Play to win: How competitive modes of play have influenced cultural practice in digital games

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Abstract

The aim of this thesis is to explore the function of emergence and spectatorship as cultural practices within the competitive arena of Blizzard's *World of Warcraft* (WoW). The game and its peripheral web spaces and paratexts will be subject to both qualitative and quantitative research approaches, including content analysis and autoethnography. Grounded theory content analysis was used to explore emergence in the context of player gameplay tactics (emergent play). It is argued that players who succeed in the game's competitive arena do so on the privilege of effective tactics and a thorough understanding of the game mechanics. Additional insight into the phenomenon of emergence was gained from a study of paratexts and the ways in which emergence conflicts with authorial intent.

The ecology of competitive gaming is comprised not only of players but also spectators. Grounded theory content analysis and quantitative analysis were used to examine the cultural practice of spectatorship. Broadcasting platforms (Twitch.tv and YouTube) facilitate indirect player interaction with games. It is my contention that viewers utilise these broadcasts of high-end play as a form of paratext to guide their individual playstyle.

Analyses suggest that the spectatorship of live and recorded emergent gameplay is directly linked to the formulation of gameplay tactics. Data also indicated tension between authorial intent and emergent practices. In some instances players worked with developers as co-authors to highlight malfunctioning gameplay mechanics (exposed via emergent play patterns). Other scenarios involved the conveyance of absolute authorial power by Blizzard. As a result of these differing relationships with players, Blizzard appear to have struggled with the implementation of a linear, single-authored experience.

Although my own gameplay experiences guided the exploration of emergence and spectatorship, my expertise with the game facilitated a sophisticated mechanical analysis and

allowed me to provide novel cultural insights into competitive play.

The outcomes of this research inform both theory and practice. New typologies for understanding games are established. This inquiry introduces the term emergent paratext in order to best understand the function of paratexts within competitive play. In terms of practical implications, this study will help develop a more complete consumption model for digital games.

Statement of Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text. I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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CHAPTER 1: INTRODUCTION

Digital games occupy a unique position in the contemporary media landscape. In contrast to traditional media types which typically provide single-authored, directed experiences (e.g., film), games proffer player agency and the capacity to configure unique user experiences. Together, these individual user experiences constitute the cultural practices of a game. In his seminal text, *Man, Play and Games,* Caillois (1961) identified and described a spectrum of cultural practices ranging from exploratory and improvisational modes through to those involving constraints and a set of arbitrary rules. Given the recent surge in popularity of competitive e-sports, this thesis will focus on competitive modes of gameplay and their growing influence in the cultural practices in digital games.[1]

Within the broad mode of competitive play lie an array of cultural practices. This study will focus on two key practices intrinsic to competition, i) emergence (playing games in ways unforseen by developers) and ii) spectatorship (observing gameplay). The importance of emergence and spectatorship as cultural practices lies in the blurring of traditional modes of engagement with games. Emergence requires players to develop a sound understanding of a game's mechanics in order to successfully manipulate them. Guided by Fiske's work on play, the goal of emergence can be understood as the player's ability to exert control over rules, roles and representations (Fiske, 1987: 235). Along with emergent play elements, this study will explore the concept of paratexts (that is, supplementary material surrounding a primary text) and their function as a form of emergent practice.

The ecology of competitive gaming is comprised not only of players but also spectators. previous studies have examined the values associated with the spectatorship of

[1] E-sports refers to the formalised and competitive play of games. E-sports represent gaming's transition from a niche pastime to a mainstream cultural interest, legitimising competitive gaming as an important cultural practice. The competitive play of games has resulted in the need for broadcast modules and player sponsorship deals. E-sports is an increasingly lucrative area which engages thousands of individuals, allowing them to experience the space of digital play.

gameplay and reasons behind its growth as a cultural practice (Cheung and Huang's 2011 work on *StarCraft II* is a notable example). It is argued in this thesis that the spectatorship of competitive games extends beyond entertainment value or voyeuristic pleasure and that spectating games often serves pedagogical ends. Players utilise recordings and livestreams of high-end play as a template for their own gameplay. For example, players can apply the tactics used by competitive players in order to develop and refine their own game-playing skills (Cheung & Huang, 2011: 4).

Blizzard's *World of Warcraft* (WoW) is adopted in the current study as the unit of analysis for the exploration of emergence and spectatorship. The game and its peripheral paratexts will be subject to both qualitative and quantitative research approaches including content analysis and autoethnography.

As this research is concerned with a highly specialised area of gameplay, there is a considerable amount of terminology used to describe various items and in-game events. A glossary has been included as an appendix (Appendix A) to provide readers with a comprehensive orientation to the game and its jargon.

In the following sections of this introduction I will provide an overview of the current research project. The first section provides an introduction to WoW. The second section provides a rationale for the selection of WoW as a case study for the investigation of emergent gameplay and spectatorship. The third section presents the project's research aims. Section four outlines the contributions and limitations of the research. The final section documents the structure of the study, providing a brief overview of each chapter.

1.1 What is World of Warcraft?

WoW is a massively multiplayer online role-playing game (MMORPG) developed by Blizzard Entertainment and released in its first iteration on the personal computer in 2004.

Since its initial release, the game has had four major content expansions and countless minor content patches. As of July 2013, WoW is played by 7.7 million paid subscribers (Karmali, 2013).

WoW's gameplay is derivative of the conventional tropes of the role-playing game (RPG) genre. Players choose from one of ten classes, inspired by a fantasy aesthetic. These classes include the Death Knight, Druid, Hunter, Mage, Monk, Paladin, Priest, Rogue, Shaman, Warlock, and Warrior. Players are then able to specialise their class choice based on their preferred metaphor for interaction; for example a Priest for healing allies or a Death Knight for tanking, protecting group-mates from powerful foes. Each class has three unique talent trees (with the exception of Druids, who have four), providing players with the opportunity to play varied roles. As characters progress, they can hone their skills by assigning points to unique play specialisations.

Like most conventional RPGs, the gameplay is centred around levelling and equipping a character. By completing quests and slaying monsters, players gain experience points which amount to level gains and gear, which in turn facilitates the defeat of more powerful enemies. Where WoW's gameplay diverges from that of the traditional RPG is in its group-based play. As an MMORPG, the game's world is inhabited not only by non-player- characters (NPCs) but also by fellow human adventurers. Players are encouraged to group up (as a 10 or 25 player party) in order to defeat powerful enemies located in raid zones, that is, areas of the world sectioned off for raid-only play. Players must employ critical thinking and problem solving capabilities in order to overcome NPC controlled encounters. The enemies located in these areas, known as bosses, drop the most powerful and illusive gear in the game. As the gameplay mechanics surrounding raiding have grown increasingly sophisticated, Player versus Environment (PvE, or raiding) has evolved from a niche metagame (that is, a

mode of play within a game) to one of the primary foci of the game's development. However, despite the popularity of pvE among gamers and the considerable resources allocated to pvE design, the shifting cultural practice within this metagame remain to be examined.

1.2 Why study World of Warcraft?

The stimulus behind my research interest in competitive WoW play was my involvement in the game's competitive scene. Having played the game since its 2004 release, I have participated in raiding at numerous levels of competition. These have ranged from play in semi-hardcore groups to world renowned raid teams. I also thoroughly involve myself as a spectator of the game, utilising gameplay streams in order to formulate new playstyles and strategies. My extensive involvement with WoW and understanding of gameplay mechanics provided an ideal stance from which to explore cultural practices within gaming.

A further reason for choosing WoW as my unit of analysis over other widely played e-sports fixtures such as *StarCraft II* (2010), *League of Legends* (2009) and *Dota 2* (2013), was the relative lack of scholarship on WoW as a competitive game. The current study will address this gap in the literature. It will also provide an empirical base for the comparison of gameplay mechanics and competitive gameplay styles across game genres. For example, while games such as *StarCraft* determine competition through player dexterity and their ability to effectively input button presses, the competition in WoW is derived largely from an ability to effectively construct tactics.

1.3 Research aims

The primary aim of this thesis is to explore cultural practices associated with the competitive play of games. Whereas many authors have approached digital games as cybernetic, narrative or representative systems (e.g. Harvey, Taylor, Jenkins) this study aims to address WoW in terms of its competitive gameplay aspects. Drawing on the work of

ludologists Frasca (2003) and Aarseth (2003), the current study will examine user interaction with gameplay mechanics. Specifically, my research will focus on the ways in which both players and spectators approach complex and competitive game mechanics, and how this interaction informs cultural practice. Although the focus of this study is on WoW, its aim is to frame competition as part of a broader media transformation related to shifts in gameplay consumption and experience.

This study is guided by my own extensive experiences as a competitive player. As such, it aims to provide novel cultural insights that may not be attainable using traditional research methods.

1.4 Contributions and limitations

The primary contribution of this study is theoretical. Little scholarship currently exists that directly addresses the burgeoning competitive gaming scene. While studies have been conducted on competitive gaming and spectatorship (Cheung & Huang and Rugnetta) they merely serve to provide spectatorship context as a form of entertainment. Literature on emergence and play is outdated and largely limited to discussions of single-player titles. For example, in their discussion of practical techniques for implementing emergent gameplay, Smith and Smith derive their argument from readings of single player games such as *Deus Ex* (2000) and *Thief* (1998). Taylor's recent investigation into e-sports explores competitive gaming and the rise of streaming platforms and is one of the few examples of literature on current competitive play (2012). However, Taylor is concerned with positioning e-sports as a cultural practice similar to traditional sports and understanding e-sports as a gendered space, rather than exploring competitive gaming's inherent uniqueness as a cultural practice. The current study aims to provoke wider cognisant discussion on the topic and address the substantial gap in games studies literature on an increasingly prominent cultural phenomenon.

This thesis has implications for both theory and practice. In terms of theory, it builds on the work of key authors (Bartle, de Certeau and Consalvo) by introducing new terminology for typologies used in video game analysis. It also suggests reformulation of existing frameworks for the modelling of competitive games. With respect to practice, a better understanding of the links between competitive modes of play and new forms of cultural practice will facilitate a more complete consumption model for digital games. A knowledge of how individuals play and interact with games can help game developers determine whether their products meet the modes of engagement brought on by competition.

The focus on a single game will yield rich and detailed data in an area where research is presently limited. However, this limitation in scope precludes concurrent comparisons between games with respect to their game mechanics, competition and cultural practice. With additional resources future studies could include games of differing genres, larger sample sizes and methodologies that include live gameplay observation. Notwithstanding these limitations, the current study is an initial step in exploring new cultural practices of competitive gameplay and contributes to the expansion of an academic vocabulary for understanding games.

1.5 Chapter outline Chapter 2:

Literature Review

The aim of the literature review is to provide a conceptual basis for the arguments put forward in this thesis. The construct of competition, which is central to this study, is defined within the context of digital games. In particular, this section draws on Caillois' play framework and more contemporary conceptualisations of competition in digital games. This section also surveys scholarship on digital games, cultural studies, media and play in order to

inform a discussion of emergence and spectatorship. Key theorists include Frasca, Aarseth, Jenkins, Consalvo and de Certeau.

Chapter 3: Research Design

Chapter 3 outlines the research approaches used in this study; namely autoethnography, grounded theory content analysis and quantitative content analysis. In addition to a discussion of strengths and limitations, this chapter will also review applications of the proposed methods in previous studies.

Chapter 4: Emergence

This chapter relates emergence as a form of cultural practice to competitive modes of play. In examining the function of emergence within the competitive metagame, this chapter explores two key emergent practices; i) emergent play and ii) emergent paratexts. Emergent play will explore players' inventive interactions with gameplay mechanics in the competitive arena. This is achieved through the qualitative analysis of WoW gameplay broadcasts. The subsequent section on emergent paratexts will investigate players' engagement with supplementary material, and its function within the competitive arena.

Chapter 5: Emergence, competitive play and the developer

Chapter 5 continues the discussion of emergence, highlighting the tension between Blizzard's authorial intent and emergent practices. Blizzard's anti-emergent stance is discussed to provide a context for investigating the tension between emergent gameplay and authorial intent. Specifically, this chapter explores Blizzard's removal of emergent play mechanics from the Feral Druid class through the qualitative content analysis of WoW's patch notes and the game's numerous fan forums.

Chapter 6: Spectatorship

This chapter shifts the focus from the way users play competitive games to the practice of observation. This section provides a comprehensive overview of the effects of spectatorship on the competitive raiding metagame. It also evaluates interactions between emergent paratexts and observation, highlighting how emergent tactics and playstyles are disseminated through paratexts such as World of Logs.

Chapter 7: Conclusion

The concluding chapter presents a general discussion of the study findings along with the project's practical implications and recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The focus of this literature review is on competition in digital games, and in particular, on spectatorship and emergence, two key practices involved in engaging the medium. As there is little literature directly pertaining to e-sports and competitive gaming,

this review will draw on texts from other disciplines in order to formulate a strong conceptual basis for the qualitative inquiry of competitive gameplay in WoW. To establish the theoretical framework for the current study, the literature reviewed will be grouped into three distinct thematic categories; competition, spectatorship and emergence. The first section defines competition within the context of digital games. The second and third sections of the literature review focus on the interface between competitive games, spectatorship and emergence.

2.2 Competition

It is a widely held belief in games and play studies that competition is an important theoretical construct. In his influential *Man, Play and Games* (1961), Caillois establishes a novel conceptual framework for thinking about play. Despite predating digital games, this text remains highly relevant in contemporary deconstructions of play. Expanding on Huizinga's (1955) work on play as culturally and socially intrinsic, Caillois constructs four categories of distilled play forms. These include alea (games of chance), mimicry (role- playing, or make pretend) and ilinx (disorientating oneself, thrill-seeking and risk taking). However, it is his idea of agon (competition on an artificially levelled playing field) that is particularly relevant to the current thesis. Caillois argues that games embodying agon "presuppose sustained attention, appropriate training, assiduous application, and the desire to win "(1961: 17). Practices of agon, including WoW, are effectively games of skill. WoW derives the majority of its endgame skill from complexity and a requisite understanding of all aspects of the game. In order to understand the game and become competent, players must familiarise themselves with numerous menus and submenus, a wide variety of class types, a myriad of hotkeys and a seemingly never-ending panoply of abilities and button combinations.

LeBlanc et al. (2004) build on Caillois' model by discussing forms of play in terms of digital games. Their *Mechanics, Dynamics and Aesthetics* (MDA) framework involves analysing games through the lenses of the producer and consumer. LeBlanc et al. note that game design and authorship occur at numerous levels and that the field of games scholarship and development involves individuals from "diverse creative...backgrounds." (LeBlanc et al., 2004: 1). They suggest that this diversity in background results in a plethora of different understandings of games. They further suggest that while it is necessary for designers and researchers to focus on a particular area, it is important "for everyone, regardless of discipline...to consider issues outside that area: base mechanisms of game systems, the overarching design goals, or the desired experiential results of gameplay..." (LeBlanc et al., 2004: 1). Indeed, LeBlanc et al. conclude that when these various aspects of analysis can relate to each other as a whole, coherence is created; travelling "between all levels of abstraction...from systems and code, to content and play experience..." (LeBlanc et al., 2004:
4).

Based on the MDA framework and examples of the mechanics, dynamics and aesthetics drawn from numerous games *(Quake, Final Fantasy, The Sims),* LeBlanc et al. propose eight major experiential features of digital games, one of which is competition (2004: 3)[2]. They argue that games such as *Quake* (1996) emphasise competitive and challenging aesthetic goals, mechanics and dynamics. In contrast, a game such as *Final Fantasy* (1987) is

[2] The other major experiential features of games, according to LeBlanc et al. are sensation, fantasy, narrative, fellowship, discovery, expression and submission.

based in narrative and discovery. Such categorisations serve as an "aesthetic vocabulary "(LeBlanc et al., 2004: 2) useful in the qualitative study of games. Indeed, LeBlanc et al. use this vocabulary to outline elements of the competitive game. Using *Quake* (digital game) and the traditional word-guessing game Charades as examples, they argue that the fundamentals of competitive game design are adversarial play and a clear indication of which party (or team) is winning (LeBlanc et al., 2004: 3).

Vorderer et al. draw further links between games and competition suggesting that competitive gaming is grounded in the inherently rule-based structure of the medium and that games are generally designed with a clear body of rules and a "very concisely predefined goal" in mind (Vorderer et al., 2003: 4). The result is a "less ambivalent competitive structure, compared to many other social situations...″ (Vorderer et al., 2003:4) allowing players to act in ways that maximises their "own benefits in relation to the benefits of others" (Vorderer et al., 2003:4).

A review of the literature on competition in games and play reveals that a number of scholars are critical of inherently competitive game structures. For example, Kanaga argues that competitive game structures "destroy the play impulse by "impos[ing] a value system on our experience," one that is "pre-determined by the game's design" (Kanaga, 2012: Para. 2). Instead, Kanaga favours exploration oriented games; games which Vordeder et al. claim do not maintain the same level of engagement as competitive games (2003:2). Vordeder et al. base this assertion on findings from their study measuring arousal levels in players of *Quake.* According to Vorderer et al., facing competitive game situations can lead to a euphoric emotional state and an increase in motivation to continue playing. Interestingly, they also argue that "dissatisfactory outcomes" (Vorderer et al., 2003: 2) can lead to an "even stronger motivation to continue playing in order to solve the task in the next run" (Vorderer et al., 2003: 2). Therefore, playing video games is expected to be enjoyable only if there is a

sufficient number of successfully completed, competitive situations. Vorderer's research highlights the importance of competition in providing meaningful and engaging play experiences.

A further aspect of competition that will be explored in this thesis is the development team's technocultural philosophy, manifest through the implementation of game mechanics. Specifically, Blizzard's stance on competitive and emergent play will be examined through deconstruction of WoW's game mechanics. LeBlanc's concept of the negative feedback system will inform this discussion. LeBlanc defines the negative feedback system as 'catch up' gameplay mechanics, the goal of which is to "keep [player] output within an acceptable range" (LeBlanc, 1999: Game Developers Conference presentation slide 8). Negative feedback systems are distinct from positive feedback mechanics, such as exponential growth in the Civilisation series of games. LeBlanc provides a hypothetical example of negative feedback using the game of basketball.

"For every N points of difference in the two teams' scores, the losing team may have an extra player in play..." (LeBlanc, 1999: Game Developers Conference presentation slide 13).

Effectively, negative feedback systems result in an artificial skill-ceiling in competitive play. It is Blizzard's use of negative feedback systems as a core aspect of their game design that will form the basis of the discussion on Blizzard's stance toward competitive practice in games.

Bartle's model for understanding gameplay through player-types (1996) is another useful framework for deconstructing competitive play. Bartle identifies four basic types of game players: socialisers (individuals whose primary reason for engagement is the social contact afforded by games), killers (who enjoy hunting down other game characters),

achievers (who compete against other players) and explorers (who enjoy discovering different aspects of the virtual gamespace).

The present study builds on Bartle's player-types by proposing additional roles for engaging competitive play. In addition, Bartle's achiever and explorer roles will be consolidated to better represent the competitive player.

While Caillois, LeBlanc et al., Vorderer et al. and Bartle have constructed robust conceptual frameworks for the study of games, they all predate the formal, competitive play of games manifest in e-sports and online broadcasts. The present study builds on the foundational work of these theorists as a basis for creating new typologies. In turn, these typologies will be used to interrogate contemporary forms of competitive gaming such as those seen in WoW.

2.3 Spectatorship

As is the case with competition, Caillois' work is central in establishing an understanding of spectatorship in games and play. He posits that "clear cut" categories of gameplay forms will rarely blend seamlessly (Caillois, 1961: 71). Using the example of a horse race as a type of game, he contends that despite being an agon game form for the jockey, it is at the same time a spectacle which consequently stimulates mimicry for the spectator. It can be argued that Caillois' influential framework also has relevance in the context of digital games spectatorship. However, the concepts proposed need to be refined in light of contemporary games studies scholarship, such as the work of Cheung and Huang (2011).Cheung and Huang posit that user engagement with games at a spectator level is often a form of pedagogy (Cheung & Huang, 2011: 4). The player, through mimicry, is attempting to refine their in-game abilities. The game spectator is actively engaging with a text (such as gameplay broadcast via livestream) in a way that directly benefit themselves. Along similar

lines, Jenkins has proposed an interactive audiences model suggesting that the digital media environment has altered traditional patterns of media consumption. He posits that digital spaces are underlain by a unique information infrastructure, facilitating "a sense of affiliation with and immersion in fictional worlds..." (Jenkins, 2006: 147). WoW spectators are not necessarily passively consuming content; instead, they are actively pursuing specific content, relevant to the betterment of their gaming skills. Digital spaces provide audiences access to a "broad...range of perspectives" (Jenkins, 2006: 141) from which they can derive new tactics and playstyles.

As e-sports are a relatively new fixture within the gaming industry, researchers do not have access to an established body of literature on spectatorship in competitive digital games. However, examination of the broader literature on traditional spectator sport can shed some light on spectatorship within the realm of e-sport.

Interestingly, comparisons between traditional and e-sports reveal remarkable similarities in the functions of spectatorship. For example, Gau argues that sport spectatorship holds value if it can meet human needs. Drawing on Maslow's (1987) hierarchy of needs, Gau suggests that watching sports might meet esteem and self-actualisation needs (Gau, 2007: 44). Similarly, Cheung and Huang contend that digital games can be spectated for pedagogical purposes, enhancing the viewer's knowledge of the game.

Another aspect of spectatorship is performative spectatorship, or the concept of observed player as a performer. Cheung and Huang describe "circles of watching" (2011: 6) in the spectatorship of games. They note that "while the game sits in the centre stage, it does not mean that the only performers are the players..." (Cheung & Huang, 2011: 6). Dalsgaard and Hansen (2008) maintain a similar point. Using the example of the public game arcade, Dalsgaard and Hansen detail the interactive processes between "game, player and immediate

spectator" (Dalsgaard & Hansen, 2008: 15). They argue that the spectator, detached from the play experience, turns gameplay into a performative spectacle.

I will use the conceptual framework proposed by Dalsgaard and Hansen to demonstrate how the broadcast of competitive WoW gameplay has the potential to shift the player to a performer. The player is typically in control of the gamestate, however, a strong spectator presence can lead to audience control of the game via the player as proxy. Jenkins' concept of the interactive audience (2006) is useful in understanding the link between game spectatorship and play as performance. The interactive audience moves beyond a traditional understanding of a text's viewership. In the case of the competitive game spectator, they are autonomous and not vulnerable to the content they are viewing; evidently able to manipulate the state of play.

McCrea's work on *StarCraft* and Korean culture provides an understanding of spectator influence. Spectators often create nicknames for pro-gamers around their play style that "describe or encapsulate the meta-narrative of their playstyles"(McCrea, 2009: 7). McCrea provides numerous examples, including Kang Min (known as Nal_rA in-game) as the "dreaming Protoss"(2009: 7), referring to the way in which he develops unusual and creative methods in building a Protoss army. These names operate in the community to form narratives leading in and out of the championships and leagues.

Like Dalsgaard and Hansen, Simons' Narrative, Games and Theory (2007) emphasises the involvement of multiple parties in the game-playing experience. Simons labels these groups as external observers and immersed players (Simons, 2007). Simons suggests that immersed players are the sole catalysts driving the direction of gameplay. In contrast, the external observer is concerned with apprehending "what has happened" (Simons, 2007: External Observers versus Immersed Players, para. 1). Effectively, Simons argues that immersed players experience more involved gameplay due to active engagement with the

text, rather than a passive appreciation via observation. While this thesis has argued that an important facet of digital games is player agency and engagement, consideration of the spectator as a party in competitive gameplay is also paramount. Accordingly, this study will draw on Simons' concept of multiple parties functioning in gameplay; however, it will not discount the significance of the game spectator.

The idea that an immersed player's gameplay experience will be more engaged and meaningful than that of the external observer is a sentiment popular amongst ludologists, including Aarseth and Frasca. Ludologists are those who subscribe to the study of games as fundamentally play based systems. Aarseth contends that observers external to the gameplay input process cannot fully experience the intended effects of a game. He argues that it is insufficient to "merely observe the audiovisual output from someone else's playing... "(Aarseth, 2003: 3). This is also a central tenet of Frasca's work. Frasca proposes that viewing a game as an external observer serves a narratological approach to games; that is, the framing of game analysis through dramatic and narrative modes (Frasca, 2003). While Frasca argues that games are simulative media, from the point of view of the game spectator, the outcome of simulation is narration. Frasca notes that such narrative modes of engagement do not adequately involve the viewer in gaming's key aspects of interactivity (2003).

While ludologists have contributed novel theoretical frameworks (external observers and immersed players) to the study of gameplay, discounting the significant role of non- players is a substantial limitation. However, this limitation is likely a product of the gaming landscape of the time. For example, in Simons, Frasca and Aarseth's work, single player games are their primary objects of analysis. Arguably single-player games do not provide the same viewing spectacle as contemporary e-sports titles, designed with the spectator in mind.

As McCrea (2009) and Dalsgaard and Hansen (2008) have explained, game spectators play a fundamental role in influencing the state of play. Similarly, this thesis endeavours to

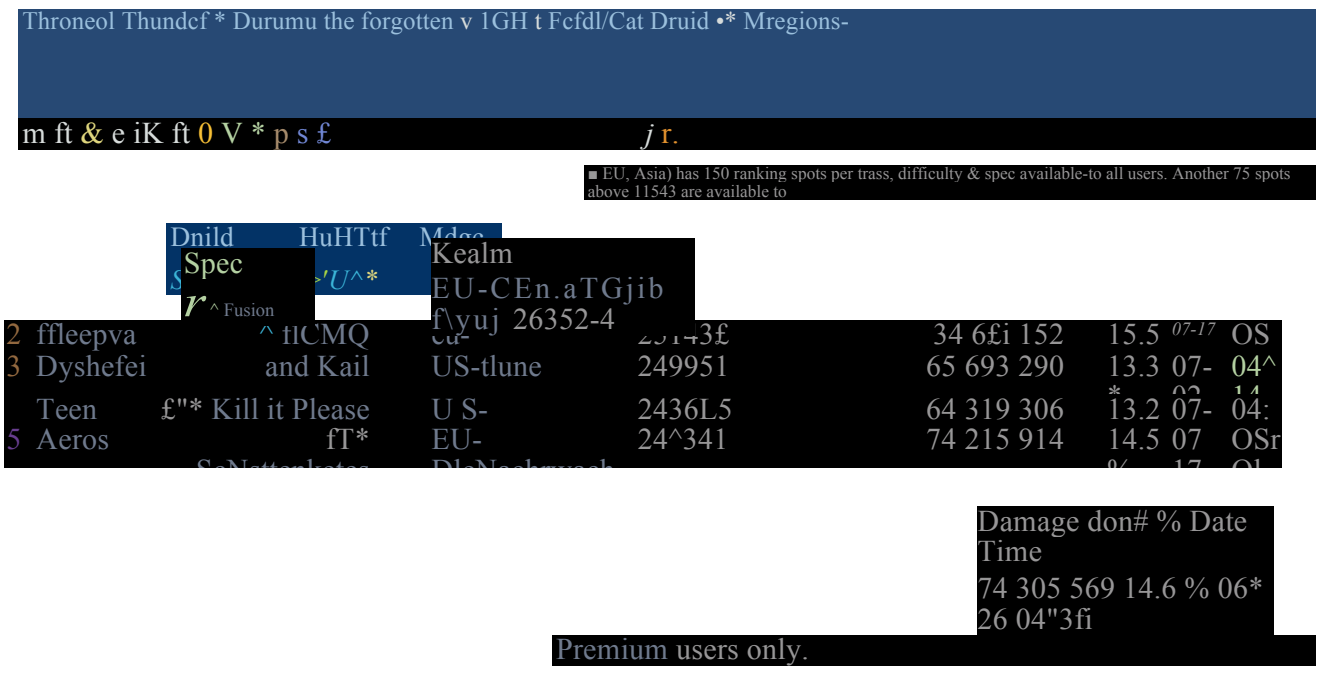
address the need for a balance between the simulative and representative in games; highlighting ludology's misunderstanding of the spectator and providing a new conceptual framework for understanding the complex role of spectators in competitive games.

Taylor (2006) engages with concepts of observing play through an examination of WoW's user modification community[3]. She contends that through the emergent practice of modding, the function of play in a raiding environment has the potential to shift from a focus on the outcome of a group's configurative input processes, to coveillence (i.e. networked individuals observing and recording each others' lives). By exploring raid assist mods such as CTRaid and Recount, Taylor documents this new form of play. Using these modifications, a player within a raid group (typically the raid leader) will be tasked with overseeing the performance of other players, ensuring that they are carrying out their assigned tasks (Taylor, 2006: 12). The raid leader, with the assistance of mods, is given an 'enforcer' type role; attempting to maximise raid's output and ensuring that their configurative input is conducive to winning; players are disciplined into particular play-modes.

Taylor's work on damage meters[4] as a means of co/surveillance are also central and will serve as the groundwork for understanding the emergent paratext that is WoW's World of Logs. World of Logs is an application which parses in-game combat logs; allowing gamers to "save, share and analyse their raiding experiences conveniently and thoroughly in WoW" (Worldoflogs, 2013). World of Logs functions similarly, albeit with significantly more depth, to damage meters. Taylor notes that damage meter add-ons are a means by which spectators can quantify the performance of other players. Players are ranked numerically, and the results can be posted to the player's group. Taylor argues that such tools enhance competition by visually representing a player's damage or healing output. The present study

[3] User modifications (or mods, implemented through the practice of modding).
[4] Damage meters are a type of modification which allows the user to see the damage and healing output of other players in their group.

will engage with the World of Logs application using Taylor's study as the basis for deconstruction. Unlike the relatively primitive damage meter mod, World of Logs publishes a player's damage and healing output in the public domain. Users are ranked globally (in terms of overall damage/healing) and as part of their specific class group (shown in Figure 2.1). Interestingly, combat log parsing has typically been the practice of high-end guilds; however, through exposure to high-end play (via spectatorship, and live streams) World of Logs usage, like damage meter usage, has become heavily entrenched in WoW gameplay. Such applications are now used casually, reinforcing competition at all levels of play.



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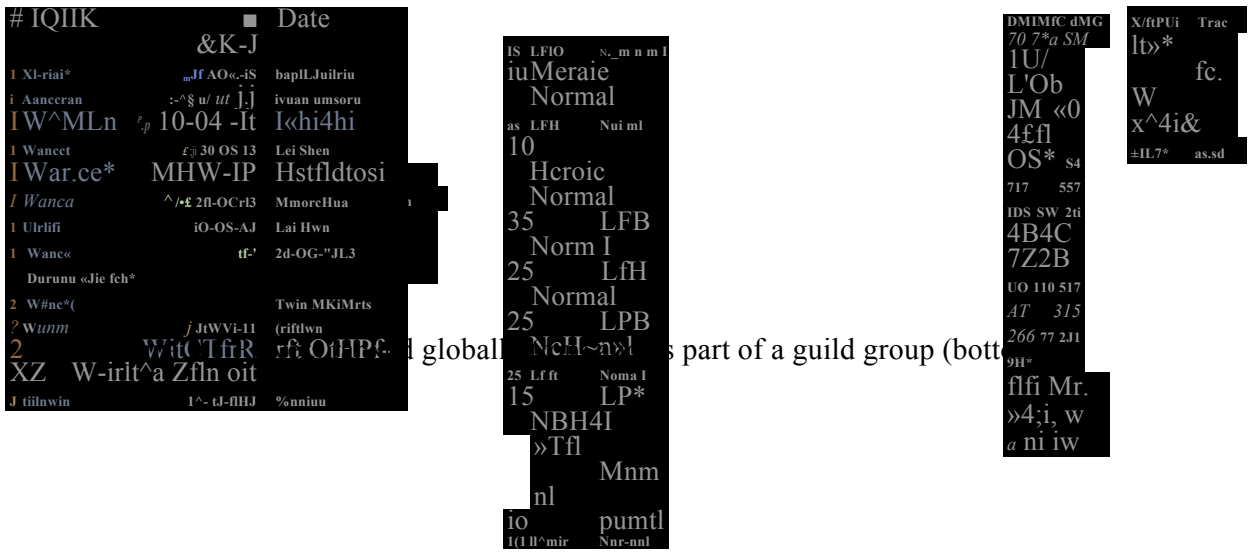

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Drawing on Poster's concept of the superpanopticon (1990), Taylor suggests that the desire to perfect one's play through means of co/surveillence has created a "superpanoptic" moment in which "we are not only disciplined to surveillance but to participating in the process.." (Poster,1990: 93). Taylor argues that damage meters represent the superpanoptic (2006: 12); a claim which could be extended to World of Logs.

Perhaps most importantly, Taylor's work highlights the ability of emergent spectator practices to enhance competitive play. While providing a novel conceptual framework for addressing observatory practice, Taylor's text deals with an early iteration of WoW. The game and its paratexts have since evolved and it is now played at a much higher, competitive level. The use of supplementary paratextual material is required for players attempting to enter the realm of competitive play. This study of WoW will draw on the core concepts established by Taylor and Poster in order to evaluate the role of paratextual material and its link with spectatorship.

2.4 Emergence and emergent play

Johnson (2006) suggests that emergent properties are intrinsic to complex systems (such as digital games). Johnson defines these emergent properties as "unexpected behaviours that stem from interaction between the components of an application and the environment" (Johnson, 2006: 3). Such unexpected behaviours occur in digital games through player engagement with game mechanics. While the game rules are set by the designer, varying degrees of freedom are afforded in applying the rules. Thus, a variance is introduced in decoding intent. Sometimes rules can create interplay in ways the designer could not have foreseen. In some instances a set of internal rules emerge which have not been taken into consideration by the designer. Inventive players are able to manipulate these rules and engineer new gameplay experiences. This variance in decoding intent, and the varied

gameplay possibilities which can ensue, are what Adamkiewicz (2013: Para. 12) terms emergent play.

Ludologists Frasca and Juul have also made significant contributions to the understanding of emergent play. In his typology for play-based game analysis, Frasca contends that games are simulative rather than representational (2003: 2). Frasca notes that as simulative media, videogames are inherently mutable and demanding of user configuration (2003: 2). Consequently, games which do afford user configuration will typically provide the user the opportunity to author their own experience. Juul makes a similar argument, noting that the configurable nature of digital games is indicative of the fact that the outcomes of a game are negotiable and quantifiable (2003: Para. 13).

Johnson, Adamkiewicz, Frasca and Juul's conceptual frameworks of emergence and player-authorship will be consolidated in order to investigate emergent play in competitive games. Drawing on Johnson's work, this thesis will consider emergence as a broad term referring to unforseen interactions between players and game mechanics. This will include emergent practices external to the gamestate, such as the formulation of emergent paratexts. Emergent play, distinct from emergence, will be applied as a term to describe players' innovative in-game manipulation of game mechanics.

A reading of Caillois' Man, Play and Games suggests that competitive play and emergent play patterns are linked. He argues that games of agon often "leave the champion to his own devices, to evoke the best possible game of which he is capable...and according to the rules..." (Caillois, 1961: 15). This idea translates neatly into a discussion of competitive digital games and emergent gameplay. In competitive games, players will often engage in practices not intended by developers in order 'win'.

The concept of emergent play, specifically the idea of working outside of the ruleset established by a designer, can be understood using de Certeau's (1984) model of strategies

and tactics; an important paradigm for thinking about the governance of culture. De Certeau's theoretical framework will be used as a key component in deconstructing emergence as a cultural practice.

De Certeau presents the concepts of strategy and tactics as opposing ideas. Strategies, according to de Certeau, are set by the powerful and serve to manipulate power relationships "as soon as a subject with will and power... can be isolated. "(1984: 87). De Certeau explains the concept of strategy using the example of the ordered city space. A city, and the routes available to individuals within it, are a strategy determined by a controlling body (de Certeau, 1984). Strategies are fixed and rigid by nature. In contrast to strategy, tactics are concerned with the non-powerful. Tactics are fluid and malleable adaptations to a strategically determined environment. There is no presumption of how things will turn out, as there is in strategy. Instead, there is readiness to take advantage of unpredictable changes. Working with the example of an ordered city space as strategy, tactics can be seen as the individual's ability to create their own routes through the planned city space.

Guided by de Certeau's core ideas, Manovich reconfigures the concepts of strategies and tactics, relating them directly to Web 2.0 media (2009). Manovich argues that the advent of Web 2.0 and related technologies represents a dramatic change in the relationship between strategies and tactics. He notes that the ability for users to configure content has radically shifted de Certeau's original formulation of tactics and strategy; "today strategies used by social media companies often look more like tactics...while tactics look like strategies..." (Manovich, 2009: 218). The producer is now invested in the user exploring and manipulating media.

Manovich only briefly mentions digital games, noting that users are able to play tactically within a set design strategy. Because discussions of games in terms of strategies and tactics are only briefly described in the existing literature, the present study will more

rigorously apply de Certeau's theoretical framework in order to better understand the function of emergence. In approaching concepts of game design and authorship, de Certeau's framework will also be applied. Specifically, it will be used to comprehend game designers' insistence that players adhere to their prevailing design strategy.

Like Manovich, Hakalax (2012) emphasises the fluid feedback between strategies and tactics prevalent in digital media. Using the example of *StarCraft II,* Hakalax documents mechanical changes over the numerous iterations of the game. Hakalax notes that throughout *StarCraft's* lifespan, it has been generally accepted that Zerg is the reactionary race. Players followed the game's design strategy, which dictated the creation of low-level worker units until it was possible to scout and identify the opposing players build. At this point, the Zerg player would create a suitable army in reaction. The rise of French player Ilyes 'Stephano' Satouri saw a drastic shift in Zerg's accepted playstyle, shifting from reactionary tactics to ones of hyper-aggression. Through the broadcast of his play, viewers incorporated Stephano's signature playstyle of hyper-aggression into their own playstyle. This radical shift in playstyle resulted in Blizzard amending its design strategy; applying changes to the Zerg race gradually over content patches. Stephano's inventive tactics were incorporated as part of the strategic game mechanics. Evidently, contemporary games media has the potential to subvert de Certeau's traditional conceptualisations of strategy and tactics. Instead of being "engaged in the work of systematising.. .of imposing order...", the strategy of *StarCraft's* game design offered "flexibility and constant change.″

2.4.1 Emergence and exploitative play

Within the realm of competitive WoW raiding there is substantial debate over whether particular gameplay practices are emergent or exploitative. Exploitative play involves taking advantage of egregious design oversight which removes any challenge from the game scenario.

Adamkiewicz cites numerous examples of exploits in his discussion of emergent

gameplay. One example is the medic-class resurrection exploit in *Battlefield: Bad Company 2* (2010). Reviving dead players afforded a brief period of invulnerability. Players were able to 'chain-revive' each other, "effectively making it impossible to kill those players" (Adamkiewicz, 2013: Unforseen Consequences, para. 11).

Drawing on Caillois' idea of working inventively within the confines of game rules (1961: 8), it is possible to conclude that exploits function outside of game rules. Considering this, exploitative play can be modelled as a variation of Jarvinen's rules and tactics framework (2008). Jarvinen argues that (legitimate) play tactics are derived from the intersection of rules and mechanics (2008: 254); thus exploitative play can be seen as disregarding the function of game rule.

Adamkiewicz notes that exploitative play, as distinct from emergence, does not introduce a new way of playing; it does not enhance the challenge by offering new tactical possibilities. Using the example of *Dark Souls* (2011), Adamkiewicz cites an exploit which allowed players to defeat a boss encounter using a broken ranged attack mechanic. Players would normally need to avoid the boss' attacks, which would be the element of skill required to win. However, using the exploit, any semblance of risk is removed by putting the player in a safe position away from the boss. Adamkiewicz ultimately concludes that the removal of a game's challenge via glitches and exploits are "bad emergent elements..." (2013: Para. 8).

2.4.2 Emergence and paratexts

The production of and engagement with paratexts is another form of emergence within the realm of competitive gaming. Paratexts refer to the texts surrounding a primary text (Genette, 1997) which "work to shape the gameplay experience in particular ways" (Consalvo, 2007: 9). In the case of competitive WoW, players shape their gameplay experience by utilising paratexts to aid them in competing at a top tier level. The practice of 'beating a game' through

means established outside of the game world represents an

interesting trend in the way competitive games are played. Much of the work that goes into overcoming high end raid content comes from an interaction with paratexts. These interactions range from analysis of gameplay broadcasts (through YouTube and Twitch.tv) and combat logs using out of game programs, to simulations and Theorycraft[5].

Emergent paratexts are not without criticism. Referring specifically to out of game simulation programs which serve as the rationale for Theorycraft decisions, Paul argues that these mathematically grounded paratexts have made the game "cease to be a dynamic role-playing world...and become a series of math equations to be solved and lists of buttons to push..." (Paul, 2011: Conclusion, para. 2). He further argues that this is ultimately detrimental to the gameplay experience due to a perceived removal of exploration and choice. In her discussion of add-on devices, Consalvo raises the issue of paratexts and their interaction with concepts of authorship (2007). Using the *Game Genie* cheat cartridge as a case study, Consalvo investigates the responses of game publisher Nintendo to a peripheral which altered the way in which their games were played (the cheat cartridge substantially reduced the difficulty of games, allowing users to gain infinite lives in *Mario).* Consalvo documents the ensuing legal action taken by Nintendo against Galoob, the producers of the cheat cartridge. Consalvo remains impartial in the disputes that she documents, but she notes that her interview data pointed toward an anti-configurative stance by developer Nintendo. Users, according to Consalvo, were encouraged to "not crack... open machines, playing only properly purchased disks, and buying a new generation of machine every five or so years" (2007: 78).

Consalvo's work provides a frame of reference for understanding Blizzard's stance on emergent gameplay and the function of paratexts, which has been traditionally unfavourable.

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[5] Theorycraft is the process of maximising the potential output of one's character, usually evidenced by simulations.

Consalvo's text reinforces the notion that particular game developers adhere to the notion that games are a medium for single-authored content, despite the inherently interactive nature of the medium.

2.5 Authorship: Game designer versus emergent play

It is evident that in some instances games designers aim to achieve a single authored experience. In his discussion of emergent gameplay, Adamkiewicz outlines the interaction between a designer's authorial intent and the use of emergent mechanics. He provides the example of MAIET Entertainment's *GunZ* (2006) and the use of animation cancelling abilities as emergent practice. Through this kind of gameplay, emergent players opened up a variety of movement and attack options and a new layer of high-level play. When these "unintended" behaviours were removed from the game, the community clamoured for their return as they enhanced the game and distinguished it from other third-person multiplayer shooters (Adamkiewicz, 2013: Designer vs Gameplay: para. 2). Ultimately, these emergent mechanics were integrated into maps for learning and honing these skills.

Adamkiewicz also cites the example of Digital Extremes' *Warframe* (2013). Like *GunZ,* the developers of *Warframe* attempted to patch out an emergent mechanic, in this case, movement chaining (which allowed players to dash repeatedly). Adamkiewicz notes that while "it didn't last for longer than a week and the functionality was returned to the game via a hotfix prompted by complaints from the players..." (2013: Designer vs Gameplay: para. 3). The player responses to the emergent mechanic's removal suggest that emergent playstyles have the potential to become culturally embedded as standard practice.

Adamkiewicz argues that game developers "do not hold the entire monopoly on intent..." (2013: Designer vs Gameplay: para. 5). In the tradition of Jenkins' work on fans as active participants in a text's production (2006), Adamkiewicz contends that players should be cast as

co-authors of digital games (2013).

De Certeau's framework of strategies and tactics (1984: 51) will be used in the current study to model the tension between emergent play and authorial intent in WoW. As strategy presumes control, it can effectively represent the game designer. Game design can be understood as a form of strategy. In contrast, emergent play is tactical in character, capitalising on flaws in an overarching design strategy.

CHAPTER 3: RESEARCH DESIGN

A multifaceted methodological approach was used to explore the shift in competitive modes of play and their influence on cultural practices in video games. The methodologies used were i) autoethnography, ii) and content analysis (both qualitative and quantitative) using grounded theory coding. This approach is consistent with Rodgers' methodological toolkit for developing analytical frameworks in which he argues that one coverall research approach is ineffective in addressing varied data sets (2007). In the present study, data sets ranged from published statistics on gameplay, through forum posts and livestream broadcasts of competition. It is expected that the use of mixed methods will enhance the empirical rigour of the research.

3.1 Data sources

Broadcasts of endgame play in WoW (specifically, scenes of competitive raiding), were the primary units of analysis in this study. The broadcasts used in this research are shown in Table 3.1. In addition, a number of paratexts surrounding WoW's competitive raiding metagame were used as supplementary sources of data.

The web-based paratexts *MMO-Champion* (Fansite, general WoW discussion) and *the Fluid Druid* (Druid class-specific Theorycrafting) were included to provide a wider perspective on various aspects of competition such as game-balancing. The raid progress ranking website, Wowprogress was selected to facilitate a discussion of links between spectatorship and tactics. Blizzard's patch notes on class balancing, which outline the iterative changes made to the game were also selected for analysis. These notes formed the basis of a discussion on authorship.

Because paratextual programs are widely used by competitive players and have the potential to provide in-depth analyses of play, World of Logs and Simulationcraft were included as additional data sources. The World of Logs application is a useful tool for evaluating individual play as it parses every individual player's input, allowing analysts to evaluate play styles. The Log Browser function permits the researcher to determine not only which abilities were used, at what time, but also *how* they were used in response to an encounter's mechanics. For example, the Log Browser facilitates examination of defensive abilities as used by members of the raid team in response to a high-damage phase of a boss fight. Most importantly, World of Logs provides an

avenue for researchers to explore aggregate data from thousands of players, highlighting generalisable patterns. As World of Logs has the potential to provide insights into important theoretical constructs, it was selected as the primary source of quantitative data.

In contrast to World of Logs, Simulationcraft encourages users to explore and create new styles of play, simulating their output potential to determine efficacy. Simulationcraft was included as the final paratextual unit of analysis.

Broadcast title	Broadcast platform and source
Avast vs Heroic Dark Animus (Zerg tactic)	Twitch.tv: http://www.twitch.tv/natakublitz/b/438592630
Terrace of Endless Spring - 10m Heroic Sha of Fear - Holy Paladin	Youtube. http://www.youtube.com/watch?v=CiD4D1WdPLs&feature=c4-overview&list=UUMImy3d39yhrbkUJwjn6N_g, Twitch.tv: http://www.twitch.tv/Palawinkip/b/29146932
Thok the Bloodthirsty live hotfix during progress	YouTube. http://www.youtube.com/watch?v=b27Jy1_gkXU
Vodka vs Gara'jal World First	YouTube. http://www.youtube.com/watch?v=XTmLbbTjN70

Table 3.1 Gameplay broadcasts used in this study.

3.2 Data selection

Data selection was carried out using minimum sample size, with maximum variation sampling. This sampling approach was adopted for a number of reasons. First, minimum sampling was necessary as WoW's competitive endgame raiding scene constitutes a small margin of the playerbase. Furthermore, as this research is concerned with competitive play, it was necessary to draw on specific play modules; in this case, the highest ('Heroic') difficulty level. At the time of writing, only 4.32% of the recorded raiding playerbase has fully cleared the current cycle of content, even after successive nerfs[6] in difficulty (Wowprogress, 2013). Consequently, a relatively small sample size was unavoidable. The potential sample size was further reduced when attempting to select gameplay in its original, pre-nerf iteration. Like the selection of Heroic only raids, this was a measure taken to ensure that data was representative of high-level, competitive play.

Second, because there are a finite number of competitive players in the player pool, sample sizes are necessarily small. However, this is not to the research's detriment. Small sample sizes of great diversity have the potential to yield "high-quality, detailed descriptions of each case, which are useful for documenting uniqueness" (Patton, 1990: 172). The decision to utilise minimum sampling was also informed by Patton's framework for designing qualitative studies (1990). Patton contends that qualitative inquiry "typically focuses in depth on relatively small samples, selected purposefully" (1990: 169).

Third, minimum sample sizing was a product of the study's limited scope. For logistical reasons, this study limited high-end play to the global top 200 boss kills as listed on raid progress aggregator, Wowprogress. The top 200 kills showcase competitive play and took place before any substantial reductions were made to the difficulty of content. Kills analysed were taken from the entire Tier 15 raiding cycle, spanning March 5, 2013-

[6] Reductions in the difficulty of game content.

September 10, 2013, and the beginning of the Tier 16 cycle (beginning October 9, 2013, and continuing through to the present).

Maximum variation sampling was introduced with the aim of capturing and describing the central themes or principal outcomes that cut across a great deal of participant or program variation. For small samples, a great deal of heterogeneity can be a problem because individual cases are so different from each other. The maximum variation sampling strategy turns this apparent weakness into a strength by applying the following logic: any common patterns that emerge from great variation are deemed to be of particular interest and value in capturing the core experiences and central, shared aspects or impacts of a program.

Data selection was consistent with Patton's argument that data should be thematically broad. This provides "reasonable coverage of a phenomenon" (Patton,1990: 186). While livestreams and paratexts were selected on the basis that they exhibited competitive play patterns, there is substantial variance in the way themes are communicated. For example, while all of the broadcasts and paratexts conveyed emergence, some did so through exploitative play patterns and others through an inventive manipulation of the game's rules. **3.3 Research methods 3.3.1 (Auto)Ethnography**

Ethnography is a qualitative research method effective in the investigation of virtual spaces and can be used to "understand the norms, structures and dynamics in online communities" (Costello, 2012: Virtual ethnography, para. 1). As technology has advanced, digital game spaces such as WoW have become increasingly sophisticated and engaging realms for user interactivity. In the case of WoW, the game's complex set of rules and mechanics have given rise to a community of competitive players and spectators. Though the concept of the game is relatively simple (that is, defeat powerful enemies in order to receive 'loot'), the wealth of knowledge surrounding the game, the mechanics, each class' capabilities,

limitations, exceptions and strengths, have resulted in the formation of networks of skilled players and dedicated spectators.

In order to locate source material, gather data and conduct informed research, the present study utilised autoethnography, drawing on my own experiences as an eight year veteran of WoW and its high-end raiding scene. Strauss and Corbin argue that the researcher's personal experiences should serve as knowledge to aid one's sensitivity; that is, the analyst's ability to seek association and meaning in the data. In this project, the researcher is the subject (Ellis & Bochner, 2000); and my own experiences will be used as a means to understand data as well as provide an account of top-tier play and competitive game mechanics.

Through the use of autoethnography, this study addresses previously mentioned concerns on games writing expressed by Aarseth, specifically the need for first hand exposure to a game and its underlying narrative and mechanical elements (Aarseth, 2003: 3). Cheung and Huang similarly posit that autoethnography is particularly useful in the study of digital games and their communities, noting that games studies literature demands a thorough familiarity with the games studied (2011: 4).

3.3.2 Applications of autoethnography in games studies

The decision to use autoethnography was informed by a review of the research literature on digital game spaces. An overview of this literature is presented in this section.

Klastrup's investigation of *Everquest* is a sound example of autoethnography's use as a supplementary method for understanding digital spaces (2003). The author's own experiences are used as a point of reference in a semiotic textual analysis. In her methodology discussion, Klastrup describes *Everquest* as a form of fiction, a "signifying text in a very

broad sense...I then combine this reading with my own observations of being a player in this world"

(Klastrup, 2003: Introduction, para.2).

Autoethnography is particularly useful in the study of digital games and their communities. Cheung and Huang posit that the games studies literature demands a thorough familiarity with the games studied (2011:4). Ludologists such as Aarseth similarly place importance on player engagement with games. Games researchers including Malliet have noted that Aarseth's gameplay-oriented approach to games studies is a practical framework for game analysis (2007:Studying Video Game Content: Different Perspectives, para. 5)

Along similar lines, Frasca's ludic deconstruction of games and simulation suggests that player input (and therefore familiarity) is a fundamental requirement for reading games (Frasca, 2003). Frasca acknowledges that there is widespread academic misunderstanding over the importance of a game's output, with games being analysed in a similar way to film. This, he argues, is due to the sequence of signs produced by cinema and the output of a videogame sharing similarities (Frasca, 2003:3). He further argues that what these commentators have failed to understand is that studies of games and simulation must account for user input; a fundamental aspect of play (Frasca, 2003: 3). Evidently, like Cheung and Huang and Aarseth, Frasca emphasises the importance of a thorough understanding and firsthand knowledge of the texts studied.

Cheung and Huang's study on *StarCraft II* is another exemplary virtual autoethnographic text and provides further justification for the adoption of this methodology in the present study. The authors note that they drew on "independent personal experiences as *StarCraft* players in single and multi-player contexts and *StarCraft* spectators in online and live *StarCraft* tournaments. "(Cheung and Huang, 2011: 4). This background knowledge of the game and its community qualifies Cheung and Huang to undertake a sophisticated

analysis of the game's mechanics and dynamics. This authorial understanding of a studied cultural group or practice provides "vividness, depth and attention to detail..."(Hannes, 2011: 5). Hannes argues that these elements signify sound ethnographic practice (2011: 5).

Arguments proposed by Kucklich similarly support the idea of familiarity with games studied. He suggests that an observation of play will not necessarily entail a direct influence on the gamestate (Kucklich, 2002). Further, he argues that a game can only be properly analysed by means of interacting with its user interface. A game has to be played in order to be understood, and playing a game implies making active choices another player or researcher would not necessarily make. Kucklich claims that there exists no such thing as an ideal player, because it is an essential part of games that players are allowed (and required) to be creative within the framework provided by the game rules (2002). As a consequence, it is not possible to grasp the meaning that is formulated in a game without taking into account specific details of player context and experience.

Evidently, a reading of play-oriented study and scholarly testimonials for ludic analysis have informed the autoethnographic direction of this research.

3.3.3 Limitations of autoethnography

One of the strengths of autoethnography as a research method is the ability to "capitalise upon researcher influence as a factor within the research; to explore and delineate the nature of the relationship between ethnographer and co-participant, rather than indulge in the pretence of 'invisibility'... "(Hannes, 2011:6) According Hannes the researcher and their experiences should be at the forefront of one's research.

While drawing on my own experiences playing WoW provide this study with a thorough understanding of the game and its mechanics, issues of potential bias are a major limitation. A reading of Morris' *Banality in Cultural Studies* suggests that "the voice of that

which academic discourses- including cultural studies- constitutes as popular begins to turn to theorise its speech "(1990: 41), academia can shift into "mimetic popular performance" (1990: 41). Morris goes on to claim that it is difficult for the researcher to separate the "invoked 'voice'" (1990: 41) of the popular from one's own argument.

This influencing force of the popular voice is a particularly problematic issue in the field of games studies. As games studies will often require a firsthand understanding of the studied games, researchers are often active participants - or fans, to use Henry Jenkins' terminology (2006) - in the game's community. Thus, the writer, as a fan, may be (even subconsciously) inclined to write in a manner which does not cohere to empirical research design; that is, writing as a fan rather than a researcher.

Due to the potential for researcher biases, I have employed autoethnography as a supporting methodology. It will be used to supplement and help to analyse the primary data of the study which is attained using content analysis.

3.3.4 Content analysis

This study will employ rigorous content analysis, in both qualitative and quantitative capacities, to evaluate competitive play's interface with gaming's cultural practices and functions. In his discussion of social research practices, Babbie argues that content analysis is a useful approach in studying recorded human communications (2010: 530). Neuendorf suggests that content analysis is an effective research method as it is not limited to the types of variables that may be measured, or the varying contexts in which messages are formulated and presented (2002: 10).

Qualitative analysis will take on an interpretive approach, allowing for the treatment of "social action and human activity as text...expressing layers of meaning" (Rodgers, 2007: 239). The analytic task is to identify and explain the ways in which players operate in a

competitive setting. Drawing from the ludologist school of games research, this project will focus on the simulative rather than the representative; that is, focusing primarily on gameplay elements.

Quantitative content analysis will involve taking a systematic and objective analytical approach to gameplay statistics. In doing so, I aim to establish trending playstyles and tactics in order to comment on emergent play. Quantitative analysis will employ theory-based sampling and serve to supplement qualitative inquiry

The primary variables of interest in this study are i) player tactics and ii) spectator interaction. These variables are measured through the qualitative and quantitative content analysis of gameplay broadcasts and peripheral paratexts.

In addressing the research question, high-end raiding gameplay will be observed, forming the basis of qualitative content analysis. Gameplay is observed via broadcasting websites Twitch.tv and YouTube. These web spaces allow users to either livestream or upload videos of gameplay (the broadcasts used in this study have been tabulated for reference in Table 3.1).

In their ethnomethodological study on skill development in first-person shooter game *Counter-Strike* (1999), Reeves et al. exhibit how play observation can be employed as an effective data collection method within the context of multiplayer games. The study situated the researcher inside the gaming experience as an observer, and explored play patterns by watching experts in situ (Reeves et al., 2009: 26). My research has adapted this approach, observing gameplay via YouTube broadcast or Twitch.tv livestream. This is due to the relatively limited scope of the project, and the logistical difficulty of organising players and raids for live observation.

Blizzard's practice of class balancing[7] will also be subject to qualitative content analysis.

This project will focus on Blizzard's adjustments to the Feral Druid class, exploring the tension between authorial intent and emergent play. This analysis will involve a collation of data surrounding recent Feral Druid class balancing, from both official and fan-based sources. The text of patch notes and forum posts will be analysed within the context of competitive play in order to highlight Blizzard's technocultural philosophy on the cultural practice of emergent play.

Along with gameplay recordings and patch notes, additional qualitative and quantitative content analyses of blogs and fansites and paratexts will be used as supplementary sources in the present study. These include *MMO-Champion* (Fansite, general WoW discussion and *the Fluid Druid* (Druid class-specific Theorycrafting).

In contrast to qualitative grounded theory, this project will employ quantitative analysis of gameplay statistics published on World of Logs. This analysis will establish trending strategies and styles of play. Raid progress ranking website, Wowprogress will also be quantitatively analysed in order to draw links between spectatorship and the formation of tactics.

In addition to World of Logs, this study will offer a reading of paratextual tool Simulationcraft, outlining its function and applicability to competitive play.

3.3.5 Data coding: grounded theory content analysis

Data collected through content analysis will be coded using grounded theory. Grounded theory coding is a form of content analysis that is used to "identify and conceptualise the underlying issues amongst the 'noise' of the data"(Glaser & Strauss, 1967:

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[7] Class balancing refers to the design practice of keeping the potential output of classes within an acceptable range. This is to prevent classes from being too under or overpowered, resulting in disproportionate levels of class representation in-game.

169) . According to Hammersley, grounded theory addresses one of the important limitations of ethnography; its inability to generate theory (1992). He argues that this is because ethnography is based on an outdated research model of theory-practice- research, which is unidirectional rather than reflexive (1992). In contrast, grounded theory has the potential to systematically discover theory in the area of games studies, an academic field still in a stage of relative infancy.

Grounded theory is also useful in terms of minimising bias. As noted in the discussion of autoethnography as a research approach, the influence of researcher bias is a substantial limitation. Grounded theory was chosen in order to enhance the rigour of the research and minimise any biases which may arise from my active participation in competitive WoW play. In grounded theory research, the interrelationship of data instances ensures that the data itself is the primary driver for interpretation rather than prior theory or biases. The data centric nature of grounded theory content analysis enhances the rigour of the ethnography. Thus, the work can be considered 'quality' qualitative content analysis when applying measures of validity (Malliet, 2007: Para. 13).

3.3.6 Applications of grounded theory in games studies

Previous studies in the field of digital games have applied the principles of grounded theory in their qualitative content analyses. In their study on game spectatorship, Cheung and Huang employ a grounded theory approach to form annotated clusters of data which are then analysed (2011:4). Similarly, Fabricatore et al. (2002) have studied the content of video games from a game design perspective. Combining a grounded theory approach with a user- centred approach that is rooted in usability research, a set of guidelines were elaborated for the development of games that have a high degree of playability.

3.3.7 Coding model

Grounded theory relies on open and selective methods of coding. Open coding is the process of discovering instances and initial categories. Selective coding refers to the formation of larger categories (or themes) using theoretical reasoning. These two methods were used in the present study in a tiered way. Upon initial viewing, recordings were first coded using open coding. Selective coding was then applied to reduce these broader categories into themes. Details of the coding model are set out in the following sections.

3.3.8 Open coding

The open coding scheme used to deconstruct gameplay was informed by Juul's ludo-centric analysis (1999). His methodological framework is useful for studying videogame content beyond modes of representation. Juul suggests that in order to develop a methodological framework for the qualitative study of games, a game must be broken down into its core mechanical components. These include i) the material, containing all textual, graphical and audio files within the game software, ii) the program, consisting of the algorithms that combine the material into an interactive experience, and iii) the output, which is the audiovisual result of the calculations performed by the computer or games console (Juul, 1999). Each of these components consist of a number of specific modules, including rules relating to the game world, characters and objects, as well as modules responsible for the audiovisual presentation and the processing of user input. While this inquiry did not strictly adhere to the guidelines set by Juul, it drew from the research principle of; reading games with respect to specific aspects rather than through a holistic lens.

Broad categories were formed based on responses to four questions designed for this study. The questions and broad categories are set out in Table 3.2.

Guiding question	Response	Broad category
Does the gameplay work within the game rules and encounter rules?	**Yes/No**	
Does the gameplay formulate new tactics? In order to address this question, it is necessary to determine what the established strategy is. To do so, quantitative content analysis of wowprogress.com and worldoflogs.com was undertaken, establishing the most widely practiced strategies of the top 200 kills of the encounter. These will then highlight whether the kills in the broadcasts are aligned with the concept of emergent play.	**Yes/No**	
If the kill was representative of emergent practice, was there any response from Blizzard? Often, Blizzard observe the play-patterns of the world's top raid groups. In certain instances, boss encounters have been subject to live patches in order to prevent these top guilds from defeating them in an unintended manner.	**Yes/No**	
Is the spectator involved in the game playing process?[8] For example, is the spectator passively consuming gameplay for entertainment value? Is the gameplay an informative paratext sought out by other competitive players? If the gameplay was streamed live, what effect do non-players have on the state of play?	**Yes/No**	

Table 3.2. Open coding protocol.

[8] It is important to note that it is difficult to code for spectator experience. As such, the majority of the gameplay content analysis will focus on emergent play.

In answering the questions in Table 3.2, brief annotations were written for each video to provide concise summaries of the gameplay. For example, applying the questions to the broadcast of *"Thok the Bloodthirsty live hotfix",* the annotation generated was "used emergent Zerg tactic and broke sequence of the encounter. Blizzard applied live hotfix ensuring no kill. No spectator involvement." A full list of the gameplay annotations have been included in Appendix B. The complete set of question responses has been included in Appendix C. The categories from the open coding process have been consolidated in Table 3.3.

Broadcast title	**Categories**
Avast vs Heroic Dark Animus (Zerg tactic)	Emergence, spectatorship (performative), sequence breaking
Terrace of Endless Spring - 10m Heroic Sha of Fear - Holy Paladin	Exploitative emergent play
Thok the Bloodthirsty live hotfix during progress	Emergent play versus authorial intent, sequence breaking
Vodka vs Gara'jal World First	Legitimate emergent play, Blizzard's interface with emergence

Table 3.3 Gameplay broadcasts and their respective broad categories.

3.3.9 Selective coding

Once gameplay was broken down into mechanical elements, data from the open coding process was clustered according to thematic similarities. The qualitative terminology, 'themes', was considered more appropriate to interpret the data. Themes are the implicit topics that organise ideas, supporting more abstract theoretical constructs (Aurbach & Silverstein, 2003); in this case the idea of competition and the new cultural practices associated with

games. Furthermore, themes serve as topics to help generate theoretical constructs (Aurbach &

Silverstein, 2003).

The themes derived using selective coding are described in Table 3.4.

Theme	**Description**
Emergent play	Data exhibiting innovative tactics
Exploitative play	Gameplay where the game rule is disregarded
Spectatorship	Includes data on how spectators make use of the gameplay, as well as on the spectator-player relationship
Developer-player interface	Blizzard's interface with emergence

Table 3.4. Open coding categories.

These selectively coded themes will guide the direction of content analysis. In addition to these themes, content analysis will be driven by the literature surveyed in the previous chapter. This will address any concerns that grounded theory lacks theoretical basis. This study will "use any material bearing in the area" (Glaser & Strauss, 1967: 169), forming the basis of an "accumulated knowledge "(Dey, 1993: 66). Aarseth echoes this idea, contending that researchers must gather as much information about the game as possible (2003:3).

It should be noted that the themes for selective coding are broad by design. This affords a degree of transferability and utility in understanding other competitive games.

While this project is concerned with competitive modes of play in WoW, it seeks to explore a much broader and pervasive cultural phenomenon.

4.1 Introduction

Both qualitative and quantitative research methods were used to explore the rise of emergence as cultural practice brought about by competitive modes of play. Research into competitive raiding indicated a tension between authorial intent and emergent practices. In some scenarios, players and developers worked together in attempting to better the game. Competitive players would discover malfunctioning mechanics via emergent play patterns, and developers applied fixes. However, Blizzard's interface with emergence and emergent players was not always dialogic and collaborative. In some instances, Blizzard refused to cede any authorial control. Instead, they aggressively moderated the gamespace in order to convey a single-authored gameplay experience. Research also suggested that emergent play practices can function as legitimate play, working with game rules, or exploitative play, which disregards a game's rule based structure.

The primary foci of this chapter are two key functions of emergence; i) emergent play and ii) emergent paratexts. Prior to a detailed discussion of the study results and their implications, this chapter gives context to the emergent practices facilitated through competitive WoW play. WoW, and the emergent practices associated with competition, will be positioned against modes of competitive play in other widely played games.

4.2 WoW as a competitive game: the importance of tactics and mechanical understanding in competitive raiding

The staples of popular competitive play have typically consisted of fast-paced, action oriented games wherein skill is determined through one's dexterity and mastery of the game

engine. In such games muscle memory, reflexes and APM[9] are considered indicators of skilful play. *Counter-Strike* (1999), *Battlefield* (2002-present), and *StarCraft II* (2010) are popular competitively played first-person-shooter and real-time strategy games where action windows and reflexes are measured in milliseconds. In contrast, the skill and complexity in WoW's competitive endgame emanates from thorough mechanical understanding. The "gameplay [is] concentrate[d] on the privilege of tactical consistency" (McCrea, 2009: 184).

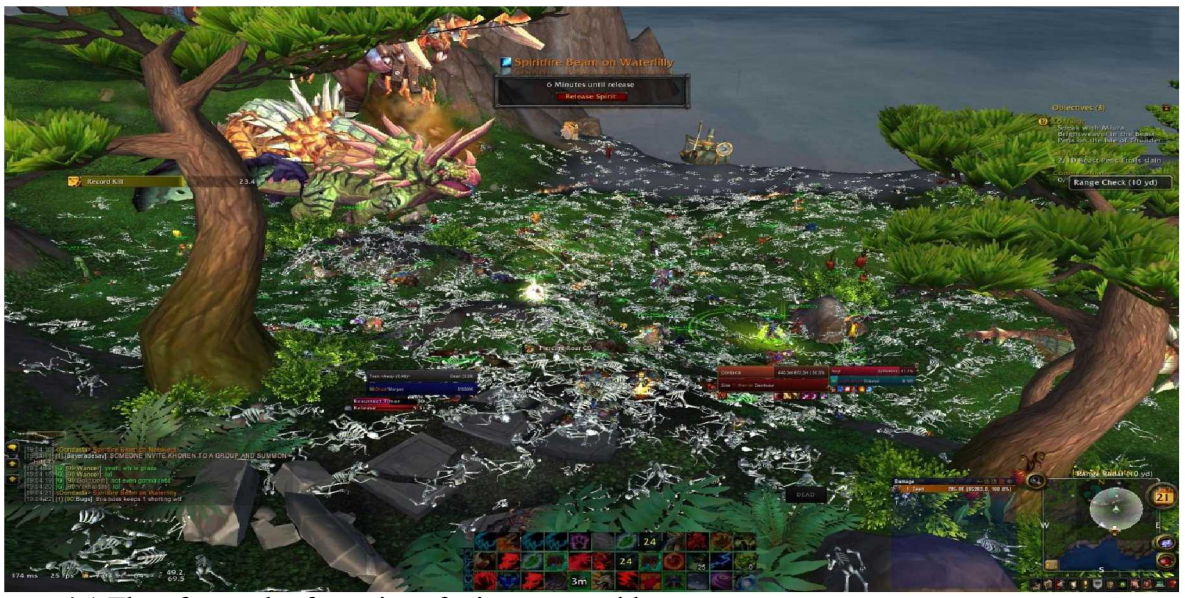

Figure 4.1 The aftermath of a series of wipes on a raid encounter.

WoW features numerous game mechanics which encourage a thorough understanding of the game's mechanics, encouraging the cultivation of tactics. Unlike earlier iterations of the MMORPG and RPG genre, there is little penalty for in-game death (outside of a corpse run and a relatively inexpensive item repair bill[10]). As there is such little consequence for dying, the player is afforded the freedom to explore a plethora of strategies without facing

[9] Actions Per Minute; the total number of actions a player can perform in a minute. It is a common metric for evaluating a player's skill in RTS and MOBA games.

[10] Each time a player dies they must run back to their place of death as a ghost. Upon death to NPC enemies, items will suffer 'durability loss' and need to be repaired for a monetary fee.

risks such as loss of gear (a gameplay feature in many RPGs). In fact, the entire flow of the competitive progression endgame is based around cycles of death and retrying. Minutes after death, the group is back and ready to put in another attempt; the game even acknowledging this rapid cycle by littering the ground with the group's the skeletal remains from previous attempts (depicted in Figure 4.1).

Interestingly, this kind of design has more in common with platforming games such as *Super Meat Boy* (2010) - where death during its short levels is completely inconsequential - than RPGs of the 1990s and MMORPGs of the early 2000s; which served as Blizzard's frame of reference for WoW's design.

Raid encounters are dealt with through careful observation. Often a new boss encounter may seem overwhelming, by analysis of attack patterns and the crushing blows inflicted to the raid group. Attempting a new boss or pushing into a new stage of the encounter might lead to quick, brutal death, but each subsequent attempt increases the group's ability to cope with the situation. The manner by which the group can handle the situation will become progressively more refined until once difficult mechanics become relatively easy and routine. As O'Reiley comments in his analysis of *Dark Souls,* "each boss often starts out feeling like an effort in futility, but knowledge is power. Often when you finally win....you feel mastery..." (2011: Para. 10). Evidently, paidia and exploratory play are strong design imperatives here. The player is encouraged to thoroughly explore the interrelationship of player and encounter mechanics in order to formulate an executable strategy. Further emphasising the importance of knowledge and understanding is the fact that the game does not adhere to the design philosophy of content obsolescence. This refers to type of game design where once players have completed a segment of the game, it should not be a requirement to complete it again. This calls for consistency in play; the raid group can

constantly be punished for their mistakes (even if they've 'beaten' a stage of the game), and therefore the game is able to put pressure on the player. The constant threat of punishment creates pressure to succeed, giving the game a challenging and competitive edge.

Blizzard further subvert typical RPG mechanical convention (and emphasise innovative problem solving and tactical play) through the fact that gear levels and stats are often secondary to solid tactics. This will be evidenced in this chapter's reading of competitive raiding and emergence; illustrating how top-tier raid groups manipulate game mechanics in order to overcome immensely complex encounters without the assistance of the game's primary negative feedback system (that is; gear. The gear obtained from killing raid bosses affords the player with higher stats and stronger abilities in order to defeat harder bosses).

Considering the underlying feature of endgame raiding's complexity is mechanical understanding and an ability to tactically approach gameplay scenarios, it is clear that competitive play is centred around learning and understanding. However, in order to compete in the competitive progression race, raid groups must employ innovative gameplay approaches. As conceptualised by Caillois, players must work inventively within the game's rule based structure in order to emerge victorious (1961:8). As a result, top-tier raid groups will utilise their intimate knowledge of the game in order to craft emergent tactics; thinking outside of the conventional modes of play envisioned by the game's designers.

4.3 Emergent play

As game spaces are inherently demanding of player interaction, it is almost impossible to ensure that there is a single, clear way to approach the game's mechanics. Even through the inclusion of scripted sequences and meticulously planned item locations, sets of

internal rules emerge that have not been taken into consideration by the designer. It is difficult to predict how a player will utilise certain game elements, or how mechanics will ultimately interact with each other. In their model for investigating game design fundamentals, Salen and Zimmerman note that the conditions created by game rules and systems determine "not only what the game system is, but also by implication what the game has the potential to become..." (Salen & Zimmerman, 2003: 541). Emergent rules and systems provide the player with interesting and compelling gameplay opportunities, adding layers of skill and increasing the importance of tactical decision-making.

This section will explore the link between competitive play and emergence as a cultural practice. As noted in the research design chapter, research will be conducted through content analysis of four broadcasts of competitive level gameplay. This current section will study the concept of emergence through the player 'role' of the competitive player; an identity formulated using Bartle's player roles of explorers and achievers which was discussed in the Literature Review.

In order to understand concepts of emergent play and innovative thinking in a competitive raiding context, this section will reconfigure de Certeau's theoretical framework of tactics and strategies (1984: 51). To recoup discussion in the Literature Review, de Certeau conceptualises tactics and strategy as opposing ideas. The setting of strategy is always the purview of power. Furthermore, strategy presumes control. By contrast, tactics relate to the non-powerful. Departing from traditional definitions of tactics, de Certeau understands tactics not as a subset of strategy, but as an adaptation to the environment, which has been created by the strategies of the powerful.

De Certeau argues that tactics, by contrast to strategies, have "no base where it can capitalise on its advantages, prepare its expansions and secure independence with respect to circumstances...." (1984: 229). Because tactics do not have place, they are heavily reliant on time; one must be watching for opportunities that must be seized. The tactician must constantly manipulate events in order to turn them into opportunities. Like the everyday examples provided by de Certeau, emergent play is tactical in character.

The analyses in the following sections are organised in terms of selectively coded themes. As outlined in the Research design, these themes are i) exploitative play, ii) emergent play, iii) spectatorship and iv) developer-player interface (n.b. there is thematic overlap between data sets).

4.3.1 Gameplay study: Exploitative emergent play in WoW, Kill it Please versus Heroic Sha of Fear

This case study showcases the use of exploitative emergent play tactics by Australian guild Kill it Please, in their victory over the Sha of Fear (Palawinkip, 2013). This encounter is the final boss of a progression cycle, its death signifying the end of a raid tier. Should a raid group defeat the encounter, their standing on the global progress leaderboard is cemented. Because of this, the nuances of player skill, and ability to formulate effective tactics, have come to be viewed as paramount.

Kill it Please's exploitative victory is particularly interesting due to the overwhelming difficulty of the boss itself, and the large extent to which their tactics alleviated this difficulty. This encounter is heavily taxing on a group's damage dealers, due to the high damage-output requirements on multiple targets. In this encounter, damage dealers are tasked with using their abilities to vanquish a primary, high health target as well as a series of additional

enemies. The difficulty stems from the requirement of damage dealers to balance damage on the boss and the continual wave of less powerful enemies. If the boss damage is neglected, the group will hit the encounter's enrage timer, ensuring a raid wipe. Conversely, if the boss is being focused too heavily, the group will be overrun by a mass of small enemies. This acts as a soft-enrage mechanic (as opposed to an instant-wipe hard enrage), killing the group if they fail to balance their damage output.

Top-tier Sha kills dictated that class-stacking was the only way to overcome the need to efficiently dispatch additional spawning enemies. A cursory glance at the kill by top US guild Blood Legion (Riggnarosbl, 2012) highlights the importance of stacking classes able to multi-dot or cleave down[11] the adds[12] while simultaneously dealing damage to the boss. Out of the eighteen damage-dealing classes brought to the encounter, Blood Legion utilised sixteen multi-dotters and cleavers (the other two classes were used merely for raid synergy and their ability to substantially enhance the output of the rest of the raid). Such class stacking tactics are evident throughout the top-ten kills (Wowprogress, 2012).

However, broadening the scope of inquiry beyond the top-ten, it is obvious that not all competitive groups can field such a class-stacked roster. This is evidently the case in Kill it Please's video (Palawinkip, 2013), which showcases an unorthodox class composition, including a Retribution Paladin and a Feral Druid. These classes cannot intuitively deal with the rapid target-switches as demanded by this encounter. Consequently they are not commonplace in a raid groups for the Sha of Fear.

[11] Multi-dotting refers to the ability to place multiple damage dealing spells on numerous enemies simultaneously. Cleaving is a general term given to abilities which deal substantial damage to a number of enemies.
[12] Typically refers to less-powerful enemies within a boss encounter.

In order to overcome these damage dealing requirements and still remain competitive,

guild Kill it Please employ exploitative tactics. As depicted in Figure 4.2, the raid group utilises a bugged Hunter pet mechanic in order to deal massive area-of-effect damage (that is, damage to multiple enemies). Through the use of this mass area-of-effect damage exploit, the raid group was able to effectively ignore the constant wave of smaller foes. Any damage required to defeat these enemies was provided by the glitched Hunter pet's Disease Cloud ability. Figure 4.2 documents the damage breakdown of the exploit. Notably, the glitched Disease Cloud ability dealt 53.1% of the overall damage to the adds, allowing players to focus their damage onto the boss.

Using theory by Caillois (1961) and Jarvinen (2008) it is possible to model this type of play as exploitative emergent play. Caillois claims that while innovative play patterns are paramount in competition, it necessary to remain within the game rules. Caillois claims that cheating (or exploits) function as play patterns which disregard a game's ruleset. (1961).

Jarvienen presents a similar conceptual framework for modelling the exploitative gameplay in Kill it Please's broadcast. Jarvinen comments that legitimate play tactics are derived from an intersection of game rules and mechanics (2008: 254). Exploitative play disregards any function of game rule, simply engaging with mechanics in order to achieve a desirable outcome. Through the use of a glitched mechanic, this raid group have circumvented the game rules and substantially reduced the challenge of the encounter.

Figure 4.2 Screenshot from an exploited Sha of Fear kill (bottom) and a World of Logs breakdown for damage done (top).

Furthermore, exploitative play represents a subversion of designer strategy. By taking advantage of design oversights, players are acting opportunistically (a key attribute of tactical manoeuvres, according to de Certeau) and not working within the game's intended design, or strategic framework. This emphasises the potential of emergent play in destabilising traditions of authorial power. Tactical play challenges strategic control.

Positioned as strategists, Blizzard have developed an encounter which should be engaged within a set of parameters. The mechanics of the Sha of Fear encounter dictate that the fight should be approached with some form of multidotting or target-swapping capable raid composition. This is the overarching strategy applied by Blizzard as a powerful cultural institution. Through tactical play, Kill it Please are able to negotiate strategies that were set for them by the developer. Paralleling de Certeau's original example of an individual tactically approaching the strategic mapping of a city's layout by taking shortcuts and navigating through favourite routes (1984), Kill it Please manipulate the strategy of encounter design via exploitative tactics allowing the group to effectively 'take a shortcut' and defeat the boss.

4.3.2 Gameplay study: Emergent play and interface with Blizzard, Vodka versus Heroic Gara'jal

In contrast to the previous gameplay study, Vodka's world first victory over the Heroic Gara'jal encounter (Vodkaguild, 2012) exhibits the use of legitimate emergent play (that is, engaging mechanics within the boundaries of the game's rules). To provide context to this kill, Vodka were the only raid group in the world to defeat this encounter in its original iteration. Decreed "mathematically impossible" (Balkoth, 2012: Para. 9) given the relatively low levels of gear available to players at the time, the raid group utilised the Mage class'
Spell Steal ability (allows the user to purge an enemy of a beneficial Buff, imbuing the Mage with their powers) in order to steal the Blazing Speed Buff from the enemies preceding the boss encounter. By doing so, Vodka's raid group was able to make up the damage required to kill the boss. Immediately following this kill, the boss' hitpoints were lowered by 4.1% and the Blazing Speed Buff unable to be spell stolen from NPCs. Unlike the previous case study, Vodka did not intentionally manipulate a broken boss mechanic in order gain a competitive

advantage. Rather, they capitalised on a useful mechanics outside of the main boss encounter while remaining within the game's broader ruleset.

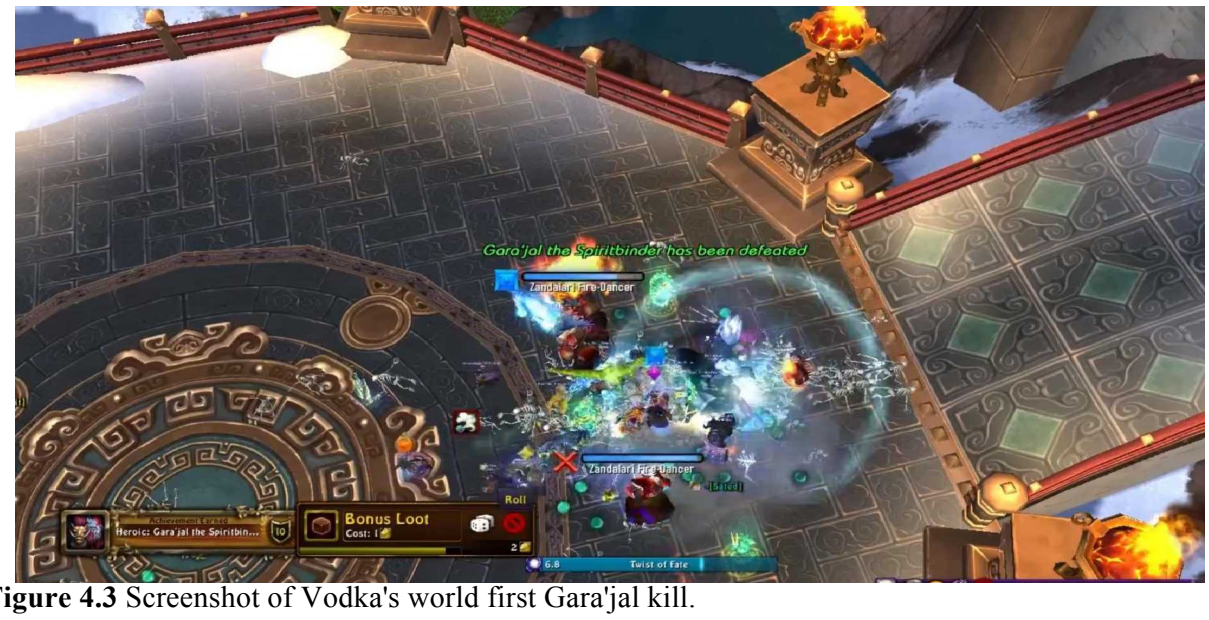

Figure 4.3 Screenshot of Vodka's world first Gara'jal kill.

Following their world first kill, Grafarion, the Guild Master and raid leader of Vodka noted that 'While this is obviously not an intended way to kill the boss, we reported it and confirmed with the developers regarding this method. After our kill, based on our feedback they made timely changes to the encounter and hotfixed the buff..." (2012). Through their emergent practices, Vodka's Gara'jal kill highlights a symbiotic relationship between developers and players. The game designer provides the player with a gameplay framework in which they can compete with others and inventively engage with gameplay mechanics. The emergent practices involved in high-end play can result in the game's most skilled players effectively testing the content before the majority of the playerbase reaches it. Vodka successfully identified a crucial design flaw in the Gara'jal fight (namely, that it was

impossible to defeat without external buffs) and ensured it was fixed before the general, non-competitive playerbase would encounter the boss.

The competitive player, in this instance, could be modelled as a part of the game's 'productive' audience (an extension of Jenkins' interactive audience concept). MMORPGs, unlike more conventional media types, are not finished upon launch. As noted by Humphreys' the mode for MMO production is "recursive or networked" (2005: 14). It is in constant production even post-launch, and authorship is shared across a range of participants, including both players and developers, who work together to create a playable gamespace.

This gameplay study signifies that emergent gameplay practices have the potential to directly influence game design, and facilitate collaborative design dialogues between competitive players and game developers.

4.3.3 Gameplay study: Emergent play and sequence breaking

Other groups employ emergent, sequence breaking strategies in order to work around raid team composition issues, or to avoid difficult phases of a boss encounter. Australian guild, Avast, rose to prominence after their use of a 'Zerg tactic' on the Dark Animus encounter allowed them to secure the position as Oceania's top ranking raid group (Natakublitz, 2013). Zerging refers to ignoring most of the mechanical elements of an encounter and focusing on burning down a boss as fast as possible.[13] The standard strategy used by raid groups involves powering up three types of enemies, each increasing level stronger than the last. After the enemies are appropriately levelled, the primary boss is focused down. This is a lengthy process and must be meticulously executed. Avast's strategy disregards the entire power up mechanic. Instead, only two enemies are powered up and the

[13] The term draws from the StarCraft race, the Zerg, who are known for their playstyle of overcoming enemies via brute force rather than tactical finesse.

rest held in place by individual raid members. Damage output is centred on the primary boss target and the fight is 'Zerged down' quickly . Non-Zerg kills are typically in the 8-9 minute range, whereas a successful 'Zerg tactic' kill will typically be from 2-3 minutes (World of Logs, 2013). The success of this tactic is contingent on speed; groups must essentially kill the boss before it becomes impossible to sustain healing through high levels of incoming damage.

The use of this emergent 'Zerg tactic' can be understood as a form of sequence breaking. Sequence breaking refers to the performance of in-game actions out of the intended linear order, or of skipping requisite actions or items entirely. (Carless, 2004).

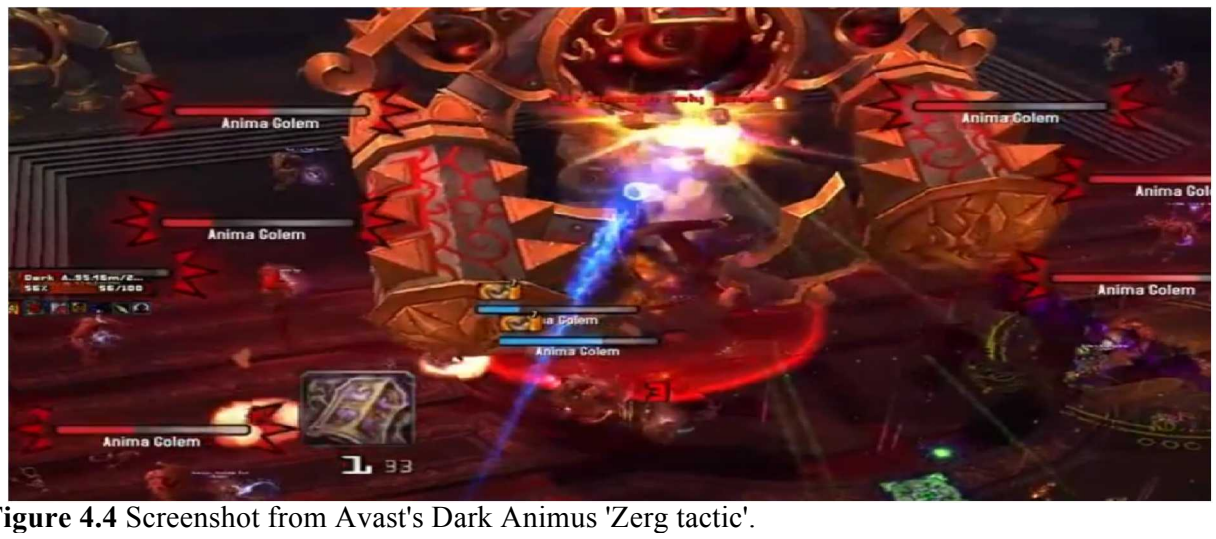

Figure 4.4 Screenshot from Avast's Dark Animus 'Zerg tactic'.

While Avast successfully executed a 'Zerg tactic', Blizzard have not always accepted playstyles which disrupt the planned sequence of an encounter. Characteristically, Blizzard have been known to modify blatantly unintended playstyles, such as sequence breaking tactics. Raid team Method experienced this in the form of a live hotfix, during what was

expected to be their kill of Thok the Bloodthirsty (Sparkuggz, 2013). Method developed a tactic for this encounter which involved skipping an entire, highly difficult phase of the fight. Instead of contending with the troublesome mechanics which would occur later in the encounter, Method "were playing a cheesy strategy of never leaving Phase 1..." (Starym, 2013). Method raider Ashvael claims that the group "felt incredibly safe for [a] kill but at 20% we wiped very suddenly without any enrage or the like happening" (2013). He notes that the group later realised Blizzard had applied a live hotfix preventing players from ignoring later phases of the fight (Figure 4.5). Evidently, Blizzard have considered the extent to which groups manipulate game mechanics in order to gain competitive standing. Consequently, in order to ensure that groups do not completely disregard design strategies, Blizzard moderate the gamespace.

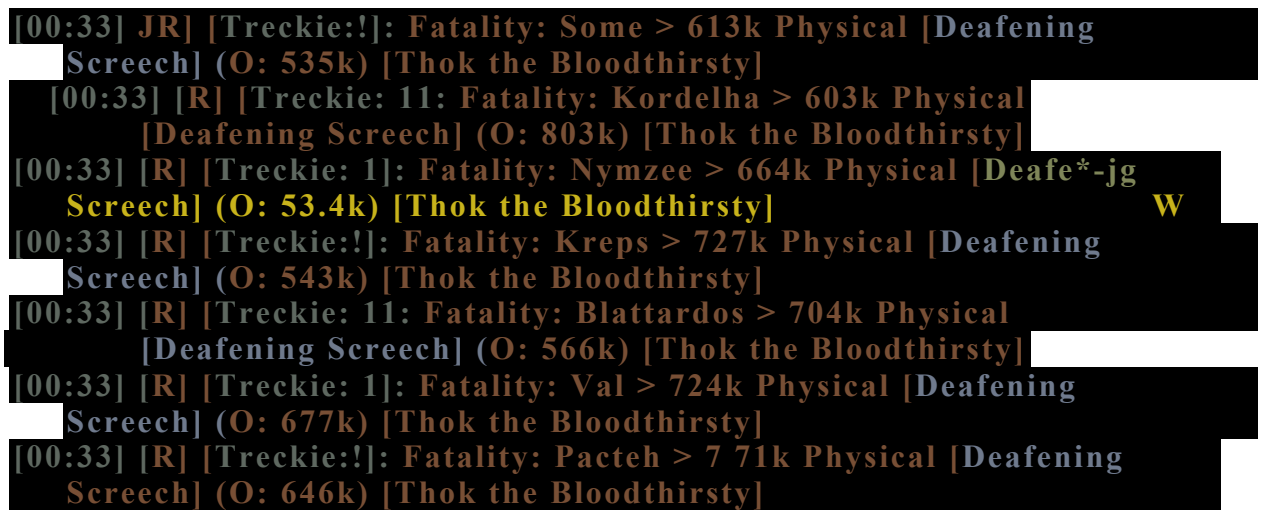

Figure 4.5 Screenshot of Method's in-game combat log at the moment of the live hotfix.

Through the moderation of the gamespace, Blizzard lessen the game's mutability and potential for exploratory modes of play. This struggle for authorial control, claims Humphreys, is indicative of an author-text-audience model of media consumption (2005:

282), whereby texts are produced by a single author. She argues that such linear communication structures are typically characteristic of conventional, less malleable media (Humphreys, 2005: 282). Thus, by implementing single-authored design strategies, Blizzard are removing the very essence of what distinguishes games from traditional media: interactivity. Issues surrounding game authorship and emergent play will be discussed in further detail in the following chapter.

4.4 Paratexts as emergence

Emergence in competitive raiding is also formulated outside of direct play through a range of different paratexts. This term was established in a non-digital sense by literary theorist Genette referring to elements of a text which are not part of the 'authorial text', such as the cover or table of contents. Despite the fact that these elements are 'external' to the main, authorial text, paratexts have the profound potential to frame and influence how readers will approach and interpret it. (Genette, 1997)

Digital media theorists including Consalvo have appropriated the term for use within digital spaces (Consalvo, 2007). In Consalvo's discussion on cheating in games she contends that focal points of digital texts do not lie within the games themselves, but at the various activities and elements that surround them (Consalvo, 2007). This chapter makes a similar thematic contention; paratexts function as a form of emergence within competitive raiding. Players in the progression race engage with numerous out of game applications in order to enhance their play, signifying this emergent function.

The idea of players generating supplementary texts which maintain relevance to (and are often essential in fully understanding) the main text can be positioned in relation to theory on fan-culture and user-generated content. An appropriate conceptual parallel is to Jenkins'

work on interactive audiences and the collective intelligence of media fans (2006). As I will examine more fully in a later section of this chapter, the knowledge and skill of competitive players (exhibited through their production of paratexts) has afforded them a position of co-authorship, heightening levels of player agency.

The impetus for the production of paratexts in digital games is often to address inadequacies in the game, implemented by the developer. In WoW, in-game features will rarely possess the level of sophistication required to be useful in the scheme of top-tier raiding. Through the production of paratexts, competitive players are not only creating emergent tools for cultivating tactics, but also repositioning the skilled player as an influential force in game design.

This study brings together the individual concepts of paratexts and emergence to create the term *emergent paratexts*; the construction of paratexts in response to particular instances in the gameplay. Effectively, emergent paratexts are composed as an out of game tactical approach to gameplay scenarios. While previous studies have been conducted on competition in gaming (Vorderer et al.), emergence (Adamkiewicz, and Jenkins) and paratexts (Consalvo and Paul), the use of paratexts as emergent tools in competitive play have yet to be considered in an academic context. What I have termed emergent paratexts will be used to frame an understanding of two primary case studies, World of Logs and Simulationcraft, arguably the two most fundamental PvE paratextual applications for competitive play.

4.4.1 World of Logs

As a paratextual tool, World of Logs builds on WoW's in-game combat log (which serves as a record of characters' recent interaction with the world). World of Logs can be

considered emergent paratextual practice as it addresses a number of design flaws in the game's standard-issue combat log; specifically, the inability to sort parsed data into organised groups. The limited functionality of the in-game combat log poses problems within the context of competition should players want to compare and contrast combat parses. World of Logs allows players to do so, and will save parsed data for as long as the user is running the add-on client.

Given the proper level of experience with using the program, World of Logs has the potential for analytical applications. Due to its ability to provide profound gameplay insights (such as allowing groups to accurately identify the cause and effect of in-game abilities), it is considered an essential tool in competitive raiding. Using the information provided by World of Logs, raid teams are able to map out tactics for boss encounters without needing to test and verify elements in-game. In my experience of competitive raiding, a group will typically engage a raid boss numerous times in order to experience the encounter mechanics. The group will then deconstruct the encounter using World of Logs, trawling through iterations of data in order to understand how players should interact with the boss' abilities. Once players understand how and when their abilities should be used, it is possible to construct an effective game plan

This out of game planning represents a new paradigm for gameplay and a deviation in cultural practices traditionally associated with gaming. Instead of working exclusively within the gamespace to improve play (for example, practising mechanics as would be common in more reflex-oriented competitive games such as *Counter-Strike),* much of the work in WoW's competitive play takes place outside of the game.

4.4.2 Simulationcraft

Simulationcraft is another tool utilised by players in order to map play strategies. In contrast to World of Logs (which records already established play styles), Simulationcraft deals with the empirical testing of potential playstyles. The program takes into consideration the player's current level of gear as well as their rotation (which abilities are used and in what order), running thousands of iterations of simulated encounter in order to determine the optimal rotational, gearing or talent specialisation strategies. Increasing class synergy and the prevalence of proc-based[14] combat modifiers have eroded the accuracy of traditional calculators that rely upon closed-form approximations to model complex mechanics. The goal of this simulator is to close the accuracy gap while maintaining a performance level high enough to calculate relative stat weights to aid gear selection. A simple graphical interface is included with the tool, allowing players to download and analyse characters from Armoury profiles[15].

Simulationcraft is important as it is in the unique position to directly influence Theorycraft (another form of paratext). The stat weights which determine optimal playstyles suggested in Theorycraft works are derived from Simulationcraft's output. As a participant in the competitive metagame, I am familiar with using such applications in order to optimally develop my character. Drawing on this expertise, I processed my character using Simulationcraft in order to determine the highest damage dealing sequence of abilities Figure 4.6 depicts the results yielded by the simulation.

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[14] A proc, derived from the MUD phrase 'special procedure', refers to an event triggered under particular circumstances. Weapons and trinket items often have procs.

[15] Public profile of a player's gear, stats and achievements. Accessible via Battle.net.

The simulation shown in Figure 4.6 provides a detailed Damage Per Execute (DPE)[16]Time breakdown, as well as an indication of time spent on abilities (over a 555 second simulation, and numerous iterations). Figure 4.7 reports the absolute optimal uptime of beneficial buff abilities. From this simulation output it is possible to derive an optimal playstyle likely to yield the highest player output. In contrast to the Simulationcraft's playstyle suggestion, Figure 4.8 shows Blizzard's in-game recommendation of how to play the same class. Where Simulationcraft provides users with a highly optimised and thoroughly tested style of play, Blizzard's suggestion is relatively outdated and uninformed. One issue with Blizzard's playstyle suggestion is the contention that players should use the Shred ability to generate combo points when positioned behind the target. Contrasting this to the Simulationcraft DPE output, it is clear that using the Mangle ability to generate combo points is much more cost efficient (note that both Shred and Mangle are relatively low in the scheme of the player's overall damage per second; thus, using Shred outside of high-energy scenarios is nonsensical).

Through emergent paratextual practices such as Simulationcraft, it becomes increasingly evident that competitive players are an important part of WoW's player ecosystem. The inaccuracy of information conveyed through the game's interface signifies a need for top-tier players to produce and utilise paratextual applications in order to optimise their performance in the competitive arena. Further, the inaccuracies communicated by Blizzard emphasise the importance that skilled players (and their paratexts) have in presenting informed gameplay approaches to the playerbase.

[16] DPE takes into account the resource cost of abilities as well as the damage output component. A DPE breakdown may indicate that an ability that deals 10 damage with 8 resource cost has less utility than an ability with 6 damage and 3 resource cost.

Interestingly, my research into Simulationcraft has provided evidence contradicting research by anti-Theorycraft scholars, in particular Paul. Paul contends that Theorycraft has reduced the game to "a series of math equations to be solved and lists of buttons to push" (2011: Conclusion, para. 2), depriving players of more natural, exploratory modes of gameplay experimentation. While Theorycraft generally does not take place in-game, it is irrefutably exploratory and arguably a form of fan-play (Jenkins, 2006). Paul's previous statement also suggests that Theorycraft homogenises the game. While standard modes of play are often derived from simulation results, it is solely through simulation that users have found the benefits of otherwise under-utilised talents.

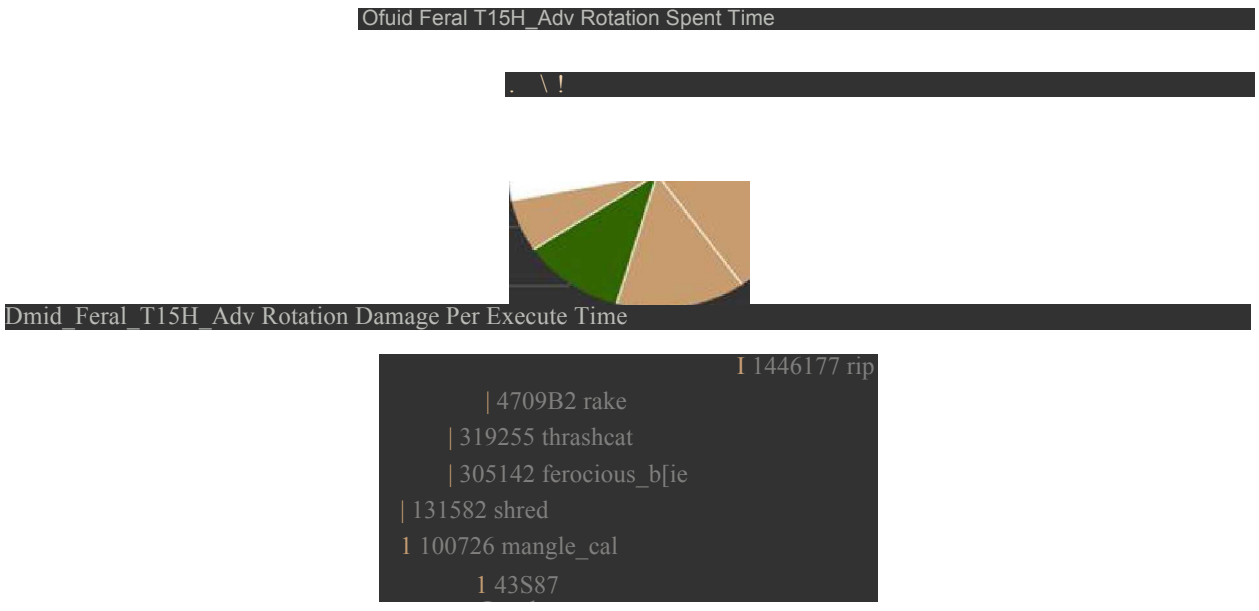

Figure 4.6 Simulationcraft results for my character.

Dynamic Buffs	Start	Refresh	Interval	Trigger	Up-Time	Benefit
► berserk	2.9	0.0	187.6sec	187.6s ec	9.50%	9.50%
► berserking	3.0	0.0	180.4s ec	180.4s ec	6.70%	6.47%
► bloodlust	1.0	0.0	0.0s ec	0.0s ec	9.01%	8.79%
► dancing_steel	14.3	10.6	32.5sec	18.3sec	50.43%	50.43%
► dream_Qf_cenarius	49.9	0.0	9.1 sec	9.2s ec	35.93%	44.94%
► omen_of_clarity	23.0	0.5	18.9sec	18.5sec	3.68%	6.94%
► predatory_swiftness	49.9	1.5	9.1 sec	8.8sec	59.44%	100.00%
► renatakis_soul_charm	6.3	0.0	74.3s ec	6.7sec	27.40%	27.40%
► rune_of_re origination	10.0	0.0	46.6sec	46.6sec	21.92%	21.92%
► savage_roar	6.1	8.5	55.6sec	33.8sec	99.40%	99.85%
► skull_banner	3.3	5.0	170.1sec	42.5sec	9.66%	7.93%
► stormlash	4.0	0.0	103.7s ec	103.7sec	9.01%	9.01%
► synapse_springs_2	7.6	0.0	62.6sec	62.6sec	16.76%	16.76%
> ti e r15_4pc_me I e e	14.8	0.0	31.3s ec	31.3s ec	32.63%	37.83%
► tigers_fury	14.8	0.0	31.3s ec	31.3sec	19.57%	7.60%
► vi rme n s_bit e_poti	2.0	0.0	360.7s ec	0.0s ec	10.13%	10.13%

Figure 4.7 Simulationcraft output showing optimal player Buff uptimes.

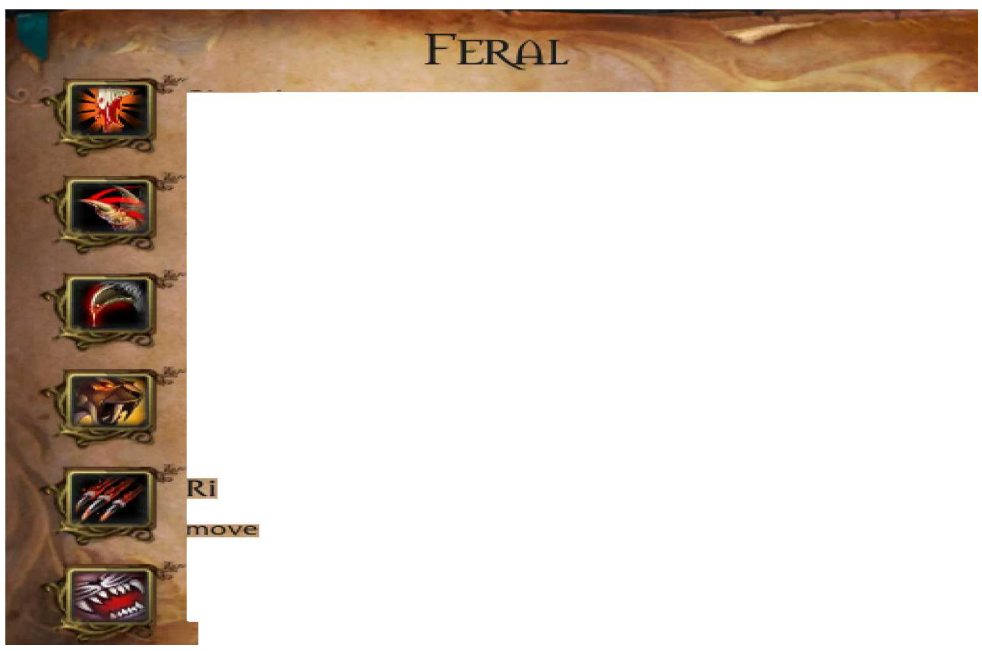

Figure 4.8 Blizzard's in-game guide on how to approach the Feral Druid class.

4.4.3 Paratexts and the relationship between players and developers

Because of their familiarity with paratexts, competitive-tier players have utilised out of game applications in order to identify broken game mechanics. Using the World of Logs application as a means to collect data samples, player Stenhaldi was able to provide mathematically sound proof of a malfunctioning game mechanic (Stenhaldi, 2013). In this case, the mechanic was a malfunctioning trinket slot item, which would proc infrequently. The user documented play over a 6 hour period, parsing the combat log using World of Logs. Through the Log Browser, the user was able to establish the mean interval between procs and the largest interval between procs. Ultimately, findings indicated errors in Blizzard's 'bad luck streak' prevention mechanic.

As was the case in some instances of emergent play, emergent paratexts provide a platform for the user to act as a game co-author. Coupling their intimate understanding of game mechanics with paratextual expertise, competitive players are able to assist designers in maintaining a properly functioning digital space.

This kind of co-authorship suggests that a conversational relationship can develop between players and designers. Through their responses to the content produced by Blizzard, players are actively participating in a direct dialogue with the game's developers. Following forum user Stenhaldi's post (2013) outlining the statistically grounded proofs, Blizzard Quality Assurance poster Sapperwix posted that a fix for the broken mechanic was underway (Sapperwix, 2013). To make use of Jenkins' terminology, this relationship between Blizzard and WoW's skilled playerbase is dialogic and collaborative (Jenkins, 2006: 235).

Evidently, emergence can result in skilled players being coopted into the design process. However, as noted in the examples of sequence breaking emergent play, the

relationship between developers and players is not always so positive. The following chapter will explore emergent play and the tension between players and developers in greater detail.

In the previous chapter, an exploration of competitive raiding scenes indicated considerable tension between Blizzard and its competitive playerbase (specifically those who engaged in emergent practices). In response to emergent practices, Blizzard have heavily moderated areas of the gamespace, ensuring that the game's design strategy is not destabilised. The conflicting technocultural philosophies, of both developers and players, on cultural practices of emergence and competitive play will guide this chapter. In exploring Blizzard's stance on emergence and competition, the design practice of class balancing was esxamined. Class-balancing is an attempt by designers of class-role based games (such as MMORPGs) to keep the output potential of classes within an acceptable range. Specifically, focus is on Blizzard's recent attempts to balance the Feral Druid class. By attempting to balance the class and increase its accessibility, Blizzard disregarded the function of emergent practices within gaming and failed to properly balance risk and reward in player choices. Findings indicated that through their class balance, Blizzard lowered the tactical possibilities available to players and effectively weakened the game's competitive framework.

5.1 Class balance: Heart of the Wild and Dream of Cenarius

As part of their class specialisation, the Feral Druid, a melee damage-dealer, is given the choice between two viable final-tier talents: Dream of Cenarius (DoC) and Heart of the Wild (HotW). HotW benefits the user passively, providing a flat damage bonus. It also gives the player hybrid utility[17]. HotW is considered the 'safe' specialisation. DoC, unlike HotW, forces a higher level of user engagement and awareness. As an emergent mechanic, this specialisation requires the user to weave healing spells into their standard damage-dealing rotation in order to gain damage-increasing buffs for their abilities. This encapsulates

[17] As noted in Figure 5.1 , Heart of the Wild allows melee damage dealing Druids to heal, tank or deal damage from range for a short period of time.

emergent play as it involves an interaction with gameplay mechanics not traditionally part of the player's standard set of abilities (namely, healing as a damage dealer).

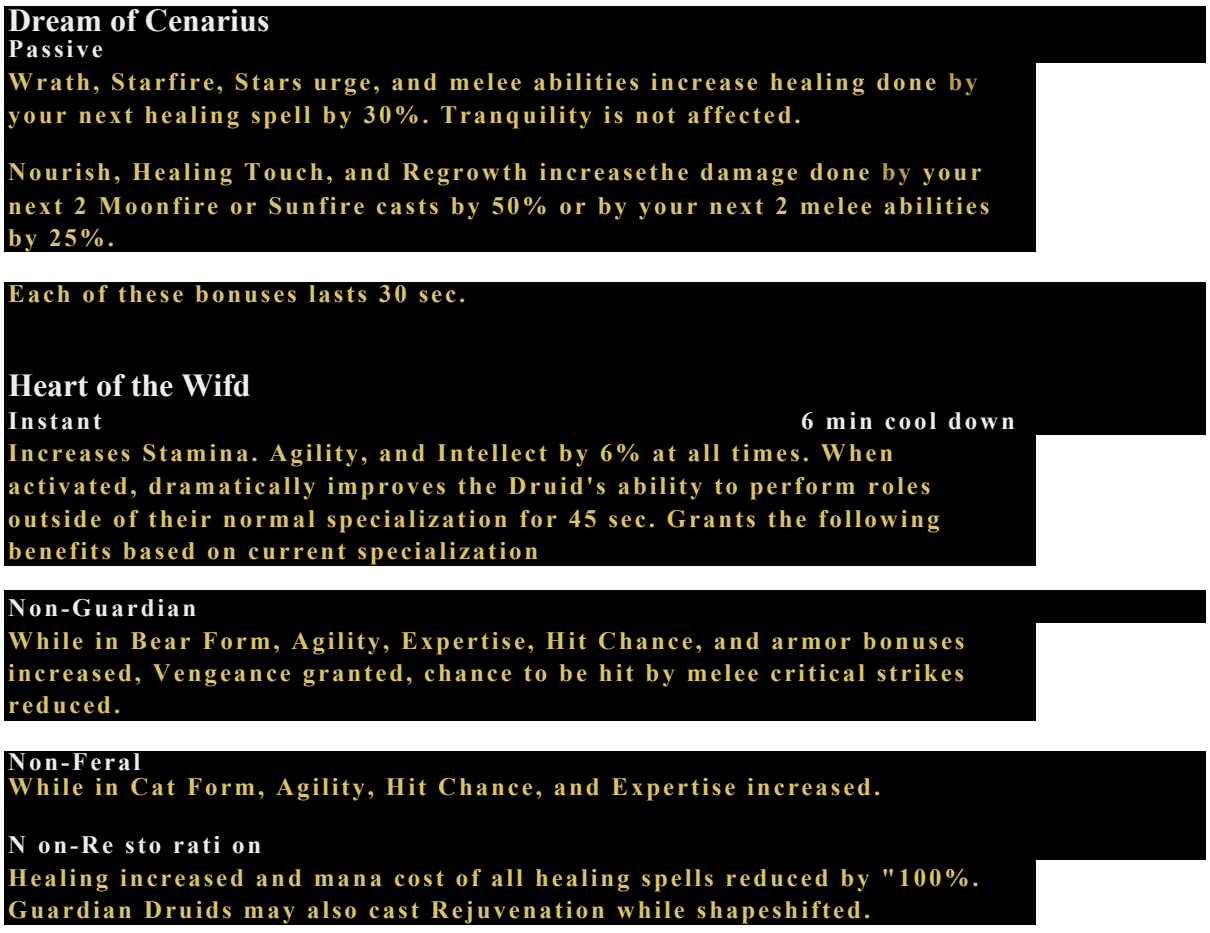

Figure 5.1 The in-game descriptions of the Dream of Cenarius and Heart of the Wild abilities

Various Feral Druid paratexts *(MMO-Champion, the Fluid Druid)* suggest that DoC will only outperform HotW if executed perfectly. However, should the player be able to perform the complex series of input combinations the difference between DoC and HotW will be considerable (Aggixx, 2012). Evidently, this type of game design works on a system of risk versus reward - the more risk an objective has, the greater the reward should be.

Should we consider Caillois' concept that agon games are games of skill (1961), it is possible to argue that high risk/high reward game design is a fundamental of the competitive game.

Despite the interesting potential for competitive play afforded by a more complex talent system, Blizzard proposed a redesign of DoC. This resulted in the DoC talent being reworked to reduce complexity and "increase usability, but maintain the spirit of the effects..." (Rygarius, 2013). The game's official patch notes stated the following alteration would be made to the ability: "Feral: Increases the amount healed by Healing Touch by 20%. Casting Healing Touch causes the Druid's next Rip to deal 15% increased damage..." (Rygarius, 2013).

Within the framework of competitive play, the change to DoC has numerous design flaws. One of the most glaring issues is that there are disproportionate levels of risk and reward. As noted by Thompson, an adequately designed game should include rewards which "match the risk" (Thompson, 2007: 109). The proposed update of the talent is for all purposes passive, compared to the engaging dynamic of the talent's original iteration. The passivity of the talent reduces the risk and skill element involved in playing the original specialisation, consequently leading to uncompelling gameplay. The nerf to DoC's complexity also severely reduced its functionality, effectively rendering the ability useless in multi-target situations, and in instances where the player must rapidly switch targets.

The reduction in the ability's damage modifier can also be seen as an anti-emergent and anti-competitive design choice. DoC's primary draw was its damage component, which scaled directly with the player's individual skill - rewarding proficient players with high damage. This damage component was the sole reason for a player to choose it over HotW. Zarhym, a commentator on the Blizzard forums, discusses the issues faced by developers in balancing active and passive talents. He states that "generally speaking, Blizzard prefer active

talents to be slightly superior to passive talents in the same tier. No one will choose an active talent if it requires more work for the same reward..." (Zarhym, 2013: Para. 4). In the instance of DoC and HotW, by reducing the reward for the player's involved input, the use of DoC is likely to diminish.

A reading of Theorycrafting forum *the Fluid Druid* indicates that members of this community recognise the appeal of a skill-based gameplay model in strengthening WoW's competitive framework. One poster argues that "both [talents] worked, and we actually made the choice on a fight by fight basis..." (Tinderhoof, 2013). Despite positive community reactions to the original model, Blizzard pursued a design choice which may potentially force competitive players into committing to a single talent tree for all raid encounters. This is detrimental as it reduces the game's talent specialisation heterogeneity. Further, as high-skill builds are removed from the game, the scope of player choice becomes limited.

While Blizzard never publically justified the change beyond reasons of "increasing usability" (Rygarius, 2013), it is reasonable to speculate that the rationale for adjusting emergent playstyles is likely to do with the prevention of skilled players snowballing[18] out of control (in terms of character-power). This design choice can be understood within LeBlanc's negative feedback framework (1999) . As noted in the Literature Review, negative feedback is a system whereby 'losing' players are given the opportunity to catch up to the 'winning' player via particular game mechanics. By reducing the damage output of emergent playstyles, and effectively rendering them useless, Blizzard is attempting to ensure that skilled players do not snowball ahead of the 'regular' playerbase. Through their game mechanics, Blizzard are attempting to keep player output within an acceptable range. This kind of game design is jarring when considered in the context of competitive gaming. If a

[18] When players become increasingly powerful up until the point that they are 'unstoppable', or unreasonably overpowered.

game is not based solely on individual merit and skill, its ability to be played competitively is called into question. Ultimately, Blizzard's class balancing suggests that the game is based around expected modes of play, rather than the myriad of alternate, emergent playstyles.

Interestingly, should one draw contrasts between the game mechanics and dynamics of Blizzard's *StarCraft II* and WoW, the varying technocultural philosophies of the design teams becomes clear. Specifically, the designers of these games differ on their perceptions of the function of competitive gaming and the importance of the cultural practices it affords.

Through the implementation negative feedback systems via content nerfs, WoW's developers are suggesting that games should be easily accessible to a wide range of players. In contrast, Blizzard's *StarCraft II* is made more accessible via the implementation of spectator features (integrated into the client, as opposed to WoW, which is broadcast via third party websites) . The ability to spectate play using the game client encourages practices of spectatorship, drawing on the tactics and playstyles of high-level players as a means for self-improvement.

As illustrated by Adamkiewicz through a reading of the bunnyhopping tactic in *Quake 3 Arena* (1999), complex and emergent mechanics are fundamental in improving gameplay (2013: Para. 8). They add layers of skill, increasing the skill-ceiling and enhance the tactical decisions available to the player. Furthermore, as noted by Fullerton et al., emergent mechanics "create dilemmas that are more complex, where the players must weigh the potential outcomes of each move in terms of risks and rewards...″ (Fullerton et al., 2004: 275).

it is possible to draw contrasts between WoW's 'low skill-ceiling' design and other competitive games, such as Valve's *Dota 2*. Discussing the game, one designer notes that players are rewarded "back for [their] knowledge and...skill..." (Blake, 2013: Para. 16).

Unlike WoW, there is no artificial skill ceiling in *Dota 2*'s game design which prevents skilled players from gaining distinct gameplay advantages over the less skilled. Seemingly, Blizzard are reluctant to celebrate exceptionalism, a stark contrast to the meritocracy that is *Dota 2*.

Blizzard's recent class design signifies a shift from game design philosophies of the 1990s (from which early WoW drew significant design influence). During this time, development studios such as Looking Glass were producing 'dungeon simulators' like *Ultima Underworld* (1992) and mutli-solution game environments like *System Shock* (1994) and *Thief* (1998). As WoW's lifespan has continued, it has moved further away from this model of simulation and its dynamism has regressed. As evidenced through the discussion on class balancing, the game now features class and ability homogenisation, less customisation and less to explore in 2013 than the 2004 original iteration of the game.

Forest argues that designing a multiplayer game means accepting that players "will make your game what it is, more than you ever plausibly could...You're effectively handing over what your game is, almost entirely..." (2013: Para. 7). Forest cites the example of Valve's *Team Fortress 2* as an exemplary demonstration of how developers can continue to develop their game in concert with the community. Valve regularly incorporate player generated content into the game, and often work in unison with the playerbase in deciding the direction of future game content. This idea of a multi-authored medium is explored in further detail by Salen and Zimmerman, who purport that developers should be responsible for the design of formal structures, however the players should determine the production of patterns of events (Salen & Zimmerman, 2003:538).

Through the aforementioned class balancing example, it is evident that Blizzard are following a traditional media model of audience interaction. While research conducted into

emergent paratexts revealed a sometimes dialogic relationship between developers and skilled players, Blizzard's reaction to emergent play via class balance suggests that dialogue only exists when it serves to benefit their vision of the game (e.g. glitch identification).

Sicart argues demonstrations of authorial power in digital games are problematic. Drawing on ludic thought, he contends that one could best justify games as an aesthetic form through play; "the performative, expressive act of engaging with a game, contradicts the very meaning of authorship in games..." Further, he notes that games at most "belong to the designer if she wants to establish a dialogue with the player through the game..." (Sicart, 2011: Against Procedurality, para. 11).

While it would be remiss to completely disregard the designer (especially in a massively multiplayer context, where they should function as moderators of player behaviour), there is some sense in Sicart's argument. Drawing on Frasca's categorisations of simulative and representative media (2003), it is clear that (most) games endeavour to engage players through simulative, play-based aspects. Instead of providing fixed description traits of events which cannot be manipulated, simulative media reacts to particular stimuli according to a set of conditions such as configurative input data. Applying Frasca's theoretical framework to WoW's PvE balancing highlights a broader game design dilemma; the tension between simulative and representative game design elements.

Through the implementation of emergent play nerfs, WoW has forced competitive players to reconfigure a particular set of actions in the way a designer has thought them, explicitly abolishing many possible instances of player creation and appropriation. This movement toward linear game design diminishes configurative and competitive possibilities and has effectively resulted in the designer "play[ing] the player" (Sicart, 2011: Against Procedurality, para. 3).

CHAPTER 6: SPECTATORSHIP

Digital games are traditionally designed for players. Play is intrinsic to games as a medium, and the player's engagement with mechanics typically forms the basis of game design. This study has so far demonstrated that emergent modes of player engagement have given rise to new cultural practices of play. However, the increasing prominence of competitive gaming as a cultural institution has resulted in less-participatory modes of engagement with games becoming important cultural practice.

Building on Bartle's categorisation of player roles (1996), this study will focus on the new identity of the game spectator. As a cultural practice, spectatorship is a key aspect of competitive gaming. Only the most skilled and experienced players, who have dedicated the time (both in and out of game) to develop a sophisticated understanding of the game's most intricate mechanics, are qualified to play at a competitive level. At the time of writing, Wowprogress statistics indicate that the top 200 sample size is within the top 0.6% of the recorded raiding playerbase.

Because of the difficulty in competing in the hardcore-raiding metagame, broadcasting websites such as YouTube and Twitch.tv are popular sources of information on tactics and styles of play. Livestreaming platform, Twitch.tv, is one of the main avenues for game spectatorship. Twitch garners over 35 million viewers watching gaming related content each month (Jackson, 2013). Additionally, emergent paratexts such as World of Logs similarly function as a platform for observation. The spectatorship of play as a new cultural practice associated with competition signifies a shift away from the medium's focus on the simulative, play aspects of games.

Through the quantitative content analysis of paratexts and qualitative analysis of broadcasted play, research findings indicated a link between play tactics and spectatorship.

Furthermore, data indicated a vicarious spectator-player interface, particularly evident in livestreaming platform Twitch.tv. As a preface to a detailed discussion of the research findings, the following section will provide a brief overview of theoretical frameworks useful in comprehending the spectatorship of digital games.

6.1 Overview of play spectatorship

A reading of Huizinga's research (1955) into the play element in culture suggests that spectators are enabled to act as participants. Onlookers share the tension of play, from games of chance to challenges of great difficulty (Huizinga, 1955: 47-49). Huizinga notes that spectators can be positioned inside the magic circle (1955: 10); the boundary separating the game world and real world. Being inside the magic circle affords the spectator the immersive and transformative potentialities of gameplay, enabling spectators to adopt the values of the game world.

Huizinga draws parallels between the spectatorship of play and Roman gladiatorial combat (1955: 74). This parallel can also be applied to competitive digital gaming. Huizinga contends that ancient gladiatorial games were played by slaves; a relatively small fraction of society. Like gladiatorial combat, only a small percentage of WoW's playerbase participate in the competitive raiding metagame. Only the most skilled and experienced players, who have dedicated the time to develop a sophisticated understanding of the game's most intricate mechanics, are qualified to play at a competitive level.

The spectatorship of play by a select group of individuals has, according to Huizinga, the potential to shift the competitive impulse from the protagonist to the spectator. Huizinga goes on to state that such a shift would not result in the disappearance of play. Instead, the spectator adopts a vicarious attitude, the gladiators representing and fighting on behalf of the spectators (Huizinga, 1955:74-75).

This blurred line between spectator and player is also pointed out by Sutton-Smith (2001). He describes fantasy play "that is rooted in the mind as a kind of vicarious play, a parallel to active play" (Sutton-Smith, 2001:21). In this respect, the act of spectating is an active form of playing-along. Hills (2002) and Jenkins (2004, 2006) also argue that play permeates fan interactions with texts (such as spectatorship) and that it is important to consider fans as players

Trail et al.(2003) and Gau's (2007) work on spectator sport is also useful in providing a conceptual understanding of spectator engagement with the typically player-involved medium of digital games. Through their research into values associated with spectator sport, they conclude that watching sport addresses self-actualisation needs and is important in providing knowledge.

These theoretical frameworks provide two major themes which will guide the analysis of spectatorship as cultural practice; i) spectatorship of competitive play as pedagogy and ii) the vicarious relationship between players and spectators.

6.2 Spectatorship: Broadcasted play as paratext

While previous studies into the spectatorship of digital games have focused on the entertainment value of observing play (Cheung & Huang, 2011), this current inquiry endeavours to draw a link between spectatorship and emergent play. Through a survey of paratexts World of Logs and Wowprogress, this section will argue that competitive play has the potential to facilitate spectatorship for pedagogical purposes. Spectating top-tier play is a means by which groups can incorporate the emergent play tactics of competitive players.

6.3 Effects of spectatorship on the competitive raiding metagame

For groups outside of the top-tier progression race, but still seeking to improve their competitive standing, broadcasted play is an important paratextual resource. Within the arena of competitive raiding, spectatorship has resulted in a 'trickle down' effect with regard to gameplay tactics. The tactics employed by top-tier guilds in their gameplay recordings and broadcasts generally form the basis for lower-tier guilds' tactics. De Certeau's strategies and tactics framework (1984) were again applied in order to understand this emerging cultural practice, and form the basis of my hypothesis. Spectatorship of competitive play has, in some instances, resulted in a 'trickle down' effect with regard to play tactics. Top tier guilds will establish a tactic, and lower tier guilds will utilise (and perhaps refine) aspects of this playstyle in order to defeat bosses.

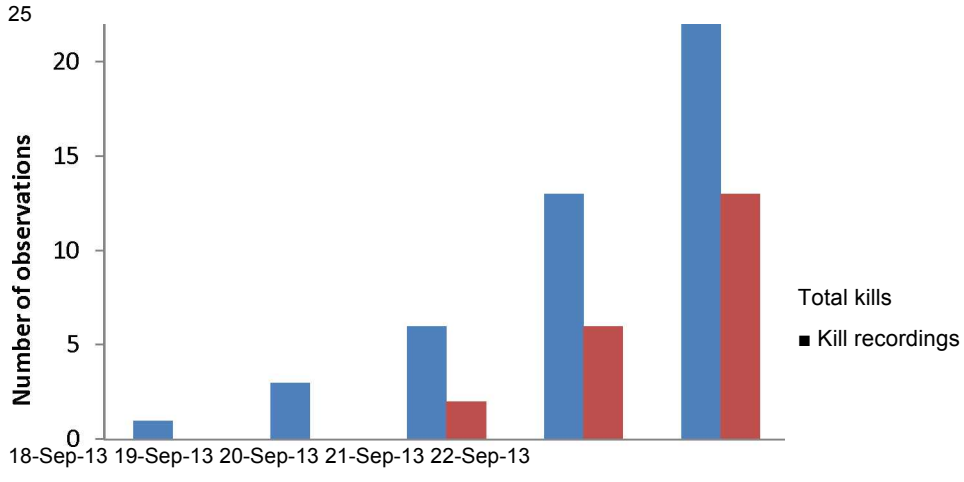

Figure 6.1 Kills/Videos for the Heroic: Thok the Bloodthirsty encounter.

Figure 6.1 highlights the importance of observation in competition. Drawing data from Wowprogress.com, Figure 6.2 indicates that there is a strong correlation between the availability of kill videos and boss kills. From the period of September 18-20, there were only three raid teams in the world to have defeated the Heroic: Thok the Bloodthirsty encounter. September 20 saw the world's top two raid groups, Blood Legion and Method, release kill videos for the encounter. Corresponding with the release of Blood Legion and Method's gameplay videos were kills by European raid teams ^K3opcyc, genuine, Envy and Wraith. By the fifth day, there were 13 kill publically available kill recordings and 22 kills recognised by Wowprogress.

I hok the Bloodthirsty 25-man Heroic **Thok the Bloodthirsty 25-man Heroic**

Kilted *Sep 20, 2013 22:43:27 GMT* Killed *Sep 19, 2Q13 07:32:35 GMT*

Recorded Guild item Level: 5GO.&2 (25-man) Recorded Guild item Level: 360.8S (25-man]

Role	Character	Hem Level	Role	Character	Item Level
DPS (Frost)	Jayos	563,73	DPS (Frost)		56D.56
DPS (Balance)	Dig	563.3S	DPS (Balance)	Zoomkins	563.19
Healing (Restoration)	Celece	554.87	DPS (Balance)	Bush in o	561.75
DPS (Balance)	Ovyd	56-4.47	Heating (Restoration)	Karashote	553.87
DPS (Feral)	stenhaldi	561,73	**DPS** (Beast Mastery)	Snit	558.53
Healing (Restoration)	Tiaerladvirl	554,93	DPS (Beast Mastery)	Owe Mate	566.4D
DPS (Beast Mastery)	CSiDertol	559.80	Heating (Mistweaver)	Affinichi	558.00
DPS (Beast Mastery)	A mown t	558.47	Tank (Brewmaster)	Rigqimonk	562. EO
Healing (Mistweaver)	Chiichan	553.06	Heating (Mistweaver)	Tracerzz	555.69
Tank (Brewmaster)	pautjhi,	562.38	Tank (Protection)	Absalom	562.S6
Tank (Protection)	Slootbaa	556.75	Heating (Holy)	Bobina	560-44
DPS (Retribution)	Silvercreek	559.40	DPS (Shadow)	Bnd	564.53
DPS (Shadow)	Pravjtv	559.13	Healing (Discipline)	Hvaeine	558.2Q
Healing (Holy)	Siory	560.19	Healing (Discipline)	Krhojre?	557.94
DPS (combat)	Kaowa	563.00	DPS (shadow)	iaoeto	562.13
DPS (Assassination)	Gondlame	556,38	DPS (Assassination)	Oaaaz	561.94
DPS (Enhancement)	Rvethe	561.38	DPS (Subtlety)	Ahdehl	557.19
Healing (Restoration)	Raine	557.93	DPS (Assassination)	Fayz	560.88
Healing (Restoration)	Incendloo	558.38	Healing (Restoration)	XACUS	559.44
Healing (Restoration)	Team	561.50	Heating (Restoration)		559.OO
DPS (Demonology)	An a si an	564.38	DPS (Demonology)	Zariis	558.25
DPS (Affliction)	Jhiaavficius	557.81	DPS (Demonology)	shinafae	565.53
DPS (Demonoiogy)	Dosonroids	561.06	DPS (Demonology)	Emberieaf	547.67
DPS (Arms)	Xonkjr	563.73	DPS (Demonology)	Zlnnln	561.SO
			DPS (Fury)	Landsoul	559.19

Figure 6.2 The raid compositions for Midwinter's World 9th (left) and Blood Legion's World 2nd (right) Thok the Bloodthirsty kills.

Figure 6.2 highlights the immediate link between spectatorship and tactics. The left- hand column shows Midwinter's world 9th kill whereas the right-hand column shows Blood Legion's world 2nd kill. Midwinter's kill took place following the release of Blood Legion's kill video. It safe to make the assumption that Midwinter have drawn influence from Blood Legion's approach to the encounter, specifically regarding class composition. The particular encounter devalued spellcasters heavily, thus classes with instant-cast abilities, such as melee, were favoured. Classes reliant on spellcasting, such as Mages, were not favoured. Blood Legion did not utilise mages in their kill, and similarly, either did Midwinter. Furthermore, Blood Legion employed an innovative Warlock-heavy tactic (using 4 Warlocks), which provided the group with much needed mobility. Midwinter similarly employed this tactic. Evidently, even during the global progression race and the peak of competition, observation of play is highly important. Furthermore, this analysis suggests that the trickle-down effect of tactics is evident at the game's highest category of play.

Interestingly, there is also evidence suggesting that tactics have the potential to filter from a lower level to a higher level, not just through top-down vertical integration. To draw on one of my earlier gameplay study examples, Kill it Please's exploitative Sha of Fear kill (Palawinkip, 2013) was broadcast on YouTube and Twitch.tv. The group's victory was achieved, largely, through exploitative measures, with a broken mechanic being used to alleviate the need for substantial multi-target damage, allowing the group to focus all damage on the primary boss target. Following the use of this tactic, guilds Duality and Ascension

utilised the same questionable approach.[19] Both Ascension and Duality ranked significantly higher than Kill it Please (Duality was ranked 31st in the world for the tier and Ascension 53rd). Despite this, Kill it Please's tactic was still adopted and used regularly by these groups.

This shift from the vertical integration of information can be modelled as a deviation of de Certeau's strategies and tactics framework. While the broadcast of high-end play has indicated a trickle-down effect with regard to the tactics of top guilds, this particular case study suggests that emergent tactics can be fluidly adopted by players of any skill or competitive level. Thus, by taking advantage of (gameplay) opportunities, tacticians can reconfigure the strategies of the powerful (top-ranking groups).

In summary, gameplay tactics and playstyles are highly derivative. Broadcast gameplay functions as an important paratext, and has direct influences on the outcome of competitive play-even within the WoW's competitive metagame.

6.4 Emergent paratexts and observation

World of Logs is another important paratextual resource which facilitates observation. Drawing on Taylor's analysis of WoW add-ons (2006), we are able to evaluate the importance of World of Logs as a spectator tool within her theoretical framework. In discussing add-ons as a mode of observation, Taylor suggests that particular game modifications (namely damage meter and raid assist add-ons) serve as means of coveillance and surveillance (Taylor, 2006: 12). In terms of coveillance, she notes that in a raid setting, certain players (usually the raid leader) are tasked with overseeing the performance of the

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[19] Members from Ascension referenced Kill it Please's video in an *MMO-Champion* discussion thread, with player Sutraqt noting that the exploitative tactic was valid as it had been used previously by Kill it Please and had not been patched out of the game (Sutraqt, 2013).

group, ensuring that members of the party are carrying out their assigned duties (Taylor, 2006: 11). Further, she suggests that players outside of the raid group using the addon are engaging in surveillance (as they are able to view the group's damage output (Taylor, 2006: 11).

Like the add-ons explored by Taylor (2006), World of Logs facilitates such observatory practice. Through the public ranking system, players' damage and healing output is quantified and ranked. The ranking system is significant as it highlights and documents emergent play. Should a player discover a tactic or playstyle which yields high damage output, it will be highly ranked and visible to community members. The World of Logs databases contain enough information about these highly ranked players and their playstyles to effectively recreate them. Through this documentation of emergent play, standard play strategies are formed.

The idea of playstyle development and player surveillance being directly linked will be investigated via an exploration of the top 100 World of Logs parses of the Feral Druid class (from the period 30/11/12-18/12/12). This period was chosen as a significant, game- changing bug became prominently used and incorporated into the class' standard playstyle following its use by a high-end player following the (18/12/12 was chosen as the end-date, as a patch was applied to the game removing the exploit's functionality). The bug allowed players to indefinitely extend their peak damage output period for the entire duration of a boss fight.

Along similar lines to broadcast play, this case of recorded exploitative emergence indicates that the surveillance of high-end players via paratexts (in this instance, World of Logs) has the potential to alter, or even dictate, the observer's playstyle.

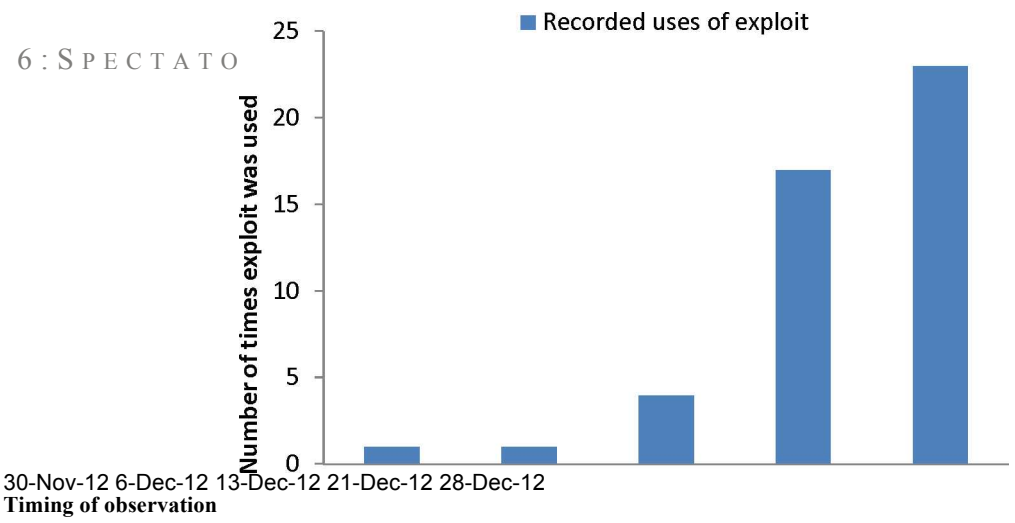

Figure 6.3 Recorded uses of exploit over 5 raid weeks.

6.5 Spectating the stream: Twitch.tv and performative play

Aside from functioning as paratexts as discussed in the previous section, the use of livestreaming broadcasting platforms such as Twitch.tv has had additional interactions with spectatorship as a cultural practice. As a livestreaming platform, Twitch.tv radically alters the position of the audience in a gaming context. The broadcaster (and player) generally interfaces directly with the viewers via a chat mechanism. Viewers are able to make play and tactical suggestions to the streamer. Figure 6.4 depicts an interface between the player, Kuocolaya, and viewers. Evidently, the widespread spectatorship of digital games has established "circles of watching" in gameplay.

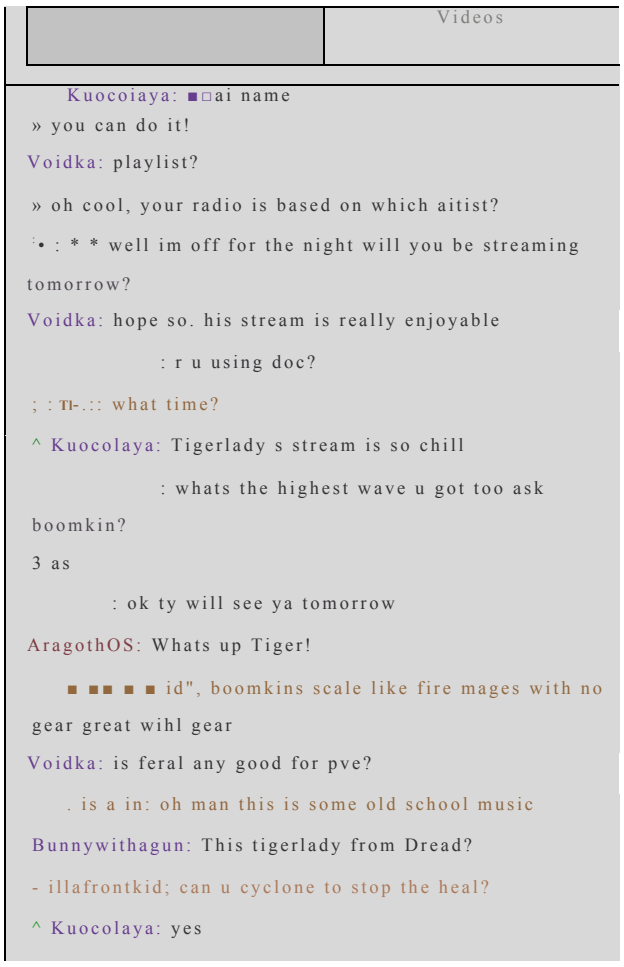

Figure 6.4 A high level player's stream chat.

Returning to the broadcasted gameplay studies, the idea of a spectator-player ecosystem becomes clearly evident in competitive WoW play. In discussing this idea, Avast's Dark Animus (Natakublitz, 2013) kill is particularly relevant. In the broadcast, we hear the group deliberating over which tactic to employ; weighing up the benefits and limitations of their innovative burn tactic. Unable to decide on a tactic, the streamer considers the collective voice of the stream chat, who argue for the use of the emergent burn strategy. Avast's raid group decide to utilise the burn strategy at the request of the stream's viewership. One of the stream's viewers comments that Avast could further refine their Zerg tactic by more effectively planning out their usage of abilities. This represents a collaborative process between spectators and players in the formation of tactics.

This example highlights the performative aspect of high level play. The livestream is a unique avenue for skilled players to exhibit their well-honed abilities and viewers to suggest new and emergent ways to play. Control of the game and its play aspects is not restricted to the player. This phenomenon can be understood in terms of Dalsgaard and Hansen's (2008) spectatorship framework. Livestreaming is analogous to the game arcade ecosystem, representing a digitised version of this physical space. Like the players at the game arcade, streamers demand an audience through play in the public web domain. Dalsgaard and Hansen also explore the spectator's ability to influence the player and turn gameplay into a performative spectacle (2008:15). As evidenced through the study of Avast's liveraid, online streaming platforms similarly facilitates such interactions.

As a medium, videogames typically afford the player with a fairly considerable degree of agency, their input influencing the flow and direction of gameplay. However, as evidenced through Avast's broadcast, the strong spectator presence brought about by streaming has facilitated truly interactive audiences; autonomous and in control of the content they are consuming.

The importance of spectators and spectatorship in competitive gaming demands a reconsideration of how games are perceived as a medium, from both a consumption and design standpoint. As a medium, games are fundamentally play oriented and are concerned with providing the player a sense of gamestate-altering agency. A ludo-centric deconstruction of games dictates that player agency and control of the gamestate are of utmost importance. Ludologists purport that considering games in non-play capacities is naive (Aarseth, 2003). Considering the importance of non-players (external-observers) in competitive gaming, one could argue that it would be just as naive to consider digital games solely as played objects.

In the current competitive gaming environment, it is important to consider traditions of representation in game analysis and design, as well as rhetorics of play.

CHAPTER 7: CONCLUSION

This study has identified and elaborated on emergence and spectatorship as cultural practices facilitated by the competitive play of digital games. As demonstrated in this thesis, the emergent processes necessitated by competitive play filter into practices both in and out- of-game. The relatively configurable nature of WoW affords players the ability to negotiate the outcomes of game scenarios by cleverly manipulating mechanics, or exploitatively working outside of the game's rule-based framework.

Examination of emergent play was not limited to a player-level analysis. Drawing on the MDA framework, (LeBlanc et al., 2004) it also addressed developer interactions with emergent play. Research findings highlighted Blizzard's conflicting positions on emergent and competitive play. In some instances, data indicated considerable tension between emergent gameplay and Blizzard's authorial intent. Drawing on de Certeau's theoretical framework of strategies and tactics, I modelled these examples of emergent and exploitative play as individual tactics and a subversion of Blizzard's overarching design strategy. Effectively, Blizzard's struggle over authorship and control of WoW's direction runs counter to the emergent practices which underpin competitive play. Actions such as live hotfixing groups' tactics diminish the 'gameness' of WoW. Mutability and considerably high levels of user agency are what make digital games so uniquely compelling and distinct from other screen based media. A practical solution to Blizzard's stance on emergent play is to more strictly define an encounter's rules.

In contrast to this anti-emergent position, Blizzard have also worked with competitive players to enhance WoW's gameplay experience. Competitive players are, in some instances, cast as co-authors; working with Blizzard in discovering and remedying design oversights.

The construction and use of what I have termed *emergent paratexts* also has an important interface with emergence. My analysis of sophisticated paratextual tools such as World of Logs and Simulationcraft demonstrated how competitive players utilise out-of- game applications as a means to generate tactics and inform Theorycraft. Despite the fact that these applications occur out of game, they are inherently exploratory and are useful in the development of innovative playstyles. Emergent paratexts represent a new paradigm for engaging with games.

The spectatorship of games is another non-traditional practice associated with gaming. I have explored how the spectatorship of competitive play occurs through broadcast platforms Twitch.tv and YouTube and emergent paratexts such as World of Logs. Perhaps the most notable outcome of spectatorship is the way it influences play practices. Through an examination of Wowprogress.com and World of Logs, I conclude that there is a direct link between broadcasted or logged play and tactics. Interestingly, top level players have integrated the tactics of lower level groups, suggesting that spectatorship does not solely facilitate the vertical integration of playstyles.

Because play broadcasts function as informative paratexts, they could serve as a potential design alternative to increasing accessibility via negative feedback systems, which lower the game's skill ceiling and reduce the potential for emergent play. Drawing influence from *StarCraft II,* Blizzard could implement an in-game spectator client, increasing accessibility in the competitive arena through a framework of learning.

In a recent interview, Blizzard's *StarCraft* Game Director Dustin Browder discusses the importance of spectatorship (Gaudiosi , 2012). Browder notes how 'watchability' is now a significant factor to be considered in the game design process. The importance of spectatorship

has numerous implications for future game design, and developers will need to

balance gameplay (whilst encouraging competitive play), and also remain mindful of the viewing experience.

As the competitive play of games becomes an increasingly prominent cultural phenomenon, it is fundamental that there are typologies for the analysis of competitive games. This thesis' framework for categorising and analysing competitive gameplay has potential applications for future research. It could be productively applied to other games across a range of competitive game genres in order to examine the interaction between specific game mechanics and competitive play.

While this thesis has centred its research on WoW, it has aimed to frame competitive play as part of a pervasive media transformation. Through an examination of the shifts in gameplay practices and experience, this study has contributed to the development of a robust consumption model for competitive digital games.

APPENDIX A: GLOSSARY OF TERMS

Add: Typically refers to less-powerful enemies within a boss encounter.

Add-on: User modifications (or mods, implemented through the practice of modding).

Boss encounter (or encounter, boss fight): Team based gameplay wherein players group up to defeat an NPC which would be unbeatable solo (known as a boss, a term commonly used throughout games). Boss fights discussed in this paper include the Sha of Fear, Thok the Bloodthirsty, Dark Animus, and Gara'jal.

Buff: A beneficial, and often temporary, increase to a character's damage or healing output.

Class: The primary playstyle of a player character which determines the type of weapons and armour it can use, as well as what abilities, powers, skills and spells it will gain throughout its adventures. Each class has three (Druids have four) unique talent trees. As characters progress, they can specialise their skills by assigning points to particular specialisations.

There are currently ten playable classes in the game; Death Knight, Druid, Hunter, Mage, Monk, Paladin, Priest, Rogue, Shaman, Warlock, and Warrior.

Class-Balancing: The practice of adjusting a class' abilities and mechanics in order to ensure the output of class' remains within an acceptable range.

Loot (or gear): The equipment a player acquires over the course of their adventures. Gear is used to defeat powerful enemies.

Magic circle: The boundary separating the game world and real world. Being inside the magic circle affords the spectator the immersive and transformative potentialities of gameplay.

Mechanics (or game mechanics): Simplified, game mechanics are the formalised rules and

goals under which a test is performed. They are the primary play-related aspects of a game with which players interact. Furthermore, they can be used as a means to encode information, vague or specific, in a way that can be understood be the player.

Metagame: A form of tactic or play within the framework of the 'main game'.

Mod: User modification (or mod, implemented through the practice of modding).

MUD: Multi-User-Dungeon, refers to the generally text-based mutliplayer spaces popular during the mid 1980s through to the early 1990s. Preceded virtual multiplayer spaces with graphical interfaces.

Nerf: Reductions in the difficulty of game content.

NPC: Non-Player-Character; a computer controlled in-game character. Raid bosses are NPCs.

Proc: A proc, derived from the MUD phrase 'special procedure', refers to an event triggered under particular circumstances. Weapons and trinket items often have procs.

PvE: Player Versus Environment (or raiding). Refers to the endgame where players, in groups of 10 or 25, attempt to defeat various AI control opponents.

Raiding: See PvE.

Talent: A class-specific ability or power that requires talent points to gain or improve. Each class, has three talent specialisations (bar druids, who have four).

Wipe: When a raid group is defeated by a boss.

Broadcast title	**Brief description/response to questions**
Avast vs Heroic Dark Animus (Zerg tactic)	Used emergent Zerg tactic, and broke sequence of the encounter, however no response from Blizzard. Significant spectator influence; examined livestream chat, collaboration between player and viewers in formulating tactics.
Terrace of Endless Spring - 10m Heroic Sha of Fear - Holy Paladin	Used exploitative emergent play, according to definition of exploits by Adamkiewicz. No response by Blizzard. Interestingly, the tactic served as the foundation for other groups' play, became a paratext.
Thok the Bloodthirsty live hotfix during progress	Used emergent Zerg tactic and broke sequence of the encounter. Blizzard applied live hotfix ensuring no kill. No spectator involvement.
Vodka vs Gara'jal World First	World first kill of boss, use of emergent tactics. Considered gameplay elements outside of the boss encounter in order to win. Resulted in dialogue between competitive guild Vodka and Blizzard when Vodka suggested that this was not an ideal way to fight the boss. Competitive players acting as coauthors. No notable spectator elements.

APPENDIX C: RESPONSES TO OPEN CODING PROTOCOL

Avast vs Heroic Dark Animus (Zerg Tactic)

Guiding question	Response	Broad category
Does the gameplay work within the game rules and encounter rules?	**Yes**	Emergent play
Does the gameplay formulate new tactics?	**Yes**	Emergent play, sequence breaking
If the kill was representative of emergent practice, was there any response from Blizzard?	**No**	N/A
Is the spectator involved in the game playing process?	**Yes**	Spectatorship (performative)

Terrace of Endless Spring - 10m Heroic Sha of Fear - Holy Paladin

Guiding question	Response	Broad category
Does the gameplay work within the game rules and encounter rules?	**No**	Exploitative play
Does the gameplay formulate new tactics?	**Yes**	Emergent exploitative play
If the kill was representative of emergent practice, was there any response from Blizzard?	**No**	N/A
Is the spectator involved in the game playing process?	**No**	N/A

Thok the Bloodthirsty live hotfix during progress

Guiding question	Response	Broad category
Does the gameplay work within the game rules and encounter rules?	**Yes**	Emergent play
Does the gameplay formulate new tactics?	**Yes**	Emergent play
If the kill was representative of emergent practice, was there any response from Blizzard?.	**Yes**	Emergent play vs authorial intent
Is the spectator involved in the game playing process?	**No**	N/A

Vodka vs Gara'jal World First

Guiding question	Response	Broad category
Does the gameplay work within the game rules and encounter rules?	**Yes**	Emergent play
Does the gameplay formulate new tactics?	**Yes**	Emergent play
If the kill was representative of emergent practice, was there any response from Blizzard?	**Yes**	Emergent play, interface between developer and player
Is the spectator involved in the game playing process?	**No**	N/A

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