afforded by the design. Just as Sutton-Smith (1986) and Kinder (1991) identified videogame design to be fundamentally more prescriptive and programmable than tangible toy design could ever be, the margin of manoeuvre contained within these virtual worlds is surprisingly limited. The limited action opportunities and chat restrictions contained within these worlds have a clear impact on the range of play activities and social interactions that players are able to engage in. Even subtle acts of user resistance are relatively rare and by no means representative of the majority of the play that unfolds within the children's MMOGs examined. Furthermore, because design rules are supplemented by the formal and informal governance systems that work to enforce social order within the virtual environment, engaging in activities that might be interpreted as "against the rules" can lead to suspension or outright ban.

Examples of user initiative found within *Club Penguin* and *Barbie Girls* are highly reflexive. In this context, reflexivity refers to in-game activities that are self-referential and exclusionary of themes and activities from outside of the constructed reality of the game world. While each of the examples described above deviates in some way from the norm, they nevertheless operate in direct dialogue with the game's underlying rule systems. The activities may contain elements of the type of spontaneity so often associated with free and unstructured imaginative play, but they are predominantly defined in reference to the game rules. Resistance is possible, but can only be enacted in terms of what is allowed by the tightly managed parameters set by the games' designs and other rules.

That the parameters themselves are so frequently the subject of the players' expressions of resistance and subversion provides further evidence of their prominence within the gameplay experience. It is reminiscent, for example, of Schwartzman's (1978) argument that many children's playground games contain subversive critiques of the social order, by mocking the authority of adults. Within digital games, where authority is largely relegated to the game's technological features, design restrictions become subject to comparable forms of subversion. Workarounds provide a key example of this reflexive dimension of user initiative observed within the case study MMOGs. Players devise workarounds in order to bypass both design limitations and expectations (as expressed by affordances and anticipated outcomes). The workarounds are illustrative of how players' encounters with game rules can sometimes lead to innovative use practices. They are also a key example of how subversive forms of emergent play can unfold within even the most basic of game designs. However, because they rely on emergent or unanticipated uses, which are already present within the design, they are

necessarily reflexive. This is particularly evident in examples such as the “boys dress all in black” workaround in *Barbie Girls*, or the “everyone in Green” game in *Club Penguin*, both of which highlight the games’ highly limited avatar customization features.

Not all instances of user initiative involve workarounds. A significant proportion of the “transgressive” play practices observed had more to do with make-believe and creative appropriation than with direct engagements with game rules or technological design. As the “goth girls” example demonstrates, and as previous research supports, a MMOG is much more than the sum of its design and rule systems. It is also the product of the players’ shared and negotiated interpretations of the game world, their unique applications of the action opportunities and customization features available to them, their make-believe stories and imaginative play. All of which unfolds within the parameters laid out by the game’s various rule systems.

Yet even here, user initiative is characterized by reflexivity, in that the make-believe play scenarios that emerge tend to reference themes and elements found in the game’s overarching (or sometimes underlying) narrative. The “goth girl” creations of AnnaFabulous27 may subvert the Barbie doll aesthetic, but it is perfectly in line with the game world’s emphasis on avatar fashion as mode of self-expression. Similarly the inability of the *Club Penguin* players to “stick to the script” in their enactment of “Fairy Fables,” is nonetheless consistent with both the play’s overarching “Fractured Fairy Tales” motif and with the game’s broader emphasis on experimentation. In addition to design affordances, the case study MMOGs thus appear to contain a number of narrative “affordances”—play themes and scenarios that are suggested by aesthetic and narrative features found in the game’s rooms, texts, themes and cultural references.

Within the games observed, design affordances, narrative affordances and play practices routinely overlap, albeit often in subtle ways. Additionally, the most prevalent overlaps are also those that tie in with some sort of cross-promotional initiative. In the examples above, for instance, avatar clothing may come to hold a variety of subversive and performative meanings for the player community. However, since access to avatar clothing is also restricted to paid-subscription players, as long as those meanings result in more membership fee payments, their promotional “script” has been realized. Similarly, the players’ participation in the ninja sightings and the events surrounding the Snow-in involved a considerable amount of make-believe and collaboration. However important these contributions were to the players’ sense of agency and community building, they ultimately also produced a viral marketing campaign that raised “world” wide awareness of a new tie-in product and resulted numerous purchases of a real-world collectible card game. Again, the script did not aim to control the themes of play, but rather to focus play toward an undisclosed promotional goal.

Within these MMOGs, the underlying play scripts are metonymic (Fleming, 1996). Similar to the dispersed and incomplete narratives that Fleming identified in metonymic transmedia intertexts such as *Star Wars*, the play scripts contained within *Club Penguin* and *Barbie Girls* function as a non-linear series of open-ended fragments, dispersed throughout the game environment, within the gameplay design, and through the action opportunities available. They emphasize liminal and flexible narratives that position the

player in an integral role of empowerment and active engagement. The importance of narrative in the construction of these play scripts is in keeping with Fleming's (1996) and Kinder's (1991) descriptions of transmedia intertextuality, wherein cross-promotional motives are sublimated to the infinite narrative potential of a truly "interactive fantasy."

Although the scripts contained within the design, rules and narrative features of the MMOGs are not prescriptive or even always explicit, they nonetheless perform a subtle and deeply effective function within branded virtual worlds. For one, they set the parameters and themes within which play will ultimately unfold. They also determine the moves, speech acts and props that make up players' in-game actions, with only limited room for emergence. Perhaps even more importantly, however, is how their prominence in the game world mobilizes the reflexive dimensions of user appropriation and innovation in order to construct new relationships between design features and gameplay. By embedding particular "themes" within the gameplay design and GUI, the player's subversive and transgressive behaviours are channelled towards outcomes that are largely consistent with those of the commercial game operators. The metonymic play script thus serves a dual function, as both an informal rule system and as a cross-promotional strategy.

Chapter 7: Discussion of Findings

While MMOGs technologies have the capacity to supply players with a wide assortment of action opportunities, including numerous possibilities for negotiation, subversive forms of emergent play and self-expression, the case studies are generally designed to minimize player autonomy while maximizing commercialization. Within these virtual worlds, the links between commercialization and design are intensified through technically enforced mechanisms of corporate control. As a result, the margin of manoeuvre within which players are able to exert individual concerns and use practices is significantly diminished. As the rules of play become technically mediated, control is wrestled away from the player and inserted into the technological design of the game. The spontaneous negotiation of rules and exceptions that is a possible (and indeed desirable) part of gameplay when a game is minimally mediated—for instance, when played between friends on a local playground—is reduced to a pre-determined number of possibilities or even removed completely once the game is digitized. As gameplay is transformed into an increasingly rationalized set of activities, scientific-technical norms and economic priorities become institutionalized at the technical level as well. As Marcuse (1968) suggests, technology “provides the great rationalization of the unfreedom [sic] of man and demonstrates the ‘technical’ impossibility of being autonomous” (p.158). Within the case studies, this “unfreedom” manifests itself in a variety of ways, from chat restrictions and design limitations, to the programmed advantages that are given to paid-subscription members.

Play scholars such as Kline (1993) and Sutton-Smith (1997) describe children’s play as a constant struggle between structure and agency, as a highly negotiated and ambiguous terrain. In this respect, children’s toy and game play is comparable to any other technologically mediated activity, in which technological artifacts are similarly envisioned as sites of struggle wherein various actors vie to determine the technology’s eventual meaning. Refocusing the analysis towards the dual-level approach outlined by critical scholars of technology (Feenberg, 1999; Wajcman, 1991) allows for nuanced and contextualized understandings of how MMOGs are both produced *and* consumed. This enables a more comprehensive understanding of the complex relationships that unfold between game rules, gameplay, and technology design. When this relationship is approached as a mutually constituted social practice, the players’ role in shaping and interpreting their own cultures of practice can be more adequately accounted for. The snapshots of play examined above confirm that even within the highly technically mediated context of a virtual world, play retains some subversive potential. As seen above, for example, rules prohibiting certain forms of speech—rules that are both described in the rulebooks and programmed into the chat system—can still be bypassed using workarounds and other forms of player initiative.

However, the adoption of a dual-level approach should not result in disregard for the underlying power relations involved in these processes. The analysis must also consider the political and social dimensions of technology, including the technical code that is reflected and reproduced within the games' designs and implementation. As the current study shows, within the terrain of commercial children's MMOGs, corporate interests stake a significant claim, yielding power and influence that substantively outweighs that of the players. These interests are embedded at multiple levels of the games' construction. They are not only articulated as design features but also reinforced in a number of the game's overlapping rule systems, including legal documents, rulebooks, packaging and narrative. Whereas some game rules are poorly enforced or otherwise easy to subvert, filling a largely discursive function, these particular rules are much more difficult to escape. For one, they often operate as fundamental features of the virtual world environment. Examples of this include the normative role that is assigned to transmedia intertextuality within branded MMOGs, as well as how designed emergence is used to advance cross-promotional strategies. These rules and design features represent the technical code of commercial children's MMOGs. As discussed in the previous chapter, they also generate a largely implicit yet nonetheless powerful form of play script, linking player practices to corporate interests in ever deeper and more complex ways.

The adapted notions of play scripts and technical codes applied above provide a useful way of thinking through the political and social dimensions of rule systems (formal and informal) found within the case study MMOGs. This discussion moreover lays the groundwork for broader questions about what emerging standards in children's MMOG design say about play and, more importantly, about the player. The focus of this final chapter is thus to consider how the play scripts examined in previous chapters not only shape gameplay but also "configure" the player in accordance with the games' underlying technical code (Akrich, 1992; Woolgar, 1991). Here, I will draw from previous work on "configuring the user," such as Taylor's (2006) analysis of how MMOG rules formulate the player, as well as the semiotic approach outlined by Oudshoorn, Rommes and Stienstra (2004).

Configuring a *Child* Player

The idea that technologies are shaped in part by the assumptions and expectations of their designers surfaces at various points in a discussion of the social and political dimensions of technical design. A more focused way of addressing this dynamic, however, is to examine how technological design processes "configure the user" (Oudshoorn & Pinch, 2005; Woolgar, 1991). Within technology studies users are most often understood as "configured" in a semiotic sense, as designers' assign specific competences, preferences and motives to the imagined future users of their designs (Akrich, 1992). Much like the technical code, these imagined users reflect the ideological biases and assumptions of the designers, as well as of the socio-cultural and institutional contexts within which technologies are designed (Suchman, 1987).

When applied to the study of MMOG design, Taylor (2006) argues that players are configured by rule systems, such as EULAs and rulebooks, aimed at limiting their participation in the cultural production of the game world. As explored briefly in Chapter 4, she argues that these rule systems “formulate” the player in four key ways—configuring them as “unskilled” or “unknowledgeable,” as “consumers,” as “(potential) disruptors,” and as “rational” or “selfish.” For example, Taylor argues that a key assumption driving MMOG governance is the notion that player populations will always (or at least eventually) have their share of “troublemakers.” She calls this assumption the “disruption model” of configuring the user and claims that it is:

Often invoked by designers to express their concern about the ways griefers, hackers, and cheaters can ruin a game (and in particular, their game) and other player’s experience. It can in its weaker version also express itself through concern that, if not carefully watched and guided into “fair play” structures (often embedded in elaborate Terms of Service and End User License Agreements), players are more likely than not to introduce troublesome elements (be they speech or play practices) into the game. (Taylor, 2006)

Taylor’s four categories provide a useful starting point for exploring how the play scripts contained within the case study MMOGs configure the player in specific ways. The prominent market rules identified in Chapter 5 support her argument that MMOGs configure their players as consumers. The rule systems contained within the case study MMOGs are comparably aimed at preventing players from “breaking the rules,” a broadly defined notion that includes everything from “being mean” to infringing upon corporate copyright claims. As suggested previously, however, the findings also indicate that when dealing with children’s technologies an additional formulation must be taken into consideration, in that the user is above all configured as a child. This impacts other categories of user configurations as well, as formulations of the player are further qualified by the deeply ideological set of assumptions that designers and marketers have about child users. For instance, although the case study MMOGs do configure their players as potential troublemakers, they also configure them as potential victims of disruption and other perceived threats. The games’ safety mechanisms, legal documents and rulebooks formulate a vision of the child player as a player “at risk” that overlaps with notions of the player as troublemaker in unique ways.

The significance of this overarching configuration of the user as first and foremost a *child* player is especially apparent when Taylor’s third category is considered. The notion that the user as “unskilled” and “unknowledgeable” takes on added weight when applied to “child players,” an ambiguous category at best, that often includes a relatively wide age range (e.g. “under 12s” or “six-to-eight year olds”) and varying levels of knowledge and literacy. Assumptions about children’s reading abilities, their prior knowledge of gaming conventions, their familiarity with genre and their understandings of legal mechanisms each contribute to the way in which the child player is configured by the rule systems of MMOGs. The special status that is accorded to children within contemporary western societies also influences how they are configured as the players

of rationalized games. Where a mainstream MMOG configures its players as “rational” or “selfish,” and thereby as able to conform to the rational and mostly competitive logic of the gameplay design, these same assumptions are rarely applied in the same way when children are involved.

Keeping these distinctions in mind, I propose that the case studies configure their players in ways that are both reflective of Taylor’s categories but also specific to children’s MMOGs. First, they configure the child player as indiscriminating, a version of Taylor’s “unskilled” player that both extends to a much broader spectrum of the games’ rules and design features, while taking into consideration important variations in children’s actual skills and literacies. Second, the player is configured as a consumer, assigned with subjectivities of consumption that reach into almost every aspect of the gameplay experience. The third configuration reproduces Romantic notions of child’s play as innocent, pro-social and inherently good, positioning the child player at once as a troublemaker, at once as a “nice” player, through the imposition of behavioural rules that aim to reduce the diversity of children’s play practices to those that best reflect idealized definitions of play. The fourth formulation is that of the child player at risk, wherein “safety” is defined predominantly in terms of restricted action opportunities and limited access to communication tools.

The Child as Indiscriminating Player

As explored above, the six case studies diverge significantly from mainstream MMOGs designed for teens and adults. As explored in Chapter 3, there are a number of possible motivations for this. For one, the case study games each represent an attempt to establish new market for MMOGs within demographic categories (children and girls) that have hitherto been left out of the mainstream market. Since the games are targeted to children, rather than teens and adults, they are bound to contain a different set of themes, design priorities and conventions. Rather than the usual themes of violence and epic adventure that shape so many fantasy MMOGs, these games are instead characterised by a shared emphasis on lightness, casual gameplay, positive feelings (such as happiness and kindness) and popular culture. More importantly, however, designing games for children requires additional considerations around issues of usability (intuitive GUI, clear and consistent feedback), literacy (instructions that take into account children’s widely varying literacy, vocabulary and reading rates), control layout and ergonomics (to accommodate for smaller hands, shorter finger span), and the users’ ability to “read” and navigate three-dimensional graphics (Antle, 2007; Allison Druin, 1999; Allison Druin et al., 1997; Subrahmanyam, Kraut, Greenfield, & Gross, 2000). Each of these additional considerations poses a unique design challenge that existing models and standards are not necessarily able to meet.

In making the substitutions, additions, simplifications and, potentially, innovations necessary to address the unique needs of the child player, the MMOG as technological artifact is inevitably drawn into a new iteration. By adopting a flexible conceptualization of MMOG as socially constructed, a number of the trends examined herein can be

understood as representative of the type of design decisions that arise when children are considered as a “relevant social group” (Pinch & Bijker, 1987). For instance, children play a significant amount of digital games, but they also play differently than teens and adults. Research demonstrates that vast majority of digital gaming that children engage is with online, free and casual games (“Amount Of Time Kids Spend Playing Video Games Is On The Rise,” 2007). Although children cumulatively spend a significant amount of time playing digital games, their individual gaming sessions usually only last for about thirty minutes (Roberts et al., 2005). The decision to design the MMOGs as browser-based virtual worlds (as was the case with all but one of the case studies) also means that the games are accessible from multiple points of access, which is amenable to the typical child’s daily routine of travelling from the home to school, to the library or afterschool clubs, to a babysitter’s house or to a friend’s houses, and then back home again. Similarly, the inclusion of mini-games and short missions, rather than the lengthy multiplayer missions found in other MMOGs, means that a typical child can complete a task within the time period of their average gaming session.

These particular choices, while divergent from the established norms, are thus much more in tune with children’s existing digital play patterns. In contrast, a traditional MMOG would require a designated hub or computer where the game can be downloaded, as well as increasingly significant player time commitments as higher levels (and more complex missions) are reached. The decision to make at least a portion of the games free-to-play can also be linked to increased access. It is significant that in each case, children can “try” the games and become quite deeply involved in the gameplay—accumulating currency, making friends, and attaining higher levels—without first securing a financial commitment from a parent. In terms of established marketing strategies for advertising to children and parents, this enables the game marketers to bypass parent (at least initially) and focus instead on instilling desire for the product directly in the child (Cook, 2001; Seiter, 1993).

Apart from enhanced accessibility and a new target demographic, however, there is little else about the games’ designs that can be justly described as user-centric or innovative. The gameplay contained within these MMOGs isn’t simply distinctive or even all that child-friendly, especially when the design limitations, glitches and other technical problems are taken into consideration. More importantly, however, the MMOGs’ general lack of technical sophistication and simplistic GUI positions them in stark contrast to the rich graphics, detailed storylines and expansive environments that have emerged as standard design features among contemporary commercial MMOGs (Castronova, 2005; Taylor, 2006c). In comparison with popular T-rated titles such as *World of Warcraft*, *The Sims Online* or *LOTRO*, the case study MMOGs offer minimal customization, fragmented game environments, unintegrated and limited play activities, as well as static GUI interfaces. The gameplay mechanics are crude and oftentimes “clunky,” delayed by time lags and program glitches. While there is no question that some of the case studies exhibit higher design standards than others, the general trend is toward simplistic game designs that exhibit very few of the conventions currently associated with MMOGs.

Particularly within the Social Arcade games (*Barbie Girls* and *Nicktropolis*), there is a clear lack of action opportunities or multiplayer features available. Although the argument could be made that this allows the players to generate their own play activities, through text-based make-believe play for example, there are very few ludic affordances available within the design to support player-driven innovations. As Breslin (2009) argues, there is an important difference between designing a game to be open-ended⁷⁸ and simply removing the usual affordances and structures that direct gameplay. He describes,

In general terms, if one removed the objectives of a game to produce unguided play, or lack of narrative, one would make a sandbox in some subtractive sense—but not a productive sense. True sandbox design means adding game behaviours which, in combination, produce interesting emergent behaviour, but is also means adding some reward for play. Emergence is good, but a free-play oriented framework is also necessary.

Within the case study MMOGs, the absence of a free-play oriented framework is marked. Even within *Club Penguin* and *GalaXseeds*, described herein as MMO Playgrounds for their relative emphasis on exploration and experimentation, affordances that promote and enable free-play are relatively limited. Once a player has explored the confined virtual landscapes and experimented with the various objects, there is little more to do until the next theme party or update. There is a noticeable lack of customizability, of action opportunities, of narrative elements, and of interactive features within these games. The limited design of the games also formalizes existing features and rule systems, while establishing top-down control, neither of which promotes much in the way of open-ended free-play.

There is an implicit assumption here that child players are indiscriminate and unsophisticated—content with empty rooms and undaunted by glitches, lags and other technical difficulties. There is also a supposition that the limited affordances, minimalistic GUI and restricted chat systems that are contained within the games' designs somehow provide adequate support for the type of play and social interaction that children engage in. These assumptions configure children's play, particularly their make-believe play, as simplistic, reflexive, and repetitive. The players are thus configured in a way that underestimates the complexity of their make-believe play and dismisses the possibility that they might engage in or enjoy richer conversations than the reflexive, and often quite superficial, chat topics that are made available to them.

The players are furthermore asked to reconcile a number of contradictions when it comes to their presumed abilities and literacy levels. On the one hand, child players

⁷⁸ It is here that the notion of "Sandbox" gameplay can provide a useful comparison. Sandbox games are designed to be open-ended, non-linear, and largely player-driven. Games such as *Spore*, *The Sims*, *Second Life* and *Grand Theft Auto IV* emphasize a "more-or-less undirected free-play"—open worlds in which players can diverge from the storyline (if there even is one to begin with) and manipulate objects, spaces and contexts in various ways to create their own game. Some sandbox games provide tools for user-generated content, enabling players to create their own virtual items, "mods" and even entire levels.

are assigned with limited skills in these areas, and are thereby positioned as in need of a more simplistic (and less demanding) game design. On the other hand, players are also expected to be undeterred by glitches and to be able to navigate through the games' fragmented and confusing infrastructure. They are expected to generate their own play activities, but are only provided with a few items, limited action opportunities and empty rooms. Players are furthermore expected to adapt to the games' narrow accommodation of children's actual and widely varying literacy levels. For instance, players are expected to communicate by scrolling through complex menus and sub-menus of pre-constructed sentences, while spelling mistakes are frequently omitted from safe dictionary chat systems.

Similar conclusions can be drawn from the analysis of the games' rulebooks and legal documents, as described in Chapter 4. First, these texts reveal a certain amount of user-centricity and sensitivity to the child user's particular needs and vulnerabilities. Although the rules of play contained within these documents reveal many of the same assumptions outlined by Taylor as indicative of how rules formulate players as "unskilled" or "unknowledgeable," the fact of the matter is that the intended users of these games do have varying levels of literacy. The games are targeted to elementary school aged children, which is a relatively broad age range encompassing players at vastly different stages of cognitive development and ability. As a result of age restrictions and other barriers contained within mainstream MMOGs, child players furthermore enter into these games with varying levels of familiarity with the genre and with gaming more generally. The games must somehow communicate the rules and expectations of gameplay to their players, especially new players, in a clear and broadly accessible way. The child-friendly language used in the games' rulebooks is a key example of how the game developers both configure and address their players as children. Within many of the MMOGs examined (all but one, *Magi-Nation*), this approach is extended at least in part to the games' legal rules, presenting key items from the privacy policy and terms of use in a jovial yet authoritarian writing style.

Again here, however, the games construct a problematic vision of the player's skill levels. For instance, not all of the items included in the privacy policies and terms of use are communicated directly to the players. This selective disclosure reveals underlying assumptions about children's literacy and about their ability to make informed decisions. As in other areas, children have widely divergent skills when it comes to issues of digital literacy, including awareness of privacy rights and authorship. Although numerous studies have found children to be quite competent in operating ICTs (Buckingham 2003; Holloway & Valentine 2003; Jenkins 2001), an equally impressive body of research shows that children lack the knowledge and skills to deal with many of the challenges, risks and responsibilities that accompany these technologies (Montgomery 2000; Kline et al. 2003; Rose 2003; Livingstone 2004). As Shade et al. (2005) demonstrate many children fail to comprehend even the basic Internet business practices (such as the use of Cookies). Similarly, a recent study conducted by Kafai (2008) reveals that most children and even teens have only a "naïve understanding" of how computer viruses work, which is often "influenced by mythological or

anthropomorphic perspectives; only a few were able to describe computational elements” (p.523). The gaps and inconsistencies in children’s digital literacy have important repercussions for the assumptions that are made about their ability to understand the implications of participating in a commercial MMOG, which invariably requires them to enter into complex legal relationships. However, not one of the case studies provides players with a comprehensive account of these implications. Instead, the emphasis is placed almost entirely on the players’ own responsibilities toward the virtual world owners and to other players (e.g. not to divulge personal information, thereby contributing to the game’s COPPA compliance).

The players are thus isolated from a significant portion of the games’ underlying regulatory and economic infrastructures. A thorough analysis of the rule systems contained within the case study MMOGs reveals that in most cases, the games’ privacy policies mostly reflect the larger regulatory requirements and social concerns that surround children’s games and digital culture. Yet, the analysis also reveals a number of instances wherein legal rules instead represent a political stance adopted by the games’ owners on regulatory issues that have not yet been resolved within the public realm. The ways in which they have elected to respond to these particular issues reveals as much about the way in which these rule systems configure the user as both unknowledgeable (e.g. children don’t understand legal terms and don’t need to) and indiscriminate (e.g. children agree to the terms because they have to in order to play), as it does about the covert prioritization of corporate interests.

Immediate examples include the near unanimous decision taken by the case study MMOG operators to dramatically limit children’s freedom of expression in exchange for technologically enforced COPPA compliance (through the restrictions on chat, for instance, as well as lack of opportunities to post original content), as well as the wide-reaching copyright claims over children’s data and ideas. Particularly troubling is the tendency within these texts to ignore children’s unique legal status as minors, by simply reproducing the same legal terms found in adult-oriented agreements. This demonstrates that children are granted very little (if any) special consideration in terms of how legal rules are formulated within these games. In this respect at least, child players are configured as legally responsible adults, albeit in ways that are never overly communicated to the children or their parents.

Within these rules and design choices, the political and the commercial overlap in subtle but significant ways. As affordances that would enable collaborative play are removed, they are frequently replaced with marketing features and other forms of commercialization. The games themselves are constructed out of a legal infrastructure that prioritizes corporate interests, including unmitigated copyright claims, and positions the player at an unfair disadvantage. Players of these games are expected to agree to stringent terms of use and submit to technologically enforced corporate control mechanisms, waiving their own basic rights in the process. Throughout the case study MMOGs, these dynamics are furthermore shrouded in paradoxical representations of the player—as a developing learner, as a self-sufficient generator of make-believe play, as an inexperienced gamer, as a crude conversationalist, and as a legally responsible adult

are just some of the examples identified. Underlying each these various representations is a deeply biased configuration of the player as an indiscriminating, undemanding and unknowing child. The child player is thus conveniently formulated as having only the most basic needs and interests as a gamer, but upon whom deeply complex relationships can be projected without question.

The Child Player as Consumer

For several decades now, the primary goal of the children's industries has been to find ways to integrate their products into the "social milieu of childhood" (Kline, 1993) and to become part of children's most intimate experiences. These strategies have been greatly facilitated by the unique properties of virtual worlds, wherein every interaction and activity can now be mediated through the transmedia intertextuality of the associated brand name or product line. As one Mattel executive stated at a recent conference in relation to *Barbie Girls*, "We really believe this is about providing a great new play experience with a brand they love that doesn't take away from the brand experience" (cited in Virtual Worlds News, 2008). Indeed, in licensed MMOGs such as *Barbie Girls*, *Magi-Nation* and *Nicktropolis*, the social milieu itself, along with the game environment and meta-narrative, functions as a branded space. Furthermore, the particularities of how children play and interact within this milieu are in large part dictated by corporate priorities, as these are translated into the game's code and rules of conduct. Through tightly structured game design and strict restrictions on inter-player communication, opportunities for player subversion of the site's promotional messages have been drastically limited.

As discussed at length in Chapter 5, the case study MMOGs are also spaces in which cultural practice becomes intimately intertwined with consumer practice. As Pybus (2007) describes, the underlying goal of much of children's digital culture is to "produce new subjectivities of consumption." Gameplay revolves around a continuous virtual shopping spree financed by the players' consumption of promotional materials and participation in both virtual and real-world economic relations. Social interactions are situated within digitized versions of traditional sites of consumption, including the domestic sphere (represented by the players' "bedrooms") and the commercial spaces of shops, cafes, pizza parlours and beauty salons. The games thus reproduce a domestic, consumption-oriented world, one that was traditionally associated with girls' toy culture and with "girls' bedroom culture" (McRobbie, 2000), but that is now found throughout the commercial children's culture. These worlds encourage players to participate in a celebration of the commodity form through a collaborative enactment (and performance) of consumer subjectivities.

Within the case study MMOGs, consumer subjectivities are often configured through the mobilization and appropriation of players' affective labour. The "Snow-in at the Dojo" is just one manifestation of the self-perpetuating feedback loop that is generated between players' interests and cross-promotional interests. Within this feedback loop, the players' affective labour can be mobilized in variety of ways that

serve to advance commercial interests. In the Snow-in example, players' engagement and game lore were channelled toward a new form of viral marketing so covert and well integrated that it would be difficult for consumers of *any age* to recognize it before it had run its course. Within each of the case study MMOGs containing a pay-to-play model, players' affect and social relationships are frequently mobilized to generate the use value of a monthly subscription. Through their engagements with pay-per-play items and activities, players are transformed into brand ambassadors.

These virtual worlds thus expand upon a trend currently found throughout the "web 2.0" commercial social networking environment, wherein users provide most of the content, which is then commodified and either sold to third parties as market research data or sold back to the users themselves in the form of subscription fees (Côté & Pybus, 2007). Within the context of virtual worlds such as *Second Life* and social networking sites *Youtube* and *Facebook*, this dynamic configures the user as a "prosumer," at once a producer and consumer of content that draws heavily on existing cultural texts (usually industry-generated), as well as the contributions of other prosumer users. Although the users' affective labour is mobilized in similar ways in the case study MMOGs, their productive capacities are not. Here, children's contributions are instead configured as *unproductive*, ephemeral and more or less irrelevant. Within the game worlds, opportunities for user-generated content (UGC) within the game world are minimal and tightly controlled by the game operators. Children's in-game contributions have almost no impact on the game environment, in-game items or GUI, and only appear to be incorporated into the overarching narrative when it serves a greater marketing purpose. Players' interactions with game items and landscapes are limited to the manipulation of pre-existing, corporately manufactured objects, avatar customizations and environmental features. Customization of these features is predominantly limited to choosing a colour or pattern from a limited palette of options. Furthermore, most of these items are presented as virtual commodities, some of which can be "purchased" using in-game currency and some of which are exclusive to pay-to-play members. In either case, the players' access to tools and customization features is framed as a consumer relationship.

The reconfiguration of the prosumer subject position in favour of a more passive form of consumer subjectivity points to a further contradiction in the way in which the players of these games are configured. Despite the limited opportunities for direct participation in the creation of in-game content, players' input is nonetheless formulated as intellectual property within the games' legal rule systems. Through a combination of TOS agreements and market research imperatives (as exhibited by the games' owners both in-game and throughout the children's industries), the games configure the players as the unacknowledged producers of vast amounts of copyrighted data. As discussed in Chapter 4, intellectual property claims over player contributions are contained within the TOS agreements and EULAs of most commercial MMOGs. They also represent one of the key ways in which MMOGs enrol their players in complex, and often hidden, economic relationships.

In addition to creating a contradictory formulation of the child player as both implicitly productive and explicitly non-productive, these rules also provide a provisional resolution to a legal debate that has yet to actually unfold within a public domain. Emerging questions about children's authorship and intellectual property rights have not been adequately addressed within legal forums. While both academics and players have debated TOS and EULA contracts at length, to date this debate has focused almost solely on adult players. It has thereby avoided addressing how the questions raised by the introduction of UGC within corporately controlled digital culture are complicated by minors' special legal status. Nonetheless, the corporate owners of virtual worlds and MMOGs have attempted to pre-empt these questions by claiming full ownership rights over all user submissions, including "practices of distributed agency" (Herman, Coombe and Kaye, 2006) and inter-player communication. Perhaps because children's culture has traditionally contained very few opportunities for children to engage directly in widespread cultural production, these claims have been allowed to continue unchallenged.

The corporate owners of children's commercial culture will continue to have an enormous advantage over child users. Although child players may resist commercial imperatives and corporate copyright claims within their individual experiences, opportunities for children to enact forms of resistance are greatly limited. Children's ability to assert their participatory and authorship rights are undermined by the fact that most children are unaware of—and often unable to fully comprehend—the underlying economic and legal mechanisms of commercial culture. For example, Shade, Porter and Sanchez (2005) argue that many children fail to understand that websites are commercial enterprises, and often imagine that their favourite online destinations are created by benevolent individuals in order to entertain them (a notion that is often propagated within the sites themselves). The research also suggests that children have serious misconceptions about privacy rights and intellectual property issues. As Gillespie (2009) describes, public and industry discourses place a much heavier emphasis on children's copyright infringement than they do on questions of child authorship and ownership. The ambiguity around children's authorship is thus exploited within the games' legal rule system, which is further used to legitimize dubious business practices.

In addition to configuring the child player in an exploitative exchange of immaterial labour, the case study MMOGs contribute to the systematic enclosure of children's play culture. The games' stringent copyright policies are significantly reinforced by the lack of action opportunities available in the game designs, in that neither rule system allows for much in the way of creative subversion of the games' associated media brand or "transmedia intertextuality" (Kinder, 1993). The transformative potential of play, long heralded as an irrepressible mainstay against the structuring potential of play scripts, is diminished. As explored in Chapter 6, this is primarily accomplished through the containment of play's subversive potential within a set of technologically enforced, commercially controlled parameters of the games' designs and rule systems. Moreover, the resulting enclosure of children's culture, as well as of children's access to the contents of their shared cultural experiences, significantly

threatens to undermine children's cultural rights, including their right to fair dealing and right of the child to "participate fully in cultural and artistic life" (Article 31, no.2).

Child's Play as "Playing Nice"

Given the strict enforcement of rules found within the case studies, it is easy to see how Taylor's conclusion that players are configured as "troublemakers" can be extended to children's MMOGs as well. Many of the items listed in the games' rulebooks and legal documents describe activities that are forbidden, illegal or otherwise unsanctioned within the context of the game environment. Players are warned that engaging in these sorts of activities will lead to suspension or even expulsion from the MMOG. A number of these restrictions are furthermore enforced by the game design, appearing as safety mechanisms or other technological delegations. To a large extent, the players of these games are configured and disciplined by the games' underlying rule systems as potential (or even likely) rule breakers. However, there is another way to approach this particular configuration of the player, by instead focusing on how the prohibitions simultaneously provide insight into the game developers' ideas about appropriate or ideal player behaviour. By examining those play behaviours that are implicitly and explicitly defined within the rule systems as the desired alternatives to rule breaking, we can begin to deconstruct the type of play that is most heavily afforded within commercial children's MMOGs.

As explored in Chapters 4 and 6, within the case study MMOGs the type of play that is most frequently positioned as favourable or appropriate reflects a highly idealized vision of children's play, accentuating "niceness" and simple exchanges focused on themes deemed relevant to the game world. This particular vision of children's play draws on long held assumptions about children's leisure, which in turn reproduce the same Romantic notions about childhood that have influenced so much of children's culture, policy and social standing within contemporary western societies. By designating those activities that do not conform to Romantic idealizations of play—such as bullying, cheating and "inappropriate" talk—as deviant and forbidden they become configured as outside of play. This narrow classification of player behaviour ignores the profane dimension which, as the works of Schwartzman (1978) and Sutton-Smith (1972) demonstrate, is a crucial element of children's play.

As Schwartzman describes, children's play is not always "prosocial" but may often "seek to challenge and reverse the social order" (p.124). Rather than merely mimic and reproduce social ideals, many of children's playground games "model" the dominant social system in order to then symbolically destroy it. Both Schwartzman and Sutton-Smith see these antagonisms of social structure and power relations as an important source of innovation, resistance and transformation—despite the fact that they often manifest in ways adults find distasteful, unacceptable and even dangerous. It is within the profane dimensions of play that children have traditionally found a forum for commenting and criticizing hegemonic culture. Through "satire and parody, caricature and burlesque" these play forms invert, transgress and often "subvert the existing social

system" (Schwartzman, 1978, p.126). This includes social expectations, gender norms, game rules and other sources of authority. Within the previous literature on branded toys, children's ability to subvert and invert play scripts is similarly described as evidence of the transformative, unstructurable nature of play. However, through both the configuration of non-authorized play forms as deviant (i.e. against the rules), as well as through the restriction of deviance through design limitations, the case study MMOGs have effectively contained (and diminished) much of this subversive potential. Additionally, although the games' underlying commercial structures are obviously among the most powerful sources of social order circulating within the game worlds, their authority is obscured through delegation. On the one hand, authority is delegated onto technical features and thereby "imposed" by the game design. On the other hand, authority is delegated onto safety mechanisms that are understood to be "under the control" of the child player's parents.

Despite the limited action opportunities available to them, players of the case study MMOGs do manage to engage in some subversive practices, transgressing beauty ideals through the adoption of "goth girl" aesthetic in *Barbie Girls*, and creating an unauthorized black market for in-game items and labour in *GalaXseeds*. Furthermore, some of the games allowed for a broader range of subversive and critical behaviours than others. Players of *Toontown*, *Club Penguin* and *GalaXseeds* could tell other players to go away, and a certain amount of experimentation and pushing the boundaries was afforded in the game designs. Meanwhile, *Barbie Girls* players could not communicate any form of dissent without the use of workarounds. For the most part, however, only limited expressions of subversion are allowed, while compliance to loosely defined play scripts is privileged and encouraged at almost every level of the games' designs and narratives. Overt forms of transgression are described in ambiguous yet negative terms, such as bullying, being "mean," cheating or breaking the rules. The player is thus encouraged to adopt the preferred subject position of a nice and well-behaved member of the game community, which is positioned in contrast to the deviant bullies and cheaters described in the rulebooks.

The Child Player at Risk

The translation of regulatory requirements and market-driven incentives to appease parental concerns about children online into a particular configuration of design features, game rules and commercial discourses presents a particularly compelling example of the technical code of children's MMOGs. As examined above, all six of the case study MMOGs contain "safety mechanisms" as part of their efforts to ensure the protection of children's "safety" within the context of the game worlds. This includes several precautionary measures, foremost among which is the use of restricted chat systems. Concurrently, the games contain rules and quasi-legal documents that respond directly to regulatory and legal concerns about children's privacy, an issue that is also framed as a safety concern within the games' textual components. The fact that these features are represented as safety mechanisms has a number of important implications. For one, this facet of the games' design and implementation configures the player as "at

risk.” Here, the player is depicted as a vulnerable child who must be protected from other players and from themselves through strictly imposed and oftentimes technologically enforced rules designed to weed out any “unsafe” speech or behaviours.

In addition, however, the mobilization of safety discourses demonstrates the incorporation and subtle manipulation of parental concerns, as well as a response to children’s needs. This includes both everyday parental concerns for their children’s wellbeing and interests, as well as media-fuelled fears about the various risks (perceived and real) associated with children’s internet use. The ambivalence that often surrounds children’s relationship with ICTs is strongly evoked within the texts that describe the games’ safety mechanisms and privacy policies. Concurrently, however, parents are given reassurance that corporate governance provides an easy solution that effectively addresses these safety concerns. In this way, the games and associated texts do not simply configure the child player as “at risk” but also use this formulation to furthermore configure the child’s parent as a responsible and informed guardian. A clear example of this is the way in which parental consent is addressed within the games’ rule systems. For instance, in addition to the parental consent requirement included during registration as well as part of the games’ privacy policies and TOS contracts, three of the rulebooks include a rule about securing parental permission. As childhood is a traditional site of familial and social disciplining, this item represents an affirmation of parental authority and involvement. That verifiable parental consent is not in fact required by the technological design of the game worlds becomes secondary to this discursive function.

Within this discussion, it is useful to remember that products targeted to children are frequently targeted to parents (and other caregivers) as well. Children’s media scholars Seiter (1993), Cross (2008) and Ito (2002) document a long history within the children’s industries of applying dual-levelled marketing strategies aimed to appeal to both children and parents, highlighting the product’s fun and empowering qualities on the one hand, while emphasizing its instrumental or educational value on the other. This strategy can be seen as deriving out of a tacit acknowledgment that children are both social subjects as well as social objects within market processes. As Cross (2008) describes, “When advertisers, marketers, designers and retailers imagine children as consumers they also place great effort into knowing the worlds of mothers” who perform much of the “purchasing, preparing, gifting and provisioning of goods and services” upon which children’s consumption relies (p.232). Within this dynamic, children play multiple roles, both “as subjects who have knowledge of and desire for consumer goods and as objects of adult affection, caring and concern” (p.235).

Rather than approach ‘child consumers’ as miniature adults, who despite their financial dependence enter into the marketplace as autonomous individuals seeking to fulfil a particular set of needs and desires (rational, socially constructed, manufactured or otherwise), Cross argues that children should always be seen as interdependent economic actors who are directly and indirectly engaged in practices of “co-consumption” with their parents (especially mothers) and caregivers. This approach enables a deeper understanding of the complex relationships that form between children, parents, producers and marketers, by positioning the actors involved “as

interacting beings embedded in social ties” (Cross, 2008, p.237). In the case of MMOGs and other online activities, where the game operators must address a myriad of special ethical and policy requirements associated with hosting an online space for children under the age of 13 years, the integration of family and market relations is all the more apparent in its configuration of the player as *child*.

Thus, while each of the games features multiple discursive mechanisms aimed at attracting and configuring child players, they also contain features targeted explicitly at parents, including the parent pages described above and the safety mechanisms explored below. Both types of features operate in confluence in the configuration, packing and positioning of the games and their users, and as such warrant parallel consideration. The notion of co-consumption is furthermore compatible with Cowan’s (2001) “consumption junction” approach, which similarly approaches consumption as a network encompassing a myriad of social relationships, familial obligations and acts of reciprocity.

Within the case study MMOGs, the balancing act involved in co-configuring the “co-consumption” of child players and their parents is primarily accomplished through a strategic targeting of contemporary family dynamics. The unprecedented levels of access enabled by digital technologies challenges traditional notions of childhood as a distinct and separate realm of existence. Thus, while digital technologies enjoy powerful and highly positive associations with technological progress and individual success, they also represent the dissolution of many of the boundaries meant to shield children from the harsher realities of the adult world. The unbounded nature of digital technologies allows children to transcend—albeit virtually—many of the spatial and cultural parameters designed to contain them within the protected spaces of the home, schools and other domesticated environments (Valentine, 2004). As these barriers are destabilized, fears and concerns associated with public space resurface vis-à-vis the digital realm (Jenkins, 1998).

Digital technologies further weaken traditional forms of authority by eliminating, or at the very least straining, adults’ once-exclusive hold over specialized knowledge and technical expertise (Livingstone, 2005; Rushkoff, 2006). As with so many domestic technologies, the average layperson’s knowledge of the components and contents of virtual worlds is quite limited—leaving their deeper mechanisms (and implications) shrouded in a certain amount of mysterious, somewhat threatening ambiguity. Adults’ lack of knowledge and familiarity becomes amplified in contrast to children’s apparent adeptness with digital tools (Banet-Weiser, 2004), as well as their early adoption of emerging technologies.

The discourses of risk, safety and parental control that envelop the case study MMOGs can therefore be seen as calculated interventions in a climate of shifting family dynamics. While the games are designed for children, they are simultaneously promoted to parents through their positioning as family-friendly alternatives to the (potentially) dangerous technologies at the centre of the moral panics about children and ICTs. Terms such as “safe” and “educational,” which frequently appear in ads for technological products designed specifically for children, are used to advance a market-based solution

to these otherwise unresolved questions. Although the application of these terms within commercial discourses is variable and often arbitrary, they are also mobilized in ways that prey upon parental anxieties. Throughout this exchange, commercialization is positioned as a necessary trade-off for ensuring children's wellbeing.

Of particular relevance is the way in which the explicit privileging of one need (perceived safety) over another (social interaction) constructs a false dichotomy between two otherwise compatible interests. The implication here is that children's safety can only be attained through the suppression of children's own freedom of expression. Yet, as explored in Chapter 4, most of the safety mechanisms contained in the case study MMOGs also represent the easiest and most cost effective way of ensuring COPPA compliance. Blanket restrictions on inter-player chat reduce the need for live moderation and verified adult authority, just as reduced opportunities for UGC affords player engagement with *corporately* produced features. Furthermore, even though the game operators promote their virtual worlds as safe havens, they are careful to distance themselves from responsibility when it comes to actually ensuring children's safety. When it comes to accountability and liability, the legal rules are clear—children and their parents are really only “protected” only insofar as they are willing and able to protect themselves.

It is clear that delegating the important task of enforcing safety rules onto a technical system alone produces numerous problems in terms of how the spaces are defined and how they are used. This finding is supported by the observations described in Chapter 6, which reveal the distinct player norms that have emerged out of the different approaches to player governance that have been adopted within *Barbie Girls* and *Club Penguin*. In *Barbie Girls*, an overly restrictive game design paired with loosely enforced rulebooks appears to have cultivated a player community that is heavily focused on pushing the boundaries of acceptable or “nice” play. The players' use of workarounds did not once initiate an observed response from the game's operators. Although *Barbie Girls* contained many of the most strictly articulated rules about speech and player interactions, these rules were not enforced beyond the implementation of a safe chat system. While *Barbie Girls* did feature the most restrictive chat system, it also appeared to invite the largest volume of workarounds and “inappropriate” talk from the players (here defined as involving topics that were explicitly prohibited in the game's rulebook).

Other rules, such as the vaguely defined behavioural rules about “being nice” or “being mean” found in the games' rulebooks, are inconsistently addressed (if at all) within the games' designs and governance. The player community also demonstrated a high tolerance toward transgression, adopting individualistic responses rather than developing and enforcing group norms. As in the examples described above, when confronted by an antagonist or propositioned by an unwanted suitor, many of the players opted to either negotiate or leave the room. Without the “adult supervision” of a formal governance system, *Barbie Girls* players are largely left to their own devices to manage the disruptive and deviant behaviours of other players. As reporting another player

means not only contacting an adult authority but also actively drawing them into the game world, it is understandable that players might hesitate to use this feature.

In contrast, in *Club Penguin* players' in-game behaviours are not only governed by a 24-hour moderator service but also monitored by other players and "Secret Agents." Over the course of the study, it became clear that a multi-modal approach has allowed for a strict enforcement of certain rules of play, through which immediate action can be taken to halt behaviours defined by the players *themselves* as inappropriate or unwanted. First, *Club Penguin* has moderators and an easy to use system for reporting abusive behaviours. Second, players are not required to leave the game world in order to report risky or unsanctioned behaviour, and can do so anonymously by activating a highly visible "Moderator" button that is integrated directly into the GUI. Third, and perhaps most importantly, reporting disruptive players has been incorporated into the gameplay and larger narrative of the game world. By offering players the opportunity to become the official protectors (and unofficial moderators) of the player community, *Club Penguin* has created a virtual equivalent of the Neighbourhood Watch program. The player community has assumed shared responsibility for ensuring that the game environment remains "safe," which in this context becomes a concept that is defined by the players almost as much as the game operators. Finally, because the rules are largely enforced by humans rather than automated systems, more room is allowed for the darker themes and conflicts that are often characteristic of children's play. While this raises a number of important issues for the moderators and players involved—including questions about how to avoid discrimination and oppressive forms of social disciplining—the direct participation of the users opens up the possibility of a democratic resolution.

As in other instances of "co-consumption," it is important to remember that notions of the child player "at risk" permeate children's cultures as well as those of parents. Research indicates that children are well aware of the many risks associated with their internet use, not only through exposure to public discourses and online safety awareness campaigns, but also through firsthand experiences encountering risk online (Livingstone & Bober, 2006). As research conducted by Livingstone and Bober (2006) demonstrates, "despite their considerable enthusiasm for the internet, children, like their parents, also worry about the internet" (p.12). Among children and teens aged 9 to 19 years, a significant proportion worry about "being contacted by dangerous people" (48%), worry about "getting a virus" (44%) and worry about "others finding out things about you" (38%) (p.12). The safety mechanisms and discourses found within children's MMOGs are meaningful to the child player as well as their parents. The configuration of the child "at risk" must therefore be understood as operating within a complex relationship that configures both the child and their play (at least ideally) in dialogue with deeply ideological notions of "safety."

Given the right workarounds and a sufficient lack of live moderation, players are clearly able to enact the very behaviours the safety mechanisms were designed to prevent. While *Barbie Girls* provides an illustration of the ineffectiveness of a commercially driven technologization of "child safety," *Club Penguin* offers a useful

counterexample. However, within both *Barbie Girls* and *Club Penguin*, wherever they are afforded the space to do so, players assume these subjectivities of risk and safety in a process of continuous negotiation. Child players appear to allow for the possibility that using action opportunities to annoy another player can be as legitimate (and fun) a practice as using the features to bond. When players are empowered to make decisions about the social norms and behaviours that will or will not be accepted within their virtual world community, their choices often reflect a much more nuanced understanding of the importance of “profane” play. In at least some cases, they also demonstrate a surprisingly sophisticated ability to negotiate and respond to rule breaking and other forms of disruptive behaviour. With an adequate support system in place, comprised of both technological affordances and live adult assistance as in the case of *Club Penguin*, the very risks that most frighten parents and children are minimized.

Conclusion

In comparing the games’ rule systems with the various ways in which the player is configured by the games’ designs and narratives, a tension is revealed. Namely, the games exhibit an underlying tension between corporate governance goals, design decisions, and player norms, which manifests as a series of contradictions. These contradictions surface as conflicting configurations, such as the above mentioned notions of the child player at risk and as the source of risk, as well as through formulations of the child player as both consumer and producer of the game world. As was the case with play scripts, rules and configurations yield the most power when they are articulated at multiple levels of the game’s construction.

For the most part, discursive classifications of particular behaviours (or of particular players) as either within or outside of the ‘game rules’ are not supported by the design. While these delineations provide an invaluable resource for identifying the intended (and unintended) uses of children’s MMOGs as an emerging technological form—its technical code, play scripts and user configurations—the disconnect that exists between discourse and design, along with the vast differences that separate the six case studies analyzed, problematizes a number of the conclusions outlined herein. Nonetheless, there is a particular theme that emerges again and again within the findings, which allows for a conclusion that presents itself as beyond repudiation. Namely, that throughout the games, their rules and configurations, and even their players’ practices, a powerful desire for corporate control over children’s play and digital culture is apparent. So too is the consistent and overarching pattern of removing opportunities for player interaction and creativity so that these may be replaced by and confined to cross-promotional content. In the absence of proper regulation, ethical industry standards, or concerted public attention, a corporately determined vision of play is being used as a Trojan horse for the infusion of extensive levels of commercialization into children’s digital culture.

Conclusion: Digitizing Bedroom Culture

The current study reveals that even in the early stages of development, children's MMOGs already demonstrate a number of patterns that have significant social and political implications. In keeping with broader trends identified as characteristic of the children's digital landscape, the case study MMOGs are all owned and operated by key players from within the children's industries. While the design features found within each of these MMOGs are fairly distinct, particularly in terms of the thematic contents and gameplay, each also places important parameters on what can and cannot be accomplished within these worlds. These parameters often produce deep contradictions, particularly when the case studies are contrasted with the opportunities for social play and participatory culture that are found in mainstream MMOGs. Although the case study MMOGs place a similar discursive emphasis on make-believe play and creativity, none of them provide adequate tools for the creation of content or the spontaneous exchange of ideas. For the most part, engaging in creative self-expression revolves entirely around purchase and arrangement of 'pre-fabricated' items. The games' designs, narrative and rule systems combine to construct powerful play scripts, which place a flexible, ambiguous and implicit set of parameters on player activity. While the play scripts do not dictate the contents of play, they construct a reflexive relationship between the players and the game's design. This reflexivity extends even into instances of subversive play and other forms of user initiative.

In determining what rules of play are contained within the case study games, the analysis revealed how a number of distinct yet overlapping rule systems are articulated at various levels of the game's design and implementation, from limitations and affordances, to rulebook restrictions, to legal documents and safety mechanisms. Overall, the rules of play place a significant emphasis on restricting inter-player interaction and channelling gameplay toward cross-promotional features, while limiting corporate accountability and responsibility toward the player community. Authority is often delegated to features of the technology design, which further obscures the underlying power relations that shape the game worlds and configure their players. When analyzed as interconnected components of a set of artifacts emerging out of specific socio-political conditions and institutional frameworks, these rule systems suggest a technical code that clearly privileges corporate interests.

The technical code of children's MMOGs works to expand existing corporate monopolies while extending the presence and primacy of transmedia intertextuality within children's play cultures. Although players enter into these worlds with a significant amount of distributed agency, which enables them to develop workarounds, engage in subversive forms of emergent play, and break the rules in a number of interesting and important ways, the impact of this particular resource is greatly limited by lack of access

and a narrow margin of manoeuvre. The small pockets of resistance that do arise among the player population are quickly contained and re-appropriated by the games' restrictive designs, rule systems and substantively indifferent commercial priorities. The paradoxes that are created within both the games' rule systems and within user configurations allow for a significant amount of the ambiguity that emerges out of gameplay. While players are largely left to reconcile these contradictions for themselves, the games are also consistent in providing (even affording) a commercial resolution. The contradictions that arise during gameplay, for instance when a space designed for imaginary play significantly restricts players' ability to express themselves imaginatively, are provisionally resolved through the adoption of subjectivities of consumption.

In comparing these conclusions to those reached in the previous research, a number of important consistencies can be identified. For instance, the current study found evidence of the same strategies found in almost every product of the "children's media supersystem" (Kinder, 1993), including transmedia intertextuality, pedagogies of consumption, covert market research, design specialization, and the exploitation of children's affect. In many ways, children's MMOGs are simply the most recent examples in a long history of corporate appropriations of children's play, yet another expansion of the commercial children's culture. In a larger sense, the relationships uncovered in the case study MMOGs are also reflective of processes that are currently dominating all of digital culture, such as the spread of corporate surveillance and cultural enclosure movements, the privatization (and monetization) of online forums and communities, and the corporate appropriation of personal data and UGC.

However, I propose that the findings outlined herein are particularly relevant to research in the area of the children's "bedroom culture." Here, bedroom culture is understood to reference a number of key studies in the area of children's leisure, not solely the foundational "girls' bedroom culture" study conducted by McRobbie and Garber (1976), but also the more recent examination of children's media-saturated bedrooms produced by Bovill and Livingstone (2001), as well Kearney's (2007) proposal that the technologically-enabled bedroom also serves as a "productive space" wherein children can engage in participatory culture. The current study reproduces many of the key findings of these more recent works, particularly in terms of the shared emphasis on the ways in which relationships between children's leisure and media consumption are transformed through their situatedness within the domestic sphere and through the introduction of technologies, specifically ICTs.

As in these previous studies, the incorporation of a new technological form (in this case, virtual worlds and MMOGs) within children's bedroom culture both reflects and reproduces larger social shifts and power relations. It is important to remember that the advent of child-specific MMOGs represents an important development in children's game design, as well as a legitimization of children's participation in web 2.0. Rather than confine children's engagement in participatory culture to explicitly "educational" purposes, these games supply children with an open-ended cultural forum, through which performatives, social interaction, mastery, negotiation, subversive acts, and a range of other play activities are allowed to unfold under a rubric of child-centred leisure

and fun. The games feature characters and themes that are drawn directly from children's shared culture. Players are encouraged to manipulate these features in a myriad of playful ways, personalizing their experience through colour selections and avatar customizations. As Bovill and Livingstone (2001) describe, along with the commercial dimensions outlined above, new additions to children's bedroom culture often represent "a vital yet taken-for-granted aspect of their daily lives which significantly enriches the variety of leisure opportunities open to them" (p.2).

As with other ICT artifacts, virtual worlds not only open up new and potentially rich opportunities for play, but also contain a promise of collaboration and creativity that has significant implications for children's participatory rights. Web-enabled technologies dissolve many of the boundaries that have traditionally prevented children from participating in cultural production, including the boundaries separating the public and the private sphere, as well as the boundaries separating adult producers from child consumers. By opening up the traditionally private and highly contained space of the "bedroom" to new forms of public and community engagement, the digitization of the children's bedroom culture enables important opportunities for cultural production (Weber & Dixon, 2007; Kearney, 2007) and community-building on a much larger scale (Boudreau, 2007). However, this opening up of opportunities extends to corporate entities and commercial relationships as well. As with the bedroom cultures described in previous studies (Bovill & Livingstone, 2001; Kearney, 2007; McRobbie, 2000), virtual worlds are also important sites of consumption. In fact, it is in examining this very tension—the tension that arises in the intertwining of production and consumption within users' engagements with media texts and other consumer products—that bedroom culture theory makes many of its most compelling contributions.

Unlike these previous works, however, the tensions that arise within commercial children's MMOGs are not limited to questions of perspective and meaning making. By focusing the analysis on artifacts rather than use practices, on virtual worlds rather than domestic spaces, the current study is able to provide a valuable glimpse into the importance of technological design, implementation and user management practices within children's *digital* bedroom culture. Here, technologies and corporate culture do not merely provide the ingredients with which children can produce their own *pastiche* or personalized assemblages of play and creative appropriations. Rather, design features and prefabricated content dictate the shape and contents of the game world, down to the range of action opportunities and which words will be available to players. Within the context of a MMOG, which is ultimately constructed or "shaped" through a collaborative process that involves players, designers and developers, the ability to contribute to the shared gameplay experience is crucial.

The case study MMOGs do provide players with opportunities for social interaction, transformative play and cultural participation. By positioning these opportunities within a virtual site of consumption, however, these productive dimensions of the emerging digital bedroom culture are reframed in primarily commercial terms. While it remains possible to negotiate these terms on an individual basis, the players' ability to negotiate the terms within the virtual world context or to engage with the terms

as a community have both been drastically limited. By determining the very *vocabularies* of play, the games are able to enforce a loosely defined but tightly controlled play script, so that even acts of subversive play and resistance (e.g. workarounds) are predominantly characterised by reflexivity. In so doing, they also resituate the wider traditions of children's bedroom culture, wherein the line between production and consumption remains ambiguous, within a more explicitly commercial context.

A key way that this is accomplished is through the alignment of gameplay with commercial priorities, such as cross-promotion and brand management. However, equally significant are the ways in which the games' designs are aligned with children's tangible bedroom experience. As Bovill and Livingstone (2001) argue, "[T]he media-rich child's bedroom is both a site of reception for commercial messages and a location for the display and use of leisure goods" (p.2). Accordingly, the "homebase" feature found in five of the six case study MMOGs, invariably depicted as the player's "home" or "room," reproduces this function of the bedroom as a place to display and use (virtual) items. It also reinforces traditional notions of the domestic as a key site of consumption. This particular alignment, which Steinlein (cited in Zipes, 1997) describes as the "domestication of the imagination," is a common theme within children's fairy tales, which often revolve around domestic ideals (nuclear families, domestic femininity, etc.). Zipes (1997) explains, "Narrative strategies of stories, particularly fairy tales, became ordered in such a way that children would become reconciled to the hierarchical structures in their daily lives and accept social arrangements as authoritative and just" (p.51). The games construct continuity between the children's bedroom and virtual bedroom, while establishing (and normalizing) the presence of the game's associated brands within each. The emphasis placed on the children's bedroom as a personal, customizable space also reflects the symbolic value that children's real bedrooms often carry. As Pasquier (2008) argues, "The bedroom territory—a personal universe expressed through specific cultural products and equipment—is highly relevant for children today. They increasingly restrict parental access to their spaces...by unofficially imposing a new rule of respecting privacy" (p.450).

Within children's MMOGs, the very concept of a children's "bedroom culture" is thus digitized. This not only increases the prominence of bedroom culture as a social practice but also fetishizes it, reconfiguring its use value in corporate-friendly terms. The games' themselves are designed in such a way that the links between bedrooms and consumer goods are furthermore extended to include new forms of consumption as well. Primary among these are the new "subjectivities of consumption" described in Chapter 5. The strong emphasis that is placed on the acquisition and collection of virtual items trains players to consume. The positioning of these activities as an integral component of role-play, make-believe and social interaction furthermore links "consumption to identity and happiness" (Carrington, 2003, p.90). Traditional associations between bedroom culture and consumption are also used to obscure the productive aspects of player's in-game activities and cultural participation.

The reconfiguration of children's bedroom culture as a form of consumer practice comes at a particularly crucial time. In the past two decades, children have gained

access to a vast array of technologies, online applications and transmedia products, very few of which have been beyond the reach and influence of the children's industries. Concurrently, a strained and tumultuous regulatory climate has produced very few safeguards for children's rights that have not come at a cost, including restricted access to otherwise appropriate social forums and MMOGs, as well as increased dependence on the corporations who increasingly serve as the gatekeepers of online culture. Despite these limitations, children have continued to engage in online culture, flocking to child-specific websites and forums in impressive numbers, and becoming early adopters of most online applications. Clearly, they have also sometimes bypassed age restrictions and technical barriers that might otherwise prevent participation. Yet, the fact that young children rarely have the technical knowledge and skills required to engage with complex technological systems at the level of design (such as hacking or programming code), has thus far served as a significant barrier to most children against engaging in the production and distribution of original content. While this makes children's well documented use of workarounds, cheats and rare instances of hacking⁷⁹ all the more noteworthy, it also highlights the potentially profound significance of the current generation of "web 2.0" tools and applications.

With the current shift towards UGC and participatory culture, children's often ignored role as contributors of online content is finally being acknowledged and, in some cases, facilitated. The introduction of child-specific UGC forums and virtual worlds represents an important step in cultivating an online culture where children's rights as cultural producers, as authors and as collaborators, are more adequately accounted for. However, as the current study suggests, this potential is diminished when realized within a commercial context that prioritizes cross-promotion and profits, as well as the reproduction of existing power relations, to the point of removing the very opportunities these new technologies are seemingly intended to produce. Unfortunately, existing legislation, both in Canada and the US, fails to provide adequate regulation and monitoring of corporate activities in the digital media environment. Both countries suffer from deeply fragmented regulatory frameworks, which have not been sufficiently adapted to address digital media convergence or children's shifting roles within a web 2.0-infused digital culture. In addition, both countries have traditionally adopted a protectionist, rather than rights-based, approach when addressing children's culture, which continues to be perceived of as something that is created for children by adults. Much of the existing regulatory infrastructure and surrounding public debate therefore assumes an adult producer on the one hand, and a more-or-less vulnerable child on the other. As governments in both countries are generally moving toward media deregulation, there is very little impetus for the children's industries to change course in their current mishandling of children's participatory rights.

Of course, given the opportunity (and margin of manoeuvre) to do so, children will continue to push at the boundaries, subvert the systems, and devise innovative user appropriations. Children's bedroom culture is a site of play and cultural practice, as well

⁷⁹ There are notable exceptions, of course, such as 13-year-old hacker AriX who developed iJailBreak, which bypasses service provider restrictions programmed onto the iPhone (Donovan & Katz, 2009).

as a site of complex negotiations of power in which the children themselves are actively engaged. However, it is a negotiation where institutional forces have the obvious upper hand. Furthermore, there is a strong likelihood that without concerted attention or resistance, the emerging patterns observed in the case studies could easily become a powerful *path of influence* in the development of this particular incarnation of MMOG technologies. As seen in the current study, a strictly enforced design and tightly managed user community has a noticeably limiting impact on the types of activities that unfold within these spaces, yet this configuration has nonetheless attracted an immense amount of participation, enthusiasm and revenues from the targeted child demographic.

These child players have already invested an enormous amount of affective labour in the worlds, producing fan communities and forming social relationships. The tight limitations on users' speech and activity may prevent players from mobilizing the more critical capacities of subversive play, but this is partially concealed by the feelings of experimentation and designed emergence that are evoked by the games' open-ended designs and customization features. The games' prominent structural features also appear to inspire highly self-referential forms of user initiative, which furthermore detract from the underlying commercial relationships that drive so much of the games' rule systems. Just as they have determined the "norms," industry standards and policy implementations across most aspects of children's digital culture, the children's media and toy industries are now redefining child-specific virtual worlds. More importantly, however, is that through a manipulative use of contradictions, inflated promises, delegated authority and hidden power relations, the children's industries are also effectively reconfiguring cultural participation as a new form of consumer practice, as yet another mode of transmedia intertextuality.

Despite the discourses of empowerment often associated with web 2.0 and UGC, there is no indication that increased user participation alone will lead to a more democratic culture. The North American cultural climate remains characterized by strong tendencies toward corporate monopolization, privatization and expanding copyright regimes. Within this climate, as Coombe (2003) describes, "Those who are seen to provide mere resources, data, or information to a 'common heritage' or 'public domain' are at a great disadvantage" (p.5). In the absence of adequate governmental regulation or the informed consent of the public, corporate interests have taken the lead role in redefining the foundational tenets of our culture, including authorship, ownership, fair dealing and the public domain. As users continue to engage in practices of distributed agency and share content online, the need for a formal acknowledgement and delineation of their rights (and responsibilities) as cultural producers, authors and consumers has become critical. This is particularly true of children, whose participation in the cultural production process introduces an entirely new set of issues, questions and responsibilities, with very little historical precedence to fall back on. As children's involvement in cultural production and media has been identified as a key entry point for the advancement of all children's rights, it is crucial that their emerging status as cultural producers be properly addressed, protected and fostered, within both regulatory frameworks as well as industry standards of practice.

Appendix A: Playing the Games

Before commencing the comparative analysis, and in order to provide adequate contextualization for the subsequent discussion of findings, a short introduction of the six case studies is called for. Over the course of the study period, and for approximately two years subsequently, I was a registered member and sporadic player of all six of the case study MMOGs. Hopping from one world to the next, I adopted the role of virtual intergalactic explorer and participant observer, learning the rules of each game and mapping out their diverse spaces and features for critical analysis. I soon discovered that each world has its own particularities, its own unique attributes and flaws, its own currency and language system. While over time I was able to identify numerous shared characteristics and patterns that would eventually reveal the MMOGs as fundamentally quite similar in design and function, my initial forays suggested significant thematic and experiential diversity.

Like other forms of children's media, the worlds place discursive emphasis on fun and excitement, high energy (with lots of exclamation points and raucous music) and saturated colours. In each world I adopted a new avatar along with an entirely new set of goals and priorities. My role, position and level of access within each world, first as a new player and later as an intermediate player, varied in accordance with a number of structural factors. Each game came with its own particular storyline, levelling system and means of classifying players into different groupings or social hierarchies (e.g. school, occupation, in-game "age," member/non-member, species, etc.). Furthermore, my position within each world was also subject to some extent to the evaluation of other players, in terms of the importance that each in-game community placed on their own distinctive versions of "social capital," such as the 'level' attained, the accumulation of wealth, membership status (paying member, V.I.P., etc.), or even the contents of one's 'inventory' (each player's own personal collection of virtual items found or purchased within the game). Nonetheless, over the course of the study, I was able to access the vast majority of the areas and features contained within each of the games, to experience multiple facets of the gameplay firsthand, as well as observe a significant number of interactions and events engaged in by the in-game player communities.

Club Penguin

In *Club Penguin*, I became a slightly chubby pink penguin in a snow-covered world preoccupied with seafood, parties and home improvement projects. Although *Club Penguin* is distributed across 109 servers (indicating its significant population size), the game world is restricted to a single island in the middle of the ocean somewhere off of Antarctica. Occupying a large section of the island is a small town devoted almost

exclusively to winter sports and leisure pursuits, complete with a skating rink, a snow fort field and a ski hill, as well as various stores, a coffee shop, dance hall, pizzeria and theatre. Each penguin also has their own personal igloo that they can renovate and decorate. The igloos significantly expand the game environment by providing additional spaces for hosting intimate social gatherings, games of make-believe, or full-blown house parties. Interspersed across the island are a variety of activity sites for Penguins to engage with, including numerous areas for site-specific role-playing (wherein clicking on certain objects will initiate a specific reaction from the object or environment), formal games of competition, and solo mini-games.

The *Club Penguin* community is highly developed, and players participate in the game's construction in a variety of ways. In addition to the round the clock moderator service provided by the game's developer, the players themselves are active in monitoring one another for inappropriate behaviours. Many players volunteer to be official 'Tour Guides,' showing new players around the world and introducing them to its many features. Most impressive is the players' commitment to the world's in-game newspaper *The Club Penguin Times*, which every day receives 30,000 submissions from players in the form of articles, poems, and artwork. According to *Club Penguin's* co-founder Lane Merrifield, *The Club Penguin Times* is read by at least two-thirds of the game's 6.7 million players, an audience share that far surpasses that of most real-world print newspapers (in Chmielewski, 2008).

Penguins are rewarded for some of these contributions in 'Coins', the in-game currency. They also (and primarily) earn Coins for playing mini-games. Coins are important because they can be used to purchase items (clothing, furniture, igloo upgrades, sports equipment and accessories), which are in turn a significant part of gameplay, as well as crucial for participating in the larger player community. Clothing and accessories enable players to distinguish themselves in a variety of ways—as a boy or a girl, for example, or in laying claim over a coveted role within a game of make-believe play. Occasionally, wearing a particular item can also “unlock” a special action that is not usually available within the player's otherwise limited action opportunities. For example, wearing a construction hat allows players to pull a jackhammer out of thin air and rigorously drill the ground beneath them. The world is continuously updated with new secrets to discover and hidden mini-games to play, and players are encouraged to explore and experiment with the space, items and emergent features of the game. Items are used as social capital as well, as a well-decorated igloo is more likely to attract party guests.

Club Penguin is also the frequent site of island-wide theme parties, during which the entire (GUI) environment is transformed. During the Medieval party, for instance, all the shops and lodges were altered to appear as medieval forts and castles, while the lighthouse became a wizard's tower surrounded by glowing purple crystals. Many of these theme parties are quite innovative in their use of the virtual world space, usurping the regular game rules and even the game mechanics for the length of the celebration, which often goes on for several days. With each theme party, a new assortment of costumes and accessories are introduced to the virtual item catalogue. Buying these

items allows players to participate directly in the events, by dressing up in a suitable costume or by decorating their igloos to reflect (and extend) the theme. All in all, the atmosphere is that of a year-round resort town, complete with street parties and free give-aways, spontaneous snowball fights, and a general sense of jovial light heartedness.



Figure 4: © 2008 Disney: Avatar (Grimstar) and the island nation of *Club Penguin*

The *Club Penguin* MMOG was originally developed by an independent Canadian game design studio, Club Penguin Entertainment, Inc. (formerly New Horizons, Inc.). However, in 2007 the Walt Disney Internet Group (WDIG) purchased it for a record-setting sum of \$700 million (\$350 million up front, with the promise of another \$350 million if the game lived up to Disney's expectations). Since its inception, the MMOG has operated on a monthly subscription model. It also offers a "non-membership" service, which is free-to-play but with significantly limited access to the game features and areas. Both Club Penguin Inc. and Disney describe *Club Penguin* as "ad-free," a feature that is used within public relations materials to justify the monthly subscription rate, and frequently appears as a key selling point in promotions targeted to parents. Indeed, for its first two years of operation *Club Penguin* operated purely as an original property, without much emphasis on cross-promotional media or licensed products. Following Disney's purchase of *Club Penguin*, however, the MMOG has developed into its own media brand, with numerous tie-in toy lines (including plush toys and action figures), a trading card game, and a Nintendo DS handheld console game, *Club Penguin: Elite Penguin Force*. Each of these cross-promotional initiatives is furthermore linked back to the virtual world through the use of "special codes." For instance, *Club Penguin* action figures come with a code that unlocks special avatar costumes and Coins that can be used within the game world. The MMOG currently has several more tie-in projects in the works, and recently ranked seventh on a list of the world's most profitable MMOGs ("How Do MMOs Make Money?" 2009).

Magi-Nation: Battle for the Moonlands

While visiting the dreamy, watercolour world of *Magi-Nation: Battle for the Moonlands*, I adopted the role of an apprentice 'Magi' (a type of warlock) from the Orothe Region. Gameplay starts with an introduction to the "History of the Moonlands" (both a short and a long version are available), which involves an elaborate tale of magic and deceit that describes how the once united and peaceful Magi were torn from their home world by the evil Invaders and the traitorous Shadow Magi. Although the Magi and their Dream Creature allies ultimately thwarted the Invaders, the Magi home world was lost forever. They now dwell behind the protective shield of the Dream Barrier on the planet's former moon, dispersed across four Regions with very unique properties. Meanwhile, the former leader of the Shadow Magi, Agram, who was imprisoned for three thousand years in the moon's Core as punishment for his betrayal, slowly plots his return. As Agram amasses a new army of minions, it is becoming clear to the elders of the Moonlands that an old threat is re-emerging. Brave, young Magi are now called upon to prepare meet this threat with a force of their own. It is only by finding and taming wild Dream Creatures, the ancient allies of the Magi, that a new generation of Magi apprentices can hope to gather enough Dreamstones to prevent Agram's escape from the moon's Core. The History of Moonlands thus sets up an epic backdrop for a quest-based game world, where players advance through the various levels and regions of the Moonlands by engaging in turn-based battles through which wild Dream Creatures are tamed into submission and added to the Magi's growing army of magical creatures.

Each one of the regions of the Moonlands is aligned with a different elemental magic, including Water, Life (instead of Fire), Wind and Earth. The name of each region is also the name of its people, or race, as well as the particular "School" of magic that is practiced there. The Orothe are aligned with the Water element, which is expressed in the make up of the Orothe underground (which consists of coral reefs), the type of spells available (such as "Tidal Wave"), and the sea creature appearance of our Dream Creatures (which resemble Octopi, Giant Squid and other ocean dwellers). Players level up by accomplishing "quests" within each of the four regions. The quests consist of dungeons, similar to those found in the *Pokémon Mystery Dungeon* handheld console games and various other RPG games. The dungeons are each different, but essentially operate as mini-games in that they are both self-contained and single player. There are four general types of quest available in each region, which players complete in five progressively difficult levels. The quests themselves are very similar from one Region to the next, with the only distinctions being the look and feel of the environment (for example, instead of coral reefs the Earth Region features mushroom filled caverns), the difficulty level and number of Dream Creatures encountered. In order to complete quests, players have access to battle-oriented virtual items (potions, temporary level ups, etc.) and "gear" (avatar clothing and weapons that give the player special skills and strengths). As is typical of RPG games, using the items and gear effectively involves strategic planning, including balancing and compensating for skill levels, equipping suitable gear items for different opponents (for example, Water magic is strong against

Earth magic, but vulnerable to Life magic), equipping and levelling up Dream Creatures, and maintaining an adequate health status.

What is particularly unique about *Magi-Nation* is its two-tiered virtual market system. As players complete quests, they are rewarded “Moons” (an in-game currency) and “Moon Items.” Moon Items fall into the two categories of “Aegis,” which consist of weapons and other gear, and “Artifacts,” which are finite items that can only be used a limited number of times during battle (as a weapon or to gain a temporary skill boost). Players need both types of items in order to complete the increasingly difficult quests. As players accumulate Moons they can eventually start to select and purchase their own Moon Items from vendors located throughout the Moonlands. However, the majority of the vendors’ inventories are dedicated to “Gem Items,” which can only be purchased using “Gems.” These Gems, in turn, can only be obtained through real money transaction (RMT) available through the game’s website, using a real world credit card. In comparing Gem Items with Moon Items, it is immediately apparent that the Gem Items are not only more varied, but bestow much greater advantages and powers than the Moon Items. For example, players can “learn” spells (by virtually purchasing them using Moons) to restore a small number of health points, but are otherwise unable to boost their health status during a quest. The only way to restore larger amounts of health during battle or in the midst of a quest is by purchasing a health potion artifact. However, the only health related artifacts are Gem Items. Although this might not be an issue in the early stages of the game, it becomes increasingly problematic as the player moves into the higher levels, where quests take much longer to complete. Eventually, it becomes tediously difficult to continue levelling up without the assistance of Gems and Gem Items, and attaining the highest level (or “level cap”) appears to become a matter of luck rather than skill.



Figure 5: © 2008 Cookie Jar Ent.: Avatar (Grimlie) and scene from the Moonlands

The *Magi-Nation* game system and overarching narrative are arguably much more intricate than any of the other children’s MMOGs reviewed. However, the game is also a tie-in to a larger media brand and reproduces many of the existing property’s established game rules, conventions and storyline. The *Magi-Nation* brand (a play on the

word “imagination”) began as a fantasy-based collectible card game (CCG), which launched in 2000 under the name “Magi-Nation Duel.” While the rules and gameplay of the CCG are similar in style to *Pokémon* and *Yu-Gi-Oh* (two children’s media brands that also started as collectible card games in the mid-1990s and early 2000s), the thematic content is reminiscent of *Magic: The Gathering*, with a heavy emphasis on elemental magic, tribes and familiars. Published by Seattle-based Interactive Imagination Corp (2i), the property first expanded into digital games with the release of a tie-in videogame for the Nintendo Gameboy in 2001. In 2007, 2i entered into a partnership with Canadian children’s television giant Cookie Jar Entertainment in order to create an animated television series based on the CCG. The series premiered on CBC Television and on the Kids WB (now CW4Kids) Saturday morning cartoon blocks in September 2007, coinciding with the release of a new tie-in toy line, ancillary products, a new CCG and a cell phone game. It was also during this time period that Cookie Jar Entertainment first announced their plan to produce a MMOG based on the Magi-Nation universe, *Magi-Nation: The Battle for Moonlands*, which would reflect the characters and storylines developed in the television series, as well as the features and rule systems established in the CCG. The game has met with minimal success, and although there are consistently at least a few other players present within the *Magi-Nation* environment, it remains sparsely populated at best.

Nicktropolis

As a citizen of *Nicktropolis* my avatar was mutable, changing each time I entered into a new “area” of the fragmented, television-inspired game environment. The world itself is depicted as a menu of disconnected options, not unlike a programming schedule or channel menu, with each option acting as a gateway into a different area or subsection of the world. There are central areas, which fall under the general theme of an urban metropolis (hence the name *Nicktropolis*), as well as branded or themed areas centred on a particular Nickelodeon television program or a third-party advertiser brand. While wandering around the central areas of the Plaza, the Pier and Downtown Nicktropolis, I was a young human girl like any other. In fact, *just* like any other as all avatars in *Nicktropolis* have identical bodies and faces that can be individualized only to a minor extent by customizing skin tones (17 choices in a rainbow of colours), hairstyles and clothing choices. Upon journeying to one of the themed areas, players are asked to select a new shape that fits with the aesthetic and narrative elements of the particular theme or brand⁸⁰. So, for example, when visiting the *SpongeBob SquarePants* ‘Bikini Bottom’ area I transformed into a purple, googly-eyed sea creature reminiscent of one of the supporting characters featured in the *SpongeBob SquarePants* television series.

Exploration and identity play are thus intertwined within *Nicktropolis*, as the discovery of new areas (which are constantly being updated to reflect the Nickelodeon’s

⁸⁰ In the time that has elapsed since the data was collected, this feature is no longer a part of *Nicktropolis*. In addition to incorporating a much greater volume of third-party advertising, including entire areas dedicated to third-party promotions, the world has become remarkably desolate and under-populated.

most current programming schedule and cross-promotional activities) often means the adoption of an entirely new appearance and a (potentially) new role within the game narrative. Each area also features at least one shop where branded items can be purchased. Similar to *Club Penguin*, citizens of *Nicktropolis* are each given home base, called “My Room,” for displaying their virtual items and socializing with other players. Because in-game currency is “found” through exploration, the player’s room and the treasures it contains becomes a sort of trophy room, providing evidence of the player’s mastery of the world and its environment. The fragmented nature of the game world is particularly noteworthy in this regard, as the world is not designed for seamless or contiguous even emergent forms of exploration. A thorough exploration of *Nicktropolis* is thus a challenge, requiring that players conduct a relatively systematic series of point-and-click walkthroughs of each area, which themselves are comprised of small clusters of interconnected yet discretely contained “rooms.”. With relatively few activities to engage in other than walking around, shopping and chatting with other players, the resulting gameplay experience can be described as one part treasure hunt and one part hanging out at the (shopping) mall.



Figure 6: © 2008 Viacom Inc.: Avatar (Grimlie) and scene from the Pier in *Nicktropolis*

Nicktropolis was one of the first commercial MMOGs introduced in follow-up to the early successes of *Club Penguin* and *Webkinz*, and it has gone through a number of changes since its initial launch in January 2007. However, since its inception, the space has been consistently mobilized to cross-promote Nickelodeon’s numerous television properties and promotional partnerships. Ads are featured throughout the game, including clickable banner ads that surround the game-application window, video-clips that run while the game areas and rooms are loading, and various other promotional images and messages that are integrated directly into the game environment. Throughout *Nicktropolis*, several areas feature screens that play trailers and webisodes of popular Nickelodeon television programs (including *Danny Phantom*, *SpongeBob SquarePants*, *The Naked Brothers Band* and *Avatar: The Last Airbender*). Other areas and embedded ads serve as a way to showcase prospective new series and product lines, which can be “tested out” at low cost and little risk online before being incorporated

into television broadcast schedules (Shields, 2006). For example, during the period of study, the world featured webisodes of *Mr. Meaty*, a CBC children's television series that had not yet been integrated into the Nickelodeon broadcast schedule. Over the course of my investigations, *Nicktropolis* also began to feature immersive third-party advertising, such as sponsored areas and mini-games. For instance, in the summer of 2009, a *Harry Potter and the Half-Blood Prince* area was introduced, complete with Hogwarts-themed rooms and an embedded video that played the movie's trailer on a continuous loop.

Barbie Girls

Entering into *Barbie Girls*, I suddenly found myself reincarnated as a wide-eyed fashionista in a swanky suburban neighbourhood. The game environment is heavily dominated by the themes and colours of the hyper-feminine girls' culture—filled with pinks, lavenders, make-up and sparkles, all of which is set to an upbeat pop-rock soundtrack. In addition to countless references to Barbie, every player must adopt a Barbie-esque avatar and play as a thin, youthful female with a large head and delicate facial features (with some variation, including a limited range of skin tones and hair colours). Continuing in the same vein as previous Barbie-themed games and websites, the *Barbie Girls* world focuses primarily on fashion and décor. Players can dress-up their avatars in endless new outfits, change their hairstyles and make-up, dress their 'pets,' and decorate their in-game bedrooms. Each item of clothing and furniture must first be "purchased" at one of the world's shops, using an in-game virtual currency called "B Bucks." A very strong emphasis is placed on shopping. Not only are new shops and items introduced into the world quite frequently, but almost all of the communal spaces are situated within the kind of commercial spaces commonly found in an upscale, suburban mini-mall. This includes a beauty salon, a deluxe pet store, a high-end dress boutique, a niche cinema (that only plays ads for Barbie DVDs), an accessories shop, a retro furniture store and various other retailers. In addition, most of the multiplayer features revolve around fashion, including a "Makeover" game and a fashion show area.

The emphasis on fashion and shopping is also carried over into many of the world's mini-games. For example, in "Fashion Frenzy" (the "featured game" in July 2008) players earn "B Bucks" for taking on the role of a clerk in a high-end department store. The game is won by successfully directing customers to the appropriate sections of the store, which are organized into the same merchandise categories found in the larger virtual world. While the main way of earning B Bucks is by playing mini-games, the easiest way is to visit the Cinema where players are "paid" to watch trailers for Barbie direct-to-DVD movies. Although all players can earn B Bucks, the ability to spend B Bucks is limited to V.I.P. members. A similar strategy is used in *Club Penguin*, where only Members are able to purchase the majority of items. Thus, while non-subscribers can accumulate vast amounts of virtual currency, browse the shops for items, and even "try on" clothing items and accessories, they are barred from making "purchases" without a subscription. As non-subscribers navigate through the BarbieGirls environment, they repeatedly encounter activities that are only available to V.I.P. members, at which point a pop-window promoting the subscription service is immediately activated.

The primary activity within *Barbie Girls* is social interaction, which includes chatting with other players, comparing outfits, and creating a network of “Friends.”. Players gather together in virtual cafés, parks and shops to role-play and discuss various topics. They visit each others’ virtual bedrooms, socializing and sharing home decorating tips. They send each other messages and gifts, via the in-game mail system. Players can also collaborate in the creation and staging of elaborate fashion shows, where attendees can vote on the best outfit. The game allows for various forms of inter-player communication, both via “text messages” that appear on the players’ in-game virtual cell phones, as well as private and public areas for chatting. After market research showed that *Barbie Girls* players wanted more social play, Mattel introduced a number of multiplayer activities as part of the V.I.P. service. For example, players can now share fashion advice through a “Makeover” feature, which enables them to click on another player and make style suggestions. Even within these social play opportunities, however, the emphasis on fashion and style is inescapable. Very few action opportunities exist outside of these themes.

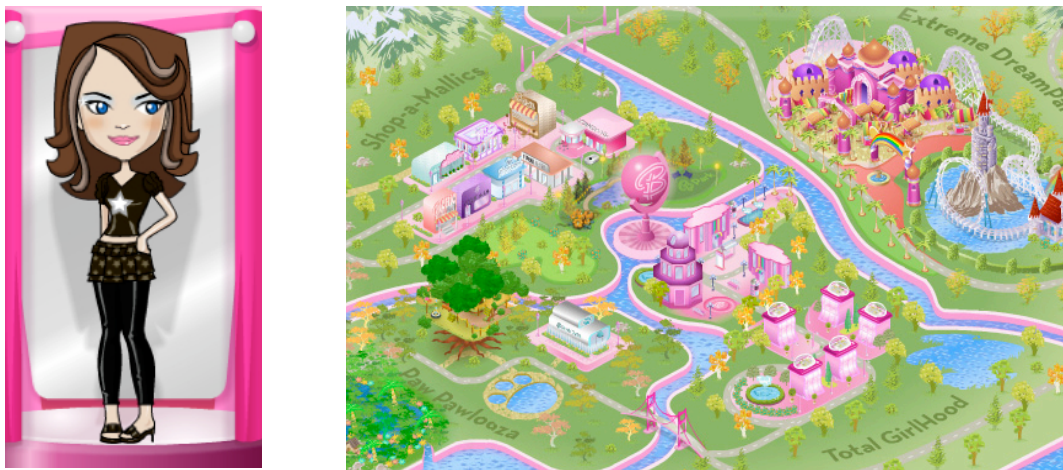


Figure 7: © 2008 Mattel Inc.: Avatar (Grimlie) and a bird's eye view of *Barbie Girls World*

The *Barbie Girls* MMOG launched in April 2007, when visitors to Mattel's previous Barbie website, *EverythingGirl.com*, were asked to follow a special link, where a cartoon version of Barbie invited users to participate in the beta trial of an exciting new multiplayer virtual world. Since its initial introduction, *Barbie Girls* has claimed the title of “fastest growing virtual world in history,”, attracting 50,000 new members every day during its first few months of operation. After a yearlong open beta, *Barbie Girls* became one of the largest online virtual worlds and likely the largest virtual world for children in terms of user base or population size. In July 2008, the site claimed a population of over 14 million members, 85% of which were reportedly “girls between the ages of 8 and 15 years” (Virtual Worlds News, 2008; “BarbieGirls.com Parents,”, 2008). In its early stages, children could join and play *Barbie Girls* for free. Soon after launch, however, the site began advertising a portable Barbie Girls USB device, which players could purchase separately (for approximately \$70 US) in order to gain access to exclusive in-game items and features. In June 2008, Mattel began to phase out the USB device while introducing

its *Barbie Girls V.I.P* service (at a cost of \$5.99 per month). Players have retained the option of accessing the site for free. The site is predominantly marketed to girls, both in terms of its advertising for the site (which is often integrated within television ads for Barbie dolls and associated products, featuring highly feminized themes and imagery, female voiceovers, and only ever show girls playing with the products), as well as in the gendered imagery, colour-coding and semiotics used in the construction of the *Barbie Girls* GUI and game environment.

GalaXseeds

In *GalaXseeds*, I was a joyful little alien Seedizen, leaping and dancing from planet to planet, collecting seeds for my garden back on Subterra. The world of *GalaXseeds* is perhaps more aptly described as a solar system, as it is comprised of three planets (Subterra, Therma and Strata) and a large moon (Luma), each of which is inhabited by a designated 'Clan' of Seedizens. Each Clan vaguely references one of the four elements, although all four contain strong thematic and aesthetic emphases on vegetation and plant life. For example, the world of Subterra is earthy and rugged, filled with cliffs and canyons, waterfalls and caves. Each player is given a 'Pod' as a home base, which is located on the player's chosen Clan home world. Pods are clustered in "Apodment Complexes," to facilitate socializing among players and the development of Clan cohesiveness. Seedizens move around the solar system using a device called the 'Teleplanter,' a plant with the metaphysical power to teleport its contents from one planet to the next. Later on in the game's development, the 'Pods' came to double as spaceships, which the players could launch into space for interplanetary travel or to take part in the ongoing battle against the 'Spaceticides' (the sworn enemy of all good Seedizens). Three times over the course of the study, the *GalaXseeds* environment was temporarily expanded through the introduction of an additional planet or the arrival of a transient group of aliens. In each case, the new addition was sponsored by a third-party advertiser and functioned primarily as a form of immersive advertising (for Lego, Skittles and Post Honeycomb cereal respectively).

There are a number of goals and missions that Seedizens can undertake while playing *GalaXseeds*, but none are more celebrated than gardening. Much of the narrative and many of the mini-games revolve around seeds and planting, and the easiest way to progress through the game is by growing increasingly exotic and fantastical plants. The Seedizens' Pods are split evenly into two parts—a 'living space' that players can decorate and use for socializing, and a garden where much of the player's time is spent caring for plants and grafting seeds. Once a plant starts producing its own seeds, the seeds can be cultivated and sold back to the Gardening supply store for Botanickles, the in-game currency. They can also be traded for different seeds or additional items with other players. Of the six MMOGs analyzed, *GalaXseeds* is the only one that allows for inter-player trade, which has enabled players to establish their own "black market" for seeds, currency and items ("YTV Take Note," 2007). Of course, it's not all fun and botany in the world of *GalaXseeds*. In fact, the enormous emphasis that is placed on gardening is described (within the game and surrounding materials) as the

result of the Seedizens' relentless desire to recapture the faded glory of their former home world Kalos. Although once known throughout the universe for its beautiful and bountiful gardens, Kalos was destroyed years ago by the greedy and unsustainable agricultural practices of the power hungry Anathema—a fifth Clan that has now renamed itself the Spaceticides. The *GalaXseeds* storyline thus has a clear environmental message that includes a critique of industrial farming and unfair global trade relations, and a warning about the detrimental environmental consequences of genetic engineering run amok (complete with a Monsanto-esque antagonist, Baron Hazrdos).

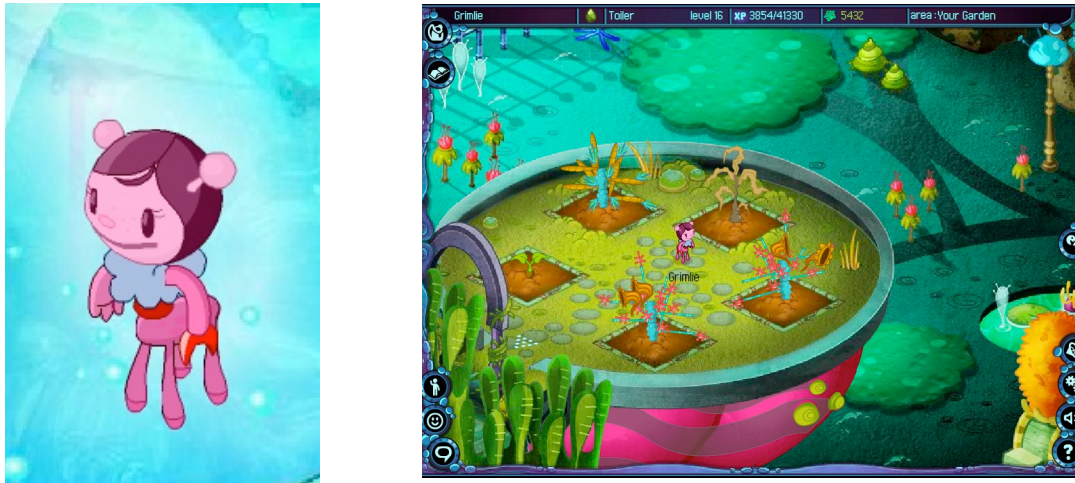


Figure 8: © 2008 Frima Studio: Avatar (Grimlie) and screenshot of my garden in *GalaXseeds*

The *GalaXseeds* MMOG was originally intended to be just one of many interconnected virtual worlds under a larger umbrella called “The Big Rip.”. The site is owned and operated by Corus Entertainment, the owners of Canadian children’s networks YTV, Treehouse, Teletoon and Discovery kids, as well as the producers of a significant amount of children’s animated television content both in North America and abroad (including global hits such as *Fairly Odd Parents*, *Backyardigans*, *Franklin* and *Babar*). The idea was to integrate both original game worlds and sponsored worlds, to provide a showcase for the company’s promotional partners and media properties, as exemplified in the short lived “Skittilization” virtual world sponsored by Skittles candy. While *GalaXseeds* has been the site of a number of immersive advertising initiatives over the past two years, Corus’ initial multi-modal marketing plans appear to have now taken a backseat. The game remains embedded in advertising in terms of the banner ads that surround the game application window, but as of May 2009 the world has been almost completely devoid of third-party advertising. This shift coincided with a *GalaXseeds* re-launch, in which a new set of NPC characters and new plot developments were introduced, along with a number of changes to the gameplay design and mechanics. Furthermore, innovations to the game design that were initially introduced through immersive advertising initiatives have now been reincorporated into the gameplay as non-promotional features. For instance, in the summer of 2007, the site introduced its first in-world multiplayer game in the form of a sponsored “Hide and Seek” game that was built around Post’s Honeycombs cereal brand (called “Hive’n’Seek”). In

May 2009, the game was reintroduced as a non-branded feature that players can join at any time, and play on any of the worlds. Since *GalaXseeds* represents the only children's MMOG in the study sample that contains entirely original content, this move away from cross-promotion and advertising is particularly noteworthy.

Toontown Online

In *Toontown*, I would resurface as a Disney 'Toon,' taking part in a large-scale resistance movement against the corporatization of a pastoral town made up of pranksters and fishermen. The overarching narrative found within *Toontown* is ironically antithetical to Disney's corporate ideology. The sunny cartoon neighbourhoods of Toontown are gradually being taken over by the Corporate Cogs—ashen faced lawyers and businessmen (who sport names such as "Bottom Feeder," "Mingler" and "Senior V.P. Sellbot") who want to drain all the fun, colour and joy out of the town and its inhabitants. Once a building or area has been taken over by Cogs, its playful themes and facades are replaced by menacing grey business buildings. But there is hope. The Cogs, who are described in the tutorial and in the Players' Guide as "evil robot business types," can't take a joke ("What is Toontown?" 2003). The Cogs' fancy paperwork and litigiousness are no match against a well-aimed pie in the face or a timely slip on a banana peel. Luckily, Toons are natural born comedians and by teaming up to attack the Cogs with Gags and laughter, the Cogs' corporate plan can be defeated. Players are asked to participate in missions or "Toontasks" aimed at enacting various forms of corporate resistance, from battling the Cogs head on, to staging sit-in style reclamations of corporatized buildings and spaces. Between missions, Toons are encouraged to participate in passive resistance by throwing parties and having fun. Outside of the steely gaze of the Cogs, life in *Toontown* goes on in the form of various theme park style mini-games, group events and shopping sprees.

The Toons are assigned missions from a variety of sources. They can check in at the Headquarters, or talk to an NPC. In order to obtain the Gags required to defeat the Cogs, players must first earn Jellybeans, the in-game currency. Jellybeans are primarily earned by playing mini-games, which are available in both single-player and multi-player format. Jellybeans are not only used to purchase Gags, but other virtual items as well. This includes clothing items, some of which bestow upon the Toon special skills, as well as special "safe chat" sentences and special avatar moves (which the player acquires by paying for "acting lessons"). Toons are each given an "Estate" that includes a two-room house, which they can further customize through the purchase of home furnishings and décor (such as wallpaper, flooring, etc.). However, the vast majority of these items are only available for purchase to paid subscription members. Despite the wide disparity between paying and free-to-play members, *Toontown* nonetheless contains an active and generally quite welcoming in-game community. Players invariably jump in to help each other complete Toontasks or compete in mini-games. Since most of the gameplay features multiplayer interaction and collaboration, it is easy to build networks of friends. Furthermore, the game world is the site of frequent parties, which are hosted by individual players but take place within special designated party areas, which the host

can then customize to create a particular type of event. For instance, a circus party might involve several trampolines and cannon ball rides, provided in the game's design. These parties are generally public, and players are encouraged to promote their events as widely as possible.

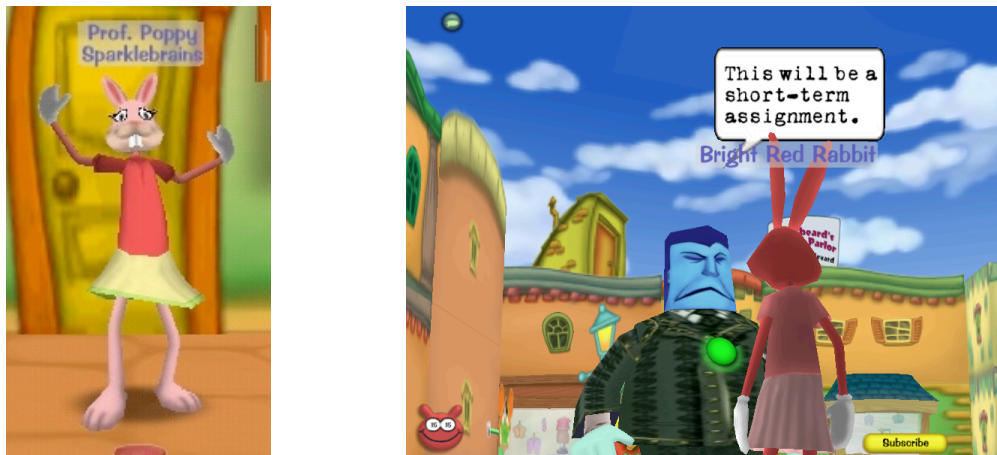


Figure 9: © 2008 Disney: Avatar (Prof. Poppy Sparklebrains) and a Cog encounter in Toontown

Disney's *Toontown Online* consists of a digital (and significantly expanded) version of the Toontown area found in most Disney theme parks. It also contains a number of features based on classic Disney characters, such as Mickey Mouse and Daisy Duck. The characters themselves appear as NPCs, giving out tips and advice, as well as greeting players as they navigate the world. Limited artificial intelligence (AI) makes conversations with the famous Disney characters possible to a certain extent. *Toontown* holds the title of the first commercial children's MMOG, and remains the only one in the current studysample that conforms in any significant way to the gameplay design conventions found within mainstream MMORPGs. The game continues to operate on a monthly subscription model, through which players are able to access the entirety of the game world, items and features. However, in the summer of 2007, Disney launched a free-to-play version of the MMOG that allows players limited access to the game world. In many ways, and as will be explored in further depth in subsequent chapters, the free version of the game functions as a "free trial" enticement ad for the subscription model. Like *GalaXseeds*, the game was originally envisioned as merely one node in a much larger network of virtual worlds, each of which would tie into a different area of the Disney theme parks. However, since *Toontown's* launch in 2003, the WDIG has only produced two other Disney-themed MMOGs, one based on *The Pirates of the Caribbean* film franchise (the "E 10+" rated *Pirates of the Caribbean Online*) released in 2007, and the more recently launched *Pixie Hollow*, based on Tinkerbell and the *Disney Fairies* media brand. On the other hand, both games are quite popular, especially *Pixie Hollow* which currently claims a population of over one million monthly subscribers (in addition to the millions of players who play the limited version for free). To date, each of the games is fairly devoid of advertising, focusing instead on fostering a cohesive brand experience that works to self-promote the associated Disney property.

Appendix B: Contents of case study MMOG rulebooks

Rule Categories	CP	Magi	Nick	GalaX	Barbie	Toon
No cheating (general)	X		X			
Don't spam or disrupt chat or play		X		X	X	X
Don't use workarounds (chat)			X			
No breaking the rules (general)		X	X	X	X	X
Don't steal from other players			X			
Engage in chat or in-game activities					X	
Block people who are mean to you			X		X	
No personal info - Don't give out	X	X	X		X	X
No personal info - Don't solicit from others			X		X	X
Don't give out your password	X	X	X	X	X	X
Don't ask for or use someone else's password					X	X
Report people soliciting personal info from you			X		X	
Read the Safety Guide			X			
Read the Privacy Guidelines						
Read the Terms of Use						X
Assume risk of exposure to offensive or obscene content						X
Don't buy or Sell (or trade) in-game content		X		X		
No copyright infringement		X		X		X
Don't advertise or use service for business				X		X
Get parents permission			X	X	X	
Tell parents if someone is inappropriate/mean to you					X	
No conspiring to cheat (passing along info about glitches, cheats)				X		
No swearing or foul language	X	X	X	X		X
No bullying or being mean	X	X	X	X	X	X
No "inappropriate" talk (drugs, sex, crime)	X	X	X		X	X
Make friends					X	
Engage in the Premium service					X	
Be nice (or friendly, or kind, respectful, etc.)		X	X		X	X

Rule Categories	CP	Magi	Nick	GalaX	Barbie	Toon
Don't impersonate another player or game employee		X		X		
Report Rule-Breakers (witness)	SA	X		X	X	X
Report bullying/meanness (to you)	SA		X		X	
No use of third-party programs (bots)	X	X		X		
No hacking the game		X	X	X		
No cheating through bugs, glitches		X		X		

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