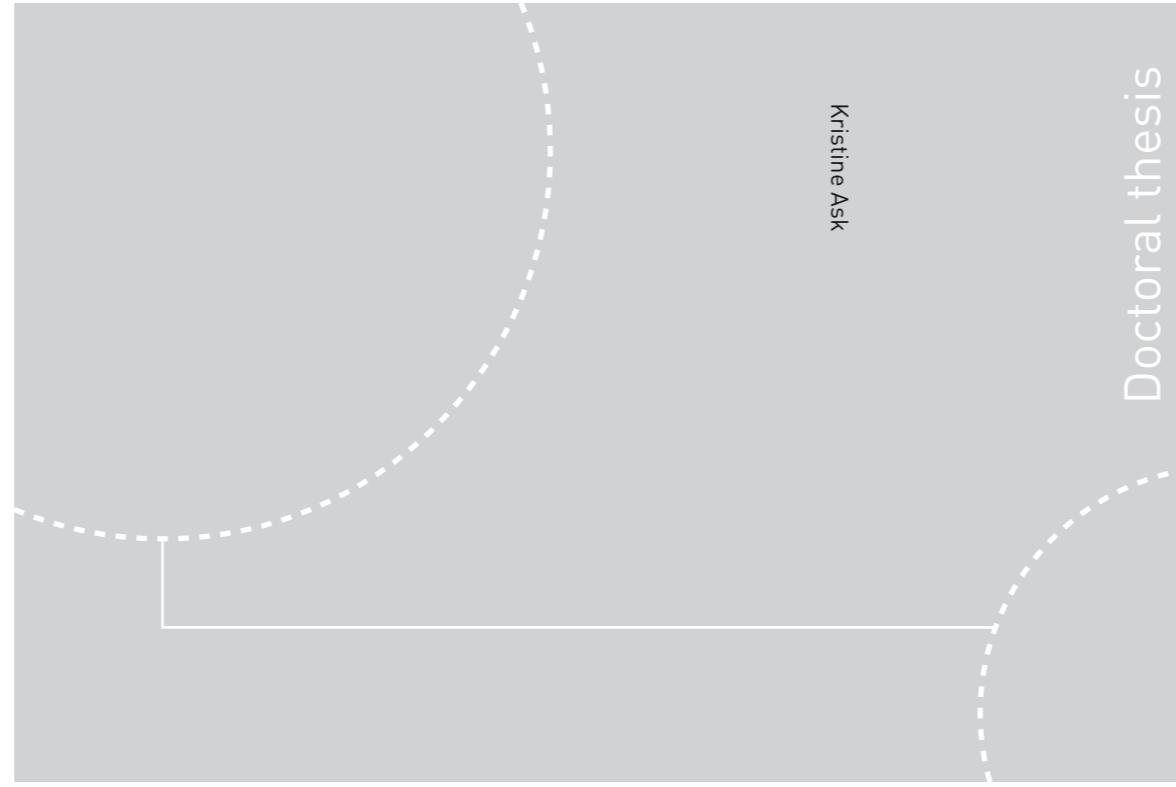


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Assemblages, domestications and  
co-productions of play

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Norwegian University of  
Science and Technology  
Thesis for the Degree of  
Philosophiae Doctor  
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## **Preface**

Over the Easter holidays I logged into World of Warcraft (WoW) for the first time in six years. I initially worried how much the game design and its community had changed; revamped zones, new classes and no breaks for small talk. It was smooth, polished and streamlined. The game I stopped playing in 2010 was still there somewhere, but only in the way a house is still the same if you tear everything down but the fundament and rebuilt it. Practices that were emergent back in 2010 is now mainstream, and for a while there I got quite worried that the work needed to play (aka Ludic work) had been removed, that the game had been so well adapted to player practices that it really was all fun and games.

Luckily for me, and my sense of calm, playing with my partner dispelled that idea. Two more different players will be hard to come by and for five whole days we were constantly arguing, sometimes quite heated, about how to play. We had different approaches to everything; from what parts of the game we considered fun -to how to interact with fellow players. Then something changed. Day six we did not fight at all. We just played. We did not have to argue about what to do, and when, because we had found our rhythm. We did not complain about each-others behaviour because we had agreed on rules. Our ludic work was paying off. I am sure we will find new things to argue about as we play on, but it was just like I remembered; we had to work to play.

Not really sure where this story ends, though hopefully it is in epic battles and loot, but I cannot help feeling it has all gone full circle when I return WoW just as I am about to finish this dissertation. It has been a long, and at times trying, journey, but it is also a dream come true. All academic fuzz aside, I am a WoW player who got to dedicate years of her life to study her number one passion. I have been very lucky. I am also in deep gratitude of the many people who helped me along the way.

First of all, I need to thank my fellow players and interviewees for sharing, not only their stories about play, but their life in WoW. A special thanks to the guild that allowed me to conduct my participatory observation with them, not only for the sake of my dissertation, but for myself. It was a wonderful year and I have many fond memories of our silliness and kick-assery.

Thanks to Knut Holtan Sørensen for advising me through this project; for believing in my ideas and generously share of his own, for always being up for discussion, for being an endless source of motivation and for our cooperation. Personally I am also very thankful for your patience with me when I repeatedly decided not to follow your sage advice and take the long way around. Thanks to my co-advisors; Vivian Lagesen for critical readings and input on my papers and kind words of encouragement, and to Helen Jøsok Gansmo for helping me shape this project in the beginning.

To Nora Levold for mentoring me, and teaching me about the offstage workings of university life. To Tomas Skjølvold, Håkon Stokland, Robert Næss and Marie Antonsen for comments on my introduction chapter, and to Crystal Abidin for excellent copy editing and feedback.

Finding a home at KULT (Department of Interdisciplinary Studies of Culture) has been a blessing. It took me a long time to realize that it was a researcher I wanted to be, but I always dreamed of working with my friends, and now I finally am. Some of you have moved on to bigger and better things along the way, but meeting you people have been the best part of this. A special thanks here to Marie Antonsen for knowing what words will heal, and understanding all too well how dark and how much fun this job can be. And to Henrik Karlstrøm for ensuring I do not run out of weird internet to discuss.

To friends and family for patience and support as I have had my focus elsewhere. I still look to you for inspiration; to mom for the courage to speak my mind, to dad for patience, to Katrine perseverance and Kristian for courage to be myself. Thank you Håvard. For tolerating the crazy and overall being you.

Finally I also want to thank my students who always help me remember why I started in the first place. You won't get rid of me now.

Dragvoll, April 2016

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## **Unexpected play and unexpected work**

*“Nothing comes from nothing”*

*Paramenides*

When I started work on this dissertation, I expected to find evidence of how easy gamers had it: how simple it was for them to organize themselves online, how effortlessly they acquired new skills, and how elegantly they coordinated across platforms. After all, game culture was a way to glimpse at future ways of organizing, communicating and solving problems (Jenkins, 2006b; Squire & Steinkuehler, 2005a). I was in awe of how gamers, without formal training, could coordinate complex and knowledge-intensive activities across continents, especially since business managers’ and tech enthusiasts’ attempts to do the same with video conferencing and intranets were failing miserably (Campbell, 2006; Pettersen, 2014). In a time when mathematics is perceived as decidedly “uncool” (Attard, 2011), I was fascinated by gamers who would spend their free time working on advanced calculations in order to uncover optimal strategies. I was heartened by a community who would keep sharing knowledge and tools without monetary compensation. By studying gamers, I was hoping to uncover the path to a future where sharing knowledge, cooperating online and building communities were inseparable, and we would be doing so not because we had to, but because we wanted to. Most crucially, I envisioned how much fun it was supposed to be along the way.

My utopian view of gamers and game culture was eventually dispelled, but not because gamers did not live up to expectations. It was true that the players I studied excelled at cooperating online and organizing mediated events, both of which are difficult tasks requiring specialized skills and tools. Their knowledge of the game was truly impressive, and they had established practices to explicate and share new information with fellow players. Most importantly, it was a lot of fun. If it was not, I would not have spent thousands of hours in-game sharing a virtual world with my friends, battling digital monsters, and craving pixelated rewards. However, after being

in the space and life of gamers for years, it started to dawn on me *why* we were so good at all these things, and it was not something unique, secret, or mystic pertaining to games. To acquire these skills, we had to expend lots of time and effort. The expertise, community and cooperation we developed through play did not come about easily or without resistance; we were having fun along the way but this did not negate the strife of learning, organizing and appropriating game related practices. Personally, I was clocking roughly 40 hours per week of gameplay for years, and have shed more than my share of tears, sweat and possibly blood to keep up. Simply put, we had to work hard to play. In this lies the focus of my dissertation: the work needed to play. I call this *ludic work*

I define ludic work as the labour that players have to do with in order to produce play. ‘Ludic’ implies a playfulness relating to games or play, and ‘work’ is an effort to reach an outcome. Together they direct the attention to the processes that make play. Inspired by Actor Network Theory, I am proposing a perspective where play does not preface action or is treated as an activity that accompanies games. Instead, play is the outcome of a process where networks of both human and non-human actors are assembled and enacted. For play to happen, someone or something has to delegate, configure and maintain the network that facilitates play. To paraphrase Latour and Strum (1987), play is not what holds us together, play is what is held together. I coin ludic work to describe this effort of “holding together”; of making people, artefacts and meaning align in a way that makes play possible. In the vernacular of Science and Technology Studies, ludic work is the assemblages, the domestications and co-productions that are necessary for play to happen. Broadly speaking the three traits relate to the configuration of actors, stabilization of networks and the creation and use of knowledge to play. In this dissertation, I will explore ways of assembling and domesticating the Massive Multiplayer Online Roleplaying Game (MMORPG) *World of Warcraft* (Blizzard 2004) and its co-productions. The main research question focuses on how play is made: What is ludic work and what kind of work is involved in this? The central themes I will explore are the relationship between player and game, the role of non-human actors in play, knowledge practices and

playing practices, and how play is contextualized in everyday life. Focusing on work in this dissertation is likely to forefront work and work-like activities over playful ones, but it is not an attempt to dismiss the unproductive, silly and strange that goes on during play, rather it is a deliberate choice to look at how playful is being produced. However, why would a dissertation about play opens up with work with a discussion of work: Can play really be about work?

Work and play are often perceived as opposites. Where work denotes effort to achieve a result, play is associated with freedom and fun:

*“...‘play’ has long been associated with notions such as buoyancy, gratuity and voluntarism, and opposed to a symmetrical set of definitive characteristics that supposedly distinguished ‘work’ as being purpose-driven, profit-motivated, and obligatory.” (Goggin, 2011)*

The separation of work and play as mutually exclusive categories is a false divide based on a simplistic understanding of both phenomena. Play might look like work or have work-like qualities (Bulut, 2015; Consalvo et al., 2010; Goggin, 2011; Yee, 2006b) and play can be a way of developing skills for future work (Prensky, 2006; Shaffer, Squire, Halverson, & Gee, 2005; Wolfenstein, 2010). Businesses has a long history of using games as part of training and to increase motivation (Gelber, 1983), and playful elements are increasingly being brought into the workplace to make workers more productive (Deterding, Sicart, Nacke, O’Hara, & Dixon, 2011; Reeves & Read, 2013). To capture the instances where play and work blur together, especially attempts to capture the productive aspects of play, a range of terminology has emerged: immaterial labour (Taylor, Bergstrom, Jenson, & de Castell, 2015), playbour, (Kücklich, 2005), and co-creation (Prax, 2012; Taylor, 2008) to mention a few.

We tend to perceive work and play as opposites because we expect one to be fun and the other not. However, there is no law of nature (or law of any other kind) that dictates that work is unpleasurable while play is. Both work and play can produce a sense of flow where time and place disappear and one is completely immersed in the task at hand. Colloquially known by gamers as being ‘in the zone’, flow is an

experience sought after in both play- and workspaces (Csikszentmihalyi & Csikszentmihalyi, 1991). Just as work has the capacity to be pleasurable (Hope & Richards, 2015), play has the capacity to be boring and exhaustive (Eklund & Ask, 2013). In fact, the work-like aspects of play might be part of their appeal (Consalvo et al., 2010):

*“Games make us happy because they are hard work that we choose for ourselves, and it turns out that almost nothing makes us happier than good, hard work.”*  
(McGonigal, 2011)

In short, play and work are highly related concepts with many overlapping practices and meanings. In this dissertation, I wish to flesh out how work and play relate to each other to produce play: What is needed to make play happen?

To answer these questions I draw on two areas of research: Game Studies and Science and Technology Studies (STS). Game Studies is a relatively new field with multidisciplinary contributions on play and/or games. Since the inaugural issue of *Game Studies* in 2001, the field has grown in both size and relevance. Of interest to my own work are the empirical studies of play and player practices, and the many ways in which play can be performed and have meaning. This also includes theories of play and studies of the effects of play. STS, on the other hand, has provided the theoretical and methodical framework for this dissertation. These theories deal with the interrelation among meaning, knowledge and practice, and provide a post-structuralist and constructivist perspective on the relationship between technology and society. The theories fits well with my investigation of games as a socio-material phenomenon, as STS encourage attention to delegations (Latour, 1992) between humans and technology, between the social and material. In this case, the interest is in delegations between player and game.

### **Meet the gamers**

The widespread interest in play is described as a ludic turn or ludification of culture (Raessens, 2006, 2014). This turn is characterized by post-modern life as having game-like qualities (op. cit) and digital games are framed as an inevitable part of our future. Game designer Eric Zimmerman has proposed a manifest for what he

calls “The Ludic Century”. Here he argues that just like the moving image was the dominant form in the 20<sup>th</sup> century, play will be the dominant form of the 21<sup>st</sup> century. In his vision, playfulness is a necessary skill to navigate and handle the very complex systems of contemporary society, because play encourages systemic reasoning. Furthermore, he asserts that play is seen as a way to bring about societal change: “Being playful is the engine of innovation and creativity: as we play, we think about thinking and we learn to act in new ways.” (Zimmerman, n.d.). Overall there is a renewed interest in games, a re-evaluation of playfulness as valuable and a curiosity about what the ludic has to offer, which is not surprising considering the widespread uptake of digital games.

The success of digital games is hard to dispute. The game industry rivals both the music and movie industries with an estimated \$111.1 billion in revenue in 2015.<sup>1</sup> 1.2 billion people play games worldwide with as many as 700 million of them playing online.<sup>2</sup> Among Norwegian adults (age 16-79), 47 percent played on a weekly basis in 2013 as compared to 29 percent in 2007 (Vaage, 2015), while a total of 94 percent of kids and teens are gaming on a regular basis (Medietilsynet, 2014). Digital games are played on mobile phones on the go or online with friends, streamed for an audience or shared during a romantic evening with a partner on the couch at home. Games are brought into schools to increase learning (Shaffer et al., 2005), into hospitals to improve health (Primack et al., 2012) and into the workplace to increase efficiency (Reeves & Read, 2013). When considering the popularity and prevalence of digital games, it is quite tempting to devise a narrative where digital games ‘came, saw, and conquered’ the world; where the widespread use of digital games is understood as the diffusion of a new and exciting technology. However, as often with clean and neat narratives, such a story would obfuscate the messy and conflicted ways in which games are becoming part of our society and everyday life. Linear stories about innovation hide the struggles and hard work that is required from users to make sense

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<sup>1</sup> ESA (2011) “Games Economy” retrieved from [http://www.theesa.com/wp-content/uploads/2014/11/Games\\_Economy-11-4-14.pdf](http://www.theesa.com/wp-content/uploads/2014/11/Games_Economy-11-4-14.pdf) on 23.03.2016

<sup>2</sup> Spilgames (2013): “State of online gaming report” retrieved from [http://auth-83051f68-ec6c-44e0-afe5-bd8902acff57.cdn.spilcloud.com/v1/archives/1384952861.25\\_State\\_of\\_Gaming\\_2013\\_US\\_FINAL.pdf](http://auth-83051f68-ec6c-44e0-afe5-bd8902acff57.cdn.spilcloud.com/v1/archives/1384952861.25_State_of_Gaming_2013_US_FINAL.pdf) on 23.03.16

and give meaning to new technologies (Oudshoorn & Pinch, 2003). Play is not merely the consumption of games or interactions with game-technology, it is also the production of meaning, knowledge, culture and artefacts. Thus, in order to study games we need to study players.

The players you will meet in this study are engaged with games in ways that, at first glance, will look little like play. Or at least, their practices look nothing like how we tend to frame play; as something beholden children that is free form and frivolous. The type of play you will encounter in this dissertation is one with set times and goals, that is highly complex and that requires hard work to learn and tremendous effort to organize. Performed in large groups of 10-40 players, it requires practice, patience and coordination, and it is commonly known in game vernacular as *raiding*. Raiding is an excellent site to study tensions between the type of play for which the game was designed and how the game is actually played, between imagined and performed play. Raid culture is ripe with emergent practices, deviant strategies (Mortensen, 2008) and new knowledges (Paul, 2011) that shape both practice and technology with consequences for how the game is played and developed. Investigating raiding is a way to understand games from a user perspective, highlighting the importance of use in technology appropriation. It is exactly because of the discrepancies between imagined play and performed play, between the individual and the collective, and between hard work and fun that raiding is such a fruitful area of study.

The dissertation is built on a participant observatory study of players in *World of Warcraft* (WoW) in 2009, including qualitative interviews with 25 players with different playstyles. As part of my ethnographic fieldwork I became a member, and later an officer, in the raiding guild I give the pseudonym “The Gummy Wolves”. During this participatory observation, I organized and participated in play sessions several times a week, and followed the trials and tribulations of the guild and its aims of community and competition. Methodically, my work is informed by previous game scholars and a strong tradition of ethnography, which fits well with the mantra of Actor Network Theory: ‘follow the actors’ (Latour & Woolgar, 1979; Skjølsvold,

2015). A full discussion of methodology is found at the end of this introductory chapter.

In the next section is a summary of five research papers that form the core of the dissertation, and it is recommended to read the research papers after that summary. It is followed by a presentation of previous research on play and games, how I approach play in my work, and a description of my theoretical foundation in STS. Following this is a discussion on ludic work where findings from all papers are combined and the concept of ludic work is fleshed out. Finally, the first chapter closes with a description and discussion of methods. For those unfamiliar with WoW, I first present a brief introduction to the game and its gameplay.

### **Introducing *World of Warcraft***

*World of Warcraft* is a MMORPG released in 2004 in the US and 2005 in Europe. As I write this eleven years later, Blizzard has released its 5<sup>th</sup> expansion package “Warlords of Draenor”, with a 6<sup>th</sup> expansion upcoming later in 2016. At its peak, the game had 12 million subscribers, although since its release more than 100 million accounts have been made by players from 244 countries. Even with the currently reduced player base of 5.6 million subscribers, 900,000 dungeon runs and 670,000 player-vs-player battles are still run on a daily basis, and WoW still ranks as one of the best-selling games.<sup>345</sup> WoW is a role playing game with a tongue-in-cheek take on classic fantasy worlds such as those created by JRR Tolkien with orcs, elves, dragons, and treasures. The lore of the game is built around the warring factions Alliance and Horde, and the heroes and villains therein. The narrative invites players to become one of the great heroes of this world through epic battles and good fellowship between warriors. Each player chooses his or her faction and class, determining with whom they can play alongside and what role they are expected to

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<sup>3</sup> Purchase, Robert (2015): “Blizzard will no longer report World of Warcraft numbers” retrieved from <http://www.eurogamer.net/articles/2015-11-04-blizzard-wont-report-world-of-warcraft-subscriber-numbers-anymore> on 25.11.15

<sup>4</sup> Games Radar Staff (2014): “The 25 best-selling games of the last generation” retrieved from <http://www.gamesradar.com/20-best-selling-games-last-generation/> on 25.11.15

<sup>5</sup> Blizzard Entertainment (2014): “World of Warcraft: Azeroth by numbers” retrieved from <http://us.battle.net/wow/en/blog/12346804/world-of-warcraft-azeroth-by-the-numbers-1-28-2014> on 21.03.16



have in the group. As is common in role playing games, the classes are akin to professions<sup>6</sup> with unique skills designed to complement each other and specialized roles in group settings, such as priests, warriors and paladins. A successful group requires a balance of protection from the monster's attack, highly damaging attacks, and the ability to keep group members alive and well. This has translated to the roles; tank, DPS (Damage Per Second) and healer. The tanks is in charge of crowd control and takes the brunt of the damage, the DPS kill the monsters while the healer uses spells to heal wounds. In group play these three roles indicate distinct and clear responsibilities, and interactions between the three are as important in 5-player dungeons as in 40-player raids. The design emphasises interdependency of players. For example, most DPS is too fragile to survive the attacks of a monster, while neither the tank nor the healer have enough damage output to kill the monster themselves. Thus, at the most basic level, the game is designed for collaboration.

There are many ways of engaging with WoW as the game has many affordances. Thus, it can be better understood as a game platform with a range of sub-games that can be differentiated in several ways. Broadly speaking, gameplay is generally divided into two phases: 'levelling' and 'end game'. During the levelling phase, the main goal is to level up the avatar by completing quests, exploration and dungeon crawling in smaller groups. Each time a monster (referred to by players as 'mob') is killed, or a quest is completed, the avatar gains experience points that, once accumulated to a certain level, lead to new levels and new spells. As the avatar levels up, it grows more powerful and is able to access new areas of the world, develop new skillsets and defeat tougher monsters. The levelling phase is largely focused on solo play or playing together in small groups. However, it is also during this phase that necessary social capital is accrued for players to gain access to desired player groups in phase two. The end game phase starts after the avatar has reached maximum level.<sup>7</sup> There is still a focus on developing the avatar and fighting monsters for rewards, but

---

<sup>6</sup> Not to be confused with the in-game professions which are supplementary skills used to generate gold such as gathering herbs, cutting gems or making weapons.

<sup>7</sup> Maximum level is increased with each expansion. Maximum level is currently 90, but during data gathering it was level 80. It's also worth noting that with the increased max level, the levelling design has been made more efficient so that it takes approximately the same time to reach maximum level.

this is increasingly turned into a collective effort as these gains are only possible to achieve in cooperation with other players (Chen, 2009a). In order to develop the avatar further and explore new areas, players are required to form large player groups (between 10 and 40 players, depending on the zone requirements) known as raids.

Raiding represents a highly collective, complex and time-intensive play style. Raiding is a collective effort that requires organization and expertise, and this happens in guilds; player organizations that facilitate play. Guilds who focus on raiding tend to have formalized systems for when they play, how they play, and with whom they play (Williams et al., 2006). It is common to have set play times; for example, my own guild assigned raiding nights on Monday, Wednesday, Thursday and Sunday from 1930 to 2300. Raid sessions were usually preceded by reading up on and discussing strategies and systems were in place to vet members and distribute goods.

The raid dungeon is populated by two types of monsters: Trash mobs and boss mobs. Trash mobs are encountered alternately with boss mobs, and need to be defeated before the raid group can attempt combat with the boss. This step is also known as “clearing trash”, and is time-consuming while promising little reward, hence the name. The boss mobs, on the other hand, will reward players with powerful magic items if defeated, and the lure of loot is a potent motivator. Boss combat are scripted for complex combat that requires different players to contribute appropriate skills, position in certain ways around the room and coordinate with others. For example, when fighting the boss monster Yogg Saron, players have to complete a fight in three stages: First defeat Yogg Saron assistant and her minions, then enter into portals to be teleported to a place where they can kill the brain of Yogg Saron, and finally, destroy the body of Yogg Saron in a race against time. In each phase, the “holy trinity” of tank, DPS and healer has to work together to ensure that damage is avoided to oneself and dealt to the enemy while players stay alive. During combat, the boss monster uses his magical abilities (a total of 29 in the Yogg Saron fight) which players have to counter by devising individual and collective strategies, such as ensuring that healers uses the right counter spells to remove harmful magic, or that damage dealers use their boosting powers to generate extra damage at the right moment. Once the strategies are

devised, players have to practice until they are perfectly executed. Once the boss is defeated the loot appears as a reward for players.

The description above gives a brief overview of raiding, but falls short in explaining why players choose to do this, what meaning this play holds, and how play is made possible. While I will return to this later in the section “A world of raiding”, for now it is suffice to assert that raiding and raid culture is about challenge, community and coordination.

### **Five stories about play: a summary of the papers in the dissertation**

The five papers in this dissertation explore how constellations of play are negotiated and stabilized in and around WoW. They draw in multiple perspectives on raiding and its configurations in an attempt to understand how this particular form of play is produced and shaped. Broadly speaking, the papers are addressing three topics: play as embedded in everyday life, play as knowledge intensive and play as social-technical enactment. All five papers are in dialogue with Game Studies and STS literature, but have different emphasis and intended audiences. Papers 1 and 2 are directed at a media studies audience more generally, papers 3 and 4 are directed at a Game Studies audience, while paper 5 is aimed towards the learning sciences and DGBL (Digital Game Based Learning).

The first topic, play and everyday life is actualized in papers 1 and 3. Empirical studies have shown that while play may be considered separate and outside the mundane of everyday life, player practices are intimately connected with offline contexts (see eg. Eklund & Jonsson, 2012; Malaby, 2007). Studying play from a user perspective means studying players where play occurs, which for the most part is at home. My research emphasises how the offline context is shaping player practices, and how non-users have an important role in configuring play. The second theme, play as knowledge intensive, is explored in papers 4 and 5 with an emphasis on the production and use of knowledge. Research on Digital Game Based Learning (DGBL) has established games as tools for learning, and play as an activity that encourages critical engagement. The focus on learning outcomes and whether or not skills can be

transferred to non-game situations have diverted attention from the mutually-shaping relationship between knowing and playing. Play does not have to be a knowledge-intensive activity, just like games does not automatically produce learning. They can, however, be configured in this way, and papers 4 and 5 address how games and play are transformed by generating user specific theories on how to optimise play, and by scaffolding play with external technologies.

All five papers are in various ways analysing play as the result of socio-technical enactments, meaning that they highlight the role of material agents in configuring play. Though it is a recurring theme, the papers approach materiality in different ways. Papers 1 and 2 examine how the game itself is being appropriated in different ways to demonstrate that digital games, like all technologies, are open to interpretation (cf. interpretative flexibility, Berg, 1998; Collins, 1981), and extensive work (and play) is involved in stabilizing related practices, norms, and technologies. In paper 4, the role of non-human agents are investigated through practices of knowing, specifically how knowledge is shaped through materialization and the consequences that arise. Paper 5 is dedicated to an analysis of the interplay among play, players, game design, and external sources known as ‘paratexts’ (cf Consalvo, 2007).

### **Paper 1: “Are you playing it right?” -Time, morality and materiality in the domestication of an online game<sup>8</sup>**

The first paper addresses play in the context of everyday life. It rejects the idea that virtual worlds are somehow separated from the rest of our life worlds and looks at how everyday negotiations of mundane aspects such as homework or mealtimes are also shaping play. Empirically speaking, the paper is based on interviews with players about their configurations of online/offline relationships, distilling three different stories about how commitments to the game were managed with commitments to family, partners, work and school. The three narratives were: (1) how time spent playing caused conflict in two romantic relationships, (2) how everyday life was structured to accommodate a time-intensive hobby, and (3) how family was enrolled

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<sup>8</sup> English translation of the Norwegian article: Ask, K (2011): Spiller du riktig? Tid, moral og materialitet i domestiseringen av et online spill. *Norsk Medietidsskrift*, 2

into a positive attitude towards games by strategic actions and arguments. Recurring themes for all three stories were the uncertain symbolic position of play (players found it meaningful, non-players saw it as waste of time) and how time was spent on the game (how much time is the ‘right amount’). To investigate these negotiations, the paper employs the domestication framework to look at how technology is appropriated.

In addition to telling three stories about play and everyday life, the paper is also about delegation of agency between players (human) and game (non-human) actors. Framed through the concept of domestication, it is a story about how the game was “tamed” through negotiations of the symbolic, practical and cognitive dimensions of the technology (Lie & Sørensen, 1996; Sørensen, 2006). Domestication is a two-way process where both the artefacts and its users, requires “taming”. Just like the players were domesticating the game through actions and strategies, the game was also domesticating its players through design and affordances. In the paper we see how players attempt to domesticate the game by changing their playing schedule, or keep their parents happy by cleaning the kitchen before they sit down to play, while the game simultaneously imposes its agency and preferences on its players. The design requires long stretches of play, a high degree of expertise, and organized play sessions in order to be successful. As an example, in the first narrative of this paper, the players themselves domesticated the game, and the game domesticated them, but vital non-users were not domesticated and remained oppositional to the game. It is thus a reminder that domestication requires more than just taming of technology. Successful domestication also requires domestication of the user, the rhythm of everyday life and significant non-users.

## **Paper 2: Domesticating technology for shared success: collective enactments of technology**

*Co-author: Knut H. Sørensen, NTNU*

The second paper also employs the domestication framework to analyse how play is configured and negotiated. The focus is no longer on the everyday life context and relationship between users and non-users, but instead on the relationships between players and player communities. Since raiding is an activity dependant on community

and good fellowship (Chen, 2009) the role of fellow users is of great importance to how the game is domesticated, as they simultaneously broaden and limit ways in which the game can be appropriated.

The paper is a comparative study of three raiding communities in WoW who have domesticated the game with different underlying rationales. The first group, the hardcore players, domesticated the game along a competitive rationale where being the best was the first and foremost goal of the community. The second group, the casual players, domesticated the game with the aim of enjoying themselves with friends and family. To them, the results were less important than with whom they played. The third group, moderates, attempted to strike a balance between progress-oriented play and real-life commitments. Of the three groups, the third group had the least stable domestication with ongoing conflicts and tensions within the community. The attempt to combine “best of both worlds” proved to be difficult because the rationales of both camps were contradictory and required constant negotiation and legitimization. Decisions had to be explained and justified as there was no obvious middle ground between the competitive and the social approach that appealed to the guild. This highlighted the role of management in collective domestication.

For both the hardcore and casual players, the underlying rationale helped guide their domestication: it enabled players to order and value events, players, and activities. For the hardcore players, this meant that progress would always be prioritized over individual enjoyment; for example, high standing members was benched for months of play because they did not fit into the current guild strategy. For the casual players, making sure that everyone was enjoying themselves and staying friends was always more important. For the moderates, their attempt at combining rationales caused a need for extensive management to keep the balance between competitive and social. There was disagreement about what a “middle ground” actually consisted of, and bureaucratic measures such as formalized mentorship, attendance tracking, performance tracking, and policy meetings were institutionalized. The paper demonstrates how collective domestication always requires orchestration,

yet it also shows that the degree and form of orchestration will vary depending on rationales and the homogeneity of the group.

### **Paper 3: The strenuous task of maintaining and making friends: Tensions between play and friendship in MMOs<sup>9</sup>**

*Co-author: Lina Eklund, Stockholm University*

The social aspects of play have been promoted enthusiastically by Game Studies in a (necessary) critique of the stereotypical player as socially inept and alone. However, there has been a tendency to black-box sociality as an essential quality of online gaming and as inherently beneficial to play. Paper 3 challenges this notion by investigating the relationship between play and friendship. It showcases the work that is required to make and maintain friendships in a gaming context, as social concerns and successful play come into conflict. The paper is synthesized from two interview studies (N=52) centred on social aspects of play. Our argument is built around three player portraits/ideal types that exemplify situations where friendship and play come in conflict. The first portrait exemplifies tensions between wanting to be successful in game and wanting to play with friends, since the game only rewards successful grouping and thus enforces the need for performance evaluation among friendships. In the second portrait we show how choices regarding play style and players' goal setting are highly contingent on the everyday life context. The desire to play with partners or friends may cause players to give up personal goals in game in favour of offline relationships. The final ideal type examines the 'player burnout', a state well known by long time players, where playing the game have turned from enjoyment to chore. Due to the social investment in gaming friendships and the knowledge that such ties are likely to dissolve once members are no longer at play, players keep playing the game long after they are bored with it, ultimately leading to a total break where they stop playing the game altogether.

The discussion looks at how the game may be understood as a foci, a social glue around which activities can be organized, and how creating and maintaining this

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<sup>9</sup> Published as Eklund, L and Ask, K (2013): The strenuous task of maintaining and making friends: Tensions between play and friendship in MMOs. In proceedings from *{DiGRA} 2013 - {DeFragging} Game Studies*. Atlanta, {GA}, {USA}: DiGRA. Retrieved from [http://www.digra.org/wp-content/uploads/digital-library/paper\\_89.pdf](http://www.digra.org/wp-content/uploads/digital-library/paper_89.pdf)

condition requires effort. In some cases, the glue is strong, causing players to stay with a community even though the main activity (playing) is no longer enjoyable. In other cases, the same glue encouraged players to create goals for themselves apart from winning or achieving success in game in order to keep relationships intact. Central to this argument is the conflict between games, which by their very nature are rational systems that emphasise performance and social rationality (Grimes & Feenberg, 2009), and friendships, all of which are (ideally) ‘for their own sake’ and in opposition to utilitarian rationales. The paper concludes that while social aspects, such as friendships, are indeed central to the enjoyment and performance of play, they may also be limiting, emotionally draining and a source of conflict.

#### **Paper 4: Optimizing play: The co-production of theorycraft and player practices<sup>10</sup>**

Paper 4 investigates the use and effect of optimization strategies on play by investigating the phenomenon known as theorycrafting. Theorycrafting is the process of reverse engineering in which the hidden algorithms of the game are discovered and used to calculate maximized play outcomes. Structured after Jasanoff’s idiom of co-production (Jasanoff, 2004b) the paper discusses how theorycrafting co-produces identities, discourses, representations and institutions in the “The Gummy Wolves” guild. The aim is to show how the seemingly objective and neutral information based on algorithms and graphs is embedded with culture, values, and ideas, and that employing theorycrafting in play has effects beyond optimized strategies. For these calculations to make sense in the first place, they rely on an instrumental approach to play where pleasure is derived from goal orientation, efficiency, and optimization (Taylor, 2006). The players who produce this information are driven by an interest to understand how the game works, to maximize their own and others’ play, (Karlsen, 2011). For the users of this information, the motivation is different and a lot simpler: it works and it is expected by other players, and observing co-productions might enable us to understand why.

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<sup>10</sup> In review



The identity co-produced with theorycrafting is closely tied to its place of origin: the forum community known as Elitist Jerk (EJ). The EJ forum had a no-nonsense attitude with explicit instructions rejecting handholding, and through their moderation and culture linked theorycrafting with the values of objectivity and elitism. For the “The Gummy Wolves”, this was an identity they both opposed and adhered to. While the players did not want to position themselves as hardcore, they desired to demonstrate they were serious about the game. Thus, the identity they built around theorycrafting became an ordering device when deciding who was on the inside and outside. The ad hoc embedding of theorycrafting ideals was also visible in our discourses. Only a few members in “The Gummy Wolves” engaged in calculations, and when they did so it was mostly done alone. However, in conversations about the game everyone used the language and framing found on EJ where play was a measurable performance. Instead of discussing experiential dimensions, they discussed play outcomes and ways to tweak them. This was linked to representations of theorycraft, such as software that recorded and visualized play sessions. These representations were permanent features of their raiding practice. They gave “The Gummy Wolves” insight into individual players’ performances and how they performed as a group, and such representation were frequently used as evidence in policy or strategic decisions. Yet, however ubiquitous they were, such logs were contested by players as reductionist and skewed, and demonstrated the guild’s resistance towards reducing the complexity of play into mere numbers. Institutions are central in stabilizing and formalizing engagement with theorycrafted knowledge and tools, and in “The Gummy Wolves” the presence of theorycrafting was institutionalized in application processes, our raids and our member evaluations.

The paper concludes that while optimization of play is both effective and enjoyable, it can also limit play. When play is tied closely to what can be measured, other aspects of play (such as creativity, sociability, exploration) are subordinated to the measurable. “The Gummy Wolves” showed some resistance to the professionalization and performance-oriented play that were embedded into theorycrafting. Yet, this opposition was difficult not the least because players were

challenging numbers, which were often taken to be objective and truer representations of the world (Porter, 1995).

### **Paper 5: Representations of play: What paratexts can teach us about learning and literacy**

The last paper addresses the role of paratexts (surrounding and supplemental texts) in playing and knowing. The title of the paper references Gee's (2003) seminal book, *What video games can teach us about learning and literacy*, and concludes that to understand how learning happens during play we need to further investigate the role of paratexts in knowledge production. Though often side-lined and undervalued, such supplementary texts have accompanied digital games throughout their history. Paratexts describe anything from forums and fanart, to user-made software (add-ons) and strategy guides (Consalvo, 2007). Play is thus advised and structured not only by game design, but also by chosen augmentations and sources of external information.

In the paper, I propose that in order to understand the role of representations (paratexts) in play we should approach knowing as an enactment. Enactment treats representations and knowing as interchangeable. Enactment of knowledge is always specific and processual (cf. situated knowledge), it is materially heterogeneous, and the character of knowing is initially undefined (e.g. tacit knowledge, beginner, mastery etc.). In other words, knowledge does not exist in the abstract but through enactments. By conceptualizing knowledge as a form of enactment, one directs attention to how something can be known, as much as how it is learned. I explore the fruitfulness of the enactment perspective by comparing it with the concept of scaffolding. Scaffolding is a term borrowed from the learning sciences that refer to any augmentation we might make to our surroundings, from textbooks to institutional rules, that enhances the learning potential and enables us to achieve more than we usually would (Pea, 2004). The metaphor is drawn from construction work where a scaffold supports a building under repair or erection. As a temporary support-structure, the idea is for the scaffolding to fade after completion, or when the new skill is acquired. While scaffolding positions material (as well as social and cognitive) augmentations as separate and temporary, enactment binds "the epistemological (issues to do with

knowing or knowing well) [...] with the ontological (the question of what exists).” (Law, 2000).

The paper finds that while some paratexts are used as temporary scaffolding for specific learning outcomes, the presence of paratexts never fades completely. Instead, we see that the enactment of paratextual representations permeates play and knowing, moving from supporting structure to semi-permanent fixture as social conventions and ideals about play stabilize and normalize the presence of paratexts. These enactments are more than a way to reduce cognitive load (cf. cognitive distribution); they shape how the game itself is enacted.

### **Summary: How do we make play?**

The papers represent five narratives about play: play as bounded in the mundane; play as collective effort; play as friendship; play as knowing; and play as materially distributed. Each paper poses some conceptual challenges in how to theoretically and methodically investigate play and ludic work. The type of play I describe clearly does not fit with romantic notions of play as frivolity and freedom; so how then should we understand it? Paper 1 focuses on the everyday life context and concludes that non-users have an important role in shaping play. How can we account for significant non-users and the everyday context when studying play? Paper 2 illustrates how player communities configure play as a collective effort, prompting investigation into organization and management of play. Paper 3 looks at how the rationale of friendship is in conflict with other rationales such as competition and enjoyment. What other rationales can we find and what is their function? Paper 4 addresses the use of expert knowledge, and asks how we can understand the relationship between knowing, playing and materiality. The last paper points to how the use of external sources is blurring the lines between what is inside and outside the game, and what technology is considered part of the game. How should this line be drawn, if it should be drawn at all? And who could be said to actually make the game since paratexts are player made?

Overall the papers demonstrate that play is both complex and multi-faceted. They also illustrate that this play does not occur spontaneously, but rather requires

translations, negotiations and compromises. For play to occur, we see players negotiating with parents and partners, organizing play sessions, managing knowledge and implementing technology. In other words, players are performing ludic work, work to make play happen. However, what characterizes ludic work? And what kind of work does it entail? Ultimately the papers address how play comes to be and it is shaped by different factors such as context, non-users, materiality, knowledge, and values. And with that I join the long line of game scholars attempting to figure out what play is about. I will start by looking at how play has been approached and explained in earlier research, I will then present some possible theoretical solutions to the above challenges.

### **Understanding play: Previous research**

Ludic work presupposes that there are no inherent or essential qualities in either games or play. Play is instead the outcome of ludic work. This is not to say that everything or anything could be classified as a game or as play. Rather, play represents such heterogeneous and multiple artefacts, experiences and actions that finding a phrase to define either would necessarily be reductionist. In previous research on play, the many approaches exemplify what a slippery and ambiguous phenomenon it is. In this section, I will discuss some prior research and explain my own approach to play.

Theorizing about play usually starts with a reference to Huizinga and his 1938 work, *Homo Ludens* (Huizinga, 1955), and the two main strands of thought he introduces: (1) that play is not inferior to work or other “serious” activities, and (2) that play instils a degree of separateness bounded by what he calls “the magic circle”. The first of these is widely agreed upon and one of the main tenants of Game Studies. The second is frequently cited, but is also hotly debated. The magic circle describes play as operating by rules which are notably different from the rest of the world, and in Huizinga’s terms, it is an activity defined by freedom, secrecy and beauty that is secluded from the grit of everyday life (Mortensen, 2009).

The separateness implied in the magic circle has been the most criticized, arguing that while “games are special contexts where particular rules apply”

(Egenfeldt-Nielsen, Smith, & Tosca, 2008, p. 35), they are not without consequences to real life. Games require time, they affect our moods and behaviour, they communicate ideas and can have direct links to non-game objects (for example, virtual currency sold for real world money) (op.cit). Attempts have been made to modify the magic circle, such as by emphasising how the magic circle is about making and maintaining boundaries as meaning is transported across them, rather than adhering to a set separation between play and non-play (Copier, 2007). Others rejects the magic circle all together as a fruitful angle on play and games, criticizing how the essentialistic qualities posed by the magic circle has little to do with how playing actually occurs (Consalvo, 2009). Thus, woven into the debate surrounding the magic circle are more fundamental questions: Are play and games unique enough (as activities and artefacts) to require their own theoretical foundation? Should they be subject to existing theories about social, cultural and aesthetic experiences and tools? Within Game Studies, there are different views on this which has led to different strands of investigations of play. In the next section I will outline how the field of Game Studies have approached these questions.

### **Game Studies: A primer**

Game Studies took off at the turn of the century, and in a relatively short space of time, has grown into a vibrant and highly productive academic field. Game Studies is more of a multidisciplinary field than an interdisciplinary one, with contributions coming from a range of disciplines. This is both a strength and a weakness and as the field grows, because it faces challenges in ensuring communication happens within and across disciplines as it matures (Aarseth, 2015). In order to give a brief overview of the main approaches, I will use the categorizations from the *Handbook of Computer Game Studies* (Raessens & Goldstein, 2011): computer games, design, reception, games as an aesthetic phenomenon, games as a cultural phenomenon, and games as a social phenomenon. As with all classifications, some things are left out or fall between the cracks. As usual, the most common category is “other” (Bowker & Star, 2000) and much research falls outside this framing.

The first category, computer games, is concerned with the history of games and its relation to the development of Information and Communication Technology (ICT). While hardly constituting a ‘direction’ in Game Studies, there are books and articles dedicated to the history of games (see eg. Kent, 2010; King, 2002). In addition, books on Game Studies frequently start with a history of video games, or at least the history of the genre it discusses (see Egenfeldt-Nielsen et al., 2008; Mortensen, 2009; Pearce, Boellstorff, & Nardi, 2009).

The second category, design studies, address at the relationship between designer and game, as well as how game design can instruct different kinds of behaviours and experiences. Examples of the first, relationship between designer and game, are Kerr’s (2006) study of the Irish game industry and Malaby’s (2011) ethnographic account of the making of Second Life.. Both studies investigate the culture of people making games, and how the designer’s context influences their design. Other research into design discusses how to make “good” games, and how to think about game design, notably in the seminal book *Rules of play: Game design fundamentals* (Salen & Zimmerman, 2003). As the potential use for games is reaching outside the realm of enjoyment, game scholars and enthusiasts are now also looking to enhance learning experiences (Prensky, 2003) or increase health benefits (see every issue of “Games for Health Journal”).

Category three, reception, on the other hand, deals with the individual player’s relationship with the game. With roots in media reception research these studies presume that there is a measurable effect of playing, be it on social well-being or cognitive processing, that can be measured and utilized (Calvert, 2005; Gunter, 2005). This strand of research has been responsible for many claims about negative effects of gaming such as increased social anxiety (Lo, Wang, & Fang, 2005), addiction (Griffiths, 2000), and violent behaviour (Anderson et al., 2010). These types of claims have come under strong critique for methodological and analytical weaknesses, primarily for reductionist (and faulty) understandings of games and play. Studies on the negative effects of video games tend to show little differentiation between types of games, and the methodological focus on experiments removes play from its context

(Bennerstedt, Ivarsson, & Linderöth, 2012; Cover, 2006; Karlsen, 2010). On the other hand, concepts such as ‘flow’ where one feel completely immersed in what you do have had great explanatory power when describing the experience of play (Mortensen, 2004).

The fourth category, what Raessens and Goldstein (2011) refer to as ‘games as an aesthetic phenomenon’, reminds me of ludology: a fascination with the uniqueness of games and how games communicate stories and experiences, either by comparing games to other media, or by looking at how games build narratives and worlds. As examples of aesthetic phenomenon approaches to WoW, there are analyses of how space (Aarseth, 2008) and death mechanics (Klastrup, 2008) work in the game to make the pixels on the screen feel like a world. In addition, WoW has been analysed as a genre and expression in comparison with earlier games and communities such as MUDs, focusing on how a change in medium affects play expression (Karlsen, 2009; Mortensen, 2006).

The fifth category, investigating games through a cultural lens, privileges how games are interpreted and how culture shapes understandings of oneself and one’s world. In particular, games studies scholars frequently debate the question of identity, in part because of the unique way in which players relate to protagonists/antagonists in games through avatars. This close relationship between player and avatar has prompted a range of inquiries: Who are we when we play? What is our relationship with avatars, and what is the relationship between our “real” selves and our avatars? (See e.g., Ducheneaut, Wen, Yee, & Wadley, 2009; Kafai, Fields, & Cook, 2010; Tronstad, 2008). Critical findings have also pointed out that there some groups are being excluded through identity work, most notably women, people of colour, and LGBTQ people. This happens by games not providing identifiable avatars, as well as by propagating a culture that opposes their expressed gender identity (Kafai, Cook, & Fields, 2010; Shaw, 2015; Waddell, Ivory, Conde, Long, & McDonnell, 2014; Williams, Martins, Consalvo, & Ivory, 2009). Another way of studying games as culture is to look at what representations that are found in games, especially with gender, race and ethnicity being central critical features as most games have a

substantial overrepresentation of white, straight men (Waddell et al., 2014; Williams et al., 2009). My own work is more fitting with the final category: games as a social phenomenon. To research games as a social phenomenon is to study games as part of society, either by looking at possible effects (from addiction to learning) or by investigating the type of organization and participation we find in gaming communities.

One of the strengths of Game Studies its multidisciplinary nature, as many research questions require answers across methodologies and disciplines. Of particular interest to me has been previous research on players and play styles. People engage with games in different ways, and one game may facilitate varied and disparate play styles. This clearly indicates the interpretative flexibility of games as well as of playing, and highlights how different forms of enjoyment can come through play. By looking at the variety of player types and motivations, we can see how different forms of enjoyment can come through play and what meanings games may hold.

Players themselves are highly aware of this variety of player types, and frequently categorize themselves and others in camps of either hardcore or casual players. Though often rebutted (Juul, 2010; Taylor, 2006; Wirman, 2007), the stereotypes are fitting imaginaries of the “other” that gamer identities may be positioned against. Hardcore players in academic literature are often referred to as powergamers. They have largely been understood as spoilsports, munchkins or simply no-lifers dedicating all their time to their game(s) of choice. Their goal-oriented and effective play style is perceived to deviate from the ideal of games as spaces of adventure and fantasy. Jesper Juul aptly describes the stereotypical perception of hardcore players as someone with a “preference for emotionally negative fictions like science fiction, vampires, fantasy and war, has played a large number of video games, will invest large amounts of time and resources toward playing video games, and enjoys difficult games” (Juul, 2010:29). Unsurprisingly, the stereotype does not agree with empirical analysis. For example, Taylor (2006) shows that this exact structuring and maximizing of own performance among powergamers is about enjoying the game and not about cheating or circumventing the rules. They engage what she coins



instrumental play, which is embedded in highly social and networked practices. The practices of power gamers have been given a great deal of scholarly attention (e.g., Chen, 2012; Malone, 2009; Paul, 2010; Silverman & Simon, 2009). It has been found that play in many cases is reminiscent of work (Yee, 2006c), and that hard work creates a sense of value and achievement during play (Consalvo et al., 2010).

At the other end of this binary is the casual player stereotype, who is described as a person with a “preference for positive and pleasant fictions, has played few video games, is willing to commit small amounts of time and resources toward playing video games, and dislikes difficult games” (Juul, 2010:29). Mimetic interfaces, the rise of social games, and the mobile phone as a gaming platform can all be seen as part of what Juul refers to as “A Casual Revolution” where finally they are making “games for the rest of us”. Nevertheless, studies of casual play debunk this stereotype as well. Juul (2010) found that casual players preferred positive fiction, but more importantly, they also prized having high levels of game knowledge, a considerable time investment and even a preference for challenging games. This indicates that duration of time one spends playing games is not the best way to gauge play, even though it is frequently used as such, especially by concerned parents (Gjesvik & Fredriksen, 2009). In response, scholars have devised typologies.

Early work to characterise ways of playing include Bartle’s (1996) taxonomy of MUD players: achievers (play as mastery of the system), explorers (play as exploration of the world), socializers (play as socializing and roleplaying), and killers (play as imposition upon others). Later work, most notably by Yee (2006b), has reconfigured and diversified this taxonomy of player motivations. Yee’s analysis of results from large-scale online surveys suggests a need to go beyond player types. He discovered 10 components that motivate and drive MMO players in across three categories: achievement components (advancement, mechanics, competition), social components (socializing, relationship, teamwork) and immersion components (discovery, role-playing, customization and escapism). For the most part, these components overlap and for the individual player different dimensions may be dominant depending on the circumstances. The importance of relationships might

increase if playing with a friend, as opposed to with strangers or immersion components might be dampened if the player is in a poor mood. In a similar vein, Kallio et. al. (2011), who studied different player practices across different platforms and genres, found a complex and shifting emphasis on intensity, sociability and type of games. Common to these empirically-based categories is an acknowledgement of their limitations as players change styles depending on the game, with whom they play, and their current life situations. Another recurring theme is the acknowledgement of how play is dependent on context, meaning that what identity is enacted, what preferences catered to or what enjoyment is produced may change from one play session to another. Enjoyment is not static.

Enjoyment is often taken for granted in play “fun” is perceived as the natural bi-product of engaging with games. I am not disputing the close relationship between play and fun, but studies of enjoyment have not provided satisfactory answers as to what makes games just so enjoyable. Based on an analysis of what features scored well in game reviews, overall game design, visual presentation and control were listed as features with the highest fun factor (Wang, Shen, & Ritterfeld, 2009), yet what appeals to game critics may not be the same as with regular users. Others have conceptualized enjoyment in games as the satisfaction of intrinsic needs such as autonomy, competence and relatedness (Tamborini, Bowman, Eden, Grizzard, & Organ, 2010), or as related to personality traits with regards to fantasy, exploration, fidelity, companionship, challenge and competition (Quick, Atkinson, & Lin, 2012). Still, this research tend to be formalistic and does not convey the experience or general appeal of play.

Game designer and game enthusiast Jane McGonigal (2011) appears to me to capture the appeal of play experiences in the four characteristics; urgent optimism, social relationships, blissful productivity, and epic meaning. Urgent optimism is meeting a challenge with joy and a belief that the problem can be overcome. In games, the implicit invitation from the designer to the player is that the puzzle is solvable, and that doing so will be worth the time. Solving such problems with others may create strong bonds and community, and if we can achieve flow we find ourselves blissfully

productive. Perhaps most important with this optimal work is the feeling that one is making a difference. This is what McGonigal refers to as epic meaning, that as a player you feel as if you are a part of something that actually matters. How we may achieve all these things, on a regular basis, is another problem all together, but the variety of perspectives in Game Studies indicate that we do not need predefined categories for play. Rather, we need both theories and methods to understand how diverse forms of enjoyment are produced through play.

Depending on the approach, we find different answers to the core questions “what is a game” and “what is play”. Perhaps as a sign of the elusive qualities of play, or perhaps just as the hallmark of a young field such Game Studies, new definitions of play are continually developed. Nardi, for example, describes play as an aesthetic experience to express “an active, participatory relation to artful material and collective activity” (Nardi, 2010, p. 41), whereas Gee addresses play as a way of critically engaging with semiotic domains defined as “any set of practices that recruits one or more modalities (e.g. oral or written language, images, equations, symbols, sounds, gestures, graphs, artefacts, etc.) to communicate distinctive types of meanings” (Gee, 2007, p. 19). Egenfeldt-Nielsen et al. (2008) list further approaches to the study of games such as games as communication, play as role-training, games as play, games as cultural reflections and games as art. Though different, they all share an idea of games as designed experiences and rule systems. The controversy appears to be about the “additional characteristic” that defines the activity involving games that separates play from non-play, and is built on multiple ontologies.

The many approaches confirm that play is multifaceted and heterogeneous. Moreover, it also demonstrates how play is a working boundary object, meaning that play is an object “both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites” (1983:393). Acknowledging the plasticity of play is not an ‘everything goes’ approach. It simply requires researchers to acknowledge and specify their own definitions rather than try to decide on a “correct” one (Egenfeldt-Nielsen et al., 2008). In the next section I will attempt to do this.

### **How I understand play**

I treat play as the outcome of ludic work. In this perspective, play is the result of directed effort, and to understand play we need to see how it comes to be. Ludic work is the result of assemblages, domestications and co-productions (more on this in the theory section) that configure networks that can be enacted for play. This is not to say that there are no distinguishing features of play. There are recurring traits of play, such as a lusori attitude: a willingness to accept the arbitrary rules of a game (though not necessarily follow them) and/or technologies with ludic affordances (which may take the form of rules, win/lose outcomes etc.). It is not their presence that separates play from other activities, but the way in which these objects are enacted. I believe that positioning play as constituted entirely different from the rest of our life, or treating games as unique artefacts, is problematic. Firstly, it creates distance between Game Studies and other disciplines, which means that findings in the field have a harder time being communicated to outsiders. Secondly, treating games as unique artefacts puts Game Studies in danger of ‘reinventing the wheel’. An exclusive focus on games draws attention away from the many generic and common traits, actions and artefacts that are in play, meaning that researchers would (un)wittingly be upholding a sort of magic circle. Finally, I am critical of the formalistic tendencies in the study of games. The focus on rules, particularly as digital games have their rules enforced by strict code rather than flexible humans, tend to overlook the social, cultural and performative aspects of those rules (Taylor, 2006). A way of overcoming this is to take a processual- and practice-oriented approach to games:

*“Then researchers will be free to pursue the more interesting questions of how people socially construct games to achieve these features (when they do); that is, how, in specific circumstances, games become seen as separable or inseparable, as low stakes or high stakes, as “good” or “bad.” What is more, we will be in a better position to explore the relationships between the various processes that comprise different games and the social formations that surround them.” (Malaby, 2007:97)*

Empirical studies have repeatedly shown players engaging in playing practices that are heterogeneous, contradictory and at times at complete odds with our romantic perception of what play should be about. Two pieces of scholarly work that aptly

exemplify this, and that have challenged our perception of what play should be, are Taylors' (2006) *Play Between Worlds. Exploring online game culture* and Consalvo's (2010): *Cheating: Gaining advantage in video games*. While the former challenges the idea of play as frivolous/not serious and how we categorize players, the latter investigates the flexibility of rules and demonstrates how games are not solitary artefacts.

Taylor's work is grounded in an ethnographic study of the MMORPG *Everquest*. Here, she analysis power gamers and gives insight into a group that puts emphasis on finding optimal outcomes, and "while sharing the same world as their fellow players, seem to be at times too focused, too intent, too goal-oriented" (Taylor, 2006, original emphasis). The intense dedication to detail and performance, the sheer seriousness they display, as well as their accomplishments as successful monster killers, is what characterizes powergamers. However, this is a loaded term that is also used as a synonym for munchkins/ min-maxers, meaning someone more concerned with rules than with story (which has been a common, yet frequently ridiculed approach in the role playing genre). Their focus on outcome and efficient strategies marks their play as instrumental and, in many cases, may be more reminiscent of work than of play. As Taylor notes, "To outsiders it can look as if they are not playing for 'fun' at all" (p 71). This is of course not the case. She demonstrates how enjoyment is instead derived from mastery, efficiency and optimization (engagement with the system) rather than roleplaying or exploring (engagement with the story). It is also worth noting that power gamers had previously been largely understood as anti-social (on the account of being too focused, too intent and too goal-oriented), but the cooperative nature of end game play in MMORPGs marks their intense involvement as highly social as well. This combination of instrumental play, social commitment and a highly productive community has made power gamers a favoured object of study for game scholars, including studies of social structure (Silverman & Simon, 2009a), delegation of goods (Malone, 2009) and socially contingent expertise (Chen, 2009b).

Consalvo's work on cheating offers a strong critique against formalist ideas about games, such as 'authentic play only happens when you follow the rules', by

showing how cheating is and has always been an integral part of play. Firstly, she explains that what is considered cheating greatly differs between players; where some draw the line at using cheat codes; others feel they are cheating when they ask a friend for advice. These distinctions emphasize how rules are defined by their enactment rather than what they prescribe. Secondly, Consalvo demonstrates how cheating has been formalized and standardized through paratexts (surrounding and supplemental texts) that advise, inform and instruct play. In other words, the rules of a game are not defined solely by the mechanics of the game, but also through the hybrid network of guides, forums, communities, and other productions that surround the game. Some of these paratexts take the shape of official guides or walkthroughs featured in gaming magazines, while an increasing amount is created by and for players and shared online (as will be discussed later in “Raiding as knowledge intensive”). A critical insight from this work is how rules are negotiable, and that cultural norms and social rules will often override the coded ruleset that the game provides (Carter, Gibbs, & Arnold, 2015).

One of the major appeals of WoW as an object of study is the combination of play and sociability and an interest in how player organize and interact. The study of play gains another dimension when it is understood as a social activity, with the formation of organizations, communities and cultures. In the following section, I will explore research on online games, online communities and previous research on WoW specifically.

### **Playing online: A World of Raiding**

Online games and virtual worlds have become important third places where people build social capital (Steinkuehler and Williams, 2006), develop identities (Yee and Bailenson, 2007), trade (Castronova, 2005), forge shared memories and stories (Papargyris and Poulymenakou, 2009) and even co-create content (Taylor, 2007). Few practices illustrate this better than raiding. Raiding began as an emergent practice in the MMORPG *Everquest*, but by the time WoW was released in 2004/2005, content that facilitated raiding had become one of the main features of the genre. Over the next few years, through a combination of player activity and interest, several expansions,

and a multitude of software updates, raiding was centralized in WoW's design and culture. A mutual drive from both players and designers made raid content and its rewards more accessible, thus shifting raid-design from an elite activity to a mainstream pastime (Azam, 2011; Paul, 2010; Prax, 2012). The result was that both the content and practices that previously were exclusive to power gamers became mainstreamed. However, the main features of raiding remain the same and the characteristics may be summed up as follows:

- A time intensive practice: Because raiding is a group effort, it is often organized around set times and schedules. As an example, my own guild had regular raid sessions four times per week from 1930 to 2300. Furthermore, the design rewards tenacity and stamina as the dungeon resets every week, requiring players to start from the beginning of the dungeon and redo old fights before starting new challenges.
- A community practice: Raiding is a group activity, often built around a player collective such as a guild or through various alliances. Friendships are central in making the game feel like a place in which time is worth spending, and in many instances can function as a 'third space'.
- An organizational practice: Killing monsters relies on the cooperation of the team as each member has a role to fill competently. Managing members and the division of goods are often integral to the raiding practice.
- A knowledge-intensive practice: Raiding require players to be knowledgeable about their own avatar and how to use its abilities. Raiding also puts an emphasis on knowing strategies and handling raid-related tools. Finally, social and cultural capital are highly relevant as both language and familiarity with norms have explicit gatekeeping functions.
- A productive practice: Play is often seen as passive, as a player sitting in front of a screen for hours on end seem anything but productive. Nonetheless, raiding is a practice that requires players to be active co-

producers of their own play, and the use of player-made software is extensive.

There are several other characteristics related to raiding, such as competition, complexity and communication. I see the above five traits as key elements of raiding, and areas where ludic work is occurring, and I will draw on this categorization to elaborate on some of the previous research and contested topics surrounding MMORPGs and raiding.

#### **Raiding as time intensive**

MMORPGs is a highly time-intensive genre. Studies have reported the mean hours each player played per week to be between 20 hours (Yee, 2006a) and 25,86 hours (Williams, Yee, & Caplan, 2008). A further 8 to 9 percent of players invest more than 40 hours per week (Yee, 2006a). To be able to raid in the first place, players have to develop their avatar to maximum level – which requires an estimated 375 hours (15.5 days played) on average to accomplish (Ducheneaut, 2006). To develop the necessary skillsets and social capital to access successful raiding-guilds, players will easily have to add a few hundred hours to that total.

Considering time as a dimension of play situates play in everyday life and in the discourse of video game addiction, but also as a way to depict a central feature of the play experience. WoW is designed in a way that encourages great expenditure of time, and more so for raiding in particular because the zones dedicated to raiding are reset every week.<sup>11</sup> Getting rewards (known as loot) is a huge motivator with high social status attached. However, only 2 to 4 items are rewarded after a monster kill. Within a group of 25 players, all of whom have 13-15 item slots to fill, repeating the kills (at times ad nauseum) to get loot for everyone is required. This is known as ‘grinding’ or ‘farming’, referring to repeatedly doing the same task/killing the same monsters usually in a derogatory way, and is common feature in WoW. In other words, WoW is time-intensive because its gameplay is highly repetitive, and managing time in order to

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<sup>11</sup> During the Wrath of Lich King expansion, it became possible to “store” the progress made in a raid dungeon to continue the week after, but in doing so players had to sacrifice rewards over new kills. The players thus had the choice of easier access to content or easier access to rewards.



raid becomes a necessary requirement for progress and success in raiding. Eklund and Johnsson (2012) argue that because gaming takes up so much of a gamer's leisure time, gaming is highly affected by ideas of effective usage of time, or what they call 'rational time economy'. This means that gaming practices were developed in part as a way to optimize how gamers spent their leisure time, therefore "rationalizing" the ways in which their overall leisure time is expended. Their findings are in line with Grimes and Feenberg's (2009) claim that games are sites of social rationalization.

The time-intensive nature of raiding, even its repetitive features, should not be dismissed as 'wasting' time. It is because so much time (and dedication) goes into the game that we see such a range of intriguing emergent practices, a high degree of expertise, productivity and complex social organizations. Let us look at the latter first.

#### **Raiding as a social endeavour**

Raiding is a collective effort that requires both organization and a sense of community. While many feats can be achieved solo in WoW, it is the group effort that sets raiding apart from other player practices. Understanding the communities of play is thus a way of understanding how this complex form of group play is made possible. Explaining the social aspects of online gaming is challenging. The mediation of interaction and the strong symbolic connotations of "being online" can make it difficult to see which of the social configurations are new, and which are reiterations of something known. I find it helpful to use Steinkuehler & Williams' (2006) proposition of online games as 'third spaces': places that are neither home nor work, but are vital for forming and maintaining communities. The ideal (and nostalgic) versions of third places, as conceptualized by Oldenburg (1989), are cafes, coffee shops, bookstores, bars, and hair salons – the kind of hangout spaces that are at the heart of a community, but whose traditional arenas are disappearing. It is the lack of third spaces to which Putnam (2001) refers when he bemoans the loss of communities through the dismantling of bowling alleys and -clubs across America. The worry is that by spending more time at home and in front of a screen, we are missing opportunities to create social capital. On the other hand, if we follow Steinkuehler and

Williams claim, we may see that playing online games might also be to address a critical civic issue. Can online games really be third places?

To assess the claim, let us look at how MMORPGs measure up to Oldenburg's eight defining characteristics of third places: neutrality, leveler, conversation as main activity, accessibility, regulars, low profile, a playful mood and a home away from home. First and foremost, MMORPGs provide neutral ground where you can come and go as you please, and you are not obliged to either play or interact. Secondly, in MMORPGs you may take on roles, such as leadership, which would otherwise be impossible due to offline constraints. Thirdly, conversation is the main activity as gamers continuously interact in a myriad of different channels to get information, trade, instruct and maintain relationships. Accessibility is high as online games are perpetually available, and the time intensive character of MMORPG play makes it highly suited to generate regulars.

Third places, as Oldenburg argues are unpretentious and homely, a trait that cannot be given to MMOs. If anything, they are typically extraordinary with grand castles, exotic nature and magical beings. The visual expression is thus not low profile. However, under Steinkuehler and Williams' closer investigation, different game spaces were found to have profiles depending on the players inhabiting it. For example, the addition of new areas with each expansion made the older areas less prolific free of players and activity, so that low profile places emerged. The next trait of third spaces is playfulness, and MMORPGs are indeed places for playfulness, even when competition runs high or when the fights are complex, there is still room to have some fun: "We observed this pattern time and again in the game contexts we researched. Players cracked jokes in the middle of epic battles, performed silly avatar-based gestures such as handstands, dances, and belly laughs, and mocked each other's (and their own) appearance on a regular basis" (Steinkuehler & Williams, 2006, p. 899). Finally, the last characteristic is a home away from home. As discussed above, MMORPG play is a time-intensive hobby, and with regular intervals of play with a set group, logging on becomes a way of seeing 'familiar faces', a place where you belong and where farewells are difficult (Eklund & Ask, 2013). Online games may be

understood as third places that increases bridging social capital – the type that occurs when “individuals from different background make connections between social networks, functioning as a kind of sociological lubricant” (Steinkuehler & Williams, 2006, p. 901). In summary, gamers don’t bowl alone. MMORPGs can work as third spaces as sites for human connection and community.

MMORPG have garnered a lot of attention because of its social dimensions. It opposes the perception of gamers as a socially excluded and isolated people, and the complexity of social interaction in game has posed important questions about how we should think about social interaction, both online and offline (Eklund & Johansson, 2013; Taylor, 2006). The opportunity to play together online has been hailed as a way for play to finally be social. While MMORPG does indeed host a range of emergent practices, being social during play is not one of them. Single-player games which have dominated the electronic games scene since their advent are “an historical aberration of digital technology” (Pearce, Boellstorff, & Nardi, 2009: 6). Before the computer, solo games where the exception rather than the rule, and it was not until networked computers were widely available that “we began to see a return to the dominant historical paradigm of the multiplayer game” (op cit: 8). In other words, play has always been social, and with online games this aspect of play is once again at the forefront. In MMORPGs, the formation of guilds, clans or leagues are a central part of the social experience, so let us now take a closer look at how players organize themselves.

#### **Raiding as organization**

Raiding requires the cooperation of 10 to 40 players. The motivation for getting that many people together on a regular basis and the goal of the individual players may vary greatly. People play MMORPGs for a host of different reasons: to interact with other players, to manipulate other players, to be immersed in another world, or as a way to escape the dreariness of everyday life (Yee, 2006a). Regardless of the primary motivation for play, raiding requires social interaction and organization. Large groups of people do not simply turn up at the same time at the same place with a coherent plan, without some planning and management. In other words, organization and

organizations are required. This makes the guild a central institution for raiders, and the player community a defining feature of the play experience.

Any player can set up a guild charter, and a range of guild types exist to cater to different experiences. Williams et al. (2006) identified four types of guilds: social guilds, PvP guilds, raiding guilds and roleplaying guilds. Usually, the different guild types would overlap each other, with most seeing themselves as a hybrid of one or two. About 60% of the players in Williams et al.'s survey belonged to a social guild, often a smaller guild, where they place a strong emphasis on social interaction and relationships. PvP guilds (Player versus Player Guilds) focus on battlegrounds against other players, while roleplaying guilds are interested in storytelling and immersion, usually on their own dedicated servers. Raiding guilds, the type studied in this dissertation, comprises roughly 35% of all guilds (although this figure is likely higher in 2016 because of the casualization and mainstreaming of raiding). The primary function of the guild is to organize raids, giving players the familiarity and practice that is needed to succeed as a raider. Common for all four was a strong sense of community and regardless of guild type “the word *social* was nearly omnipresent” (Williams et al., 2006: 345, original emphasis).

To facilitate raiding, guilds have established some common organizational practices that are not only a way to make things work, but also a way to discipline those involved. A telling example is the use of Dragon Kill Points or DKP. DKP originated in the early MMORPG *Everquest*, and is both a way to distribute goods and to discipline the group. There are many different systems of DKP, but the basic idea is that players gain points for attending raids and spend points when they are awarded items. DKP is a way to reward loyalty and perseverance (as opposed to letting loot be divided by a dice roll which is common in temporary groups), and is a way for the guild to put sanctions on players who do not perform or uphold the guild rules without having to remove or demote them (Silverman & Simon, 2009). The use of DKP speak to an instrumental type of play, but also to the expectations from players that their play (and work) should be fairly rewarded. It should be noted that even though these systems come across as formalistic, they are not necessarily applied with impunity.

After all, raiding is still a social endeavour and maintaining the good fellowship is just as important to keep the guild going.

A way of understanding how players organize themselves is to look at leadership in guilds: What is being organized and how? What orchestration is needed for a raiding guild to have enough social cohesion to function? The guild is designed for hierarchical organization with a guild leader on top, followed by ranks such as officers, members and recruits. The code only allows one account to hold the guild master position, but raiding guilds are not necessarily organized in this fashion. Practices that oppose the hierarchical design, such as forming councils and alliances are common, and often include other technologies (such as forum websites) to establish and enforce policies. In addition, it is common for the guild leader to have a set of officers to help manage the guild. This leadership team perform many jobs in order to facilitate raiding: economic management where the guilds resources are harnessed and distributed; recruitment management that ensures that the guild is promoted and new members taken care of; social management that deals exclusively with 'keeping the peace'; and more general management issues of dealing with day to day requests and making sure that the guild is moving in the direction of their policies (Guillot 2015). Of all the officers the raid leader holds a special position.

During raids the raid leader is placed in front and centre of all activity. Raid leaders choose members for the raid, decide which fights to take on, what strategies to use and when to take bathroom breaks. Raid leading is result-oriented, often with strict discipline where the raid leader speaks and the raid listen (Prax, 2010). Similarly to how a conductor sets the goal and pace for the musicians playing, the raid leader ensures coordination between players through instruction and direction. Organizational and managerial efforts are highly characteristic of raiding since the task is too complex to be conducted without planning, and demonstrate forms of ludic work. Cleaning up the guild bank or adding up the latest DKP score is not playing, but rather, activities upon which play depend. This is ludic work that is done voluntarily and without pay, wherein rewards are experienced as the enjoyment of play and success of the team. Yet, the ludic work is not free of controversy or strife.

The managerial efforts required to conduct raids is a good indicator of how challenging raiding can be, and that it is an activity that requires many forms of expertise. In the next section, I will further investigate what constitutes game expertise in WoW by discussing how raiding is a knowledge intensive practice.

#### **Raiding as knowledge intensive**

In theory, all that is required to a raid is an avatar at a max level. In practice, the two other requirements are social capital (as seen above) and game expertise. In a raid situation, you need to know about the abilities of other players and different encounters, how to find and use expert information about WoW and social norms and expectations from the guild (Chen, 2012). But how do players gain expertise to start with? How do you learn to play WoW?

WoW may be described as a nurturing affinity space (Gee & Hayes, 2012; Gee, 2005), a place where expertise is highly valued and the exchange of information is ubiquitous. Novices and masters share the same space, and everyone can (if they want to) be producers as well as consumers. Your offline identity, age, race, gender, class and nationality do not matter. In an affinity space only the weight of your argument is considered. Tacit knowledge is used and honoured, and explicit knowledge is encouraged. Specialist knowledge is pooled, often on out-of-game sites, so that it can be used by other players. In many ways, affinity spaces describe an ideal learning culture, and serves as a stark contrast to the average classroom. While Gee & Hayes (2012) present an overly romantic and idealist notion of play culture/spaces, the concept of affinity spaces does capture several of the characteristics of WoW culture in relation to how knowledge is shared and what kind of learning culture it represents, such as peer-to-peer learning and the use of external sources. In accordance with good game design, WoW has pedagogical affordances where you start out with few and simple choices/abilities that grow in numbers and complexity as you progress through the game. The interface will give basic information about your avatar and tasks, and there is an accompanying game guide that explains the basics of the game. However, this official guide was widely mocked, and rarely in use. It was considered out of date, and far removed from the day to day reality of a WoW player. Instead, conversations

between players and the use of paratexts are the dominant modes of learning in WoW. It is not planned or structured, but it works none the less because information is given in a context where it is needed: “In *World of Warcraft*, learning in conversation is event-driven with no planned curriculum. It is spontaneous, erratic, serendipitous and contextual” (Nardi, Ly, & Harris, 2007:3)

As a player there are three main types of knowledge you have to master: fact finding, game ethos and tactics and strategies. Players may encounter these types of knowledge from explicit requests in public channels or from friends, or through serendipitous instances, such as when other players offer information about how a seemingly worthless item is actually valuable. Helpful facts include the how an item works or what ability to use against a monster. The latter might occur during combat (for example, “use sunder armor [ability] to get the monsters attention”), providing an excellent contextualization for information sharing where the gap between theory and practice is removed (Nardi et. al., 2007:4). Tactics and strategies refer to the ways in which players may solve quests and tasks. In light and playful conversation, players may exchange experiences that give insight into other classes and areas they might not have visited themselves. Yet, this factual information is interwoven with the game ethos. Game ethos is the subtler aspects of play, and has to do with “the right way of playing”. For instance, one might add a comment about how shameful it is to leave a battleground when explaining the game mechanics of a “deserter” – a mark given to players who abandon an ongoing match – or note who should ideally bid on particular items when describing loot mechanics. Thus simultaneously giving information about the game and the game ethos. In Nardi et al., (2007) the social aspect of sharing information is highlighted, similar to what others have found (see eg. Chen, 2009; Steinkuehler, 2004), but what about the material aspects? For this let us turn to paratexts.

Paratexts are texts that surround and supplement the original work. The WoW community is well known for its productive players and its interest in paratexts. They

have authored the second largest wikipedia in the world with over 100 000 articles<sup>12</sup>, and boast a highly active blogosphere and a wide range of forums dedicated to the game. The presence and use of paratexts varies greatly between games. In WoW, a considerable number of paratexts take the shape of walkthroughs and guides, such as instructional videos and texts detailing how to overcome a specific monster or gear towards a particular route. The use of walkthroughs would be considered cheating and highly unsportsmanlike in many gaming communities, but their role in WoW culture is one of necessity and reverence. As Paul (2010) summarizes: “Good raiders [players] must both play the game well and actively participate in the consumption of texts about the game”. This is explained by the complexity of fights that players meet, as well as an underlying instrumental approach to play in which efficiency is a factor:

*“Groups that simply show up and expect to learn by trial and error are likely in for a long process of learning, which can be substantially shortened by looking outside of WoW for guides and discussions about how to defeat Keal’thas [a boss monster].”  
(Paul 2010)*

There is also a growing body of studies investigating paratexts, interpreting their use and function with different perspectives. Lowood (2007) sees the making of machinimas as a way players contribute to the player community, where creative and oppositional readings are welcome. For others, paratexts are tools that enhance and encourage learning. Steinkuehler & Duncan (2008) argue that forum discussions encourage scientific habits of mind, while Martin & Steinkuehler (2010) link paratexts to increased information literacy. For Papargyris & Poulymenakou (2009), paratexts are a way of creating a collective memory and demonstrated how stories about online play was shared and stored on sites that lived on after the game world itself was decommissioned. Paul (2011) describes strategy guides in WoW as platforms that create templates for play and that draw play away from creativity and individuality, and towards standardization. Similarly, Grimes & Feenberg (2009) relate paratexts to the ‘democratic rationalization’ of play (as opposed to rationalization imposed by official or corporate owners). The integral role paratexts may play in bringing meaning

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<sup>12</sup> From WoWwiki “Guide” <http://wowwiki.wikia.com/wiki/Portal:Main> retrieved 01.04.2016



to digital games has invited critique of how paratexts are treated as external discourses, provoked a general call for attention to the role of paratexts in Game Studies (Marcus Carter, 2014). Overall, paratexts play a large role in shaping game literacy not only as tools to learn, but also as ways of showing the right way of playing (Consalvo, 2007).

It is obvious that the use of paratexts is changing how the game is played, thus encouraging a view of games as social artefacts rather than solitary ones. Paratexts are part of the game ecology where different systems (from walkthroughs to forums and add-ons) intersect and inform each other (Sherlock, 2009). Taylor (2009) suggests that we should think of these non-game tools as non-human raid members, but how can technology have agency, and why should we think of technology as on par with humans? How should we understand players who are shaping gameplay through their creations?

#### **Raiding as productive**

A distinctive feature of WoW paratexts, in addition to instructing and informing play, is that they are made by players for other players. This means that players are moving beyond being mere consumers of games into becoming producers themselves. One area where this is most striking is in the making of add-ons or mods: software or hardware modifications to a game or game technology as it is direct contribution of code to the game. In WoW's history there have been many cases where the add-on code was appropriated by the Blizzard and incorporated into the next version of the game, which illustrate the pivotal role player productions have had in WoW.

Scacchi (2010) identifies four types of mods: 1) interface customization where new functionalities are added (such as what information to display or how to change attire); 2) game conversion mods that range from changing the look of characters to adding own levels to changes in game mechanics; 3) machinima and art mods where creative artwork displace play in favour of storytelling, and 4); the building of custom game PCs for competitive advantages in online games, and hacking game consoles to expand on its possible uses. In WoW, there are only user interface customizations due to set limitations by the producer (Blizzard), but the add-on community in WoW is strong and important, with sites and groups dedicated to the making and dissemination

of their own productions. Whereas modders tend to design for advanced users (like themselves), Blizzard tends to simplify and mainstream. In some cases, modders work on problems for years (such as the Shaman's totem bars) and given players good alternatives before Blizzard decide to provide a solution, thus creating a buffer zone where players' needs may be met without having to spend on developing costs (Prax, 2012). It is difficult to draw the line between user and producer in cases like this, and issues such as ownership and revenue arise in the tensions among the players, modders and producers.

This tension is exemplified by the controversy that arose after Blizzard updated their add-on policy in 2009. The new policy included rules that add-ons had to be free of charge and that modders may not solicit donations, which that left the modder community feeling betrayed. To the modders, there existed an unspoken agreement between themselves and Blizzard that modders were welcome, and that they were adding value to the game. With the change in add-on policy, it seemed that Blizzard wanted copyright and ownership over all aspects of the game, including add-ons. Where this change was met with opposition from the add-on community, regular players considered it to be positive that ads appearing in game (as a consequence of modders trying to generate income) were removed. Ultimately there exists a fragile synergy among producer players, and modders, as the creative freedom desired by modders may be incongruent with a company's long term vision (Kow & Nardi, 2010).

In summary, the study of play poses some challenges: How to account for play when it is such a heterogeneous phenomenon? How to set boundaries of what is inside and outside the game when code is extended or play is negotiated far from the game world? Finally, there are also questions about the technology: How is material affordances negotiated? How are player actions shaping the technology? To answer this, I look to Science and Technology Studies.

### **Give me a game and I will raise the world**

The link between Game Studies and Science and Technology (STS) studies might appear spurious at first, but the way we tend to view games and gamers is reminiscent of how we have viewed science and scientists. Just like play has been considered a unique and bounded activity, so has science been understood as pertaining to its own domain – the laboratory. Furthermore, both have been explained through idealist and essentialist characteristics that emphasise their independence from the mundanity of ordinary life, and have been studied as if they were. Those involved, be it gamers or scientists, are understood as catering to eccentric interests indiscernible by “ordinary people”. In the case of the scientist, the engagement has been understood as a necessity of expertise, but in the case of the player it has been a cause of concern. A key insight from laboratory studies has been that neither labs nor scientists exist outside the social realm, and that investigation should be focused on how things are moved in and out of the lab. Empirical studies of play have shown it to be intimately linked to what happens outside the game, so perhaps a similar approach could be fruitful?

In the essay “Give me a laboratory and I will raise the world”, Latour (1999a) illustrates this point. He shows how Pasteur’s work on microbiology was not only the result of disciplined bacteria, but also a product of contemporary concerns and controversies. Problems were translated in to the lab, and later out again and institutionalized across France in a way that makes it meaningless to describe the lab as outside society. The idea is that by studying movements to, from and inside the lab we might better understand the transformations from controversy to experiment, from bacteria to scientific facts. Lab studies invite us to investigate translations across borders, places and actors and not to be fooled by its apparent separateness. Transferring this principle over to games, we may ask: How is effort translated into play? How are tools transformed into toys? To find these answers, it is relevant to study how games are embedded in the world, what is put in and taken out of games, as well as what happens within them in order to analyse how play is produced. To paraphrase Latour: “Give me a game and I will raise the world”.

The game I use for this is *World of Warcraft*, and to analyse the movements in and out of the game, I have conceptualized it first and foremost as a technology; but what is a technology? And why would it be a fruitful approach in the study of play? In this following section I will outline the theoretical framework for the dissertation, in particular, the underpinnings of ludic work: assembling, domestication, and co-production.

### **What is technology?**

The word ‘technology’ has its roots in the Greek word “techne”, which means “skills in arts” (Nye, 2006, p. 7). In the hierarchy of knowledges laid out by Plato and Plotinus – with science at the top and crafts at the bottom – techne had an ambiguous middle position. In the renaissance, one can find the first uses of the word technology, then referring to a systematic study of the arts such as a book on the ‘technology’ of glassmaking. This meaning persisted during the industrial revolution, and it was not until World War I that technology came to stand for the mechanical arts as a whole and “the sum total of systems of machines and techniques that underlie a civilization” (Nye, 2006, p. 13). Since the 1930s technology has “emerged as a comprehensive term for complex systems of machines and techniques” (Nye, 2006, p. 13), but it remains a slippery term as it has also become a synonym for digital devices and electrical gadgets such as computers and telephones. Our understanding of creation and diffusion of technology has also been distorted by the idea that technology is simply applied science or the result of individual geniuses. Technology has become a catch-all phrase for anything digital or mechanical, and technological innovation is often falsely attributed to superior functionality rather than as related to use.

To strip technology down to a workable definition, we can distinguish three different layers of meaning. Firstly, technology refers to physical objects or artifacts; secondly, it includes human activities such as designing and handling machines; and thirdly, closest to the original Greek meaning, technology also refers to knowledge related to machines and production (Bijker, 2006). Inferred from this is the notion that technology is not purely material. Indeed, there is the artefact, but there are also always the cultural, practical and cognitive dimensions at work as well. However, the

ways in which we have studied technology has not always accounted for this as technologies have often been analysed as existing outside of our social world.

To think of the technical and the social as co-produced, as STS advocates, is also a way of avoiding technological determinism. Technological determinism presumes that a) technological change is predetermined and cannot be altered by other factors, and b) that technology is an external factor that exerts decisive power over societal changes. Video games have been subject to many a deterministic statement about their effects on society, ranging from video games as world saving, to video games being the root of all evil. Such premises are deterministic in that they presume there are inherent qualities in games that will manifest themselves as a given type of impact on society. As an analytical perspective, technological determinism is outright rejected, but as a way of thinking about technology and society, it is intriguingly persistent. Though obviously flawed, it is common belief that the invention of the phone would eventually lead to the invention of the mobile phone, or that computers were always destined to become smaller and faster as we developed them. This completely ignores the context for creation of technology, that technology can be used and understood in different ways (cf. interpretative flexibility Collins, 1981, Pinch & Bijker 1987), and the interdependence between technologies and social systems. Thus, a deterministic perspective may also prevent us from intervening in socio-technical processes, and puts us in danger of reducing complex problems to a question of developing new technology (also known as ‘technological fix’ Rosner, 2013).

Chandler (2012) gives several reasons for why we experience technology as obligatory and outside human control, and implicitly, why technological deterministic thinking persists. The first reason is how technological narratives are often told in a macro-perspective that hides the everyday negotiation and mess that is actually involved in making technology. As end users, we are rarely able to see what those negotiations are, so we are unable to imagine other possibilities. Another reason for why we experience technology as obligatory is that large technological systems at times do change society considerably. They do this by gaining momentum and through its related institutions and agents shape both social and cultural premises. There are

also those who profit from a deterministic approach. A game designer pitching her new game for learning might promote it by jumping on the “Video games will change education forever!”-bandwagon, or argue for essentialist qualities of games as tools for learning to reassure uncertain clients. Critiquing deterministic approaches to technology is not to dismiss the role of technology in societal change, or to pretend that technologies are without consequences. Rather, it is a way to start a discussion on how material agents can be accounted for. For STS, the answer has been in embracing the co-production of the social and technical dimensions. This approach is fundamental in Actor Network Theory, which takes a relational perspective on how humans and non-humans interact. In the next section I will expand on this approach.

### **Actor Network Theory: A relational approach**

Actor Network Theory (ANT) is both a method and a theory. As a theory, it is a way to understand the associations and relationships between humans and non-humans in heterogeneous networks, and as a method, it is a way of finding and tracing these relationships. In both cases, it is an approach that rejects internalistic explanations of science and deterministic understandings of technology. Though only briefly mentioned in the five research papers, it has been both a theoretical underpinning and methodological inspiration for me. I am not the first to use ANT theory to analyse and bring forth stories about digital games, game knowledge and players. Both Taylor (2009) and Chen (2012) have used ANT to understand the relationship between play and mods, where mods are treated as non-human actors. Their research has shown how raiding in WoW was heavily reliant on delegations between players and mods that instructed play. Others have studied knowledge production in games (Wenz, 2012) or gendered aspects of play (Harvey, 2011) through the lenses of techno science. Several game scholars are influenced by STS and are focused on important tenants of field such as empirical grounding, processual perspective, rejection of dichotomies, and the relationship between technology and users (see Giddings, 2006; Glas, 2014; Malaby, 2007). Overall, there appears to be a fruitful relationship between Game Studies and STS, and an interest in technology as part of the study of play through ANT. In the following section I will expand on ANT and its applications in the study of play.

However, doing so is not without its challenges, something one of ANTs main contributors also admit:

*"I will start by saying that there are four things that do not work with actor-network theory; the word actor, the word network, the word theory and the hyphen!"(Latour, 1999b)*

This now infamous self-critique has always been a source of comfort to me. Even though he has later retracted part of his ANT critique (Latour 2005), the quote is a reminder of how messy and elusive ANT can be, and how resistant the concept is to plain explanations (Sismondo, 2004; Skjølsvold, 2015). Personally, I have no strong opinions on the hyphen, but I still find “actor”, “network”, and “theory” useful ways of explaining ANT so I will use those categories in the following section.

#### **Actors**

The most radical proposition of ANT is whom it considers actors. Since an actor is defined as someone with agency, it has been a category reserved for humans in most social sciences. In ANT non-humans are also given agency. At first glance, it seems almost ridiculous to grant agency to lamps, cars or video games, but this shift grew out of empirical work on scientific and engineering achievements. Latour (1987) demonstrated through references to his and others lab studies how scientific work was not performed solely by humans, but rather *with* technologies that were tasked with measuring, storing or computing information. Agency was the result of these processes, not something that existed outside of them. Machines were made to answer research questions, effectively delegating parts of the scientific investigation to a non-human. Similarly, Callon (1986) found that not accounting for non-human agency could be highly problematic. In his study of scallop production on the coast of France, he showed how all human actors eventually became aligned with the same goal of setting up scallop farms, yet the scallops resisted by not anchoring at designated places and escaping, leading the network to fail. The interests of fishermen, researchers and businessmen in artificially growing scallops were not shared by the scallops themselves. This resulted in scallops having agency enough to make the network fall apart, which illustrates the need to expand on whom we consider actors.

ANT also grew out of a critique of social sciences lacking interest in the material. Described as the problem of “the missing masses”, Latour (1992) compares sociologists’ neglect of the material to the problem of missing masses in physics, inferring that there is something huge and important out there with effects that are not accounted for:

*“They are constantly looking, somewhat desperately, for social links sturdy enough to tie all of us together or for moral laws that would be inflexible enough to make us behave properly. When adding up all social ties, all does not balance. Soft humans and weak moralities are all sociologists can get. The society they try to recompose with bodies and norms constantly crumbles. Something is missing, something that should be strongly social and highly moral. “ (Latour 1992:47)*

The quote also speaks to the role of material actors as highly moral and as a stabilizing factor. Morality is inscribed into artefacts, as judgement values are embedded into the design, and often tasks of keeping people in line is delegated to technology. An everyday example of this is in-built car alarms that sounds until you put on your seat belt, or lights that turn off automatically when there is no one in the room. In both cases the technology is given the task of ensuring moral behaviour, be it safe driving or energy efficiency.

All technology holds affordances, that is, cues or hints about its preferred use and its envisioned user. “Designers thus define actors with specific tastes, competences, motives, aspirations, political prejudices, and the rest, and they assume that morality, technology, science, and economy will evolve in particular ways” (Akrich, 1992, p. 208). The innovation process is thus also where the designer’s worldview is inscribed (“written”) and materialized. To create new technology is both to make hypotheses about what its use will be and to infer its relationship with other technologies and systems. While the involvement of users in the design process has been trending for decades, there are practical limitations, such as time and resources, to how users can be involved. I-methodology, where designer’s own preferences are used as a guideline, is still prevalent among many engineers and is in danger of reproducing the same in and out groups as the mostly white, mostly straight, mostly men engineers already have configured (Oudshoorn, Rommes, & Stienstra, 2004;



Sørensen, Faulkner, & Rommes, 2011). The theoretical argument it sound, but elevating the status of material agents is somewhat of a challenge in practice.

One approach is to look at technology as a text and use as reading it (Woolgar, 1990). Following this semiotic turn, the goal is to constantly move between the technical and the social. By doing so, two vital questions come into focus: how the technology constrains actors and their relationships, and secondly, the character of the relationship between actors and how it influences understandings (and thus use) of the object in question (Akrich, 1992). Akrich (1992) uses the term “script” to describe how “technical objects define a framework of action together with the actors and the space in which they are supposed to act” (p. 208), similar to how a play manuscript configures the role of stage performers through set and props. Unlike on stage, the provided script might be resisted. The de-description (“the reading”) does not always result in the technology being used as the designer had imagined, and may instead lead to anti-programs (“counter-readings”) about use. Digital games are abound with examples of oppositional readings where the sociomaterial practice is reliant on approaching the game design from another perspective than what was originally intended. One form of such practice that I study in this dissertation – raiding – emerged as an oppositional reading of the Everquest game design. However, as described earlier, raiding is involves other actors than the text and its reader, or a game and its player. There is a diverse ecology of other people, things and ideas that comes into play during raiding and that requires accounting for. After all, actors do not act alone.

### **Networks**

Actors, both human and non-human, are related through a series of networks. An ANT analysis investigates the relationships that exist between the actors, and the effect of the network. Even phenomena as quintessential human as falling in love may be understood as a series of delegations and translations in a network; emotions are conveyed through flowers or rings, actions are facilitated through contraceptives and relationships are stabilized through common ownership of household items, such as a dishwasher. Not only is this network used to express romantic love, it is also what

configures it (Sørensen, 2004). Networks are created through translations, which is why ANT is also referred to as the sociology of translation. Translation refers to the movement of interest from one actor to another, and networks are made when successful translations enrol new actors with aligning interests into the collective (Callon, 1986). ANT moves away from intentions and is more interested in effects, with a special affinity for the unintended consequences. This means that ANT's approach to many controversies is to make the issue of concern into an empirical question. For example, a question such as "Are video games good tools for learning?" is answered by "Let's see them in practice". It does not matter if the game is designed to facilitate learning (intention), what is of interest is its application and use (effect). With networks and relationships between actors as the focus, we might find out that the question of learning effects in games lies not with the game itself, but with other human or non-human actors. This has been referred to as the social construction of facts and artefacts, but has later been critiqued for the use of 'social' as it effectively black-boxes 'the social' in its attempt to highlight the constructive aspect of technology (Skjølsvold 2015)

The early studies of ANT focused on techno-science; how scientific facts and artefacts were made. In later iterations, ANT has been expanded to be a more general theory (or method) for the study of sociomateriality, which is why ANT is also of relevance to play. In "late ANT" (also known as "ANT and after"), there is a shift from analysing the relationship between the material and the social, to analysing it as co-produced – as sociomateriality. The argument for focusing on sociomateriality is that it is analytically impossible to separate social and material, as they constitute and shape each other. Thus we should use sociomaterial phenomenon as our unit of analysis. Another key element of late ANT is the turn toward performance and enactment. Whereas early ANT was already oriented towards process, late ANT takes this further and argues that phenomena are not real until enacted into being. An example of this is Callon's (1998) study of markets that show how they are the enactment of specific networks in specific places, and that how they are constructed depended on the context and the relationship between actors.

The effort in making and keeping these networks stable is a key interest point for this dissertation, so I will return to this work as sense making, orchestration, and assemblage in a moment, but first we have to expand on ‘theory’ as the last element in the explanation of Actor Network Theory.

### **Theory**

As stated in the beginning of this chapter, ANT is both a theory and a method. This has caused a lot of confusion and some misguided critique. From a pragmatic researcher’s point of view, I find that it makes sense that my methodology supports the ontological framework within which I am operating. As a method, ANT instructs us to follow the actors, to let questions be answered empirically, and to always be open minded about how matters could be different and how action may have unintended consequences. As a theory, ANT has evolved from social studies of science, to a critique of social studies, to a general theory of contemporary society. However, the label “theory” is still not a comfortable one.

*“Theories usually try to explain why something happens, but actor-network theory is descriptive rather than foundational in explanatory terms, which means that it is a disappointment for those seeking strong accounts. Instead it tells stories about ‘how’ relations assemble or don’t.” (Law 2009:2)*

ANT does not provide explanations for why something happens or not, instead it is a way to conceptualize and study what is going on. Still, it has strong theoretical implications, primarily the rejection of essentialist or deterministic explanations, and a view of the world as processual and shifting. Inspired by Greimas and Serres, ANT depicts the world as “patches of order in a sea of disorder” (Law 2009: 5), and concerns itself with how order and disorder is made and kept stable, for brief or long periods of time, through translation and assemblage. As such, it can be said that ANT is about movement: How ideas, people, technology and meaning are moved (translated) through networks. This has some consequences for how we think about commonly used concepts in social science.

First of all, levels are not inherent in society, but a product of networks. Similarly, phenomenon like class, nation state, patriarchy, and as I propose; play, are

effects of certain networks, not explanatory foundations. This means that we should apply the same relational logic to both big and small phenomena, and the difference between micro and macro is the actors and relations that we study, not some inherent quality that dictates that processes on a state level are different from those happening in everyday life (Law, 2009). This also means that there is no action at a distance; because everything is related through networks, there is no unaccountable link between structure and agent, only actor relationships that have yet to be mapped. Although the mapping of these relationships – for instance, between national policies and individual behaviour – can be highly challenging in practice, this does not retract from the fruitfulness of a relational approach.

My own work is positioned somewhere between early and late ANT, and my understanding of play is closely linked to ANT and its empirical ontology. Just like ANT considers agency as something produced through networks, I see play as produced through the same means. If the outcome is playful, it is because the relationships between the actors have a ludic quality, and because all actors have been enrolled into the networks and have aligned their interest towards play. In the same way Latour argues that the “social” is not an explanation but rather what needs to be explained (Latour, 2005), I believe that “play” is not an answer but what needs to be figured out. How is play made? What shapes it, and what are the effects? These are questions to be discussed in relation to ludic work. In the next sections, I will expand further on concepts that are relevant to this work: assemblage, domestication and co-production.

### **Assemblages**

For networks to be functional and to have effects, they require actors to be aligned with similar interests. The concept of assemblage is built on the relational perspective of heterogeneous actors being bonded together in more or less stable configurations, and gives us a way to discuss how given networks are being configured and to what effect. Formulated by Latour (2005) in *Reassembling the social. An introduction to Actor Network Theory*, the concept of assemblages proposes how ANT may work as a general theory/method for the study of contemporary society.

In a recent paper on assemblage as a way to understand space, Muller (2015) neatly explains assemblages as having five features. Firstly, assemblages are relational. This means that actors are defined not by inherent features, but by their relation to other actors. To understand the role of actors requires investigation into the constitutive relationship between them. Secondly, assemblages are productive. This refers to the ANT perspective that class, levels and other social phenomena are the result of successful assemblages, and that it is through assemblages these are realized. An interesting element here is that the production might lead in a different direction than what prominent actors have envisioned, such as how better and faster computers have led to an increased need for support staff (Tenner, 1997), or how social media which was designed to increase social interaction can make us feel alone (Turkle, 2011). Thirdly, assemblages are heterogeneous. There are no assumptions about who or what can be related, or in which way. Power is understood as the ability to assemble or translate actors into a network, but who holds this power is an empirical question and is not predetermined. Heterogeneity also refers to the inclusion of non-human actors and the sociomaterial approach where there is no nature-culture divide. Fourthly, assemblages are deterritorialized and reterritorialized, meaning that they shift between order and disorder as movement occurs in the network. Finally, assemblages are desired, because assemblages make things work.

Using assemblage to understand play is a way to investigate play as a series of enactments of heterogeneous networks, and provides a solution to many of the problems we have in studying a phenomenon so diverse, multi-sited and multi-technological. There is so much variation in the types of play and the kind of artifacts involved that every time a seemingly workable definition emerges, there are empirical examples of types of play that are excluded in the process. In this sense, assemblage – which works with no a priori assumptions about who or what should be involved in play – may capture and include forms for play that would otherwise be neglected. In my own work, assemblage and ANT analysis are also ways of including the many technologies that are assembled during play: add-ons, guides, forums, chat, and more.

However, a weakness is that the generic approach of assemblage might obfuscate possible unique characteristics of play as simply “yet another relation”.

I list assemblage as a characteristic of ludic work to highlight the work that is required for the assemblage to come together and have the desired effects. The network will have actors with different interests and motivations, and enrolling actors require translation. Furthermore, it does not presume that assemblages are stable, or somehow easy to maintain. A part of the skillset required from players is thus the ability to make and maintain functioning assemblages of players, guilds, policies, game affordances and paratexts. Domestication is a directed effort to make assemblages work, and the next characteristic of ludic work.

### **Domestication**

So far we have seen that assemblages are brief moments of stability in a unsteady sea of relations between diverse sets of actors. The multitude of actors with which we surround ourselves will remain fragmented and ineffective, if not assembled. Thus, we shape and reshape our networks through translations, hoping that the assemblage will work as intended and that the effort is not wasted. This analytical approach has no a priori assumptions other than the existence of interactions where the fluidity and messiness of relationships is highlighted (Law, 1992). Yet, if assemblages and networks are so fleeting, fragmented and dependent on translational work, how is the world more or less the same when I wake up the following day? How come actors remain aligned?

One reason is that many technological actors who provide resistance and stability have been domesticated. That is to say, they have been placed, routinized and stabilized in the lives of ordinary people. After all, it is in everyday life that we are continually enacting assemblages and producing effects. Everyday life studies are interested in the ordinary and mundane, in routines and repetition that is opposite of the party and the carnival where the playful, subversive, and extraordinary are happening. However, I would argue that while everyday life is characterized by routine, it is still very much a place of transformation. The study of games has shown that play is intimately connected to everyday life (Malaby, 2007), so much so that we

even daydream about play (Poels, Ijsselsteijn, & de Kort, 2015). Play has subversive qualities as the studies of emergent practices have shown (Mortensen, 2008). It is also a highly useful perspective in the study of sociomateriality.

The everyday life perspective is a way to avoid technology determinism. The micro perspective deters grand narratives about technological progress where compromises and bargains are rendered invisible, and highlights heterogeneity in use through close readings. Secondly, it brings forth technologies that have previously been overlooked. Looking back, the history of technology has been the history of engineering feats, focused on large technological systems, economies, and inventors. Everyday studies were in part a critique of this perspective, as the engineering paradigm does exclude many technologies and users. By focusing on everyday life, stories about household technologies and women as users of technology also emerged (Berg, 1998). For studies of ICT, including games, there is also a third element to why everyday life and ordinary users are important: ordinary users (if there is such a thing as ordinary) are increasingly playing a larger role in the development of ICTs (Levold & Spilker, 2007b). In the study of new media, we might be in danger of focusing too much on the revolutionaries on social media, and forget that most users are not trying to change the world, but are quite content with using technology for mundane, self-oriented and frivolous purposes, such as posting pictures of food on Facebook (Brabham, 2015). Lines between the private and public, the professional and amateur, and between the user and producer are blurring as ICTs are integrated into an increasingly larger part of our professional and private lives (Levold & Spilker, 2007a). With this in mind, domestication appears to be a fruitful perspective in the study of technology.

The role of users has been highlighted in STS studies with strong roots in the Social Construction of Technology (SCOT). In their seminal study of the development of the bike, Pinch and Bijker (1987) identify relevant social groups such as sport cyclists, women cyclists and tourist cyclists who end up defining what bike model prevailed among the many alternatives, and more importantly, what symbolic and practical role it should have in society. Different social groups may frame and use

technologies in diverse ways, emphasizing how we need to look at design and use as two sides of the same coin. It is exactly the perspective of users – here, specifically gamers – that tend to be ignored in grand sweeping statements about the harm or benediction of play. The conflicting framing of digital games highlights how the meaning and use of new technology is not a given, as “no one essential use can be deduced from the artefact itself” (Oudshoorn & Pinch, 2003). Just as a text can be read in different ways, so are technologies flexible in their interpretations (Pinch & Bijker, 1987).

Domestication is a theory about technological appropriation, use and development. It is based on the idea that technology, like animals, needs to be domesticated in order to fit into everyday life. The domestication theory asserts that all technology starts out as unknown and “wild”, and it is through negotiations and use in everyday life that they may stabilize as a “tamed” technology with an established role, function and use. Both ANT and domestication is interested in associations between humans and non-humans, but its focus on regular users and everyday life also provides an important critique on what technologies and users we should care about. It is also, in comparison with ANT, a “sharpening” of the analytical lens towards use and users, and the importance of local negotiations and routines.

Domestication theory was first used by Silverstone and Haddon in their study of ICT use in everyday life (see Haddon, 2007; Sørensen & Berg, 1990). They were interested in how the context shaped their viewing experience, as watching television was mostly done with the family in a household. They identified four phases the technology would have to go through: appropriation, objectification, incorporation and conversion. The phases are meant to illustrate how the technology is formed through a series of processes where the artefact is placed in the home, uses are established, and it becomes part of the users’ identities. The Trondheim model (Sørensen, Aune & Hatling 2000; Sørensen 2006) focuses instead on three dimensions: practical, symbolic and cognitive. The practical dimension has to do with making routines: Who is using the technology? For what purposes? When and for how long? The symbolic dimension is about meaning and identity: Why is this technology being used? What does it mean?



The cognitive dimension is about learning, that all technologies require some kind of knowledge and skill, be it operation skills or knowledge of appropriate use: How have users acquired the necessary knowledge? How does knowing shape use?

Overall, domestication of technology is an analytical approach that highlights the interrelation between use, meaning and materiality. The micro perspective and case-oriented approach has been criticized for close readings, but it is exactly in those messy and rich descriptions from everyday life that we learn that so many technologies are configured through use. In my own work, I have emphasized two elements of domestication that I feel have been insufficiently addressed: Firstly, that domestication is a two-way process; that is to say, that everyday life is as much in need of “taming” as the technology, and it is a mutual shaping rather than an appropriation. Secondly, that domestication might be a collective process, and that a collective domestication is reliant on extensive work and coherence between domestication rationales and orchestration efforts.

As a dimension of ludic work, the domestication of technology represents the routinization and stabilization of assemblages so that they become lasting and working features of everyday life. In addition, to highlight play as rooted in offline contexts, which includes relevant non-users, the domestication perspective emphasizes how meaning and use are affecting technological configurations. Where assemblage forefronts the making of networks for play, domestication looks at the negotiation and stabilization of them. The third and final dimension of ludic work is co-production and refers to how knowing is interwoven with values and practices.

### **Co-production**

Rooted in performativity, knowing can also be understood as a form of enactment. To know something, you need a subject (someone who knows) and an object (something to be known), indicating already that knowledge is never separate and abstract, but always relational. Furthermore, it is through enacting heterogeneous networks that knowing comes to be and can have effects (Law, 2000). In paper 4, I use co-production to analyse the creation and use of theorycrafting, and its

performative aspects are continued in paper 5 to understand the role of non-human actors in shaping what players know and how they know it.

Just like ANT it is more a method than a theory co-production is primarily a way to interpret and account for a phenomena rather than having explanatory power in itself (Jasanoff, 2004b). Co-production rejects linear models of knowledge transfer where knowledge is treated as given and just, and where the problem is perceived to lie in the transportation into a social, messy world. Instead, the concept of co-production captures how science and society is mutually shaping. Following this is an ontological critique of dichotomies such as nature/culture, science/politics, and technology/society. Co-production, like many STS concepts, arose out of studies on the relationship between science and society. The main argument is that science and society is co-produced; that is, “each underwriting the other’s existence” (Jasanoff 2004a, p17). The concept of co-production draws on critiques of the dichotomous treatment of nature and culture (Latour, 1993), the sometimes unexpected results when human and non-human goals mangle (Pickering, 1995) and an interest in the role of representations and how they are used (Jasanoff, 2004a). Co-production has been used to make sense of entanglements of knowledge, science, politics and practice in a wide range of topics: such as problems with making a working climate policy (Ryghaug, 2011), the making of bio-politics (Levold, 2014), and regulation of nano-technology (Åm, 2015).

Work on co-production tends to cluster around four recurring themes: emergence and stabilization of new techno-scientific objects and framings, resolution of controversies, how techno-science is made intelligible and portable across boundaries, and the cultural practices involved. To study these movements and negotiations, Jasanoff suggests investigation along four pathways or ordering instruments – identities, discourses, representations and institutions – that create order out of messiness, and if successful, stabilizes that order. Firstly, identities are central to how we make sense of disorder. How we make an issue, a fact or technology part of ourselves is an important ordering instruments because we are in part shaped by knowledge related to our identity categories. Identifying as an expert or as a novice

has effects on how one would approach a difficult topic, just as collective identities such as “White” or “Nordic” are co-produced with certain knowledges. The important point is that neither knowledge nor identities are inherently stable. How one conceptualizes and identifies as “White” has changed over the last decade, in part because of how knowledge about race has shifted.

Secondly, discourses are interesting because new problems and new knowledge tend to produce new language. By analysing discourses, we can find underlying assumptions about science, society and humanity. Perhaps more importantly, studying discourse can help us find out what is considered normal and what is abnormal, what is made visible and what is kept hidden, since ordering and standardizing what is being said is a way of disciplining actors. Thirdly, representations are by their nature a form of translation or displacement, as they are asked to stand in for the whole and show what is considered relevant. As no representation can show the whole, they are always biased. In the study of scientific production, this is a particularly salient point; even scientific representations such as charts, models or academic papers, are only a selected part of the world. In the same vein, game paratexts are telling stories about play from one perspective, representing one story of play, but instructing more. The fourth ordering device, making institutions is also about stabilization, as institutions tend to be “stable repositories of knowledge and power” (Jasanoff 2004, p 40). Through institutions we decide what is true and what works, and make sure it is re-enacted as new actors are enrolled.

I list co-production as a characteristic of ludic work to highlight the determining relationship between play and knowing, and a processual perspective on knowledge. The strong link between play and knowing has been widely discussed in the literature on game based learning (Gee, 2003; Prensky, 2006; Shaffer et al., 2005; Van Eck, 2006), yet the focus has tended to be either on learning, information, or knowledge management. Using co-production as an analytical lens is a way to make sure that knowledge is understood not only as learning outcomes or the transference of skills from games to non-game situation. Furthermore, co-production situates knowledge in a heterogeneous network where knowledge is made possible through its relationships.

It treats knowledge as a constant interplay of the cognitive, the material, the social and the normative, thus avoiding bias of the cognitive or the social in understanding learning. At the same time it is accommodating for the often overlooked material aspects and their normative role in shaping and stabilizing actors.

Across the three theoretical underpinnings – assemblage, domestication and co-production – is an interest in the processual and productive, or how something comes to be. With my interest in ludic work, I pay special attention to the work that is involved in these processes during play: Who are making networks and how? How is technology appropriated? What is being co-produced and how? In short, what characterizes ludic work? When delving further into ludic work, another relevant question to keep in mind is what other effects ludic work might produce apart from play, as sometimes work to create order in one area might produce disorder in another. In the language of ANT, this is known as “a slight surprise of action” (Latour, 1999c). This ultimately has to do with our understanding of action, or what it is to act.

### **The slight surprise of action**

The idea of unintended consequences has roots in Merton and his formulation of unintended benefits, drawbacks, and perverse results (Merton, 1936). Through the lens of ANT we might better understand how the unintended comes to be.

In an essay on the making of facts and factishes Latour urges us to relinquish both realist and relativist approaches to action. STS has critiqued the realist view of science and technology for not accounting for the social, and the relativist approach for emphasizing the social too much and forgetting the material. The middle position, that it is both social and material, is often employed in STS. This is still troubling, not because it is untrue, but because we still dress up the analysis in the constructionist language that gives an illusion of control, where including both social and material equates to everything being known (Latour, 1999c). Our method of scientific inquiry with deconstruction and reconstruction, which conspiracy theorists have bastardized so successfully, is a power move that provides a mirage of order and control (Latour, 2004). This is not usually the case as order also produces disorder, and we must embrace imperfection and mess if we are to truly understand the world (Ellingsen &

Monteiro, 2005; Law, 2004). When we act, there is a translation which in turn means there is a “drift, a slippage, a displacement, which, depending on the case, may be tiny or infinitely large” (Latour, 1999c, p. 88). This mess is often left out of academic storytelling, as we like to keep things neat. Yet, Latour compels us to relinquish control, or at least the illusion of mastery and order. However, this is easier said than done. I am not sure how to “let go”, but I believe paying attention to the “slight surprise of action”, the unintended chaos that is the result of ordering, is a step in the right direction. To see both order and chaos as the result of our translations and configurations, as the delegation of agency can lead us into the hinterlands. When we act, we might end up in another place than we intended:

*«... whenever we make something we are not in command, we are slightly overtaken by the action: every builder knows that”* (Latour 199c, p. 281)

Tenner (1997) examples of when ‘things bite back’ are apt in showing how attempts to create order might lead to disorder, even how technologies can enact revenge upon us. That is to say, sometimes our efforts to make things more efficient, more informative, or smoother through technology result in the exact opposite. Tenner calls this revenge effects:

*“A revenge effect is not the same thing as a side effect. If a cancer chemotherapy treatment causes baldness, that is not a revenge effect, but if it induces another, equally lethal cancer, that is a revenge effect”* (Tenner, 1997, p. 8).

Tenner’s examples of revenge effects are both funny and sad: false alarms that tie up police in non-events while crime flourish somewhere else; air conditioners that keep inner city offices nice and cool, but make the inner-city air warmer overall; the comforts and cleanliness of homes has produced allergies; safety gear in American football has made the sport more dangerous. In relation to ICT, we also see some distinct revenge effects: computerized office jobs were supposed to be a safe alternative to the shop floor, yet office workers are prone to new problems such as chronic back pain; operating systems that have made computers more accessible and easier to use have hidden the mechanics so well that when they fail, most users have no idea how to fix it, and bugs and glitches can “easily wipe out the productivity gains

in any system” (Tenner, 1997, p. 252). Central to his argument is that it is not the technology in and of itself that causes revenge effects, but rather, the system in which it is placed:

*“Revenge effects happen because new structures, devices and organisms react with real people in real situations in ways we could not foresee”* (Tenner, 1997, p. 11)

While revenge effects are less common than a “slight surprise of action” which appears the norm rather than the exception, this idea that our efforts can truly backfire invites us to look at the darker side of use – or in this case, the darker sides of play. As the saying goes; “it is not all fun and games”, and to this I add, “because there is also ludic work”.

I have defined ludic work as the effort required to make play happen. Drawing on ANT theory and STS studies more broadly, I have formulated ludic work as three processes: making assemblages, domestication and co-production. Making assemblages speaks to the way in which actors are configured and what relationships are formed; how humans, non-humans, knowledge, imaginaries, practices and more are connected in heterogeneous networks and brief constellations of order. Domestication speaks to how these configurations are stabilized, with emphasis on the relationship between use and meaning. Furthermore, that everyday life is the key arena for this stabilization. Finally, co-production was utilized to capture how knowing and playing are tied together. Since games require players to have certain skillsets in order to be played – for instance, by not letting you advance before you complete the given quests or tasks – knowledge and its shaping factors are crucial in understanding play. Not least because it is so prominent in facilitating and making play possible. This implies that actors involved in play are not necessarily aligned towards play to begin with, and that play does not occur without some effort. This is not to say that putting in that effort is not enjoyable, or that configuring a heterogeneous network towards play is removed from the play situation. If anything, the opposite is true; ludic work tends to be intimately connected and interwoven into other playing practices. The concept does highlight that whatever play we observe, study or participate in requires configuring, negotiation and stabilization. Simply put, play requires work.

In the next section I will return to the concept of ludic work and how it features in my empirical data. What did the ludic work consist of? When was it successful and what challenged it? My aim is to demonstrate how ludic work was done, and with revenge effects in mind, how ludic work might not always lead to more or better play.

### **Cross cutting analysis: Ludic work and the trouble with fun**

When beginning a dissertation on play, I did not expect to end up writing about work. When analysing the data across my research papers, it became obvious that the common theme across these five papers was work. Players were working to fit the game into everyday life, working to develop identities and communities, working to keep friends and have fun, working to know how to play and to make things for play. Naturally, work became the overarching theme for the dissertation. In this cross cut analysis I will continue to explain ludic work and discuss how it shapes play.

In this cross cut analysis, I will expand on five areas where ludic work is prominent in order to better understand the relationship between it and play. I have formulated this as five tensions that have to be negotiated, balanced through ludic work; and configured: (1) social and instrumental, (2) online and offline, (3) knowing and valuing, (4) users and producers, and (5) freedom and management. Across interviews, ethnography, and papers, these tensions represent assemblages that proved difficult to configure and stabilize; areas where fundamental understandings of play, sociality, knowing, and enjoyment clashed and conflicted, while at the same time representing processes where those exact elements were produced. The first of these tensions is about the meaning of play –social and instrumental.

#### **Social and instrumental**

For some people, the end goal justifies all. For others, the journey is more important. In the context of MMORPGs, these different approaches may be described as social and instrumental. In the social approach, one is concerned with community and friendship, while in the instrumental approach, one values goal orientation, winning and efficiency. This juxtaposition of underlying ideas about play is well known amongst players, though primarily under the heading “hardcore vs casual”. The

stereotype of hardcore gamers is skilled players with no social life (because all their time is spent on gaming). Conversely, the stereotype of casual gamers is unskilled players who care little about success in game. In paper 2, we demonstrate how these stereotypes, while being incorrect, still are active imaginaries that players use to position themselves in relation to, and figure heavily in their perception of what play should be about. Across papers, the work related to these imaginaries comes across as a way to conceptualize differentiated enjoyment in play. Consequently, positioning yourself and your community according to these rationales is a way to configure play.

WoW is scripted to allow for both social and instrumental play, while at the same time demanding some combination of both; you need a community to compete, and the community is supposed to be built on shared achievements and dedication. Over the many years since WoW's release, both design and culture have changed to cater to these opposing understandings of play. On the one hand, the design was made more casual by ensuring end game content accessible to the majority of players – the size of raid groups has been reduced, and tools to ease the organization of guilds and raids and time saving features, such as teleporting and instance-saving,<sup>13</sup> have been introduced. On the other hand, there has been an instrumentalization of WoW culture through practices such as theorycrafting. The extensive use of paratexts has normalized a playstyle in WoW that is based on goal orientation and expert calculations, rather than exploration and personal experience (Paul, 2011, Paper 4). The total script is one indicating that a combination of social and instrumental rationales is to be expected, yet they are treated as opposites. This is in part due to how instrumental and social play has been configured by the WoW community and expressed through paratexts.

Paratextual practices in WoW, such as those in theorycrafting, configure competitive play as embedded with values of elitism, objectivism and professionalism. Being kind to others is considered “handholding”, and caring about fellow players’ personal wellbeing rather than their performance as unprofessional (Paper 4). This framing of play fits poorly within a rationale of sociability, and the categories are often

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<sup>13</sup> Meaning that the progress in raid instances can be saved and the instance will not reset on a weekly basis.



treated as mutually exclusive. Even though previous research on instrumental play has shown how power gamers are highly social (successful play requires social cohesion and community), indicating that they are not opposites (Taylor 2006), a more accurate understanding would be that social and instrumental are boundary objects (cf. Gieryn, 1983) that change meaning depending on context. For this reason, within the same week my guild experienced a player leave us because he wanted “to go hardcore”, and another apply to join us for the same reason.

The tension between the social and instrumental has to be dealt with on an individual level (player) and on a group level (guild). Eva (paper 1) exemplifies the individual experience of this tension. She had been playing online games competitively with her boyfriend before WoW, but found that over time her dedication to the game was not matched by her partner. He wanted to spend more leisure time outside the game and have less involved play sessions. In their relationship, this became a source of stress as he felt neglected when Eva played, and Eva was sad to play alone. For her, the lesson was to find an equally dedicated boyfriend the next time around. Similarly, Benedict (paper 3) started with WoW because he wanted to play with his friends, but found that he quite enjoyed playing competitively and became an expert player. Since he started to play to be with his friends, his solution was to stay in a social guild while attempting to experience some occasional competitive raids with other like-minded players on an ad hoc basis.

The “hardcore vs casual” controversy appears to on the surface to be about time. Disagreements about how much time should be spent playing is a common conflict that surrounds games (Ask, 2011; Eklund & Jonsson, 2012; Medietilsynet, 2014), yet the concern about time tends to speak to a deeper concern about the value of play in and of itself. Both Eva and Benedict enjoyed a dedicated and instrumental approach to play, and did so to a greater extent than their friends and partners. Both stories illustrate how the player’s individual freedom to follow his or her preferences is limited by other factors than what the game allows, or how they themselves derive pleasure from play. The assemblages they end up enacting are not optimized for their enjoyment, but are attempts to compromise on values, obligations and enjoyment.

The same tension between the social and instrumental is addressed in paper 2, though on a group level. In the story of how three player groups have domesticated WoW, we see one group domesticating along the social rationale and another group doing so along an instrumental rationale. The social group is happy to spend time with friends, ensures their raids are personal and social, and is not too concerned if they do are unable to defeat the final boss. The hardcore players, on the other hand, are very content with being as competitive as they can possibly be, and their undisputed success go hand in hand with low member turn over and dedicated players. The trouble befell those who tried to combine these two rationales in a middle ground assemblage. “The Gummy Wolves” guild set up a comprehensive set of practices and systems in an attempt to instil and maintain a balance between the social and instrumental, such as assigning tutors, ongoing member evaluations and frequent officer meetings. Paper 2 thus showed that attempting to domesticate the game with a complex rationale of moderation required more extensive orchestration and management of the domestication process.

On a group level, ludic work becomes more precarious as multiple understandings of what casual or hardcore entails are enacted, causing conflict and strife. This has been the reason for players leaving guilds, while other guilds have disbanded over interpretations of what is casual or hardcore “enough” (Chen 2012, Paper 3). Successful ludic work in the area “social and instrumental” appears to be a configuration of play that is flexible enough for multiple symbolic interpretations and identities to exist simultaneously, while strict enough to separate itself from undesired play (regardless of that being “more casual” or “more hardcore”). Furthermore, ludic work appears to be easier if it subjugates one of the rationales to the other.

From a domestication perspective, the rationales may be understood as two different symbolic interpretations of the technology. It might also be because social and instrumental approaches are so closely tied to player identity that this topic invokes such heated discussion and why it is so configurative in play. A great deal of ludic work happens on both an individual and group level to position oneself according to these imaginaries, as both social and instrumental rationales will be

present in play. Overall, ludic work in social and instrumental rationales may be characterized as involving identity work, boundary work and interpretation work. The identity work pertains to how players position themselves in relationship to hardcore and casual stereotypes; the boundary work is performed through the othering of undesired play to keep these stereotypes in place; while the interpretation work is necessary as the game's affordances needs translation and negotiation. However, this work does not only happen online. In the next section, the role of offline context for online interaction is discussed.

### **Online and offline**

In conversations with my fellow players, there would be clear linguistic distinctions between online and offline. For instance, players “logged on” and “went offline”. Like many others, they tended to decouple online activities from “real life”, where what happened online was assigned different meaning and value. This separation is misleading. A substantial amount of research has shown that the boundaries between the online and offline are often blurred as people, money and meanings are shared across the online/offline divide (see eg. Aibar, 2010; Castronova, 2005; Haythornthwaite & Hagar, 2005; Taylor, 2006). The question is no longer if online and offline spaces are separate (they are not), but what work is put into differentiating them and/or making them fit together. As the relationship between everyday life and play is of such relevance to how play is performed, it is perhaps not surprising that it was also an area that required substantial ludic work. The mundane and repetitive sides of play are highlighted when contextualizing play in everyday life. To me, this perspective has appeal exactly because being mundane is supposedly antithetical to play. The narrative painted by the WoW's design is one of heroic exploration and conquest (“Strike now, heroes, while he is weakened! Vanquish the Deceiver!”, Blizzard 2004), with an invitation “to step through the looking glass” (cf. Turkle, 1995) and do something extraordinary. Yet, life still contains dirty dishes, homework or parent-meetings. Activities in that are far from the perceived magic of play.

The ludic work enacted to construct working assemblages of play and everyday life mainly consisted of attempts to configure non-users, and negotiations over the value of games and play. In the paper 1, I discuss how the offline context is shaping player practices. The interviewees have similar online practices and interests as they are all raiders, yet their offline situations are quite varied. This means that their domestication has followed different trajectories, and when investigating their involvement with the game as a whole, they are working with very different networks. Beate and Carl were both single and lived on their own. For them, it was a relatively easy task to fit raiding schedules into their everyday lives. Beate joined another guild with a better suited raiding schedule, while Carl bought in-game gold illegally to reduce his playing time. In both cases, they needed to make adjustments, but their situation as singles living alone meant they had fewer obligations and could do the configuration freely. This was not the case for the other interviewees for whom the domestication included a “taming” of non-users as well.

This was exemplified by the story of Anders, Arne and Alf who lived at home and spent considerable time and effort convincing their respective parents that gaming was a worthwhile endeavour. Their parents were sceptical about how much time they spent online, so they devised strategies to translate their own gaming experiences in a way that would enrol their parents into their network. By highlighting learning in-game, comparing it to other online activities and even doing house chores, they worked hard outside the game to be allowed to play. This situation is far from unique. On the whole, public perceptions of games and gamers are poor. 56 percent of adults categorize most or some video games as “a waste of time” (Duggan, 2015). For children and teens, the most common conflict surrounding games is the time spent on them (Medietilsynet, 2014a), once again signalling a difference in how players and non-players value games. Non-users kept pushing back on established routines and configurations of play, making it difficult to stabilize assemblages the ways in which the players had planned.

Even if everyone in the household considers play valuable, the type of play found in WoW may still be challenged by everyday life. Anya is described as “mother

by day, rogue by night” and represents an archetypal story of how everyday life constrains her online exploration. Anya had played WoW for many years and was a skilled player who participated at a competitive level. She enjoyed the seriousness of hardcore gaming and looked back at that time with pride. She could not keep up her raiding schedule when she got a new job and children, and moved to a more casual and social guild. Most importantly, she moved to a guild with other parents because “finding a group of people sharing her real life constrains made it possible to continue playing with others” (paper 3, p8). In a guild where everyone had children and jobs, there was a greater respect for offline obligations and no one got upset if someone had to leave a group to take care of a crying child (paper 3). Such a leniency would be completely out of place in a highly competitive guild like Ensidia, where they expected players to set aside their holidays for new content releases and to stay online for up to 15 hours in one sitting. Thus, individual players have to engage in ludic work to find a community with a shared understanding of how play and commitments to real life are to be valued.

We tend to think of players’ practices as freely made and in line with their own desires and preferences. Yet, player practices might be shaped by life circumstances as much as by what they wish to do in game. Parents, partners and children, and their view on play, have been a determining factor in how my interviewees produced play. When Anya raided with a casual guild, it was because her job and role as a mother did not accommodate a hardcore style of play, not because she lacked the skill or had no interest in competitive play. When Arne (paper 1) cleaned the kitchen counter every day after school, it was to appease his parents so they would not complain about how much time he spent gaming. The ANT perspective shows that many actors beside the game and the player(s) have to be managed and stabilized in order for play to happen. In addition, it shows that enrolling other actors might pose a significant challenge as the symbolic status of games and play are deeply contested.

The ludic work related to the management of online-offline relations mainly consisted of legitimization work, or attempts to legitimize play as a worthwhile activity and games as a cultural artefact. Part of this work also took the shape of

boundary work as assemblages on each side of the online/offline divide had to fit together. Thus, shifting the boundary between online and offline was needed as part of the necessary effort to play. In the next section, considerations and valuations of play are also central, but from a perspective of how knowledge shapes this evaluation.

### **Knowing and valuing**

The etymological origins of technology – *techne* – is an apt reminder of how the use of technology is always reliant on some component of knowing. However, often use and knowing becomes inflated, and it can be difficult to see how both are configured by knowledge. For instance, how to use a chair seems utterly obvious and requiring zero skill, yet it only means we have forgotten how many times we were told by our parents to sit still, to cross or not cross our legs, and where to keep our arms if the chair is in front of a table. In the case of raiding, the knowledge aspect is decidedly more visible and complex than with a chair, yet the principle is the same: what we know shapes how we use technology. I have conceptualized the dynamics of knowing through Jasanoff's concept of co-production to highlight that all knowledge is culturally and materially configured, and that there is neither abstract information, nor purely cognitive processes. Rather, knowing is always situated, and knowledge has effects outside someone knowing something (papers 4 and 5 deal with this explicitly). In this section I will look at how ludic work relates to knowing and valuing.

I link knowing and valuing because across my data, sociotechnical practices related to knowing often involved evaluation of play as well. Paratexts used to inform play, such as theorycrafted class guides, were highly informative and accurate in their description of game mechanics and were widely used. Yet, in spite of theorycrafting's reliance on numbers and calculations, the guides were not neutral actors with objective information. They were embedded with values of professionalism, elitism and objectivism, reflecting the culture in which they were made (paper 4). Similarly, the many tools developed to analyse play were designed with ideals oriented towards the measurable and quantifiable. Taken together, this theorycrafted knowledge co-produced player practices where the individual contribution was brought into focus. Tools such as 'Recount' pit players' individual performance against each other when

they quantify and visually represent damage output on a scoreboard. Furthermore, class guides emphasize a solo player's maximum potential rather than considering that player as a member of a team whose strengths and weaknesses require consideration. Both guides and tools were used in tandem with moderating strategies – such as in “The Gummy Wolves” when logs were considered across sites for better accuracy – and using theorycrafted paratexts was not a complete rejection of the collective and the unmeasurable sides of play.

The material aspects of knowing are also highly relevant here. Material agents have played a large role in democratizing and spreading theorycrafted knowledge, and many of them are so taken for granted that they are rendered almost invisible. Take for example strategic representations that detail how raid encounters can be managed through positioning and targeting. To play the game requires, in addition to a copy of the game, a computer and an Internet connection. To make a video of game play requires video recording and editing software and video hosting sites for sharing and commenting on videos. These paratexts are then shared in smaller player networks, through in-game chat, out of game chat, and guild forums. The role of these technologies should have been discussed more in this dissertation, but I bring them up now as a reminder of how many large technological systems (Hughes, 1987) this paratextual exchange is dependent on. It also serves as a reminder that the collective intelligence (Jenkins, 2006b) of WoW is situated and made possible through Web 2.0, widespread access to the Internet and a culture oriented towards sharing. Despite elitism on forums such as Elitist Jerks, paratexts are made to be shared and enjoyed by fellow players.

Strategic representations take an experience that would otherwise stay within a group of players and externalizes and materializes it so it can be accessible to “everyone”. I use everyone here in quotation marks, because even though strategic representations are by and large available free online, they require the user to have an extensive understanding of the game to make sense of them. It is by materializing the play experience in the form of a guide, or perhaps just a bragging video for fellow players, that it is possible to share this experience. In paper 5, I detail how such

representations become interwoven into the day-to-day running of a guild, the individual performance of the player, and the WOW culture at large. Even if positioned as just “a user”, this use includes searching and vetting of information, and discussing and sharing information with fellow players. The extensive use of paratexts and ways of facilitating a certain type of play means they might be better understood as infratexts rather than paratexts, as they are binding people and activities together rather than surrounding them.

The ludic work with regard to knowing and valuing occurred at several levels. To the individual, it might be about finding information, evaluating its importance, implementing it, and evaluating its effect. To a group, such as “The Gummy Wolves”, these practices of knowing and valuing were institutionalized: guild policies were written to demand that players engaged with expert knowledge, that players regularly posted links, and that rewrites of expert guides and assigned officers instructed new players about how to do this. In many cases, the ludic work consisted of adapting the information from experts into something useable by the group. A working hypothesis is that this ludic work was made easier when the values spouted in paratexts aligned with those of the player community, as they required less translation work to be adapted. “The Gummy Wolves” did, for example, at times struggle with the translation of ideals from the Elitist Jerks forum into working guild policy decisions that did not affront individual players by taking an overly instrumental approach. The ludic work can be characterized as co-production work, but also as translation work and standardization work. I have described the co-production work in paper 4, but in this discussion we also see the work performed to move paratexts in and out of different contexts through series of translations. The materialization of knowledge in this form has standardization effects as the paratexts inform play as instrumental and optimized by externalizing and materializing what was previously tacit. Finally, this materialization is only meaningful as a standardizing force through the extensive sharing work that happens between players and in player communities. In the word of Jenkins et al, “If it doesn’t spread. It’s dead” (Jenkins, Ford, Green, & Green, 2012, p. 1)



In the next section I will continue the discussion on paratexts from the perspectives of users and producers. After all, there is no doubt that paratexts have had a significant impact on how the game is understood and played. Yet, very few paratexts sport any official stamp of approval, prompting the question: Who is actually making this game?

### **Users and producers**

Who are the makers of WoW? STS encourages us to answer this question empirically. In this section I will further discuss role of users in the making of WoW. The ways in which WoW players have developed and used new knowledges (paper 4) and tools (paper 5) has garnered scholarly interest, not least because they represent emergent peer-to-peer learning and distributed practices of knowing. As mentioned above, this knowledge is not neutral. It ascribes understandings of ideal play that align with instrumental perspectives of play. From a more practical perspective, these tools and knowledges are also subject to ludic work to render them usable by a collective.

If play is the outcome of a process where human and non-human actors have to be enrolled and enacted, players and designers are working in different areas to make play happen. The designer (in this case Blizzard) has assembled an actor network in the form of a game, which is no small task. The game has, among other things, about 6 million words of in-game text (quest, dialogue, items etc.) and 3900 minutes, or 44 audio CDs worth, of music. Every day, 900,000 dungeons are run and 2.8 million trades are made at the auction house, which is twice that on eBay on Cyber Monday in 2009 (Blizzard Entertainment, 2014). In other words, Blizzard has to keep together a highly complex and heterogeneous network that is also very large. However, the phenomenon known as *World of Warcraft* would not be the same without substantial effort from players and player communities.

If we allow ourselves to black-box the game for a moment, we can look at how players use the game and make assemblages of their own. While not as big or complex as the one Blizzard is keeping together, they are far from simple or inconsequential. In “The Gummy Wolves” over the course of a single raid night, several assemblages had to be put together. Some were routine and had become part of our collective

domestication, but even if players had experience in assembling raids it required work every time. There was no such thing as a work-free raid night, and ludic work in this area was concerned with the assembling of both human and non-human game actors. To illustrate this point, let us investigate the assemblages that were enacted during a raid to produce play.

During the course of a night, “The Gummy Wolves” would assemble and enact several networks, and in my role as raid leader it was my job to make sure that the right assemblages were enacted at the right time. In the raid formation, the following elements had to be successfully assembled for the raid to occur: the raiders and their situated experience as raiders; raid leader(s) who instructed play; the sign-up sheet listing people wanting to join the raid; logs of past performances indicating the skill level of individual players; the rotation policy documented on the forum; and friendships and personal feuds. During combat another network had to come together: every single raider (still toting their situated experience as raiders); add-ons that coordinated players; the individual mods used by players running with anywhere from 5-50 add-ons; the voice chat used to speak; the many chat channels used for communicating; the hybrid of avatar and player, as well as the magic and abilities of the avatar that interacted with the game world. When distributing loot, another assemblage of DKP tools, listings and guild policies was enacted. In addition, our play was co-produced with a range of representations in the form of strategies and discourses on the kind of play deemed desirable (paper 4).

This small slice of day-to-day raiding practices clearly demonstrates that referring to Blizzard as “the producer” of this game is an omission of player efforts. The majority of the tools described above are made by and for players, along a rationale of participatory culture (Jenkins, 2006a) where sharing and contributing to a community are the main motivators. When considering that the paratexts were embedded into play in a way that makes it meaningless to separate which tools are “inside” and “outside” the game (paper 5), it becomes clear that WoW many has more designers than those on Blizzard’s pay roll. Not least because in some cases, new

interpretations of the design and game that were developed through add-ons, were eventually included in the official game design (Prax, 2012).

Every assemblage was managed by the raid leader, configured individually and enacted collectively, making it a complex situation to direct. These assemblages remained mostly stable, yet the need to instruct players on how to do the assembly and ensuring that they had, meant continuous work. If a player did not assemble the right tools, it could have negative, even detrimental, consequences for the group. In many instances one player's misstep would cause the entire group to fail, so there was a shared interest in making these assemblages work as predictably as possible. This indicates that domesticating the game, in the context of raiding, also requires a taming of paratexts. It was in the interest of the guild to direct that domestication towards the set of paratexts that the guild valued and required from its players, and in "The Gummy Wolves" this requirement was part of the guild policy. Even if both the domestication of the game and its paratexts worked on an individual level, making it into successful assemblages that could be enacted collectively required work to persist (paper 2).

The situations I described above focus on the tools players had to assemble. This account does not take into consideration how often the role both tools, policies and design was contested. This would happen frequently; add-ons got updated, strategies changed and improved, design altered and guild policies evolved. At each point extra work was required, particularly from the officer team in the orchestration, to make the assemblage work again; this included instructing players, enrolling new technologies and revising policies. Thus, the ludic work in this area was mainly configuration work and domestication work. The configuration work consisted of assembling the necessary tools, while the domestication process involved negotiations of meaning and use. Successful ludic work occurred when assemblages were kept stable and compatible with each other, often through managerial efforts on the officers' part. In "The Gummy Wolves", they attempted to keep this stable through guild policies and discipline, with mixed success (paper 2). In the next section, I will continue to discuss the role of management and freedom in ludic work.

### **Freedom and management**

In definitions of play, freedom and voluntariness are frequently listed as inherent features (for summaries, see Mortensen, 2009; Salen & Zimmerman, 2003). Since I have rejected essentialist understandings of play, I prefer to treat the presence of both features as empirical questions: How is freedom produced in play? How player practices are made voluntary? The questions are interesting because to play is, in part, to subject oneself to a set of rules. Described as ‘lusory attitude’, it is an acceptance of a system and its limitations on actions, and a sense of exploration that is both free and voluntary (Salen & Zimmerman, 2003). Players will concurrently adhere to and oppose rules during play, frequently accommodating opportunities for emergent practices and artefacts (Mortensen, 2008; Steinkuehler, 2006). In WoW, this is complicated by the presence of other players, organizations and systems of management that shape each player’s individual freedom in the game. In this section, I will focus on how collective domestications of the game involves dealing with tensions between freedom and management.

To focus on the tensions between freedom and management is also a way to look at the potential conflicts between the individual and collective interests that frequently occur in raiding. Being part of a raid group is, on the one hand, gratifying because of high levels of action and combat at the highest level which would otherwise be impossible. In addition, it grants social status and belonging in a community. On the other hand, raiding is an exercise in delayed gratification; rewards are few and far between as they need to be shared among all players, and the guild might be aiming for something that gives you no personal gain. The interest and enjoyment of the individual player is often pitted against the wellbeing of the collective, which puts pressure on the guild to provide for each player. In WoW, you “vote with your feet” and guilds that cannot keep their players happy will be deserted. The extensive work that is invested into DKP systems is an example of ludic work to manage and balance individual input and collective rewards. DKP is an example of reduced freedom for the individual player as the distribution of goods is put in the hands of the guild, but it is widely accepted because it brings a sense of fairness in the balancing of individual

rewards and collective achievements. The key insight is that it is not a case of “more freedom makes better play”, but rather, that the loss of freedom has to be compensated.

In paper 2, we compare three collective domestication processes that exemplify this. The first group, the hardcore gamers, had rather little freedom. The guild was run strictly top-down with no delusions of democracy, and each player had to subject themselves to the guild’s overall goals and progress. In the interviews, the players sometimes spoke wistfully of the sacrifices they had to make, such as not being invited to raids because the leaders wanted a raid configuration that did not include their avatar class. Yet, this was seen as necessary for the common good, and the collective’s progress clearly provided some levels of satisfaction nonetheless. To Ensidia players, the lack of freedom was intimately tied to the belief that individual enjoyment was not of relevance. Their enjoyment came from collective achievements, even if they were not allowed to join the play session.

The casual players approached this differently and wanted few restrictions regarding their play time: to be allowed to show up when it suited them; to log off whenever their children woke up; and in general not to be bound by game goals or community commitments. That is not to say that they were unengaged with their fellow players or that they did not have any responsibilities to the community. Rather, those responsibilities were subordinated to their personal freedom. They were also fully aware that the ad hoc way in which they organized themselves granted freedom at the cost of coherence and discipline. However, this was a deliberate choice as the freedom allowed them to combine both play and everyday life in a way that suited them.

The third group, “The Gummy Wolves” who attempted a balancing act, ended up extending the managerial efforts to the point that freedom was effectively quelled. Attendance records, performance logs and DKP were all used to organize and discipline players to adhere to guild policies and to fall in line. However, with the loss of freedom, the guild failed in providing enough gratification and enjoyment through success in raiding. The result was that many players “voted with their feet” and left the

guild; sometimes they left for other guilds, and others left to take a break from the game all together. In interviews, some expressed frustration and admitted that they did not care about or followed some of the rules imposed by the guild, as they wanted to do things their own way. At the time policies were implemented, they were understood as useful ways of balancing individual input and collective rewards, as they were designed to increase fairness and commitment. With hindsight, it that appears the policies considered neither the players' freedom and enjoyment, nor difficulty of disciplining people who were voluntarily participating in a leisurely activity.

One reason for “The Gummy Wolves” failure was the unsuccessful balancing work that this area (freedom and management) required. To prioritize between individual freedom and the need for management during play was a challenging one. Keeping this balance was done by control work; attempts at disciplining and directing other players through organizational efforts. The individual freedom of players was limited through systems of control, such as DKP and attendance keeping, that had the aim of making the game fairer. The control work was challenging to perform in the context of play because compensation was expected with the loss of freedom.

It was not the first time “The Gummy Wolves” realized that their ludic work, which cost both sweat and tears, did not take them where they wanted. The ludic work produced unexpected and sometimes undesirable effects, because if ludic work is about configuring and enacting networks for play, those networks might produce results other than those originally intended. This is the “a slight surprise of action” (Latour, 1999c) discussed earlier, and refers to how the creating order in one area may produce disorder in another.

### **A slight surprise of action, revenge effects and the unforeseen**

The intended outcome of ludic work is play and enjoyment. As we have seen, players are prepared to go to great lengths to achieve this; they willingly compromise on preferred play styles, negotiate with non-users and do homework (reading up on paratexts) in an attempt to configure play in their own image. Sadly, play was not always the outcome of these efforts. In some cases, the ludic work took away enjoyment and reduced playfulness, resulting in a revenge effect where the exact

opposite of the intended effect occurred. The first of these revenge effects had to do with paratexts.

My own daily gaming routine involved checking forums, reading and vetting applications, reading strategies, keeping up on general news and debating with my fellow officers about the best course of action. Most weeks I would also write strategies, replace and configure new add-ons, write guild policies, and read long discussions on how to optimize my avatar. In other words, a huge amount of time was spent being deeply involved with the game, making play possible through ludic work, yet not actually playing per se. The “slight surprise of action” (Latour 1999c) was that the ludic work I performed to be a good player reduced my actual playtime. For other players, the slight surprise of action was a loss of freedom. Without the use of paratexts, “The Gummy Wolves” guild would not have been able to see and conquer so much of the game’s content. However, playing in accordance with a 3-page strategy guide rather than the monster in front of you is not always enjoyable. During interviews with my fellow guildies (term of endearment for fellow guild members), some disclosed that they did not adhere to the guild policy of reading up on strategies before the raid. They preferred to play by ear and react to the content instead of following abstract instructions memorized outside the game (paper 4).

Trying to control other players’ behaviour, monitoring and controlling their performances, and setting up strict rules for what players should or should not do reduced spontaneity, and placed a great strain on the officers. This made their playing less enjoyable. As the guilds bureaucratic system of disciplining grew, the precarious balance between activities that only looked like work and tasks that actually felt like work shifted. The revenge effects “The Gummy Wolves” faced was that the harder they worked to play – that is, the more ludic work they performed – the less they were enjoying the game. Looking back, it seems obvious that beaurocratization of play is not a great strategy, but at the time it felt simply unfair that our efforts did not bear fruit. After all, the guild was working *so hard* to make the best out of it, to have a laugh with our friends as we were crushing monsters, yet, we were met with dissatisfied members, unsuccessful raids and stress. This revenge effect was felt

strongly because of the hard work had taken lots of time. Individual players had prioritized ludic work and play over other activities and social obligations, sometimes even over obligations from work or school, and some reward seemed due.

A final revenge effect – not discussed in my data, but which I still consider relevant – is how ludic work relates to game culture at large. Because of the hard work that is required to play, players tend to feel a great sense ownership when it comes to the game and its contents, and they are not shy about voicing their concerns about changes in game design or class balance. Over the last few years, game communities, including those in WoW, have gained quite the bad reputation in how such concerns are voiced. The Kotaku opinion editorial titled “We must stop telling people to kill themselves” quite aptly pointed out that the outrage player communities has displayed towards designers, game journalists, and others when games are announced, changed, or discussed, is utterly disproportional.<sup>14</sup> While I wholeheartedly agree that the anger and harassment that feature heavily in some game cultures are toxic to gaming as a whole (Braithwaite, 2013; Salter & Blodgett, 2012), we should still try to understand it. A possible perspective on gamers’ outrage is their insistence of fairness and expectations from work; that hard work should lead to a fair reward. In a designed and closed system such as in a game, this should, in theory, be more feasible than in the “real” world. The revenge effect here is that ludic work to keep the game fair, actually ensures that not all players get to engage with the game community on equal footing. This has to do with the form this player outrage takes where hatespeech and slurs directed at gender, sexuality and ethnicity is prevalent, that effectively polices some game spaces as the arena for white, straight men (Ask, Svendsen, & Karlstrøm, 2016).

I defined ludic work as the effort to make play happen, and as the outcome of configuration, domestication, and co-production. Through this analysis, another interesting feature of ludic work has come to light: it persisted across playstyles and player types. The outcomes varied, of course, but the types of work remained the same. In the five areas of tension we have seen a diverse range of work occur. Ludic

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<sup>14</sup> Serrels, Mark (2015): «We need to stop telling people to kill themselves» published on sept 2. Retrieved from <http://www.kotaku.com.au/2015/09/we-need-to-stop-telling-people-to-kill-themselves/> 05.04.16



work consists of identity work, boundary work, interpretation work, legitimization work, co-production work, standardization work, sharing work, configuration work, domestication work, balancing work and control work. Play requires a varied set of actors to produce assemblages, and it is through this work that play is produced. These assemblages are places where different rationales and logics of play are pitted against each other: the social versus the instrumental; adventure versus routine; leisure versus productivity; individual versus collective; and freedom versus management. These rationales are not mutually exclusive, and the assemblages I identified in my data always contained elements of both. Instead of dichotomies from which players must choose, these categories should be understood as hybrids. Furthermore, they are also by-products of ludic work. In the making of working assemblages, the relationship between, for example, social and instrumental has to be configured and enacted. In the process what the social and the instrumental are have to be defined. In all cases, hybrids were made where elements of both rationales co-existed, but with varying emphases depending on the players and player community.

The ludic work performed by Ensidia players produced play that was instrumental with little regard for offline commitments. As elite players, they were important shapers of the WoW culture. Of all the players I interviewed, the Ensidia players had the least freedom, but they were content with the dictatorship-style of leadership because it produced successful play, which they found enjoyable. The casual players, in contrast, produced play that was oriented towards relationships and considered the realities of their everyday life. This meant a high degree of freedom often at the cost of progress, but they cared less about winning than about spending time with friends. When juxtaposed these two groups of players appears as end points on a scale, but it is important to remember that such assemblages remain hybrids. For example, the Ensidia players I interviewed were thrilled to be part of their community and even though competition was privileged, being with friends was still very important to them. Similarly, the casual players did not reject competition or success, they simply subjugated that priority. The most successful assemblages were made from having one rationale being dominant and the other subordinate, whereas attempts

at combining rationales on equal footing led to extensive ludic work that did not result in more enjoyable, successful, or gratifying play (paper 2).

In addition, it appears that ludic work may also lead to what the players themselves do not experience as play. Instead, it is just work; something that feels forced, unenjoyable and unsatisfactory. In my analysis, ludic work produced revenge effects that complicated how enjoyment was derived from games and shifted work to play by making flow an unattainable experience. Thus, it appears the main function of ludic work is to differentiate between play and non-play, and between games and non-games. Through assemblages, domestications and co-productions, certain activities and artefacts are defined as playful, while others are not. If the ludic work is unsuccessful, the “magic” is lost and activities, artefacts and actors are outside the boundary of play. If the ludic work is successful, the network remains stable and able to produce play.

A problem of all these assemblages, successful or not, is the external pressure of enjoyment. Players accept a certain amount of delayed gratification, as completing rather mundane and repetitive tasks for rewards is a staple feature of MMOs. Gratification and enjoyment are detrimental. Without them the assemblages makes no sense. This speaks to the unspoken promise of games as enjoyable, and ultimately to the slight surprise of play.

### **Conclusion: The slight surprise of play**

The opening quote in this dissertation – “nothing comes from nothing” – alluded to how everything requires some kind of effort to come into being. That effort might be comprehensive and overwhelming, such as the work put into making viable environmental policies. The effort can be taken for granted and rendered largely invisible, such as the work done at home to keep a family functioning. Ludic work turned out to be highly visible, yet at the same time it was often taken for granted. As players, we black-boxed the work we did such as keeping schedules, reading strategies, and making policies as simply being “part of play”. My analysis has showed how a wide range of work had to be performed, such as legitimization and identity

work, yet the only time the need for such work was questioned seemed to be when it became excessive. The ludic work only appeared as work when play no longer was satisfactory.

Just like early studies of games were dismissed as improper science or of no interest to the academe, the disdain towards enjoyment as a feature of media use is perhaps best, or at least most famously, formulated by Neil Postman in the seminal book *Amusing ourselves to death* (Postman, 1986). Postman argues that media is so focused on entertainment that public discourse is deteriorating, that we as a society are more concerned with form than content, and that we are being trained by television to ‘consume’ only bite-sized pieces of information. His argument is built on McLuhan’s notion of ‘the medium is the message’, meaning that “[e]ach medium, like language itself, makes possible a unique mode of discourse by providing a new orientation for thought, for expression, for sensibility” (Postman 1986: 10). As new media is focused around visual rather than textual communication, and short entertainment segments rather than well founded arguments, Postman believes that our “public discourse has become dangerous nonsense” (Postman 1986:16). At the core of Postman’s critique is not only how entertainment, enjoyment, and amusement are becoming prime features of new media use, but that this discourse focused on entertainment is in opposition to meaningful and productive discourse.

Juxtaposed against my own research, it is interesting to see how Postman frames amusement as something that we will have to fight, as if it an unwanted consequence of entertainment-oriented media. In contrast, my analysis demonstrates how much effort that has to be invested in several arenas to make play enjoyable. At times, “The Gummy Wolves”, and especially I, worked so hard to have fun through play that there was no room for the fun part. Analytically speaking, the lack of working concepts to understand the pressure of producing enjoyment and the emotional aspect of play is detracting from our understanding of both play and games. A possible future trajectory is to turn to affect theory to include how enjoyment and desire to play is created, configured, and circulated (Ahmed, 2004), as it is clearly does not just occur spontaneously.

WoW is a game with a fairly open script. It gives the greatest rewards to those who defeat the most challenging monsters or top the ranking lists. Yet, rewards are granted for a range of different activities and goals, such as exploring the game map to learn crafts. The open script of the game and its sand box elements that encourage players to find their own meaning are a source of delight and frustration: Delight, as it caters to many forms of play; frustration, as it implicitly requires players to negotiate and actively produce their own goals and playstyles. The open script of WoW and the collective configuration of its affordances are elements that place the goal of enjoyment under pressure.

Our reaction to fragile assemblages and unsuccessful configurations are deeply embedded in both reflexive modernity and individualization. The responsibility of enjoyment is framed as entirely resting on the players' own shoulders. Everyone is supposed to be their own architects of fortune, even though many factors are external and outside the individual players' control. This happens largely within the confines of a community where personal freedom becomes highly limited. Play becomes managed by fellow players and their desires, guild officers, and policies. This makes collective efforts more challenging, as they contain compromises.

In this dissertation, I have described and conceptualized ludic work as the effort to make play. Through the processes of assembly, domestication and co-production, boundary work is performed to differentiate between play and non-play, and between game and non-game. What qualifies as play or game is not predetermined, instead it emerges as the result of ludic work. In my data, the ludic work was prominent in the following five areas of tension: the social and the instrumental; online and offline; knowing and valuing; user and producer; and management and freedom. To manage these tensions the individual player and their player collective had to configure conflicting, and at times, opposing perceptions, rationales, and systems of play. In the types of play and players I have studied, ludic work does not only produce play, it defines play: what play should be about, why it has value, and how it is enjoyable. At times this ludic work is rewarding and adds value and meaning to play, while at other

times, there is a distortion in the translation of actions and something other than play is produced.

Paying attention to ludic work can be a critical entry point to understand how technologies may turn into games and how activities come to be considered as play. We have entered “the ludic century” where play is seen as a solution to low motivation or productivity in schools or at work, and many utopian visions of the transformative power of play have been proposed (McGonigal, 2011; Prensky, 2006; Reeves & Read, 2013). In opposition to this, to analyse ludic work means to reject deterministic understandings of the effect of games and highlights how even “naturally occurring play” requires effort. Playfulness might make the world a better place, but someone has to work in order for that playfulness to be realized. As games are implemented in workspaces and at schools, it will be interesting to see how ludic work will unfold since it will no longer be pertaining to gamers alone. Furthermore, we tend to define our contemporary society based on the kind of work we do, be it harvesting resources or handling information (Bell, 1976), and in a ludic century where games are centralized, ludic work will follow. Perhaps we are on the way to a ludic society?

## **Methodology: All work and no play makes for boring research**

*“The one piece of advice I would give people: If you're going to study these games, you damn well better be playing them” (Steinkuehler in McKee and Porter 2009: 20)*

I first started playing *World of Warcraft* in the spring of 2005. After initially trying the game on a friend's account, I waited impatiently for the next shipment of boxes to hit the game stores so I could finally get my own copy and join in the trending game of the season. It was the closest I had even been to Alice in Wonderland's description of “falling through the looking glass”. I had indeed found a new and fascinating world. There were strange beasts, magical forests, particular jargon (which I mostly did not understand at the time), and the feeling of starting an epic journey. The first time I typed “hi” in the chat window to an unknown player I got a rush of nerves and excitement: nerves, for appearing like a twat, and excitement, because I had always dreamt of an online world of avatars and heroes. Every completed quest and new ability I learned was a thrill. I had no idea what was coming next, but hearing my friends talk about challenges to come led me believe that WoW was a vast and exciting world to explore and conquer.

Over the next five years, I spent thousands of hours logged into the game. At times, that same sense of amazement would re-emerge, and I would bask in the exploration and experimentation that this virtual world allowed. However, all the time I was logged in the game were not all spent in a state of wonder. As I matured as a player, it became clear that playing was not only about exploration and frivolity. Playing was also about challenge and mastery, drama and friendships, inspiration and burnouts, debating and organizing. There were times when hours flew by and I was completely immersed in the trials ahead of my group, while other play sessions were filled with mind-numbingly boring tasks or yelling at the screen because my latest instalment of add-ons were not working. During this time, playing WoW was a source of work, my number one pastime, a discussion topic of choice and a place for friendship and romance. Like many other players, I experienced my engagement with WoW as much more than “just playing a game”; it was my life. I had never envisioned

a game taking such a defining role in my life, and thus accumulated many curiosities and questions: How did I make the game fit into my life? What did these friendships really mean? How had I become an expert player? These questions became the basis on which I developed this dissertation, and in this final section of the introduction chapter I will outline how I approached these questions and discuss some methodological concerns.

### **What I have done**

The methods used in this dissertation are ethnographic fieldwork combined with in-depth interviews. The ethnographic fieldwork comprised one year of participant observation in a medium-range raiding guild in WoW, as well as four series of interviews with different player groups in WoW. Ethnography has been a much employed and fruitful method to study online spaces (Boellstorff, 2008; Miller & Slater, 2000), including online games (see eg. Chen, 2012; Karlsen, 2009; Kelly, 2011; McKnight, 2012; Nardi, 2010; Steinkuehler, 2004; Taylor, 2006). The method's strength lies in the richness of data that is provided, and is well suited for a study where production of meaning is central. In Game Studies, the method has a special position, as the mantra of 'play what you study' has a strong standing. Early research on digital games was often flawed because the researchers lacked understanding of game mechanics.

Prior to this study, I had already been playing WoW for four years, accruing important social capital and game expertise, and had written a master dissertation on online and offline relationships in WoW. It was my own previous experiences during play that formed my research questions, and without them I would have had a hard time doing the kind of participant observation I wanted to do. The ethnographic data was gathered in the period of January 2009 to December 2009. Together with a group of friends, I joined the guild I have given the pseudonym "The Gummy Wolves". This was at the start of the Wrath of the Lich King expansion, so there was much activity and excitement regarding new content and abilities. I distinguished myself as an engaged and opinionated player, and was promoted to raid leader within two months. I had experience as a raid leader from earlier, and was once again a member of the

officer group that kept the guild up and running. I have often considered how my analytical interest in the work that surrounds play is tied to my own experience as an officer and raid leader, always knowing what goes on offstage and how much effort goes into keeping the front stage presentation together (cf. Goffman, 1978).

During the year of participant observation, I organized, led and played in raid sessions four nights per week, though I was often online for six or seven nights per week to join in on other smaller raids as well. Outside of playing, I also spent several hours every week keeping up with discussions on forums, reading and posting on blogs, looking up strategies, or watching videos of other players. In other words, I was playing and experiencing the game in similar way to my fellow players, but with an added analytical focus; or as formulated in my favourite quote about ethnography, “All humans do what ethnographers do, only on a more modest scale and for personal rather than professional reasons” (Wolcott, 2008, p. 6). My role as a researcher was disclosed when I joined the guild, and both interviews and recorded sessions prompted extra information and consent. My role as a researcher was, as far as I know, well received, and I would at times get humorously jealous comment about how lucky I was to have WoW as my job. I held a position of great authority in the guild, but I believe that was wholeheartedly tied to my role as raid leader and not as researcher, and have hundreds of pages of forum discussion to prove how my (seemingly useful) insights about the game were as frequently dismissed as approved.

In addition to the ethnographic work, the dissertation is also based on qualitative interviews with players. My interest in meaning, heterogeneity and negotiations made qualitative methods well suited, and the interviews were designed with the intention of capturing stories about life in WoW to contrast and compare with my own. The interviews were designed as semi-structured interviews, yet they often flowed like a normal conversation. This has a lot to do with our shared identity as a WoW players, and my methodological choice of active interviewing (Holstein & Gubrium, 1995) where both interviewer and interviewee shared experiences and ideas. All interviews were recorded and later transcribed for further analysis.



The first group of interviews was conducted as part of my master dissertation during the fall of 2006. This was still early in the lifespan of WoW, and raiding was still an elite activity accessible by few. Even if they players themselves did not identify as ‘hardcore’ players, the affordances of raiding at the time required an instrumental approach to the game and a high degree of time investment. The interviewees consisted of 5 men and 2 women, all Norwegian and in Trondheim, whom I found through my own extended social network or through snowballing. All interviews were done face to face, with the conversation being recorded and later transcribed. Topics in the interview guide related to their playing practices and the ways in which they intersected with real life obligations. They told me how they started playing, who they were playing with, what kind of guild they were in and type of play they enjoyed. The focus of the interview was the online/offline divide, looking at relationships and commitments that cross and blurs this boundary.

The second group of interviews were undertaken in the fall of 2008 in the two months prior to the release of the Wrath of the Lich King expansion. I found interviewees through my own extended social network, and by posting and asking for interviewees on a relevant Norwegian discussion board (diskusjon.no). I had wanted to speak with hardcore raiders, but at the time there was little competitive raiding going on, and the people I interviewed would for the most part be described as “social” – always emphasising the community and friendship aspects of play. The interview guide had three parts: one about their gaming history and play style, one about how raids and guilds are organized, and finally about tools and paratexts. All interviewees were Norwegian, and interviews were conducted either face to face or via voice chat. Among the interviewees, there were two women and six men, and two of the interviews were conducted as a small group (one with two friends, and one with a couple).

The third set of interviews was with members of “The Gummy Wolves”, the guild I joined as part of my ethnographic study, in the fall of 2009. I posted on the internal guild forum that I was looking for people to interview, and did six chat interviews (either in game or through Messenger) about if/how they used the guilds

forum and other paratexts as part of their playing practice. Since I was a member of the guild, I already knew how it was structured and organized in theory. All interviewees were men (there was only one other woman in the guild besides me), and since I knew them well the interviews were quite light-hearted and full of digressions.

The fourth and final set of interviews I did in the winter of 2010, and was in some ways a surprising addition to my dataset. From the beginning, I had wanted to do interviews with the most elite players, those who competed to be the best in the world and whose status was akin to minor celebrities in the WoW-verse. During what became known as “Ensidia-gate”, where the elite guild Ensidia had their world first kill retracted after their use of a game glitch was deemed cheating, I came across contact information to Hams, a player in Ensidia. When I learned that he was Norwegian, I attempted to contact him, as my previous attempts of getting access to elite players had failed (quite likely dismissed as scamming or trolling, as with McKee and Porter 2009), and he agreed to do an interview. Through him I also was put in touch with Ragebar, Eoy, Tjani, and Alex, all members of Ensidia, with whom I did chat interviews. The interview guide focused on how the guild was organized and how they prepared and followed through on raids, similar to what I had asked in interview groups two and three. In addition, I asked some questions about their relationship with their fans, and focused on their meaning of hardcore.

<b>Time of interview</b>	<b>Players interviewed</b>	<b>Men/women</b>
<b>Fall 2006</b>	7	5/2
<b>Fall 2008</b>	8	6/2
<b>Fall/winter 2009/2010</b>	6	6/0
<b>Winter 2010</b>	4	3/1
<b>Total</b>	25	20/5

Interviewing gamers about their playing habits and meanings is a rewarding exercise. As demonstrated in papers 1 and 2, player identity and style is developed in dialogue with perceptions what public discourses about play, discourses of the right way of playing, as well as community built constructs about different playing styles, such as hardcore and casual. Perhaps it is because gamers have frequently been asked to justify their interest in games that their stories about how they became gamers and what they like about playing are so rich. This concern for how gaming is perceived in general was made visible through the mandatory last question, “Do you have anything else to add?” where video game addiction frequently came up. Here they would criticize the idea that they were sick or deviant and that playing was both enjoyable and rewarding. Their trouble lay not in self-reflection (some freely admitted that playing would at times come at the expense of other responsibilities), but rather finding a language and arguments to use for ‘outsiders’ so they would understand the inherent value of spending time in a game. My data and analysis do not deal with addiction explicitly, nor is this an aim for this dissertation, but it does highlight the close relationship between player identities/practices as public discourse. It is also a reminder that players (at least my interviewees) still experience gaming as a type of subculture with clear lines between insiders and outsiders, even though an increasing amount of studies show play as a mainstream activity (ESA, 2014; Vaage, 2014).

That the focus of this dissertation is ludic work was not according to plan. The project’s original title was “Synthetic cooperation and learning: A study of knowledge production and sharing in online video games” and had the aim of investigating “the practices that exist for knowledge production and –communication among users of online games, as well as their experiences and understandings of these processes” (quote from project proposal, own translation). As the introduction describes, I had intentions of uncovering a secret pertaining to play that somehow made mediated organization, -cooperation and -communication easy. Through my participatory observation and interviews it did however become clear that it was not easy, and my attention turned to topics like organization, friendship, paratexts and materiality.

The analysis has largely been abductive (Reichert, 2007), meaning that I have moved between the empirical material and theories to identify both which theories are relevant and to focus in on analytical interests. The first paper was based on my master dissertation and was conceptualized in opposition to the (then) ongoing discussions about how strange and otherworldly virtual spaces were. Domestication theory seemed suitable because of its emphasis on technology, use and everyday life which also was the focus of interviews, while at the same time domestication theory informed my perspective in the first place, as reading about it had kindled my interest for everyday negotiations around technology. The second paper's comparative perspective of three players groups was conceptualized after the interviews were complete and it became apparent that I had interviewed players with three distinct player practices and identities. To analyse these play styles as three collective enactments, or collective domestications, was inspired by how player practices were configured in relationship to other players and the importance of guilds in this. I was at that stage already familiar with domestication theory and wanted, in cooperation with my co-author Knut H. Sørensen, to use the case to further develop domestication as a concept. The third paper was conceptualized through discussion with my co-author Lina Eklund where we shared stories about play from our respective data. We shared an interest in how prominent negotiation and compromise was in play, and that stories about friendships were as frequently about conflict as about joy. To synthesise our data we created three ideal types to illustrate tendencies we had identified, and to demonstrate our analytical points about how the relationship between play and friendship may be a conflicted one.

My initial interest in theorycrafting (paper 4) was its science-like form and practice, and my original idea was to analyse it as epistemic culture (Knorr-Cetina, 1999). However, I did not have data that could inform that perspective, so I returned to my field notes and interviews and was intrigued by how The Gummy Wolves appropriated theorycrafted knowledge. It was clear that the success of theorycraft was dependant on more than just utility, and co-production emerged as a theoretical framework to understand what else than knowing was produced through use of

theorycrafting. The fifth and final paper on enactment of knowledge and assembly of paratexts is perhaps the only one that pertains to the original project proposal where the role of material actors in knowing and play is investigated. I wanted to highlight material aspects enactment and assemblages was chosen as analytical lenses in order to investigate how material actors across platforms were tied together and made into something stable.

The concept of ludic work emerged as a possible relevant perspective after all 5 papers were completed, and it became apparent that work was the common theme across them. My emphasis on enactment and how things “come to be”, had in different ways highlighted the work required to play, and the introduction chapter has been used to develop this concept.

### **Messiness in the life of a gamer/researcher**

As a researcher exploring the virtual worlds of MMORPGs, I am placing myself at the centre of my own research. When participating in the game it can be hard to tell if I am a researcher or a gamer. Sometimes it seems I am both. Can such a dual role still produce good data? When gathering data, we expect, or at least hope, to separate the unclear and murky ways of the world from ‘real findings’, findings that will explain and exemplify and make sense of the madness. Sadly, in many cases the findings are not as precise as we might want them to be, not as clear as we hoped for. Sometimes what we find is simply a mess (Law 2004). Studying online computer games is studying worlds that are notoriously fuzzy, contradictory and moving. Boundaries among roles, places, and experiences are shifting and under constant negotiation.

MMORPGs provide a mess in more than one way, but this mess is one of its defining features. The gameplay and the practices surrounding the game are to a large extent defined by activities and experiences that are multi-sited, varied and fleeting. It is what makes the phenomenon so exciting to study. However, it does not match well with key aspects of current methodology. Because the methods we use are looking for precision and clarity, we are making a huge presumption about there being something

specific, definite and identifiable to understand or discover. This is a problem that spans across methods:

*«Most current methods look for clarity and precision. It is usually said that messy findings are a product of poor research. The idea that things in the world might be fluid, elusive, or multiple is unthinkable» (Law, 2004, p. i)*

It is not that the methods themselves are not worth using, or that the current methodology is a waste of time, what is needed is reflection on what answers they are creating. Law's critique is not directed at the individual methods, but the ground rules and ideals that permeate them: What is seen as good research? What is seen as simply “a mess”? The need for a structured set of rules and procedures is taken for granted. By excluding realities that are not “a set of fairly specific, determinate, and more or less identifiable processes” (Law 2004: 5), we are rendering the many parts of the world that are vague, diffuse, slippery, emotional and/or ephemeral completely invisible. While our theoretical framework is recognizing structures as fragmented, agency as embodied and emotive, standard methods tend not to allow for this complexity. The structure and ideals of standard methods, which are there to secure findings of high quality, also restrict what we see and what kind of data we can gather. Methods are not only tools to gather knowledge; they are also tools with which to produce knowledge.

I have tried to embrace the messiness of play, but there is still so much left out I could probably fill another dissertation with it: The secret channel I set up to whine about (the other) officers; how I used to flirt using only WoW related phrases and abilities (“If you [CHARGE] me now, you might end up with a [PSYCHIC SCREAM]”); how I missed the guild’s first Yogg Saron kill because of work, and cried my eyes out for not being there; how I spent hours and hours on the guild forum during the work day procrastinating about my dissertation, just longing to get back home and log on; when I met up with guildies face to face as I travelled around Europe during conference season; how I used to fight with my (ex) boyfriend about Paladin’s use of two handed swords; the time I turned down sexual advances from a guildie because I could not quite figure out how to write that up in the methods section; the

falling out I had with a friend after a heated forum debate about loot policies in the guild; the drunken raid where we took down more bosses than we had in months of sober raiding, and how it ended when one of our healers passed out on the keyboard mid fight; the funeral feast we had for a guildie who passed away years after we stopped playing together. These stories, and many more, are part of the mess I have tidied away. Yet, this mess has been a necessary part of my experience as a games researcher.

### **Being native: Going there and back again**

*«First of all, be in the space – understand it. Be a native to the space. You simply cannot underestimate the way mechanics of the environment will mitigate what you can do and what you can gather» (Robbins in Mckee and Porter, 2009, p.20)*

To study MMORPGs is also to study the people playing it, since they are the ones populating the world and giving meaning to its content. Ironically it is at this point where both the fun and the mess starts because there is no option of being a quiet observer in these games. To observe is to participate, to explore is to experience. In the case of MMORPGs, that also means involving yourself with other players. Since so many tasks are dependent on the cooperation between players, and much of this happens within the structures of guilds, unless you go out of your way to not interact with other players it will happen “naturally” as the game progresses.

If you do wish to explore the nature of grouping or guilds, being a passive observer is not an option. This has much to do with how the game itself is designed. For example, guilds usually have a channel that is restricted to members only, a channel that is central to communication within the guild. The only way for a researcher to look at the internal workings of a guild is to be in one. You can, of course, label yourself as a visitor, and ask to join on the premise to simply do research, but a researcher that does not involve himself/herself with the activities of the guild will not have a chance to observe them. This has to do with how group play is scripted, and playing together is largely what guilds are about. Many tasks in game are made so that players need to form groups of 5 or more players to complete them (be it killing a dangerous computerized monster or capturing the flag from an opposing team of

players). It will take place in an enclosed area where only the members of that particular group have access and every member of the group has a role to fulfil to overcome this challenge. Since there usually is a limit on how many people participate in a group, the group needs all its members to be functioning properly; it has no room for “just a researcher”. What the group needs is a player who can fulfil their role adequately. The only way a researcher can do that, is by becoming a gamer.

To become a gamer, the design of MMORPGs may pose another challenge: time. The average player invests around 26 hours per week (Yee 2006), meaning that a researcher should be spending an equal amount of time to uphold at least an “average type” of game play. In addition, this is a type of participation that will extend over weeks and months, in order to generate interesting data. Not only might you need to level up an avatar to maximum level in order to see certain parts of the game, even then much time will be spent on fairly unproductive activities. This has also been noted by other game ethnographers:

*“... all playing involves long stretches of routine activities that are mostly devoid of analytical value, but necessary to access other part of the games.” (Karlsen, 2009, p.22)*

At the same time, those barren times are a part of how these games play. Much time is spent on mundane things like travelling between zones, waiting for other players or queuing for battles. It is dull, and in itself tells little of the game and its practices. Enduring it all gives perhaps a better understanding for why gamers choose to ignore the repetitiveness and the dullness, and just keeps on playing. Might it be that in these games, a vital part of the world is what is not happening? Where does that leave us in regards to gathering data? What mess is it we will have to accept or allow for here?

When doing participatory observation in MMORPGs, the role of the researcher and the role of gamer is bound to be mixed up. To be able to uphold a presence in the game that gives access to both player organizations as well as certain activities such as raiding, substantial quantities of time needs to be put in. Time that cannot be provided by working hours alone, but instead has to be supplemented with personal time slaying



virtual monsters. This means that a researcher and her avatar might be a gamer at one time, and a gamer and researcher at another. The challenge is to adequately signal when these two overlap, for ethical as well as analytical purposes. For this, I will propose the construction of a gamer-researcher, and our methodical focus needs to be on how to capture the experience of this hybrid, rather than trying to separate them. This is not to say that some distance will be necessary.

For the first few years of working on this project, I was a WoW native. It was not a question of “going native” during the project as I already identified as a WoW player long before it started. This had advantages and drawbacks. The main advantage was my intimate knowledge of WoW culture, the game mechanics and its paratexts. It was also advantageous in giving me access to player communities and a great legitimization in our interactions. Because I understood their world and their life my interviewees saw me as one of them. The drawback was that I kept writing from the perspective of gamers, and many of my early drafts were outright defences of play against straw-man accusations of addiction or violence. I felt a great need to speak for my fellow players, and to show them in a good light, because I wanted to contribute with positive stories about play. I wanted to provide an alternative to the dystopic descriptions of online gamers flaunted in the media. While it was a noble cause, it did not make for good research. The distance I needed to critically analyse my data material came in part through working with theories that forced new perspectives on old experiences, much through discussions with academic peers, but the most important reason was a lot less academic and a lot more mundane; it was time.

As I am writing this, 8 years have passed since I submitted in my application and project proposal. For the last six of those years I have not been playing WoW. The reason I stopped playing was personal: I had a total burnout, but it had great consequences for how I approached my data. My day was no longer spent debating minute details of design changes or class balance on the next raid, and I got more interested in why we were debating them at all. With distance and fewer stakes in how play would or would not be represented as positive in research, I opened myself and my analysis to the darker sides of play. As time passed, it got easier to admit to myself

how hard I had worked to make play for myself and for my friends, and that I was not always fairly rewarded with enjoyment or success. I let myself remember why I stopped playing, and I let myself remember the wonder I felt when I started. Through discussing my data with peers and students alike, the analytical potential was highlighted. With time and distance, and some guidance, I got more interested in play as a phenomenon and how it comes to be in the first place rather than the minutia of WoW raiding I would observe on a more or less daily basis. In the end, I still identify as a gamer, but I am no longer a WoW native.

### **Reliability, validity and the problem with gender**

I consider the reliability and validity of the dissertation to be good. The qualitative approach excludes possibilities for generalization, and its focus is instead on whether the results could be replicated by another researcher and the suitability of methods. The findings in this dissertation corroborate and build on existing research on online games and gamers, and the similarity in both results and approach indicate good reliability and validity. However, one glaring problem with this dissertation is the missing gender perspective, so I saved this monumental issue for last.

Games as gendered technologies were an early topic of discussion in Game Studies (Cassell & Jenkins, 2000) that has received much attention over the years (see eg. Bryce, Rutter, & Sullivan, 2006; Kafai, 2008). The last years have been particularly interesting and horrifying, with regards to games and gender. The controversy known as “Gamergate” has highlighted how important gender is to gaming identity, and has brought renewed interest to game culture as gendered practice (Chess & Shaw, 2015; Massanari, 2015).

My reasoning for excluding gender is sadly a poor one, but it is honest: as a woman gamer I actively distanced myself from any gendered discourse in an attempt to be treated as a player not a gender. I did not want gender to matter, and even though I noticed I was treated differently than my men co-players on several occasions, it made more sense to me to keep quiet about it than to make it an issue. As a woman gamer, I was treated as “the other”, as woman gamers invariable are. This means that I got many sexual advances (usually completely unsolicited), comments about my

gender and/or body, different expectations with regards to skill, and was often singled out in the guild – for better or worse. Yet, this was something I did not talk about, as bringing attention to feminist issues in gaming culture is a risky adventure with a high chance of backlash (Braithwaite, 2013; Salter & Blodgett, 2012). My strategy to ignore all gendered discourse is not unique. In the othering of women players, ignoring or embracing it tend to be the main strategies (Eklund, 2011).

In my role as a gamer-researcher, I was making decisions based on my gamer identity and sense of belonging rather than what could have analytical and explanatory power. By bringing in a gendered perspective, I might have been able to highlight several crucial perspectives in my own research; how instrumental play and the strive for objective knowledge about play in theorycrafting, may also be understood in relation to discourses on new positivism and masculinity where feelings and experiences are considered inferior, in part, because their association with femininity. Even though research shows that men and women who play accrue skills at the same pace (Ratan, Taylor, Hogan, Kennedy, & Williams, 2015), a socio-material perspective on knowledge should also include barriers to community participation, such as gender. My interests in paratexts as a way to expand and co-produce play does not take into account how some gaming communities are ripe with toxic masculinity and sexual harassment which makes it harder for woman players (as well as LGBTQ persons) to participate in paratextual discussions and productions (Braithwaite, 2013; Salter & Blodgett, 2012). In my analysis of how play comes to be, I do not consider how choices regarding play might be informed by gender, where guilds and play mates are chosen to avoid sexual harassment rather than to fulfil a game driven motivation (Ask et al., 2016). With attention to gender I might have uncovered other forms of ludic work. Unfolding strategies to avoid sexual harassment might be characterized as a form of safety work, while dealing with unwanted sexual attention may be a form of emotional work. The reason for not bringing in a gendered perspective later on in analysis is because it was not something I looked for during my participant observation, and bringing up gender now would require memory-work as primary method, and I believe the topic deserves more rigorous analysis than that. In summary;

The lack of a gendered perspective is a major flaw in the analysis because of its configurative power during play and in player communities, and is surely the one thing I would prioritize if I could go back in time to make a change.

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## **Are you playing it right? Time, morality, and materiality in the domestication of an online game<sup>15</sup>**

### **Abstract:**

*Massive Multiplayer Online Roleplaying Games (MMORPGs) have gone from sub to mainstream culture in the past decade, showing play as social and diverse. Looking at play as a continuous process, I analyse how the practice of play is shaped not just by design, but also by the context in which it is played. Based on qualitative interviews with a group of powergamers, defined by their instrumental approach to the game, I investigate the ways in which these players negotiate their time-consuming play style with their everyday lives.*

### **Keywords:**

*MMORPG, domestication, player practices, everyday life*

This paper focuses on the use of digital games in the context of everyday life. The key argument is how challenges posed by the game can be in conflict, or in support of, social relations, daily routines and obligations. The paper thus shows the complexity of appropriating new media technologies into the home, and how morality and materiality shape this process.

Online games have experienced an enormous growth in the last decade. The game *World of Warcraft* (WoW), for example, has become a huge commercial success with over 12 million players worldwide, gaining the attention of both mainstream media and academia (Corneliussen & Rettberg, 2008). The game belongs to the genre of Massive Multiplayer Online Roleplaying Games (MMORPG), where thousands of players interact through avatars in a virtual world. Studies of MMORPGs have shown how players develop friendships, create complex organizations and acquire specialized knowledge and language as part of virtual play (Steinkuehler & Williams, 2006). At

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<sup>15</sup> English translation of the Norwegian article: Ask, K (2011): Spiller du riktig? Tid, moral og materialitet i domestiseringen av et online spill. *Norsk Medietidsskrift*, 2

the same time, the popularity of games like WoW is not only stories about having a presence online, but also how it relates to family and personal obligations (Linderoth & Bennerstedt, 2007). Based on qualitative interviews with players of WoW, I will discuss how the context of everyday life is of importance to player practices. Through the concept of domestication I will show how both everyday life and the game are subjects of symbolic and practical reconfiguration as players attempt to develop their playing practice.

In the last 30 years digital games have been increasingly popularized and undergone rapid development, and there is increased attention has been given to people who play (cf. “Homo Ludens” in Huizinga, 1955) . This is evident in how the international gaming industry now rivals the movies and music industry in revenue.<sup>16</sup> Recently, the first white paper was published expounding digital games as a “central expression of culture” (St. Meld 14: Dataspill). Unmistakably, digital games have progressed from subculture to the mainstream.<sup>17</sup> They engage with players across generations: 96% of children between the ages of 9 and 16 play digital games<sup>18</sup>, and the Entertainment Software Association reports that the average player is 34 years old, having played for an average of 12 years.<sup>19</sup>

In the short history of digital games, several disparate visions about their implications have emerged. Early debates claimed that digital games were violent (Anderson & Dill, 2000; Dill & Dill, 1998). Later allegations of video game addiction (Chappell, Eatough, Davies, & Griffiths, 2006; Griffiths, 2005) buildt on the stereotype of gamers as socially isolated and mentally unstable people (see eg. Rutter & Bryce, 2006; Cover, 2006). Nonetheless, in the MMORPG genre, time use has been a key topic. Perhaps not surprising as quantitative studies show that the median time spent on digital games is roughly 26 hours per week (Williams et al., 2008), and this time intensive form of play has been a cause for conflict and worry (Gjesvik,

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<sup>16</sup> The game industry had a 190 bill NOK revenue in 190, opposed the music marcedds 217 bill. NOK. From St Meld 14 (2007-2008): Dataspill.

<sup>17</sup> From St Meld 14 (2007-2008) Dataspill

<sup>18</sup> From Entertainment Software Association, «Game Player Data» hentet fra <http://www.theesa.com/facts/gameplayer.asp> 25.06.10

<sup>19</sup> From the report “Children and digital media” (2010) by the Norwegian Media Council

Fellmann, & Fredriksen, 2009). On the other hand, digital games have also been posited as having potential to save youth from lack of motivation by having students engage in critical learning through digital play (Gee, 2003; Steinkuehler, 2004). With such contrasting claims about the effects of digital games, perhaps it is no wonder that digital games are still a technology with room for different interpretations.

Digital games in other words are open to oppositional interpretations, and have been understood as both dangerous and educational. Thus, digital games are a good example of how the role and understanding of technology is not given. Pinch and Bijker (1987) calls this “interpretative flexibility”. As a critique of technological-deterministic approaches, they show how relevant social groups compete in the innovation and appropriation process about what the technology should be. Parents, politicians, players and game researchers negotiate with technology and with each other in an attempt to establish the meaning of digital games and standards for good player practices. In the early stages of a technology’s lifespan, it can be unclear how various kinds of uses, regulations and meanings will be embedded into a given artefact such as digital games. Even though digital games are now both in the domain of public policy and culture, this negotiation of meaning also frequently occur in everyday life and in domestic spaces. This article demonstrates how gamers have negotiated the meaning of digital games when they balance commitment to their game obligations and duties as well as to their family, work and school. The gamer’s enthusiasm and engagement has to be negotiated in and outside of the game when they attempt to establish how to play “the right way”. How may we understand this?

### **Gamers do more than play**

Game Studies have been divided into different strands, the most visible being ‘ludology’ and ‘narratology’. Broadly speaking, ludology focus on unique qualities of play (see e.g. Juul, 2005) while narratology analyse the stories told by games (see e.g. Murray, 1997). The difference between these two perspectives is often exaggerated, but the debate between them has uncovered their weaknesses. The ludologists are fascinated with the uniqueness of play, thus risking a separation of play from other central practices in everyday life. Narratologists, on the other hand, are limited by their

focus on story and form. Common to both approaches is the lack of interest in users (Malaby, 2007). Karlsen (2009) compares this to early studies of other mediums where the audience and other user perspectives were excluded in favour of studies of form and content. User activities were gradually incorporated as the importance of participation and active use became clear. Television was, for example, eventually put in a family and everyday life context (Morley, 1986). The same kind of user turn within Game Studies is necessary in order to avoid approaches to digital games where the complex network of players, design and meaning is reduced to a question of form or content.

The understanding of play as a process where player practices configure both meaning and design is more prevalent in the growing literature on online digital games. Since Sherry Turkle's (1995) pioneer work on Multi User Dungeons (MUDs), the combination of cyberspace, identities and play has been important in academic studies of online play. Even though the glory days of MUDs are over, there are many similarities between early text based game platforms and MMORPGs. With strong roots in roleplaying, both platforms offer access to a fantasy world where players can solve quests, kill monsters and find treasure. However, the most central feature of these online games is the social interaction between players that is woven into the narrative (Mortensen, 2006). A key aspect of the play experience is the opportunity to share victory and defeat with fellow players, during which strong bonds are formed between players who are driven to take on new challenges (Chen, 2009).

Empirical studies of players have questioned what it is to play, and how we should understand gaming communities. In this context, research should not be limited to whether they are digitally mediated (online) or face-to-face (offline), but rather be based on the social worlds of which they are a part of (Haythornthwaite & Hagar, 2005). This is a fertile approach because relationships frequently intersect mediated and unmediated spaces, continually shifting between both boundaries (Taylor, 2006). Even though digital presence is central to play practice, the everyday, local and routine context of play is often ignored (Rutter & Bryce, 2006). Online games offer a range of new experiences, relationships and digital journeys that are both extraordinary and

exceptional, but playing is just as much about the routine and the mundane when one considers the physical context in which playing occurs. We cannot assume that all choices and decisive events in online games take place in the virtual world. While we must not ignore the fact that play is a cognitive rather than a physical journey, the challenges of everyday life have great consequences for what happens inside the game. With this, I turn the focus to understanding the connection between practices of play and practices of everyday life.

### **Digital dragons in everyday life – Domestication as an analytical approach**

The concept of domestication ties technology use to everyday life contexts. Under the assumption that all technologies have interpretative flexibility, the domestication perspective looks at how this flexibility is reduced through actual use. By analysing users' own understandings and practices, we may observe the adaptations that are made when new technology is introduced or used in a given situation. I will use this perspective to situate the gamer and show how player practices are tied to the domestication aspects of meaning, practice, and learning (Sørensen, Aune, & Hatling, 2000; Sørensen, 2006). In this way, play may be analysed as something material, moral and tied to everyday practice.

First introduced by Silverstone, Hirsch & Strathem (1992), the concept of domestication describes the process in which technologies change from being strange, exciting, and complex, to being mundane, close and taken for granted. This process was defined by four phases: appropriation, objectification, incorporation and conversion. The Trondheim model (Haddon, 2007; Sørensen, 2006) departs from phases and instead focuses on three dimensions of domestication: practical, symbolic, and cognitive. The practical dimension refers to the development of routines and user patterns as the technology is made part of everyday life, while the symbolic dimension highlights production of meaning, identity and self-presentation in relation to the artefact. The cognitive dimension emphasises the learning process and how new artefacts require new knowledge. A key aspect of domestication is how it conceptualizes the appropriation of technology as a two-way process where both the technology and everyday life are subject to change and work. Furthermore,



domestication studies are anchored in their belief that the role of technology should not be taken for granted. Technologies have to be investigated empirically for us to understand how different patterns of use and constructions of meaning arise, and to demonstrate that such negotiation of meaning may happen on several levels.

With strong roots in audience studies, the interest in domestication also hailed the 'empirical turn' in an otherwise hermeneutic and semiotically dominated field. Notable exceptions here are, among others, Morley's (1986) and Lull's (1988) studies of television audiences, which arose from studies of households and observed how this context shaped viewers' experience and interpretation of messages from television. At the same time, focusing on the household as a unit of analysis became problematic as new media, like the Internet and mobile phones, was shifting the boundaries between the private and the public (Morley, 2006; Silverstone, 2006). Thus, an alternative was to understand domestication in the context of everyday life (characterized by routine, non-specialization and non-bureaucracy) which is not limited by the contradictory and fluid perceptions of what constitutes a home.

The ways in which technology is used and integrated into a person's everyday routine and the meaning assigned to these uses is not random. They are influenced by factors such as morality, which refers to perceptions of correct use, and materiality, which refers to the possibilities and limitations communicated through the technology (Sørensen, 2004). Levold and Berker (2007) refer to this as 'moral practice' and points to how use is never separate from normative statements and understandings about how the technology should and ought to be used. Since digital games are surrounded by a range of controversies that are largely tied to moral value judgements about correct use, there are reasons to ask whether and how these ideas are shaping the player practices being developed. However, it is also important to note that these understanding and practices do not arise separately from their material context. Even though domestication may lead to radical re-design in the shape of new meanings and uses, this does not happen without limitations. The design communicates "its" ideas regarding the correct use of the technology. Artefacts are not empty objects waiting to be filled by the users' meanings. In the process of making them, ideas about use and

users will be written into the very design and be materialized in its form. Madeleine Akrich (1992) uses the term ‘script’ to analyse this process. She treats technology as a text and asserts that the design is akin to a manuscript with cues for use. This explains how use might develop in similar ways across contexts.

It is possible to oppose the script and create alternative understandings of intended and correct uses (cf. user scripts in Gjøen & Hård, 2002). As will be demonstrated in this paper, what is considered a correct use is a key part in how the script is reconfigured. The script in WoW emphasizes presence, social ties and expertise, all of which are highly contingent on time: Time to participate in game sessions night after night, week after week; time to develop social relationships that will withstand periods of hardship; and time to acquire the necessary knowledge and skills. In light of this, the script is influenced by the idea of the socially-isolated and dedicated gamer that has no other interests or obligations of which to care. Even though WoW took steps to make their design more suitable to a “casual market” as compared to earlier MMORPGs, the dominant player practice is 3-4 hour play sessions several times a week, as rooted in the traditional notion of a gamer as a young, single man with time at his disposal.

Even though the design can be domesticated in different ways, the script plays a central role in shaping users’ player practices. The time requirements of WoW, such as set times for play sessions, has clear consequences for how everyday life should be organized and ordered. At the same time, school, work, family and partners put demands on and limited the individual player’s time and availability, thus modifying player practices with different understandings of “the right way” to play. This indicates that the domestication of WoW is complex and at great risk for potential conflict. What happens when users end up in conflict with the script? Is it possible to develop a player practice that also allows for participation in other commitments and activities?

**Method: How do you play WoW, and how do you study it?**

I have chosen to study the domestication of WoW because I am familiar with the game from prior research and because of its popularity. Additionally, the main

features of WoW are similar to those found in the majority of online video games, with the implication that the domestication of WoW will bear similarities to that of other games. In this regard, it might be useful to begin with a short description of WoW.

Players can get involved in a range of different activities when playing WoW, but the avatar is at the core. By solving quests and killing monsters the avatar is rewarded with experience points that makes it possible to 'level up', a system for progress known from the related genre of roleplaying established through games like Dungeons and Dragons. By levelling up, the avatar gains access to new and better abilities, which makes it possible to fight even more dangerous enemies. In addition to advance in a level, the avatar can also be improved by being equipped with magical objects, such as a hat that makes magic more potent or a sword that does more damage. The game is frequently understood as consisting of two stages: The first stage is marked by solo play and exploration (while levelling up). The second stage happens at max level, also known as 'end-game', where the objective is cooperation in large groups. In end-game, it is only by acquiring items and weapons that the avatar can be made more powerful. This equipment is rewarded when players defeat particularly challenging monsters. Players have to band together in large groups, also known as 'raids', to defeat them. At the time of interview, the size of groups was set at 40 players. Undoubtedly, getting 40 players to simultaneously work towards the same goal requires some organization.

Ensuring that the group succeeds as a whole has generated practices that might appear rigid and at odds with play at first glance. Since the virtual world demands synchronicity, play sessions must be planned and executed at set times. At the core of the network created by players is the 'guild'. Guilds are player made organizations made to facilitate play. Accesses to raid guilds (guilds that focus on raiding) are limited, and many guilds demand written applications in which players' abilities and previous experience is mapped. They often incorporate a trial period before a player can become a full member. Discipline is maintained through a system of internal rewards. Attendance and general adherence to the guild's rules are rewarded with points, known as 'Dragon Kill Points' that can be used to upgrade magical equipment

(Silverman and Simon 2009). A player who does not adhere to the guild's requirement for minimum attendance will be demoted or kicked. Furthermore, the design scripts raiding as a continual process that takes place over time. There are relatively few rewards and players have to return every week in hope of getting a chance at the rewards. In addition, new areas and challenges are continually added to the game through patches and expansions. Thus, the design has no clear ending or limitation with regards to how much time should be spent on the game. This has to be negotiated by the players, and as I will show, requires both enthusiasm and hard work in and outside the game for players to succeed as a raider.

The article is based on five in-depth interviews with a seven informants in the fall of 2006, comprising two girls and five boys. Gender has been a much debated topic in Game Studies because of women's apparent disinterest in games. Even though this perception is now changing, game design and culture has been dominated by masculine symbols and practices (Kafai 2008). My woman informants described how they sometimes had to fight harder (than their man counterparts) for respect, but gender did not appear central to the domestication process (unlike for Lie and Sørensen 1996). Thus, gender is not emphasized in this analysis.

At the time of interviewing, I was an active WoW player. My own experiences as a gamer have informed my research questions and interpretation of the data. Inspired by the active interview method (Holsten and Gubrium 1995), I focused on dialogue, exchange of ideas, stories and perspectives, wherein the interviews were conducted as semi-structured conversations between players. We exchanged stories, laughed at inside jokes and discussed guild policies. I could relate to the conflicts they described and this gave us a common frame of reference. The interviews were recorded and then transcribed. The call from Game Studies for researchers to play the game(s) they study thus gave the research design an ethnographic slant. Furthermore, my experiences have played a role in how the interview data was coded with a grounded theory approach (cf. Clarke 2005).

The gamers in this article may be described as 'power gamers'. The stereotype about power gamers is that they are obsessed with numbers, have no imagination and

no interest in their fellow players. Their goal-oriented and effective playing styles have been understood as in opposition of the ideal of engagement and digital storytelling. The instrumental dimension is, however, not in opposition of joy or pleasure, and may be understood as a type of enthusiasm (Taylor 2006). It shows that definitions of play as separate, carefree and without consequences (cf. Huizinga 1955) are not always fitting to describe the kind of practices in which players involve themselves.

The focus of the interviews was players' relations in and outside the game, as well as potential conflicts and solutions at the intersection between gaming and everyday life. As power gamers, my informants came across as quite homogenous as first, especially if I had analysed their characteristics solely based on their game activities. The development of their avatar, as well as play activities, were planned in advance. They were all members of raiding guilds who at times spent 50 hours per week logged in the game (even if this varied a lot). As with other raiding guild players, their play was shaped by their organizational structures, set play times and commitments to the community. The difference among my informants was their partner status and living arrangements. Three of my informants lived at home (Alf, Anders, and Arne). The other informants were older and lived by themselves (Beate, Carl, David and Eva). David and Eva had both been living with their partner. All names are pseudonyms.

I found three main types of domestication which I have coded under the following themes: (1) "Lovers and love for the game" (David and Eva), (2) "Structured and self-disciplined" (Beate and Carl) and (3): "Constructing acceptance" (Alf, Anders and Arne). The categories were derived from informants' emphasis of the challenges they faced in their everyday gaming, and the strategies they developed to negotiate a working gaming practice. As we will see, the strategies for regulating how much time they spend playing was distinct to the three types of domestication. The challenge posed by the game designers Game designers experienced similar challenges. The challenges posed by the design were interpreted in similar ways among my interviewees. The design invited participation and their fellow players were both online and offline friends who encouraged more play time. How was this

handled? What happens in the domestication process, and on what premises do the domestication strategies differ?

### **Domestication process 1: Lovers and love for the game**

What David and Eva told about the domestication of WoW was in line with expectations of complex and demanding challenges surrounding play. At the time of the interview, they were both single, but had been in relationships when they were playing WoW. With hindsight, both David and Eva felt the game had been a key contributing factor to their respective break ups. In a social contract that required attention and spare time in the evenings to be divided between their partners and the game, they both discovered that the fascination of the game and connection to fellow players made the balancing act difficult. In the evenings, for example, David often chose to stay up to play even after his partner had gone to bed. He asserted that this was not because going to bed with her was “boring”, but because he felt an obligation to those with whom he was playing. If they were in a middle of quest or halfway into enemy territory, the group could not easily substitute him. Had he left the game, the “work” committed to the game by the team be lost. It was also obvious that when he was most intensely involved in the game, there was not much room left for “quality time” with his partner: He reported his daily routine as arriving home, putting the oven on, logging into the game, making a pizza and eating in front of the PC. His daily rhythm was set by WoW. It worked well for David and his progression in the game, but because play was so centralized in his life, this also became a source of conflict with his partner.

Eva’s situation had a different starting point. Both her and her partner had started WoW together, but conflicts arose because they valued the importance of play differently. They had a shared history as gamers, had played together in guilds and considered WoW gaming an important joint hobby. When WoW was released, they levelled up their avatars together. But where Eva was getting increasingly engaged with WoW, her partner preferred more moderate doses. WoW preferences quickly became a source of their arguments. When Eva wanted to talk about WoW, her partner

was not interested. Soon, Eva realized they did not have many common conversational topics after all

*He was so sick of gaming, so he couldn't handle me talking about it. He would play and then want to do something else. But I just wanted to talk about it, and didn't understand why he didn't want to talk about it. So eventually he saw WoW as an enemy, and then I couldn't talk to him about things I liked. So it got boring talking with him too.*

Eventually the relationship broke down, but Eva kept playing WoW. She did not want to continue with the relationship because her partner did not understand her passion and enthusiasm. She described how proud she was of her own achievements in the game and of the gaming community of which she was a part. Eva felt like playing as a single person allowed her to freely engage in WoW, and suggested that a potential future partner would have to have respect for and understanding of this enthusiasm.

In this story, had we only focused on the relationship between player and game, without examining the context, Eva and David's use of WoW could be described as a successful appropriation of technology. The game was strongly considered as a natural, taken for granted, part of their everyday life where they gained, among other things, the necessary expertise to participate in prestigious guilds. WoW was an important arena to keep in touch with friends, and they undertook gaming as an engaging and rewarding hobby. They were fully aware of the public discourse that problematized such time intensive player practices, yet were still proud when they described their achievements in the game. Eva was especially determined that her priorities with regards to gaming would continue in the future as well. For Eva and David, the symbolic remaking of gaming from something potentially dangerous to something that dominates everyday life, was expressed through the many times the game was prioritized over time with their partners. In fact, the game practice was given so much space that it dictated their daily rhythm by determining even when they ate and when they went to bed. In summary, Eva and David had a cognitive taming in acquiring knowledge about use, a symbolic process wherein the game was given meaning and the user pattern reflected this. However, by using everyday life as the analytical unit we can see that the domestication was not entirely successful.

A successful domestication would position the game as a natural part of everyday life, an unquestioned artefact and activity. However, even though Eva and David were able to tame the technology on an individual level, conflicts persisted because of the other actors that related to the game. Domestication is a two-way process where both technology and everyday life has to be adapted to each other, and conflicts with partners were triggered because the relationship was not domesticated in line with the game. Significant non-users such as Eva and David's partners lacked the necessary knowledge to understand the activities in the game, assigned gaming little value, and thus did not orientate towards a daily routine premised on the game. Eva and David were only successful with the technology, confirming that domestication of the game was a challenge. In a way, it was WoW that domesticated David and Eva. Was this inevitable?

### **Domestication process 2: Structured and self-regulated**

The troubled domestication of WoW we observed with David and Eva had an ambivalent outcome: On the one hand, they had freedom to enjoy the game to a great extent. On the other hand, the cost of this was broken relationships. This indicates that there could be potential rewards in a more disciplined domestication, something both Beate and Carl talked about. They were both active gamers who were able to balance play time with time for other activities. In addition they were single, lived alone and had few commitments outside their jobs or studies. Beate and Carls negotiations in the domestication were mostly about balancing how they spent their leisure time. Beate did not like that she had to decline requests from friends to visit cafés after school. Her solution was to apply to a raiding guild with raid times that better suited her social life:

*An important reason for applying [name of guild] was the raid times. The old guild had raid times from 19-24, but the new [guild's time] is from 21-24, so it's a shorter time to raid. So you can have a normal life as well then, if you work late one night or have to work something after school or something. Then you don't have to stress to get home to be online [at] six thirty for the sign ups*

Even though she was happy to be there for her old guild at their expected times, their schedule was too intense. As a single student with a need for a social life, Beate preferred raiding later in the evening, even it meant leaving her old guild behind. Her



new guild used their time more effectively and worked well for her because it allowed her to balance spending time with friends and family, accounting for her studies and active raiding.

Carl had clear priorities with regards to his level of engagement in raiding. He had previously experienced how gaming had ruined a romantic relationship – something he determined not to repeat. The guild of which he was a member required extensive participation and had a strict raiding schedule. For Carl, the solution was to have nights dedicated to raiding, and nights dedicated to non-game activities. One day a week was set aside for going to the movies with a friend, another was reserved for quiz nights at the local pub and weekends were dedicated to concerts. Thus, the predictability of his guild’s raiding schedule suited him well.

Carl also had other ways of ensuring that he spent his time in the game efficiently. Virtual gold (more commonly referred to as “gold”) is the currency used in game to buy equipment, travels and repairs. Gold can be acquired in many different ways, each of which is time consuming. In the wake of this an illegitimate industry known as “goldfarming” has arisen, wherein some players spend time and/or use illegal codes to acquire gold and sell it for actual money on dedicated websites. Blizzard, the game producer, forbade the sale of gold, but Carl had no qualms with using this service:

*I have bought gold simply to be able to do end game. If you are not going to buy it, you almost have to be unemployed. It just doesn't work. There isn't enough time [...] One can easily spend a couple of hundred gold in a single night. Only in potion<sup>20</sup>s [consumable items spent while playing]... It's a pity, I think, that they have designed the game so you are dependent on potions. I think its poor design.*

Carl broke the game rules, but only because he perceived the design as “poor” and such “shortcuts” as necessary. This demonstrates how technologies, even with strong shapers like EULAs (End User License Agreement), can still be interpreted in different ways.

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<sup>20</sup> Potions are items that are frequently used throughout combat to grant the avatar more health or energy. To make potions one has to harvest raw materials from the game world, and one might choose to train the avatar to gather these, or to buy them from other players through the auction house.

Just like David and Eva, Beate and Carl acquired knowledge about the game's mechanisms and society that made it possible for them to play at a competitive level. Knowing about alternative ways of regulating play was not unique to these two informants. All informants discussed buying and selling gold during the interviews, and all had experience in different guilds with different schedules. There was a shared understanding among my interviewees that the game design was greedy timewise, and had to be regulated. The moral aspect (evaluation of own use) was an important resource in this process. Even though Beate and Carl were active at high levels and were proud of their achievements, it was important for them to subjugate WoW, and its community, to other relationships and commitments because they saw extensive gaming as problematic. Their practice involved time reduction aspects through set routines such as setting aside specific days for raids, reserving some nights for social routines or prioritizing quality time with friends over game play. Their evaluation of the game as potentially harmful for their career and other friendships shaped their domestication. Beate left her old guild for one with a more suitable schedule, and Carl chose to break the game rules to save time for a few nights off to do other things. Their domestication of WoW was relatively successful, and this relied on their ability to structure and discipline their own everyday life and time use. While WoW was designed as a game with no clear ending to invite players to extend their play, Beate and Carl created counter strategies wherein everyday life contexts were used to create a framework with limitations time spent playing.

Beate and Carl's structuring and disciplining was something they could control quite independently. Both were single, lived alone, and had no significant others, like partners or parents, to oppose these strategies or valuations of time. For Eva and David, it was exactly their significant others that led to problems. Is great independence and freedom necessary for a successful domestication of WoW?

### **Domestication process 3: Constructing an acceptable meaning**

David and Eva had both failed to domesticate WoW, and the meaning of play, in a way that could be accepted by their partners. For Beate and Carl, this construction was easier as they simply had to make gaming morally acceptable for themselves,

which they did by managing their play and ensuring it did not become too much of a dominant theme in their lives. In our third story about domestication we meet Alf, Anders, and Arne, who were in high school and lived at home with parents and siblings, which meant that their domestication was dependent on others. Their parents had strong opinions and decisive power with regards to the time spent in WoW, and the boys' durations and times of play did not go unnoticed by them.

My three young informants (age 18 -19) were open about how their gaming had been a source of many fights at home, but also that they had been able to find solutions. From their perspective, the biggest challenge was getting permission from their parents to allow them to play in the ways to which they desired. To achieve this, all three boys, in each their way, ventured on a translation process where they tried to communicate to their parents an understanding of the enthusiasm they experienced towards the game. By highlighting the commitment to their community and the inflexible character of gaming sessions (set raid times), the interviewees tried to create room for negotiation where gaming was respected and did not come across as "wasteful" or "harmful" leisure. Arne and Alf spoke of two different approaches they undertook to make their parents understand their game experiences, which tied gaming to values and activities that their parents could relate to as positive.

Arne compared gaming with other online activities, since his sister spent a lot of time on MSN [direct messaging service] and other chat pages, which the family accepted. Arne used this as a starting point to explain what he was doing when he was gaming. Alf focused on the potential for learning in game. After having learnt how much time Alf actually spent gaming, his mother pulled out the network cable to stop him. Alf then explained that there were 39 people waiting for him, that he had promised to be there, and that they could not continue without him. He also brought up how playing could be a positive thing because he was training up his English language skills, and that raiding was a complicated affair that helped him improve his cooperation skills.

In this analysis, the cognitive aspect of domestication was more prominent. Domestication involves developing and sharing knowledge on use. This last story

shows how this is not only true for the users themselves, but also for non-users with power (in this case the parents) to have a successful domestication. Where my informants treated the game as something pleasurable and exciting, their parents' understandings of the game reflected the public discourse on ill effects and consequences. As my informants were teaching their parents about WoW, they were simultaneously performing important symbolic work on games and play -with the aim of changing it from problematic to valuable. To ensure that the game did not come across as a threat, or something potentially harmful, they compared gaming to other online activities that the family accepted. They also highlighted aspects of play they would not usually consider important, such as learning the English language or cooperation skills. This was a strategy that intentionally highlighted values they believed their parents would respect so as to create a better understanding of their commitment to and camaraderie with fellow players.

Even though Arne, Anders and Alf were largely successful in creating understanding and space for their play, the game was at times a source of conflict in the household. In a continued attempt to avoid these kinds of confrontations, the players subjected themselves to change. For example, they realized that if they were quick to answer requests from their parents and adequately participate in family activities, there was less of a chance their gaming would be perceived negatively. Alf, for example, recounted how doing chores allowed him more game time:

*It has happened that mom walks in and is like, "Maybe you want to stop [playing] now?" [...] If I had, for example, cleared the kitchen counter when I came home from school so it's nice and tidy, I could do whatever I want for the rest of the day.*

As we can see, several play related practices emerged that were not about the game in itself, but were important to the players' access to and ability to commit in-game. The routines that kept this constellation in place were not only about when and how the technology should be used, the three boys had also developed standardized solutions for themselves that included keeping their parents pleased and off their back by completing household chores in a timely manner. In other words, their successful domestication was just as dependent on their family being kept in line in their gaming

network as the technology. As opposed to David and Eva, who ended up in conflict with their partners, Arne, Anders and Alf were able to translate the meanings and purposes of their game engagement to those around them.

In both the first and third story we see how the interviewees focused their negotiations on the people around them, rather than seeking solutions in the game that could make their gaming more efficient. Considering the amount of work that is otherwise spent reshaping play and design through use of external technologies (Taylor, 2009), developing expert knowledge (Steinkuehler, 2004), and organizational tools (Silverman & Simon, 2009), it is surprising that so little of the adaptation was tied to situations in the game. With the exception of Beate and Carl, these domestication stories are characterized by negotiations that do not take advantage of the game design's possibilities for flexibility. Carle and Beate stand out among my informants as the only ones who saw the need to regulate their own gaming, but then they also had no need to convince significant non-users that their chosen leisure activity was not dangerous or pointless. Perhaps this is why they scrutinized the design to find material and practical solutions.

The cognitive aspect of domestication is less visible in this data material and analysis. This has to do with how learning in the game is often not perceived as learning, because it is experienced as a natural part of the play (Gee, 2003) and remain tacit. However, we should not underestimate the amount of time these players have had to invest to gain enough expertise, as well as social and cultural capital, to participate in raids at their level. They all possessed in-depth knowledge about the game's mechanics and culture, and should be acknowledged for shaping their own understandings of play and player practices.

### **Gaming in everyday life, and everyday life in gaming: A double domestication**

The public discourse on games has had a tendency to be polarized: video games are treated as either harmful and a threat to a "normal" life, or harmless fun with potential for learning and creative exploration. The domestication concept makes it possible to nuance our understanding of what it means to play, by situating play in

everyday life and showing how player practices are developed in relation to actors other than just fellow players and the game design. The informants themselves had by and large domesticated the game into their everyday life, but they would have turned out different had it not been for all the other actors with defining power in the construction of play. The focus of my analysis has been on my informants' attempts to enrol outside actors to shape a less conflict-oriented player practice. In-game activities informed decisions in how the players understood the game, but the out-of-game activities played a larger role for non-users. The game world, in all its fantastical majesty with dragons and heroes, was in stark contrast to the unglamorous work that preceded it: doing household chores, buying illegal gold and translating meaning to parents and friends. Through these personal accounts, my analysis has also highlighted how domestication is a two-way process in which both technology and everyday life have to undergo symbolic, cognitive and practical changes.

By focusing on negotiations in everyday life, I have also attempted to show how larger discourses about normative use are expressed on a micro level, such as "playing the right way". Even though many of the negotiations were of a more general character, a central part of the domestication had to do with the meanings assigned to games and gaming. In spite of the informants' disagreement with the general notion of play as wasted time and potentially harmful, they had to relate to a discourse focused on regulation and restriction. The amount of time spent in game was a deciding factor in the configuration of "playing the right way", where both conflicts and solutions were centred on whether or not the game was worth spending time on. Since the MMORPG genre is characterized by intensive time consumption, it is not strange it is an important factor in what is considered the right way of playing. However, in my data, this concern appears to have overshadowed other possible valuations about who to play with or where. The negotiations were also removed from the player's sense of accomplishment or chosen level of competitiveness. Considering that my informants were all performing well at a very high level, their recounts exemplify how the debate on video games appear detached from the actual experiences of gamers.

The different perspectives from players, parents and partners illustrate the interpretative flexibility of design, as one artefact may be configured differently depending on its context and use. Even though they all had to relate to the same script, which is very demanding with regards to time, a successful rewrite relied on both organization and commitment to fellow players, and on local adaptation. Where the script encouraged boundlessness and flexibility with regards to time spent (at least that is how it is seen from the outside, raiding is in reality a highly regulated activity with set times and play sessions), the players worked hard to deal with regulations or to make regulations, in order to play the right way.

One's commitment to work or friends does not go away just because you log on. Even though games like WoW offer a fantastical world with magic and dragons, it is in practice not far from the mundanity of everyday life. Social relationships crisscross the offline/online divide, though the transition might not always be soft or natural (Taylor, 2006). The players continually face the balancing of demands from the design and guild, their own personal goals of progress in the game, school or work, and quality time with family and friends. In this sense, time is a precious commodity that needs perpetual negotiation and evaluation. Play can be a source of joy, friendship and entertainment, but it is not the only path happy living.

Enthusiasm for games requires moderation and communication, which my informants exercised in different ways. David and Eva gave themselves few boundaries and were unable to communicate why WoW was so important and fascinating to them; the game became a source of conflict with their partners because of very disparate ideas about the value and meaning of play. Beate and Carl gave themselves strict guidelines for when and how the game should be played, such as regulating play through set routines. Alf, Anders and Arne worked on changing their parents' perceptions about play, and understood that participating in family events was necessary for their play sessions to be accepted.

The main take away from these three stories how everyday context for play is of importance to how player practices are developed and performed. When we study what affordances shapes play, we have to look outside the design of the game as well.

To succeed as a player you have to do more than simply domesticate the game by developing skills and knowledges as a player. To succeed, one also has to reshape everyday life to make space for player practices. Player practices are developed in line with, or in opposition to, more general understandings of what correct use is and what it means to be “playing it right”. Domestication is a two-way process where play and everyday life is co-produced.

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# **Domesticating technology for shared success: collective enactments**

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## **Abstract**

*In this paper we discuss domestication as collective enactments. Previous studies on domestication have focused on single-actor strategies and have paid little attention to the success of domestication outcomes. By studying players in the online game World of Warcraft this paper addresses collective domestications in a performance oriented setting, based on a one year participant observation and qualitative interviews with players (N=19). A comparative study of three players groups' domestication of the game demonstrated that collective enactments of technology are reliant on coherent and uncontested rationales if extensive managerial efforts are to be avoided, while more complex rationales prompted bureaucratization and discipline. On this basis, the paper develops the understanding of collective domestication by highlighting activities such as orchestration, management and synchronization.*

## **Key words**

*Domestication, online games, collective enactment, management*

## **Introduction**

To study domestication of technology is to apply a user-oriented perspective to the appropriation of technology. This entails looking at the diverse, heterogeneous processes in everyday life that shape both technology and use. Previous studies of domestication of technology have mainly focused on single-actor strategies, also when examining organisations or households. To the extent that interaction between actors has been considered, this has been through concepts like moral economy (Silverstone et al., 1992) or ethos (Godbolt, 2015), emphasising the effects of shared norms and values. This indicates that relations between individual actors, collectives and strategies require further attention. In addition, previous domestication research has

mainly studied situations where outcomes are not measured against any standards or performances of other people. Thus, the emphasis on outcomes not being predetermined has overshadowed the fact that some domestication efforts may be considered more successful than others. In this paper, we try to correct these weaknesses by analysing domestication strategies that are enacted by collectives that are orchestrated, or managed towards the achievement of particular, measurable goals.

Our analysis of collective domestication is based on a study of organised and managed groups of people – called guilds – who play the online computer game *World of Warcraft* (WoW, Blizzard Entertainment, 2004). Playing computer games like *World of Warcraft* is not about defeating an opponent, like in sport, but rather about succeeding in achieving set and measurable goals. In the game context, this may be killing a particular ‘monster’ or completing a set of challenging quests, but in other contexts achievements may be measured in terms of market share, profit, grades or public recognition. We think WoW is an interesting case of collective domestication because the game is a system that gives continuously feedback on performance by providing rewards or punishing poor play. Even though the game may be domesticated in many ways, it has set win/loss conditions and measurable outcomes. In addition, the type of play we are looking at, known as *raiding*, cooperation between individual players is necessary. Raids cannot be completed singlehandedly; they have to be undertaken by a collective. In this paper, we use domestication theory to study the effect of goals on collective enactments of technology when the group’s leadership try to control these efforts.

### **Domestication as collective enactments**

Domestication theory was developed in the late 1980s and early 1990s through cultural studies analysis of the uses of media, with an emphasis on what Silverstone, Hirsch & Strathem (1992) call the double articulation of technology and content. It was subsequently developed along two routes; one grounded in media studies, the other in technology studies (Haddon, 2006; 2011). The media studies approach emerged from audience studies and the analysis of how Information and Communication

Technologies (ICT) were appropriated in British families, including single-earner families, elderly people, and teleworkers, with increased focus on context, culture and symbolic meaning in relation to goods (Haddon, 2006, 2007). Domestication was considered to be about “how the entry of ICTs into the home is managed, how these technologies are physically (and symbolically) located within the home, how they are fitted into our routines and hence time structures and how we display them to others, and by so doing give out messages about ourselves” (Haddon, 2007: 26).

This paper employs the technology studies approach to domestication (Haddon, 2007), due to its emphasis on enactments in wider everyday life contexts than the household (Sørensen, 2006). Another advantage is the implied blurring of binaries like producer/consumer and public/private. This is important when analysing activities in collectives larger than households, like workplaces or organised leisure. Furthermore, it makes no a priori assumptions about the nature of domestication processes. Domestication analysis based on technology studies pursues three aspects of making technologies a part of everyday life: the development of practices (use), of symbolic interpretations (meaning or sense-making) and the learning involved (cognitive issues) (Sørensen et al 2000; Sørensen, 2006).

Domestication theory has been applied to a wide set of technologies and systems, like multimedia at a national level (Brosveet and Sørensen 2000), online technologies in small businesses (Harwood, 2011), home pregnancy tests (Childerhose and MacDonald 2013), public spaces (Koch and Latham, 2013), electric toothbrushes (Carter et al. 2013), Disney media products (Sørenssen 2014), webpages of local governments (Liste and Sørensen 2015), and digital games in the lives of older adults (De Schutter et al. 2015). These studies show that when an artefact is domesticated, it is integrated in practices in ways that may result in reproduction or transformation of existing activities -or even in new activities (net surfing did not exist before the computer and the internet). The symbolic interpretation provides meaning to the artefact, through sense-making or presentation of self. Learning emphasises the temporal quality of domestication as an ongoing process that may be influenced by experience or input from others, for example instruction from managers, colleagues

and friends or by reading manuals. Domestication may also be unsuccessful – e.g., a piece of software is employed wrongly or in a very limited fashion - or it may even fail – for example, when a new artefact is left unused in a closet (Sørensen, 2006; Liste and Sørensen, 2015). Of course, domestication may also be an issue of controversy.

At the core of the approach is “the active user”. The idea of users as active represents a focus on context, practice and everyday life as important elements in the shaping of experiences and meanings, facts and artefacts. How may we conceptualise what users do when they domesticate? With reference to actor-network theory (e.g., Latour, 2005), domestication is a way of assembling human and non-human elements to make the artefact or the technology in question socio-technically embedded. This production of heterogeneous assemblages entails the making of links to, e.g., other artefacts, other practices, and other people, as well as engaging in interpretative and organisational efforts (Liste and Sørensen, 2015).

The assembly work, or the domestication related to a given technology, may be seen as the unfolding of a strategy related to a purpose or a rationale. People domesticate technologies in order to achieve something, like performing tasks in a better way, being entertained or making food. However, one cannot always expect to reach set goals. Domestication happens in conjunction with the acts of objects and other people. If we follow Latour (2005: 45), action is under-determined; domestication may produce surprises.

Frequently, as noted above, domestication happens within coordinated collectives. This means that managerial efforts may be undertaken to provide instructions about how domestication is to be done, as well as to measure and control the outcome. There may also be need for synchronisation between group members, to adjust one person’s domestication to that of other people in the group. Previous domestication research provides few clues about such dynamics. This paper is intended to fill this gap through empirical analysis. As a point of departure, we suggest two possible sociotechnical dynamics. One is that collective domestication is tacitly distributed in the sense that the material features of the game playing, together with a shared understanding of what is to be achieved, help to orchestrate the process. As a

consequence, the rationale supposedly directing the process of domestication is uncontested and domestication apparently has produced a stable practice, which simplify the task of managing the collective activities. The other suggested dynamic is that collective domestication requires leadership and management due to disagreements about the material features of the group's activities, as well as about the right ways to perform these activities. In this case, domestication would need to be explicitly negotiated and organised to make the group perform in a successful manner.

We explore such dynamics by analysing cases of domestication of the online game *World of Warcraft*, a set of activities that includes the interpretation of the synthetic world (Castronova, 2005) that is made through the enactment of the game. Such worlds may be arenas for a range of activities: social interaction (Steinkuehler & Williams, 2006), trade (Castronova, 2005), work (Yee, 2006b), increased literacy (Martin & Steinkuehler, 2010) and player production (Prax, 2012). Also, they are spaces of emergent practices and diversified strategies (Mortensen, 2008) as players develop new readings of the game. Thus, we face what also may be described as a 'mangle of play' where player norms and systems "amplify, enhance, negate, accommodate, complement, and at times even ignore hard-coded game rules" (Steinkuehler, 2006:200). This suggests that the domestication of an online game like WoW may be quite complex.

An important object of analysis is the role of goals or rationales in collective domestication processes. In the case of computer game playing, early efforts to characterise ways of playing, like Bartle's (1996) taxonomy suggest that goals or rationales may vary substantively. Even if Yee (2006a) suggests going beyond player types (see also Kallio et al., 2011), the much-used dichotomy of casual versus hardcore gamers or casual play versus power gaming is important because it is frequently used by players themselves. Power gamers are seen to use a goal oriented, instrumental and effective play style (Juul, 2010) although Taylor (2006) shows that the maximizing of performance among power gamers also is about enjoying the game. The casual player stereotype is described as a person with a "preference for positive and pleasant fictions, has played few video games, is willing to commit small amounts of time and



resources toward playing video games, and dislike difficult games” (Juul, 2010:29). Such labels often are used by players as markers of identity, they may be considered a point of departure for the process of domesticating a game.

To conclude, our aim is to describe and conceptualise collective domestication, using playing of *World of Warcraft* as a case, emphasising the potential impact of different goals or rationales. We analyse collectives (guilds) with three different rationales for the playing of WoW, how these rationales were articulated and enacted, and possible controversies about their interpretation. Further, we study accounts of how the player collectives were managed and the negotiation processes among the players regarding practice and sense-making with respect to WoW. Also, we examine the importance of the way game playing implies a fairly concrete feedback of the players’ efforts, and thus of the relative success or failure of domestication.

### **Method and context**

The paper is based on in-depth interviews with 19 WoW players between 2008 and 2010, undertaken by the first author. All interviews were recorded and later transcribed and coded. In addition, the first author did a one year participant observatory study in a WoW raiding guild, referred to the here as “The Gummy Wolves”, during 2009. The fieldwork observations have been discussed between the two authors over a period of more than five years, based on field notes and player made documents gathered during the participation. The analysis have been abductive (Reichertz, 2007) meaning that we on the one hand have coded data to identify and outline main features of the three groups of players, while on the other hand have used domestication theory to refine and combine codes to develop concepts to describe the idea of collective domestication.

Similar to the observations of other game ethnographers, the roles of player and researcher were hard to separate. As an experienced player, the first author had a well-established gamer identity before the fieldwork. This gave access to and credibility within the community, but it also meant prioritising depth over analytical distance to the research subjects (McKee & Porter, 2009). Blurring and hiding of roles raise ethical concerns (see (Sveningsson, 2003) for discussion). The first author chose to

disclose her scholarly intentions when applying for membership in the guild, explicitly asked for consent during interviews and logged play sessions, and often discussed the on-going research with the guild. Her fellow players showed interest in and excitement regarding the project, and she recruited informants for interviews both within the guild and through other player communities.

The idea of doing a comparative study of three player rationales emerged after the interviews were completed and partly analysed, inspired by the observation of three distinct play discourses among the interviewed players. Further analysis showed that these discourses were articulations of three different rationales of playing WoW. Two of them could be characterised by the labels from previous research: hardcores belonging to the guild Ensidia, and casual players from several guilds. The third group we call moderates. These interviewees belonged to “The Gummy Wolves”. As we shall show, these labels were negotiated and worked as boundary objects that facilitated game player conversations and shaped player practices.

The interviewees from the group of casuals and “The Gummy Wolves” were made anonymous. For those from Ensidia, we use the actual names since their public role is of relevance. The choice regarding anonymity was made explicit to the interviewees. The interviews have been transcribed and analysed in a way inspired by grounded theory (Strauss and Corbin 1998), but drawing on the concept of abduction (Reichertz 2007) since the analysis was done in dialogue with domestication theory. Before embarking on the analysis, we provide some basic information about our context, *World of Warcraft*.

### ***World of Warcraft: Many paths and many goals***

*World of Warcraft* (WoW) is a very successful Massive Multiplayer Online Role Playing Game (MMORPG) and it has been given considerable scholarly attention (Corneliussen & Rettberg, 2008; Nardi, 2010). WoW serves as a platform for a range of player activities, from trading of virtual gold to erotic role play, but the game’s script focuses on mastery and sociability. Players are expected to develop their avatars through new levels while engaging in cooperation and interaction with other players.

The entanglement of mastery and sociability was particularly present in the activity known as *raiding*, and this activity has been at the forefront of our analysis.

During raids, large groups of players (10 to 25 at the time of fieldwork) battle the game's most challenging monsters in a series of highly complex combat manoeuvres. By defeating these monsters, player groups are rewarded with powerful items, titles and acclaim of fellow players. With internal systems for distribution of goods, attendance keeping and roster regulation, guilds are the hub of social, cultural and material distribution in raiding communities. Though no official ranking system had been put in place to determine the best raiders, user-made sites like [wowprogress.com](http://wowprogress.com) and [wowjitsu.com](http://wowjitsu.com) tracked guilds and generated worldwide ranking list based on who were the first to defeat new monsters. Thus, these lists provided one set of criteria for 'successful play', but as we shall show, it was not universally accepted.

In the following, we analyse the three different player rationales and how they affected the domestication process. We study how players appropriated the game of WoW and related technologies, by developing game practices, making sense of WoW, acquiring skills and becoming familiar with strategies of play. Playing WoW also means to appropriate a computer, the internet, relevant homepages, etc. The analysis of game practices in this paper has in particular focused on the organisation of play sessions. Our study of sense-making has mainly been concerned with players' interactional identity making, while we have examined the cognitive aspects of domestication by looking at how players learnt and taught others about the game.

We shall start the analysis with the hardcore players belonging to the Ensidia guild and discuss how their instrumental power gamer approach influenced their domestication of WoW. Then we turn to the self-defined casual players to explore the consequences of their focus on social dimensions, and the implications of their discourse of a previously "better time" when online games were about community, not competition. Finally, we look at "The Gummy Wolves" and their attempt to strike a balance between a competitive and community centred approach, thus striving for a moderate domestication of WoW.

### **Player rationale I: Hardcore – being the best**

Raiding is often labelled a hardcore way of playing due to the strictly set times, the high level of commitment, the complexity of the tasks undertaken, the shared effort and almost work-like activities. Hardcore gamers are stereotypically seen as players with “too much” time and effort invested in the game; as taking the game “too seriously”. This description was decisively dismissed by the hardcore interviewees as they explained what it took, not only to be a “proper hardcore raider”, but to succeed at it. We observed a rationale of competitiveness that structured their domestication as they aligned practices and sense-making, aiming to be the best players in the world.

The hardcore interviewees belonged to Ensidia, a guild formed in 2008 as the result of a merger between two champion guilds: Nihilum and Curse (also known as SK Gaming). The success of the merger was demonstrated by Ensidia getting more ‘world first kills’<sup>1</sup> than any other guilds combined, and they frequented the top of the world-wide guild rankings for years.<sup>2</sup> As one of the most highly profiled guilds in the world with plenty of fans and attention, they also sported an explicitly public profile online. To the extent that there are celebrities among WoW players, Ensidia fits the bill. Their website posted news, not just about the guild, but about gaming more generally, complete with a social networking platform (user generated news, blogs, profiles, etc.) for their fans to discuss and to build a community. During her fieldwork, the first author noted how her fellow players would shrug at Ensidia’s accomplishments by mobilizing the stereotypical image of the hardcore gamer, arguing that Ensidia was successful because the members had ‘no life’.

The interviewees from Ensidia labelled themselves as hardcore because they redefined the meaning of hardcore from being a person with no social life outside the game – a “no-lifer” – to being a person with skill and determination. This was partly done by refuting the idea that hardcore players spend more time than others, but also by highlighting virtues that were necessary to compete for world firsts, such as patience and sacrifice. Ragebar argued that they actually spent less time playing because their skills allowed for highly effective and productive play sessions:

*Being hardcore, ha ha! It's not like most people think. We play in a hardcore guild, but we don't need to play 24/7 to make it. There's almost a mathematical formula behind it: the better the guild equals the faster you can complete X, Z, etc. (Ragebar).*

There may be something to this claim. When the first author was participating in the moderately oriented guild, her number of hours logged for the last week of playing was about twice what Ragebar claimed to spend. Of course, hardcore players devote much time and resources to gaming, but time spent on playing is a problematic measure for categorizing players (Kallio et al., 2011; Karlsen, 2013). While refuting the focus on time as the key feature of hardcore play, the Ensidia interviewees constructed another narrative where they (as gamers) were more reminiscent of professional athletes or performers “giving it all”: «Hardcore means having the will to hunt aggressively for a world-top kill and sacrifice some stuff for it [like skip a day from school/work or go to bed one hour later] » (Alex).

With regard to sense-making, the hardcore group domesticated WoW to counter outsiders' views by framing intensity of playing in terms of dedication, skill, and sacrifice. The competitive context shaped their domestication to provide a symbolic interpretation of hardcore playing of WoW where all efforts to become more competitive were desirable, and after giving their addendums they were quite proud to identify as hardcore.

The strict hierarchical organization of Ensidia was shaped by the ambition of being the best raiding guild, as well as dealing with the attention that comes with frequent World First Kills and top rankings. A small group of officers was engaged fulltime to run the guild and its website (known as Project Ensidia). The guild's vision and practice was not up for question; it was a matter of loyalty. Collective performance was always prioritised above individual enjoyment, 100% attendance was required and all players were expected to manage their lives to allow for raids and performing optimally. Without a satisfactory performance, membership would be revoked, regardless of social relationships.

Ensidia interviewees claimed to enjoy efficient, well-mastered task solving. Playing at this level also meant being deeply socially involved with the guild. The

interviewees spoke highly of their companionship, a claim supported by an unusually low turn-over:

*I guess the success of Ensidia and other higher end guilds comes from stronger bonds and leadership. I mean you look at the top 10 or 20 guilds world-wide, you can probably bet that the core of the guilds have been playing with each other for a very long time, and know each other inside out (Tjani).*

Though the hardcore interviewees varied in age and background they seemed quite homogeneous. They were there for the same reason: to be the best. Their narratives about why and how they played were very similar, suggesting standardized and synchronized domestication efforts. For these players the rationale behind playing was explicit and shared: they had deliberately sought out this community in order to play in a competitive way. The competitive rationale produced clear priorities for all three dimensions of domestication; on a practical level they would organize to be competitive, and the skills (cognitive) that they valued were performance oriented. It was tied together by their hardcore identity, where playing was to be competitive and dedicated.

### **Player rationale II: Casual – friendship, family and fun**

The interviewees considering themselves to be casual players pursued a different rationale in their domestication efforts, namely that of sociability. This meant to facilitate and to prioritize relationships and interaction with friends and family, which clearly affected their sense-making regarding WoW. Playing was mainly regarded as a good way of spending time. Several interviewees mentioned TV as an alternative, and they saw WoW simply as a way to relax after work. Consequently, they stressed that the game should not take precedence over other activities or take control of their life. The game was a way of spending time with friends, including staying in touch with friends who now lived in other parts of the country.

Several casual interviewees belonged to “The Funny Club” (anonymized), a guild that emerged from an IRC chat group that they established during high school. Now, none of them lived in the same city, and game playing allowed the school-time friends to keep in touch. Other interviewed causals emphasized that game playing was

about spending time with family. Minho even described WoW as a combined chat-room and game: «I am very social. I used it [WoW] a lot for talking. Instead of sitting on MSN to talk I go in there and talk and do stuff together [play]. Since we can do both things at the same time».

Thus, social aspects of raiding were prioritized, in addition to enjoyment. Further, their involvement in raiding was based on a desire to play with friends and explore the game. However, unlike the hardcore players, this should not come at the cost of friendship, family and fun. Their emphasis upon sociability and real life obligations clearly affected their domestication of the game, both in terms of practice and meaning as concerns for fellow members always trumped goals of progress. Amber provided a concrete example of this: “I was in a raid last week, but it had to be cancelled because one of the players had a kid that fell out of bed. It happens”.

The emphasis on social benefits also dominated their practices and organization. The casuals’ guilds consisted of friends, family or friends of friends. New members were not actively recruited but invited on a “friend of a friend” basis. With a small officer group to organize raids and keep track of the guilds’ wealth, the organization tended to be fairly flat. Some had even experimented with democratically elected officers, while others went with the common option of giving that responsibility to the more experienced, dedicated and willing members of the guild. Members had few or no obligations. The raids were organized on an ad hoc basis, without penalties for no-shows or participation requirements.

Another prominent feature of this type of player community was the strong link between online and offline relationships. This clearly affected the domestication. As mentioned, quite a few were playing with friends or family, using the game as a way of interacting with them. The result was a blurred boundary between online and offline, which included practices like “real life meetups” and using forums to share pictures of real life events such as holidays and weddings.

The focus on social interaction also shaped the way players shared information and developed new skill sets in-game. Just like the raiding schedule was without

demands, players were not required to prepare or perform during these events. Those who were skilled and knowledgeable were respected and honoured, but there were no other incentives to learn more about WoW. The websites used to find information were similar to those employed by the hardcore players, but the casual interviewees also emphasized the importance of other players as a source of learning. Actually, to use guild-chat or asking someone directly were favoured ways of finding things out. Amber described this as making informal one-night-mentorships:

*I experience our raiding environment in the guild as good. I like to read up on what to do, while at the same time allying myself with a kind of "supporter" if we are going to a new instance. Preferably of the same class or at least of a DPS class [same archetype as her]. To hear a bit about what's going on here and what happens when. Have also had new players following me, where I supported them. I think it's really nice and very social (Amber).*

Thus, the casual players had domesticated WoW to mean spending time with friends and family. Their measure of success was to explore the game world with people they cared about, and their domestication reflected this. Unlike the stereotypical casual player, poorly skilled and not investing in the game, our interviewees were highly skilled and spent much time in game. Emphasizing social relations is not unique to this style of playing, but casuals stood out by doing so explicitly and rating it higher than game-related progress. The underlying rationale of sociability directed their domestication towards making play relaxing and providing social intercourse and game knowledge as something to gain together. Thus, hardcore and casual appear as two distinctly different strategies of domesticating WoW, leading to distinctly different sense-making and game playing practices. The interviewed hardcore players pursued a competitive rationale with a singular emphasis on performance, while the rationale of the interviewed casuals was always to prioritize social relationships inside and outside of WoW. What happens when a group of players starts with an explicit ambition of balancing success in game playing with social aims?



### **Player rationale III: Moderates – balancing progress and real-life commitments**

As already noted, “The Gummy Wolves” was a guild that wanted to strike a balance between performance and social benefits of playing WoW. Their game playing achievements were pretty good. At the time of the fieldwork, the guild was ranked among the top 20 on the server where they played, and among the top 6-7% on international ranking sites. “The Gummy Wolves” profiled themselves as a mature raiding guild that played in a less time-consuming way, but still demanded commitment. The guild was also proud of its rather abrasive and far from politically correct humour. The founding members were long-time gamers who wanted to raid without having to spend most of their leisure time playing. When the guild decided on a “middle ground policy” it seemed like the sensible choice; not spending too much time (like the stereotypical hardcore players) but also succeeding (unlike the stereotypical casual player). However, it turned out that the balancing act attempted in the domestication of WoW continuously created controversies in the guild and required much work. It was an accepted “truth” that moderate demands of players regarding attendance in raids, performance and preparation were harmful to the guild’s ability to make progress, game-wise:

*I have enjoyed being here [in the guild]. Most of the people are laidback, but still take the raiding semi-seriously. People can talk shit and usually don’t take it [bad] if there is some friendly mocking around. (...) But, because it’s a friendly guild I realise that the raiding isn’t pro and sometimes it also doesn’t feel so nice (Aaron).*

It soon became clear that the major challenge facing “The Gummy Wolves” in their domestication of WoW was to balance social concerns with being competitive. After all, what is a satisfactory level of success? How to optimize the use of available time? What may be demanded of commitment in a “real-life friendly” guild? This ambivalence was evident from the sense-making as well as the practical organization of playing WoW. The collective domestication, pursuing a rationale of moderation, produced the idea that playing was challenging leisure. On the one hand, it was a hobby on par with watching TV or playing sports; on the other, it was about performing well in raiding. The guild wanted the best of two worlds; the success of

hardcore players and the more relaxed social life of casuals. For example, “healthy respect for Real Life obligations”, which was stated as a goal in “The Gummy Wolves Lowdown” policy document, was realized by a relatively light raiding schedule. “The Gummy Wolves” had four raid nights per week and demanded only 50% attendance. The offset was a requirement that everybody should show up prepared, having read strategies and knowing what was going to happen. The idea was that such preparation would enable the guild to raid more efficiently:

*Show up prepared. We will be posting strategies on the forum in advance when possible. Read them, watch the movies, discuss them. The raid leader is there to help improve on strategies, not to babysit you (from Raid rules section in “The Gummy Wolves Lowdown”).*

However, this idea was not carried through. It was the same few players who took part in developing guild strategies, and during raids the raid leader usually ended up by having to explain the strategy before it was carried out. Everybody knew that many members came unprepared, but nobody was excluded for this. While the rules stated that the guild forum should be a hub for discussing strategies and helping players to improve, reality was that it was the off topic threads filled with funny pictures of cats and boobs that were most frequently used.

A major concern for the guild was low attendance, leading to “raid fades” – cancelling a raid because too few members were present. This was tracked carefully, and those falling below the required 50% attendance rate would get a warning and request to join more raids. Continued absence would lead to demotion or removal from the guild. Similarly, the performance of all members was continually evaluated. For those underperforming, guild rules required an “improve or leave” reaction. However, this rarely happened since the roles of officer and friend proved difficult to combine.

Nonetheless, the officers spent much time and effort in trying to make the guild successful. Their main challenge was the ambivalence embedded in the moderate rationale, which meant that almost all situations required negotiations. To meet this challenge, the officers created several systems to make the most out of the available people and time. One system focused on training and follow-up of members. Informal

apprenticeship has been suggested as a key way of learning in MMORPGS (Steinkuehler, 2004). In “The Gummy Wolves” this was encouraged by assigning experienced members (usually officers with relevant knowledge) to candidate members or members who were falling behind. This worked as a way of sharing expertise and improving the standards of the guild while also standardizing the process of evaluation. Another was to track attendance, and give notice to those falling below the “magic” 50 percent line and encourage them to attend more raids. In addition the internal system for distribution of goods rewarded attendance and dedication, and punished absentees. These were all attempts at managing the collective domestication, to reach the supposedly shared goal of being social and competitive.

Many in the guild were critical towards the balance that was struck between performance and social ties. Often, the officers considered taking the guild in a more hardcore direction with stricter demands on players and who were allowed to play. However, none of “The Gummy Wolves” officers were comfortable with the confrontation that came with trying to remove unqualified candidate members or members. This led to evasive strategies. The prime strategy was to simply ignore underperformance by giving second and third chances to players in the hope that the problem would somehow be resolved. The first author, in her role as officer, would sometimes bench problematic players for weeks in the hope that they would simply get bored and leave voluntarily. Another strategy was to build routines that could serve as standards, thus legitimizing officers’ actions. Tracking attendance and performance should ensure that the guild had a working roster of players but also providing evidence if an officer deemed that a player needed to be removed.

The moderate rationale meant that decisions should be explained because one had to demonstrate that proper consideration had been exercised, and that the decision was for the common good. Especially during times of raid fades it was difficult to keep the guild content with the roster; some demanded that the officers kicked out those who did not show, while others argued that we needed them. After all, “they were good people”. Even when attendance records or performance logs identified problems, the guild still disagreed about what constituted “good enough”.

“The Gummy Wolves” had a high turnover, which also could be seen as an indication of domestication problems. Members frequently left because either they wanted better performance or greater emphasis on social interaction. In addition, quite a few members stopped playing, explaining their choice to quit as the result of burn-out. The game had become too much hard work with too little success and fun (Eklund & Ask, 2013). While in some aspects “The Gummy Wolves” were a homogenous group consisting of largely white, straight European men in their early twenties, their approach to the game differed substantially. Some raided seven nights per week while others barely squeezed in two raids, some had years of experience as raiders while others were just starting. However, the diversity of practice or of actors is insufficient to explain the domestication problems of “The Gummy Wolves”. Unlike the competitive and social rationales, the rationale of moderation seemed to provide too fuzzy directions to guide the collective domestication process. Thus, in this latter case, to achieve stable outcomes proved very difficult.

### **Conclusion: the dynamics of collective domestication**

Collective activities like on-line computer games provide an intriguing case for domestication theory. Firstly because users depend on each other’s successful individual domestication (as seen in Ask 2011), but also because they are dependent on the collective to produce a configuration of meaning and practices that allows for orchestrated action. Secondly because games are interactive, requiring active user choices, and they are often structured with clear success/failure conditions. Thus, domestication is not simply about finding *a* use, to ‘tame’ the technology to make it useable; it is ultimately about reaching set goals. These goals and the underlying user rationales may vary, which allows us to analyse the role of rationales in collective domestication.

In our study, we identified three distinct user rationales with respect to game playing achievements. The rationales proved to have considerable impact on domestication efforts. Among hardcore as well as casual players, their respective rationales guided domestication of WoW effectively -in the sense that largely, their goals were reached. The outcomes of the domestication of WoW of the two groups

were distinctly different, but in both cases fairly stable configurations with a low level of conflict and a high degree of satisfaction were constructed. The moderate rationale proved more demanding and less effective in guiding the domestication process. This was due to ambiguities in the rationale, which facilitated disagreements about how the rationale should be interpreted. In turn, these disagreements tended to make domestication result in less synchronised and less compatible outcomes.

Thus, continuous negotiations and more managerial efforts were needed with the moderate rationale. To achieve sufficient compatibility among players' practices, sense-making and skills, the officers in "The Gummy Wolves" had to take steps to explicitly manage the domestication process. For example, they introduced bureaucratic measures like check lists for attendance, suggestions of performance standards, and running evaluation of all members. This worked to some extent, but the underlying problem of combining a goal of good gaming performance with prioritising social benefits like friendship remained a continuous challenge. This was particularly evident from the analysis of how the raiding collectives were managed.

The hardcore rationale demanded leadership, but this was mainly about having somebody responsible for the needed management of raids and for coordinating tasks, but not for managing domestication. There was no need to manage the symbolic dimension; what play was about. The accounts of the interviewees who labelled themselves as casuals, suggested that leadership was pragmatically relaxed, mainly focused on a modest level of coordination of tasks, and not much of an issue. With the players pursuing the moderate rationale, leadership was comprehensive, bureaucratic and precious but contested, due to the disagreement about relative priorities. Clearly, collective domestication demands orchestration, but as we have learnt, with substantial diversity with respect to management strategies and efforts.

Among hardcore and casual players the collective domestication appeared to be what we earlier called tacitly distributed. Shared technology and shared aims facilitated the development of compatible practices and sense-making. However, the accounts of the hardcore interviewees suggested that a high-achieving guild demands a higher level of compatibility than guilds pursuing a casual rationale. Playing WoW

mainly for social purposes may be done in many ways, since there are many views of what constitutes friendship and satisfactory social interaction.

The collective domestication among the players following a moderate rationale seemed much closer to what we suggested to call managed domestication. To overcome disagreements about goals and consequently about practices and sense-making, substantial managerial efforts seems to be required. This situation is probably common in many organisations, like workplaces or schools. Previously, the concept of domestication has been used to emphasise “how users matter”; that practices and sense-making are not pre-determined by technology. When domestication has to be a collective achievement, this imposes limitations emanating from needs related to compatibility and coordination. A player participating in a raid cannot pursue a practice that does not fit with the practices of other teams members without negative consequences.

How this limitation is perceived seems to be shaped by the degree of agreement with respect to user rationales. With a high level of agreement we have a consonant situation, where freedom to choose how to act is not really an issue. Disagreement, on the other hand, produces dissonance, which may make freedom a more relevant and precious concern. “The Gummy Wolves” thought they could balance game achievements and social goals but this produced controversies and a need for a fairly strong leadership. The leaders found ways of managing the collective domestication of WoW to facilitate successful playing. However, the high rate of turnover among guild members and burn-outs speak to the consequences of management of domestication where individual freedom of choice is limited visibly and probably beyond what many guild members saw as reasonable. This leads us to some preliminary conclusions about how collective domestication happens and how it should be studied.

Domestication is collective when users are dependent on the successful, or at least adequate, domestication efforts of other users. Individual domestication may be described as the unfolding of a strategy for use. Collective domestications are in addition the unfolding of orchestration for use. The level of orchestration needed is determined by the extent to which the underlying rationale of domestication is shared

and understood. If the rationale is perceived as ambiguous and potentially controversial, considerably more managerial effort is needed to provide for a well-functioning and stable process of domestication. In the case of *World of Warcraft* we see a particularly strong link between rationale, meaning and identity; the rationale was uncontested when these aligned in either social or competitive dimensions. This indicates that the suitability of the rationale is dependent on compatibility with the symbolic dimension of domestication, particularly identity. In short, studies of collective domestication require an investigation into the relationship between rationales and orchestrations.

## Notes

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<sup>1</sup> Meaning they were the first guild in the world to defeat a specific monster.

<sup>2</sup> From “Guild: Ensidia (Tarren Mill EU)”

[http://www.wowwiki.com/Guild:Ensidia\\_%28Tarren\\_Mill\\_EU%29](http://www.wowwiki.com/Guild:Ensidia_%28Tarren_Mill_EU%29) retrieved January 31, 2016.

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# The strenuous task of maintaining and making friends: Tensions between play and friendship in MMOs<sup>21</sup>

Lina Eklund and Kristine Ask

## Abstract

*This empirically driven study concerns the creation and maintenance of friendships in online gaming. Social interaction and community building are integral to online game-play, yet maintaining and making friends within a gaming context is not without its conflicts.*

*Through analyses of interview data (n=52) combined from two research projects concerning MMO-gaming this study presents three ideal type portraits of gamers. The portraits illustrate different struggles of balancing friendships, a challenging game experience and everyday-life. Specifically they look at the relationship between social design and social play; everyday-life and contexts of play; and 'player burnout', when players leave the game. Results emphasize how friendships and everyday-life constrains affect how we play, our preferences towards play, and who we play with online. The study concludes that maintaining and making friends in an online game can be a strenuous task limited by both a rational game structure and everyday-life.*

## Keywords

*social relationships, sociability, digital gaming, social interaction, game structure, rationalization*

## Introduction

The emergence and popularization of new game technologies, game titles, and game cultures have asserted digital gaming as an activity where friends and family can play together (Eklund 2013). Empirical research on play and players has debunked the stereotype of gamers as socially inept and solitary beings. Particularly studies of online

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games have highlighted play as a social endeavour, and play has been reframed as an arena to make and maintain friendships. Not only do gamers make new friends while gaming, they also maintain existing friendships; these relationships being necessary to build functional gaming groups and so progress in their gaming (see e.g. Taylor 2006; Steinkuehler & Williams 2006; Williams, Yee & Caplan 2008). The effort to highlight play as meaningful and social has been an integral, and necessary, part in the development of Game Studies. However, framing the link between friendship and play as inherently beneficial to play is problematic due to the instrumental and rational nature of the play space where both skills and contributions are made explicit and measurable (see Grimes & Feenberg 2009). Thus friendships become subjected to conditions of performance evaluation; conflicting with the ideal image of friendships as freely chosen and given, voluntary, and a matter of personal choice (Allan 1989). As the field of Game Studies has matured the one-sided image of Massive Multiplayer Online games (MMOs) as inherently social for everyone is now being questioned (e.g. Ask 2012; Eklund & Johansson 2010). The unproblematic image of game relationships often ignores the conflicting aspects of friendship and MMO-gaming; an issue which has become increasingly apparent to us during our MMOs studies.

The purpose of this study is to critically examine the relationship between friendships and MMO-gaming. Specifically we investigate online gaming as an arena for conflicts of friendship with the research question: What conflicts may arise in the meeting of play and friendship in an MMO? To answer this question we present three ideal types that portrait tensions between challenging game play, everyday life and friend work (the effort put in to make and maintain relationships). The portraits are based on analyses of interview data with World of Warcraft (Blizzard 2004) gamers from two different research projects.

## **Background**

When playing online, gamers often spend time with others as active participants in an enjoyable and social activity (Taylor 2003). Jakobsson and Taylor studying MMOs state that, “The production of social networks and the circulation of social

capital prove to be one of the most important aspects in EQ [EveryQuest; Sony, 1999].” (2003: 88). Thus, MMOs constitute social spaces with inbuilt possibilities for social interaction where individuals together take part in different adventures. Online games have been described as ‘third places’ (Ducheneaut et al. 2007); places for informal sociability that give opportunity for bridging social capital leading to community building (Steinkuehler & Williams 2006). Community building is often integral to play itself, and friendships are central to game enjoyment, motivation, and accomplishments (Chen 2012). In MMOs gamers can compete against others, work together and through the shared experience have the opportunity to build lasting relationships (Kolo & Bauer 2004). Social interaction is the key attraction and the unique selling point of these games (Williams 2006; Cole & Griffiths 2007) and the design for interaction between gamers is a basic condition.

Developers foster social engagement within the game through features like guilds (player constructed social groups) and more short-term player groupings, they also support interaction through friend lists as well as global and local chat channels. ‘Gamer interdependency’ is strengthened by limiting solo content and by creating challenges and characters that are reliant on team work (Jakobsson & Taylor 2003; Ducheneaut et al. 2006). Functional gameplay is dependent on high levels of trust and cooperation between members (Chen 2012). Even highly instrumentally focused gamers are ‘forced’ to be social in these types of games, collaboration often being the only way to progress (Taylor 2003). The creation and maintaining of social ties, like friendships, seems to be an integral part of MMO-gaming. Meanwhile, play, in MMO’s and other games, is a situation with clear win/loss conditions. This puts pressure on social relations operating within play spaces. As the play space is instrumental; both skills and contributions are made explicit and measurable, thus also subjecting friendships to conditions of evaluation and performance.

Gaming is a goal driven activity with set strategies and rules. Trying to mediate between goal driven and social aspects of online game-play is often framed as a conflict between hardcore and casual play styles (Juul 2010). The stereotype dictates that hardcore players care more about progress than friendship, and casual players are

friendly but unskilled (Taylor 2006). Such dichotomization of play styles and player groups is highly problematic, as 'hardcore gamers' (or power gamers) are dependent on strong social ties to succeed, while 'casual players' may sport impressive game-play skills. Juul (2010), questions several assumptions that this division rests on, showing, for example, that casual and hardcore gamers can spend similar amounts of time on gaming. The juxtaposition of the two play styles suggests (however incorrectly) that gamers have to choose between friendship and progress. Thus explaining the pervasiveness of the casual versus hardcore discourse as an articulation of the conflicts gamers experience when attempting to make play both social and challenging.

Play can be seen as social 'glue', a foci of activity (Feld 1981) around which friendships can form and relationships be maintained: "A foci is defined as a social, psychological, legal, or physical entity around which joint activities are organized (e.g. workplaces, voluntary organizations, hangouts, families, etc.)." (Feld 1981:1016). Friendship is often seen as a relationship based solely on choice and individual preferences and as a relationship opposite ideas of rationality (Allan 1987). However, in reality friends are often people similar to oneself and who you meet through occupying the same arenas. For example geography limits who we can and will name a friend (MacPherson et al. 2001). Moreover, the structure of a foci, in this case a game, have implications for how such relationships can be performed. While games may encourage free-form and imaginative engagements, they are built as rational structures.

Grimes and Feenberg (2009) argue that games are sites for social rationality in which different structures of rationalization such as the optimization of effort and calculation of results invites the players to engage in a rational game. Research on gamers and instrumental play has demonstrated that achieving goals, finding optimal strategies and mastery of rules is not in opposition to enjoyment or playfulness (Taylor 2006). It is however worth noting that goal driven gaming with set strategies and rules may be in opposition to sociability. Sociability, or pure sociability, is defined by Simmel (1949) as the play form of association; that is, interaction free of meaning or

purpose. Thus the very idea of sociability stands opposite to sociality driven by a goal or rationality which we could expect to find in games.

### **World of Warcraft**

This study focuses on *World of Warcraft* (hereon WoW, Blizzard 2004) one of the largest and most influential MMOs. WoW can be played in many ways but is foremost a multiplayer game, heavily dependent on collaborative play. One of the more important player practices is raiding. Raiding may be defined as large player groups fighting the most arduous monsters the game has to offer in a series of highly complex and coordinated battles. The complexity of play and required effort to succeed has made raiding an activity that highlights the link between play and work. For example, raiding guilds often use advanced point systems for delegation of game rewards (Silverman & Simon 2009), extensive application processes to join guilds, and signup systems for organization of play. While not all raiders identify as power gamers, MMO-culture is highly informed by power gamers' ideals of efficiency and optimization. This makes raiding an ideal site to investigate the relationship between goal driven activity (raiding) and non-goal driven relationships (friendships).

### **Method**

This study is built upon data from two Nordic research projects. Both projects deal with MMO-gaming and concern social aspects of gaming, gaming culture, and everyday-life. Findings in this study are built on interviews with gamers with a special focus on WoW- players performed during 2009-2011. Though Eklund's material (N=33) focuses on social dimensions of gaming and Ask's (N=19) tones towards emergent culture and knowledge management the overarching focus and method in the two projects are compatible; allowing the data to be pooled and compared. The analysis is articulated as three player portraits depicting situations concerning friendship and play. Using an inductive approach inspired by phenomenology (Creswell 2007), we let the lifeworld of our informants, as well as our own extensive experience as WoW-players, suggest relevant ideas, concepts and theories. The three portraits represent ideal types (Weber 1904) created to exemplify trends in our material and are based on synthesized actual events and people from our data. Ideal in



this case does not imply perfect but rather signify certain extrapolated common elements of a given phenomenon, ideal types are used to capture, interpret and analyse the life world of studied informants. Our portraits are inspired by the travelogue jargon found in Miller's (2011) ethnographic study of Facebook-users. Thus, the individuals who embody the results are not actual people but ideal type gamers constructed in analyses of our data. However all quotes used in the result originates in our interviews. We argue that these portraits are thematic for situations and experiences commonplace in MMO-games that have not yet been identified in the literature.

### **Results**

Given public discourse around games we sympathize with the desire to tell positive stories about games and friendships, as the negative view of gaming as isolation and introversion has needed correction. However, in our material we noted a similar legitimization discourse sometimes skewing the informants' stories towards play as free of conflict or emotional costs. While our informants were generally open and articulated about their gaming situation and practices, they were more reluctant to talk about gaming in negative terms. They frequently lifted positive aspects of play, even when these did not accurately describe their own situation. One example was informants who rarely made new friends online, but freely talked about how great online games are for meeting new people. Another example was informants talking about how great it is to belong to a game community, while leaving out his or her longstanding conflicts with other members in the guild. In both cases this construction leaves out much of the everyday conflicts, sacrifices and tensions that make up a game career. The portraits are thus not only chosen to reflect some of the tensions that come with strong social engagement in a time intensive and competitive hobby like gaming, they are also an attempt to articulate part of the life world that our own informants are under-communicating. The first portrait details tensions between friendship and the desire to play competitively, the second relates friendship to the limitations of an everyday context, while the third portrait details how strong connections to a player community has its costs.

### **“Should I stay or should I go?”—tensions between social game design and competitive gamer culture**

MMOs are embedded with social engineering features that encourage group play and player interdependency. Guilds, group quests, various in-game chat channel, character skill design, as well as the general promotion of an online experience where you “join millions players” (www.wow.com), forms a ‘script’ (manuscript for use, cf. Akrich 1992) where group play and interpersonal relationships are encouraged. In the first ideal type portrait we meet Benedict who started playing mainly because of the possibility to play with friends, but found that as he progressed through the game he needed to readjust both aims and play style.

Benedict started to play WoW in order to play with his friends. The “Club Stupid” guild was formed by people he knew from school and only friends of friends were invited. Initially social in nature progression through the game brought up the issue of raiding and a change within the guild:

*Benedict: We started to play because people we knew played; it was they who pulled us in so to speak. And we played with them in the beginning and then they quit but we continued and started to raid and become more serious.*

The move from ‘friendly guild’ to ‘raiding guild’ was not entirely unproblematic. Whilst Benedict enjoyed the added challenge, investing more time studying strategies and improving his character, his desire to play the game competitively was not shared by everyone. These differences in player attitudes became more tangible after they began raiding:

*Benedict: Half [of the guild] wanted to kill stuff and the other half only wanted to talk, and then it became hard when half didn’t care about killing things and the ones who wanted to kill things got angry and then the others got angry because they nagged about it...*

During a period where the guild continually failed on a raid challenge Benedict considered leaving and finding a more competitive group to play with. He knew that if he applied to a more progress oriented guild he would be accepted. He had the in-game items and the necessary skill to play at a more difficult level, but in the end he decided to stay:

*Benedict: I mean you have your friends and you don't want to leave them.*

Benedict knew that the guild would never be a successful raiding guild, and that raiding with this group of people would mean that much of the game experience and content would be out of his reach. He, however, did organize groups of likeminded players in his guild he considered skilled for more challenging content—distancing himself during play from those ‘who were there to talk’—a compromise that allowed him to continue playing with friends.

Benedict’s story illustrates the emergence of, and possible solution to, a conflict between competitive play and maintaining friendships. It is not a story about choosing between optimal or sub-optimal play, or between social and unsocial communities—it is first and foremost a story about how friendships are put under strain when entering a competitive culture and practice. The strain may be seen as a consequence of competition, and occurs in many social arenas where competition becomes a dominant rationale (Hessen & Eriksen 2012). Of interest is how this competition emerges between players who are presumed to be ‘on the same team’. “Club Stupid” was explicitly formed in order to share exploration and enjoyment, yet the MMO context lifted previously unarticulated differences among the friends towards play and leisure.

These results resonate strongly to Chens (2012) story of a guild that started out as a group of friends wanting to raid, but eventually split up when central members decided that the guild’s progress and attitude towards raiding were not competitive enough. While WoW’s design is clearly aimed toward promoting sociality there are still game features that are adverse to sociability. The game either rewards or penalizes players based on their abilities and expertise (like situational awareness, understanding of game mechanics, and familiarity with strategies), not the relationships between players. Both social and cultural capital is highly relevant in gaining access to, and maintaining players’ communities, but will in and of itself not guarantee success in any grouping effort. Rewards are only given to players in groups which succeed in their effort to defeat digital dragons, and unless the player community constructs a

radical oppositional reading of the design (like an anti-program see: Akrich 1992) this imposes win/loss conditions on team effort.

Friendships are, for many gamers, an essential part of gaming. Friendships are not only a way to play together; friendships can give alternate meanings to the performance of play. Benedict's story exemplifies how, in many cases, friendships make gamers redefine their own goals and what enjoyment they could/should attain from playing. Instead of seeking flow, the sensation of total engagement which comes from being adequately challenged, Benedict in our example sought community. For gamers the tension lies not only in choosing friendship over challenge, but also in knowing what is forsaken at the cost of friendship. It serves as a reminder that even though virtual worlds and games may be used to explore new and other identities and challenges, they are never separate from the everyday context in which they are performed. The next portrait explores this further.

**“Mother by day, Rogue by night”—online gaming as situated and performed within constraints of everyday-life**

Virtual worlds are often depicted as separate from physical places. Particularly early studies of online gaming supported the idea of stepping into another place that was different and ‘other’ compared to our everyday-life. Turkle's (1997) analogy of “stepping through the looking glass” serves as a good example of this. In this second ideal type portrait we explore how, in actual practise, gaming and everyday-life is rather inexorably linked.

Anya has played WoW for several years. Her level of dedication has varied throughout the years, but she still enjoys playing. Today she plays at home together with her husband, and while it took a while for her to convince him to try, he is now as involved in the game as her. Previously, she used to play in a serious guild, raiding and playing most evenings. She took great pride in her skill and intensive progressing. She stopped playing with this group once she finished university and got a job.

*Anya: I played in a good guild, but then I didn't have that much time to play so I wasn't allowed to be with them anymore \*laugh\* so I had to join a calmer guild*

The new obligations of her life changed how much time she had available for gaming and essentially dictated her play style. Her new job changed the hours she could keep and reduced leisure time. Changing guild and play style was not a hard choice, choosing to prioritise her working life over gaming. She views her time as a more serious gamer as a passed phase that she does not miss. Today Anya and her husband have a child and this has, of course, changed their lives further. However, they both continue their gaming passion in the evenings after their child has gone to bed. Anya's new guild is also quite different from her old one.

*Anya: Yeah we are all parents or older at least. So no one minds when you have to suddenly go afk [away from keyboard] to change nappies or something like that.*

The fact that everyone in the guild is in a similar life stage makes it easier, if not possible for Anya to manage her gaming with the life of being a parent to a small child. The guild still raids a bit, but more leisurely. The guild is a mix of real life friends and acquaintances and a few people that have joined independently. Everyone speaks the same language though, something Anya's husband especially appreciates due to his poor English. Anya thinks that the shared language makes everything much easier.

*Anya: I feel very safe in this guild, you can ask questions and feel you get support and that you can be social, get to know people, not just talk to a lot of people you don't know who they are.*

This guild is limited to same language speakers. This, according to the guild, is to avoid culture shocks and to make sure everyone gets along. Anya's gaming has gone up and down; as her life changed so of course did her gaming. Starting her working life and later having children are factors in everyday-life which restrains gaming style and motivations. Finding a group of people sharing her real life constrains made it possible to continue playing with others. The fact that she now plays with her husband also matters to her.

*Anya: It's something we have together, like a hobby. Playing together just makes it much more fun, and easier as well. There is always someone you know you can count on completely.*

Anya's story highlights the social context of play. Often research considers virtual spaces as spaces in their own right (e.g. Turkle 1997; Adams 2005), even if this is increasingly questioned. Malaby (2007) argues that games are processes rather than objects; they come into existence as we game. The game spaces that users occupy allow synchronous doing together with others and in this way game spaces become social spaces. However, as we see in the empirical data underlying this study, gaming is tightly connected to gamers' everyday-lives, showing that the virtual is far from disconnected from the physical; in turn questioning game space as a virtual place in its own right. Space and place matter even in our digital society and the virtual and the physical are linked together; gaming can be seen as an offline situated activity. How gamers play, what they enjoy in a game is restricted or allowed by factors from their everyday-life.

As Anya does, playing with a partner further allows the everyday social context to extend into the game. It is clear in her case and for many others in our study that gaming with family or close friends is different from playing with strangers or acquaintances. Family and friends not only make gaming more enjoyable, they also make play easier to plan and organize as when playing with family and close friends gamers become more deeply invested in the social gaming situation. It does matter then, who we play with. Something further highlighted by the shared language in the guild. A certain cultural understanding is clearly outlined by the shared use of a language. It becomes quite clear that sharing game style or game space is not enough to create stable social groups and additional offline characteristics are felt to be necessary for achieving social cohesion online. These processes are also visible in the first portrait, serving as a reminder that even though games are excellent arenas for building trust and community, making meaningful relationships requires effort.

In the first and second portrait we see how Benedict chooses friendship and offline ties over competitive play and how Anya's game goals and friendships depended on her everyday-life. In the final portrait we meet Rupert who was able to combine friendships and competitive play—at least for a while.

### **“I think we should see other games”–gamer burnout and work-like play**

The problematic work/play dichotomy has been highlighted in Game Studies, and raiding in particular calls this divide into question. Empirical studies have pointed at how play can be performed through strenuous effort, optimization, and productivity; traits we have previously defined as pertaining to work (Yee 2006; Consalvo et al. 2010). The blurring of the two spheres, while being an accurate theoretical reading, might prove to be a challenge to players themselves. How work-like can play become and still be enjoyable? The following ideal type portrait shows how such strong bonds and commitment to the community combined with a work-like play situation can cause what many players label ‘gamer burnout’.

Rupert is an officer in a raiding guild called “Poxxy”. As part of the guild’s officer team he is an integral part of the day to day running of the guild, often spending 40 or 50 hours online every week. He is respected and is at the core of the social network of his player community. The game has been a central part of his life for several years, but lately something has changed. Some of the other officers note that he is not signing up for as many raids as he used to, and that he doesn’t stay logged on after the raid for the usual post-fight chitchat. Then one day his resignation post is up on the guild forum:

*“Hi all Poxxy-people*

*This has been a long time coming for me, but it’s still sad to write. Anyways, here goes: I am leaving Poxxy and I’m taking a break from the game altogether.*

*Poxxy has been a good home for me the last year—you guys are awesome! Downing Ygg Saron was beyond epic and I will never forget it. Or how Drae kept spamming me PMs during the ENTIRE fight about some dudes he was watching have cyber [sex] at Goldshire Inn. To this day he claims he was only watching, BUT WE DON’T BELIEVE YOU!*

*So it’s been good times, but it’s time for me to do something else. It’s just that logging into the game feels like a chore and killing pixelated monsters just don’t make me as happy as it used to. And if I am not having fun, then it’s not worth it.*

*After the summer I am starting grad school and I need to focus on that. My band “The Jackets” is also rocking hard and we are gearing up for our first concert now.*

*I would like to especially thank Darrow for his help with figuring out my attack rotation, to Sheyna for hours and hours of fun alt-ing and to Mika for gold making tips.*

*Thanks for everything, please stay in touch—here is my MSN: [Rupert@msn.com](mailto:Rupert@msn.com)*

*/salute”*

As he quit, Rupert felt good, now he had time for all those little things he used to do, like walks on Sundays and cooking a fancy meal on a weekday. Things he had cut to make room for gaming. Yet he still missed the people.

*Rupert: “The thing that left the biggest hole in my life when I stopped playing, it was that I couldn’t log into teamspeak [a voice over IP program] and just sit and chit chat with everyone, the rest was ok but I missed teamspeak”*

Quitting the game also meant quitting his friends in the guild, which was the reason he postponed it for as long as he did.

Rupert’s farewell post reads much like a ‘Dear John’ letter where the player ‘breaks up’ with the guild; ‘Thank you for all the great times we had, but things aren’t the same anymore and I need to see other people/games/interests’. As an officer Rupert had in the last year attended officer meetings, interviewed applicants, trained recruits, managed disputes, and lead groups. He was happy to take on these responsibilities as they were both necessary and vital for the guild to play successfully together, and he performed those tasks with pleasure for a long time. However, at some point what used to be pleasurable, joyful, and exiting turned to routine, stress, and chore. Rupert’s portrait illustrates the gamer burnout; when playing is no longer fun and thus play no longer feels like play.

The description of this situation as a ‘burnout’ is quite apt. In psychology a burnout is: “a general wearing out or alienation from the pressures of work” (Tracy 2000: 6). It describes a process of growing stress, dissatisfaction and waning energy. Considering the amount of hours Rupert put into the game, his responsibilities and tasks, the analogy to the burnout we know from work life is strong. The main



difference lies of course in this being leisure time, and that the structure keeping him in place was not bound by contracts or formal responsibilities, but rather friendships.

Just as friendships may keep a guild together through hard times, give increased meaning to and enjoyment to play, friendships might also hold players in the game longer than they actually 'want'. A player without responsibility and friends can quit as soon as the game starts to become tedious, and therefore quitting would not be a big deal. Because of Rupert's central role and the guild's tightly knit social network, leaving "Poxxy" and the game behind was a big decision. In many cases leaving a guild also implies leaving many friends behind, and the formulation of the 'Dear John' letter in itself speaks to leaving as something that needs to be explained. It does not make friendship or work-like activities enemies of play, or something to be avoided. They do however put a strain on the role of friendships, as the friendship may no longer exist for its own sake. Friendships are measured up against the amount of work the player is committing to the game, and Rupert's story is an illustration of many similar examples in our data when that tipping point has been reached and found wanting.

### **Discussion**

Friends are people we choose to have relationships with and friendships have to be maintained and constantly worked on. Our three ideal portraits constructed from analysing and syndissertationing our interview data (n=52) highlight several aspects of conflict and friendship management in MMO-gaming. We have seen that there are conflicts between friendships and game goals in a game that promotes winning, rather than grouping. How constraints in everyday-life affect which social groups are sought out and which friends made. Furthermore, that friends can be a reason to continue playing, even after the game has ceased being rewarding and 'fun'.

A "foci of activity" (Feld 1981) allows social interaction and relationships to have something to organize around. It is clear from this study that online gaming indeed can be such an activity. The game becomes an underlying structure creating a platform for relationships. Around and in gaming, works of friendship can be performed. Relationships are maintained both while gaming together and while

engaging in sociability, talking and enjoying each other's company. As Stenberg et al. (2011) has argued the sociable aspect of online gaming should not be underestimated. Yet, for many relationships created in WoW the game is the only foci and without the game the player risk losing the relationships built around it. Gaming friendships are difficult to keep up unless another foci for the relationship is found, e.g. engaging in a new game. As the shared base is lost the 'natural' ground for friend work is lost, and this weakness in player relationships is something players are acutely aware of. As the third portrait illustrates, the will to maintain relationships can make gamers play longer than they might have done otherwise and can be the cause of a gamer 'burn out'.

The tension that arises between the desire for challenging leisure time and meaningful friendships is not unique for games. However, the very nature of games puts the possible conflict between optimized results and sociable relationships on the agenda. As Grimes and Feenberg (2009) argue, games are rational structures through increasingly featuring rules determined at the technical and institutional level as well as the measurement and optimization of game play, these are processes through which games are/become rational structures (ibid.: 112). It is therefore in the nature of MMOs as structures—that might be rational in their very form—to reward successful groups, rather than social groups per se. Rationality becomes the antidissertation of sociable- or free form-play as play for its own sake. Corliss (2011) argues that when engaging in a digital game we are embedded in a 'virtual play scape' which disciplines us into certain ways of acting; we become part of the game. A gamer has to act within a designed architecture that structures the experiences in that space. In other words, games allow only for certain behaviours and the ways that the game user can act are largely implied in the design (Aarseth, 2007). This, we argue, leads to a situation where the social possibilities of games are inherent in the designed structure and different games allow for different social behaviour. To do 'friend work' gamers not only need to communicate and be social with each other, but also to engage in game challenges together. When these game challenges reward rational and goal driven actions they promote a streamlined socialisation at one's own proficiency level to maximise the outcome of gaming. On one hand the rational structure of the game

encourages players to engage the game with rational logic instead of encouraging sociability. At the same time the same structures can highlight previously hidden differences between friends as their friendship is tuned towards in-game performance rather than relational persistence. Chen (2012) points to the introduction of user made software (add-ons) like 'threatmeter' that for the first time visualized each players input into a fight. Such changes to the design guide play towards instrumentality, surveillance, and competition (Taylor 2009). This creates a space for competition between players, in addition to the competition between the player-group and the in-game challenges. The software modifications thus further emphasise and visualize how the goal oriented nature of gaming rewards performance not experience.

The game becomes a platform for the process of doing friendships, yet it is also persistently situated in everyday-life. The second portrait illustrates how gamers start playing young then grow up, go to university and on to jobs. As gamer's everyday-life changes their gaming changes as well. It is clear how limitations and possibilities in everyday-life affect gamer's engagement in the game. Montola (2012) argues that games are often treated as systems and as such interpreted as isolated from ordinary life; as the system we explain the game with cannot explain the outside reality. In other words, games are often portrayed as isolated complete systems, with no effect on 'real life', and are seen, therefore, as being outside everyday-life. This study shows on one hand how players make room for gaming by reorganising everyday-life activities, and at the same time that everyday-life clearly influence how we can game, our play-style and what friends and groups we seek out in the game. For gamers, play is situated inside the social context of everyday-life and the social relations one upholds there can sometimes (and sometimes not) extend to the game and have a clear impact on how gaming is experienced. How we can and also how we want to game can only make sense if we see gaming as situated within everyday-life. What we enjoy in games is thus dependent on more things than personality or game-style preferences, something often forgotten in studies on game-play behaviour.

Malaby (2007) has argued that the idea of games as safe, fun and separate from everyday- life does not hold as an intrinsic and universal feature of games when they

are studied empirically. While engaging in games is seen as something we do in our ‘free time’, a part of life that—contrary to production—is voluntary and liberated from all but the game’s own rules; this is far from the truth. Our portraits point to how rationales from everyday life, sociability, and games both overlap and conflict as players uphold or make friendships online. Using the term ‘friend work’ thus points to how the relationships that are forged around and through play are neither incidental nor effortless.

The three portraits tells of players who have foregone play as a form of challenging leisure in order to maintain friendships, who change their play style as job and family situations change, and finally friendship as a ‘glue’ that keep players online long after their desire to play has waned.

### **Conclusions**

This study investigated online gaming as an arena for friendships; specifically we focused on the maintenance of existing relationships but also on the creation of new friendships in MMO-gaming as a strenuous task. We asked: What conflicts may arise in the meeting of play and friendship in an MMO? Our conclusions exemplify several points of conflicts. Firstly, MMO-games can be seen as foci (Feld, 1981) for friendships, a structure around which relationship work can be performed. This implies that once the foci is lost, as a gamer stops playing, the structure supporting the friendship is lost and often the friendship in turn falls apart. MMO friendships are created on the basis of a shared activity and this shared interest and social sphere is what keeps the friendship going. Secondly, friendships today are often defined as voluntary relationships defined by choice and lack of demands. These ideals of friendships conflict with the nature of MMO-games as rational structure that, contrary to first impression, rewards successful gamer groups instead of sociability. When these two ideals meet conflicts arise. Thirdly, real life constrains create boundaries for how gamers can play and who can become friends online. Due to real life constraints gamers create groups with people who are like themselves, can relate to their everyday-lives and the limitations and possibilities therein. Not only what

opportunities someone has for play but also how they want to game depends upon the social context of everyday-life.

It is clear that when looking at points of conflict we gain an increased understanding of the social structure of online gaming. Future research should put more focus on such areas of conflict. While previous research has placed too much focus on showing that online games are social this study rather shows the intricate and sometimes conflicting work gamers put down to support their social gaming life.

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## **Optimising play: The co-production of theorycraft and player practices<sup>22</sup>**

### **Abstract:**

*This paper investigates the use and effect of optimising strategies in the online game World of Warcraft. Specifically, it looks at the phenomenon known as ‘theorycrafting’, wherein dedicated players reverse engineers the game and uses its underlying algorithms to make and share maximized play strategies. Play from a theorycrafting perspective is about the correct input and output of numbers, challenging the narrative of play as something free and frivolous. The paper discusses how theorycrafting’s seemingly abstract, objective and neutral information about the game is also laden with values, ideas and norms. Based on a one-year ethnographic study, the paper uses Jasanoff’s idiom of co-production to discuss how and to what extent such knowledge of optimised play is enacted to guide player practices, and the consequences of this in terms of stabilising particular ways of playing World of Warcraft.*

### **Keywords:**

*Power gaming, online games, co-production, player practices, theorycrafting*

### **Introduction**

How do you know what to do in a game, and what expertise is used to assess and improve game playing? For many *World of Warcraft* (WoW) players, the answers to these questions would include a reference to so-called ‘theorycrafting’ – the science-like way in which dedicated players make sense of the game and share with the community. Theorycrafting is defined as ‘the attempt to mathematically analyse game mechanics in order to gain a better understanding of the inner workings of the game’.<sup>23</sup> It instructs players on how to customize their avatar, what abilities to use and what strategies of play gives the best projected outcomes. The information is presented in comprehensive text posts free of interactive elements and laden with algorithms. In

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<sup>22</sup> In review

<sup>23</sup> ‘Theorycraft’, <http://www.wowwiki.com/Theorycraft>. Retrieved 04.05.2015.



short, theorycrafting represents the antithesis of the notion of play as frivolous, fun and for its own sake. Where we expect play to be relaxing and open-ended, theorycrafting is goal-orientated, calculated and science-like. What is the attraction of such methods of playing, and what is the relationship between theorycrafting and play?

Based on a one-year ethnographic study of player culture in the Massive Multiplayer Online Roleplaying Game *World of Warcraft*, the paper studies the enactment of theorycrafting in order to investigate the relationship between knowing and playing. Because theorycrafting is a player-created expertise that was not foreseen by the game's producers, it may be understood as a transformative force. Consequently, analysis of this phenomenon allows for an investigation of how emergent knowledge about optimal ways of playing may change the way in which a game is played. To discuss this, I draw on Jasanoff's (2004) idiom of co-production to highlight the interrelationship between knowledge and practice in a WoW guild, and how the use of knowledge (in this case theorycrafting) is more than the consumption of information. Knowledge is never neutral or free of values, so a key question in this investigation is what ideals and rationales we can find in theorycrafting and how are they appropriated.

My aim is to show that engagement with theorycrafting is not something external to the game that players appropriate or learn, but rather something that is made intrinsic in player practices and culture. For the players who do the reverse engineering and calculation, 'the theorycrafters', the motivation behind this rather complex enactment – which, in some sense, takes time away from actually playing the game – stems from a general fascination with game mechanics and technology (Karlsen, 2011). The collective effort involved is an important pre-condition, as sharing results with the wider player community is neither paid nor a sure-fire way to earn social recognition. Though competitive aspects should not be underestimated in the provision of theorycrafting knowledge, the joy may lay in opening the black box of the game to see what makes it tick, then adding one's own work to it, similar to what has been observed among hackers (Håpnes, 1996). For the players whom are users of theorycrafted information however, motivations and practices are quite different. To

develop a better understanding of this, one must first consider the concept of instrumental play.

### **Instrumental Play, Power Gaming and the Role of Paratexts**

Players have a long history of optimising their efforts. This optimisation may be referred to as ‘min-maxing’, ‘power gaming’ or ‘hardcore gaming’. A central feature of such optimisation is understanding the game system to such a degree that one is able to take advantage of inherent favourable combinations or configurations, often by specialising in one element to the detriment of character realism and depth and by expending a great deal of time. Taylor (2006) defined this as ‘instrumental play’: a goal-orientated approach to play that values efficiency, expertise and optimising strategies. Crudely put, the point of the game is not just to reach the end, but to find the *best* way of getting there.

Instrumental play has received much attention from scholars, as it challenges romantic notions of play that portray it as frivolous, light and enjoyed for its own sake. This tension has also been noted by players who characterise the dedication of power gamers as ‘over the top’. Power gamers are often accused of having no social life outside the game and even playing incorrectly by taking the game too seriously. However, because of their dedication, power gamers tend to be integral social actors in player communities. Furthermore, power gamers are productive and skilled participants whose expertise is sought after and admired (Taylor, op. cit.). Critical investigations of power gamer culture and practice have shown that enjoyment from games may also come from achieving set goals, finding good strategies and gaining insight into the mechanics of the game (Consalvo et al., 2010). These studies are helpful in contributing to our understanding of how players find enjoyment in engaging with formalist and complicated knowledge such as theorycraft, but they black-box the way in which theorycrafting is understood and made workable. For this we need to examine paratexts and their role in play.

Digital games have always been surrounded by supplemental texts, tools and other artefacts. Consalvo (2007:21) referred to these as ‘paratexts’, which she defined as all ‘elements surrounding a text that help structure it and give it meaning’. Some

paratexts are commercial products that accompany game titles, while others are made by and for users. Digital games has, throughout history, been played in tandem with strategy guides, reviews, ‘mods’ (user-made software), ‘mod-chips’ (user-made hardware), cheat codes, game magazines and instruction books, as well as fan creations such as artwork, costumes, movies, cartoons and so forth. In relation to instrumental play it is worth noting that even in the early days of digital gaming, paratexts produced an image of the ‘ideal’ gamer that fit well with the power gamer approach. The guides ‘frequently reminded [the player] that exploration, persistence and strategizing were essential to succeed in the given game’ (Consalvo, 2007:28). In other words, paratexts has a history of prescribing ideals of instrumental play onto play. Though not technically a part of the game, these tools are brought into play through the engagement and interest of players. The game in question, *World of Warcraft*, is at the centre of a highly productive community with impressive collective paratextual productions, including the world’s second largest Wikipedia page with more than 100,000 articles.<sup>24</sup> In many games, use of external sources (such as guidebooks) is considered cheating. WoW players, however, are encouraged to seek out guides and strategies to play and defeat monsters, and those who do not are considered unsportsmanlike. The use of paratexts in WoW are framed as putting in the ‘proper effort’, while opposing them is understood as leeching off other people’s hard work of learning and understanding both game mechanics and strategies (Paul, 2011).

While paratexts comes in many shapes and forms, they do share a dominant theme: how to better understand and master the game, and how to play it ‘the right way’. In relation to theorycrafting, this inscription happens on the Elitist Jerks (EJ) forums (2005–2011).<sup>25</sup> The forums, which are the hub of all theorycrafting, are run by the Elitist Jerks guild and have 475,000 members and 2.2 million posts.<sup>26</sup> Their prominent position with respect to theorycrafting has made the two interchangeable. The forums hosts the Theorycrafting Think Tank project, which is ‘aimed at

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<sup>24</sup> At the time of writing, 04.06.2014, the WoW Wiki had 100,783 articles:

<http://www.wowwiki.com/Portal:Main>

<sup>25</sup> Elitist Jerks Forum: <http://www.elitistjerks.com/forum>.

<sup>26</sup> User statistics from <http://elitistjerks.com/>. Retrieved 21.01.2013.

condensing the large amount of information available on these [EJ's] forums into an easy-to-reference, organized repository for the *World of Warcraft* raiding community' (Boethius, 2008, in Paul, 2011). In other words, the forum hosts discussions on theorycrafting related topics which are then condensed into written guides made to communicate their findings. Though the guides represent summarised versions of ongoing discussions, they are usually quite comprehensive documents. One example is the 'Resto PvE compendium and discussion',<sup>27</sup> which was listed as a 'brief introduction' to 'widely accepted knowledge about the druid [a character class in WoW]'. The compendium was approximately 6,800 words long followed by a 17-page discussion on the validity and application of those numbers. These discussions and guides are rather dry reading with a strong reliance on proof through calculations, and the mentioned compendium has no jokes, memes or personal digressions, which is unusual for an online forum discussion. Theorycrafting's science-like format presents itself like neutral information (Wenz, 2012), but this does not mean that 'facts' are the only thing communicated through the theorycrafted guides and other paratexts, nor that the information exist in some abstract space to be tapped into when needed. Guides, even if they are all numbers, communicate ideas about what play is considered right or valuable, and the use of theorycrafting happens in specific contexts with actual people and practices. So let us turn our attention to the use of theorycrafting, and how both play and theorycrafting relate to each other. To understand this dialectic relationship, the paper draws on the idiom of co-production.

### **The Idiom of Co-Production**

Learning is a central part of play and, over the last decade, this seemingly innocuous insight has generated a lot of interest. Research has shown that good games are designed in line with key pedagogical principles, and that by studying games and players researchers might gain new insights into learning itself (Gee, 2007). Furthermore, studies have shown how players develop or enhance new sets of skills through play, from problem solving (Squire, 2005) and scientific habits of mind (Steinkuehler & Duncan, 2008) to digital and information literacy (Martin &

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<sup>27</sup> [http://elitistjerks.com/t73/t88239-resto\\_pve\\_compendium\\_general\\_discussion](http://elitistjerks.com/t73/t88239-resto_pve_compendium_general_discussion). Retrieved 16.08.11.

Steinkuehler, 2010). However, by focusing on the relationship between play and knowledge as either cognitive (what has been learned) or cultural (how culture promotes learning), the work required to create, disseminate and use game-related expertise is rendered invisible. Co-production is a way to showcase how knowing is also work.

With the idiom of ‘co-production’, Jasanoff (2004) provided a framework for understanding the way in which knowledge and society are mutually shaped. Here, the co-production idiom is employed to avoid a priori distinctions between information, values, ideals, matter and practice. Though the knowledge investigated is not scientific, it is science-like. Theorycrafting does after all involve testing hypotheses, gathering in-game data, analysing logs, discussing findings and disseminating new information based on algorithms (‘episteme’); it also refers to obtaining knowledge through practice by reverse-engineering the game design (‘techne’) and communicating this new knowledge through various guides (‘phronesis’) (Wenz, 2012). Jasanoff’s main argument was that ‘we gain explanatory power by thinking of natural and social orders as being produced together’ (Jasanoff, 2004:2). The co-production idiom focuses on meaning, discourse and text in the creation and diffusion of knowledge. Instead of separating the domains of nature, fact, objectivity, reason and policy from the hierarchies and norms in which they work, the co-production approach highlights the messy and untidy process of imbuing values and culture in knowledge. There is no such thing as information without ideology or knowledge without practice. Jasanoff’s co-production approach specifies four so-called ordering devices through which these processes can be investigated: the making of identities, institutions, discourses and representations. These devices represent different aspects of sense-making relating to new knowledge, and outcomes of the making and sharing of knowledge.

The first device, making identities, relates to configuring and ordering the surrounding world. The making of discourses, on the other hand, refers to the construction of an understanding of a particular phenomenon, or a new language in order to facilitate the expression and dispersal of new knowledge. This understanding

or language may be used to persuade and provide assurances as well as to link practice and action to new information. The making of representations focuses on visual and verbal instruments constructed to present observations and results to an outside audience; such constructions may include narratives, descriptions of strategies, graphs and measurement tools. Finally, the making of institutions results in the development of stable repositories of knowledge and power, where knowledge is created as well as validated and accredited. Analysing the enactment of theorycrafting through the lens of co-production is a way to challenge theorycrafting as a seemingly rational and objective knowledge. Above all, theorycrafting promotes certain values and ideals while discouraging others. Analysing knowledge from an enactment perspective means acknowledging the work involved in managing these affordances and inscriptions, going beyond a linear model of knowledge transfer and towards a processual one. Drawing on the co-production idiom and the abovementioned ordering devices the analysis will highlight the work involved in making sense of theorycrafting and rendering it useable, but before that some quick notes on methodology and context.

### **Method: Ethnographic Play**

This paper is based on a one-year ethnographic study of a *World of Warcraft* guild during 2009 (for general accounts on ethnography, see (Wolcott, 2008); virtual ethnography, see (Boellstorff, 2008); game ethnography, see (Nardi, 2010; Taylor, 2006)). The guild, anonymised here as “The Gummy Wolves”, consisted of a friendly group of players with a questionable sense of humour and delusions of grandeur. The guild’s main focus was raiding. Raiding is as a series of highly complex and carefully coordinated battles executed by large player-groups against the most arduous monsters the game has to offer. Its dominant features are collective effort, complexity, persistence and strong organization (Chen, 2012). “The Gummy Wolves” guild promoted a balance between a competitive approach to gaming and a ‘healthy respect for RL [Real Life] commitments’ (from the guild’s internal policy document, ‘The Gummy Wolves Lowdown – Everything you ever needed to know and a whole lotta shit you probably don’t care about’). On our server we were considered a ‘proper’

raiding guild (ranked in the top 6 to 8 per cent worldwide and in the top 20 guilds on our server), and strong personal relationships were formed within the guild that persisted long after the guild disbanded. In addition to four weekly raids, we had many additional guild activities such as ‘drunk weekend raiding’, IRL meets and guild shoot-offs on other servers and in other games. However, like many other WoW players and communities, the guild had frequent disagreements about how to balance friendship with progress (Eklund & Ask, 2013).

During my ethnography, I spent much time on websites dedicated to theorycrafting, such as *Elitist Jerks*, and websites dedicated to advising and instructing play. As part of the research project, 26 players were interviewed about their use of paratexts and their strategies for learning to become more efficient; included six in-depth interviews conducted online with “The Gummy Wolves” members. For 10 of the 12 months I spent in “The Gummy Wolves”, I was one of the guild’s two raid leaders and part of the officer team that organised the guild and its events.<sup>28</sup> This was a highly visible and powerful position in the guild, and, in this position, I influenced the policies and practices of the community. However, as raid leader, I also had access to the inner workings of the guild- and raid operations. This perspective allowed me to see both front stage performances (such as the way in which the guild presented itself to prospective applicants) and off stage reality (more exceptions than rules).

Like other game ethnographers, I found my roles as player and researcher difficult to separate. I had started playing WoW 4 years prior to this study and my own gamer identity had been well established before the project. On one hand, this gave me access to and credibility within the community; on the other hand, it forced me to prioritise depth over analytical distance to my research subject (McKee & Porter, 2009). Blurring and hiding roles might be grounds for ethical challenges (see (Sveningsson, 2003), for discussion); I therefore chose to disclose my intentions as a researcher when applying for the guild, and asked explicitly for consent during

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<sup>28</sup> As the raid leader, I was in charge of the organizational aspects of raiding, such as sending out invitations to raids and deciding which players should join the raid, which monsters we would go after and which strategies to use. During raids, I was in charge of leading the event, explaining what to do, delegating tasks and deciding on new strategies.

interviews and logged play sessions. I often discussed my ongoing research with the guild, and my fellow players showed interest and excitement regarding the project. The only negative feedback I ever received was from a guild member who was disappointed that I did not use any quotes from *his* interview in a conference presentation. The names of both guild members and interviewees are anonymised here.

My analysis took a bottom-up approach, wherein the life world of informants, combined with my own, dictated themes and perspectives. However, for analytical clarity, the presentation and discussion of data is structured by Jasanoff's four ordering devices: making identities, discourses, representations and institutions. Through this backdrop, I try to show how theorycrafting was enacted within "The Gummy Wolves" guild, and how the emergent local practices was necessary for the appropriation of knowledge, tools and practices. The first section deals with the making of identity and how the power gamer approach facilitated performance-orientated gaming. The second section looks at new discourses and how the talk about numbers supported an expert-orientated culture. In the third section, I analyse the representations made in and out of the game to show how theorycrafting was made visible. In the fourth section, I discuss the ways in which the enactment of theorycrafting shaped the organisation of players.

### **Making Identity: Perceived Objectivity and Elitism**

Identities are used to make order out of disarray, and our identities shape how we relate to knowledge. In theorycrafting this had everything to do with the identity of Elitist Jerks (EJ) forums. The EJ forums were well known for their no-nonsense attitude: "The name of these forums [Elitist Jerks] is not intended ironically; we have high standards for the discussion that occurs herein, and we're quite unapologetic about it".<sup>29</sup> On the EJ forums, there was no such thing as taking the game 'too seriously', and any kind of personal conversation was antithetical to the pursuit of better and more accurate information. The elitism observed by "The Gummy Wolves" on EJ was not understood as a wish to be rude to other players, but rather as a signal of dedication. It was explicitly stated that the forums were not there to 'help you out', nor

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<sup>29</sup> "Forum Rules" <http://elitistjerks.com/misc.php?do=cfrules>. Retrieved 09.11.10.



were they a place for ‘friendly chats’; they were places for serious, competitive players to share empirically-based findings. Uninformed or unwanted requests were put on public display in ‘The Dung Heap’ or ‘Banhammer’ section for others to ridicule. The success of EJ could, in part, be attributed to strict moderation, as it *did* keep threads free of the flame wars and anecdotal digressions found on other forums. In this sense EJ configured elitism as a necessary evil of excellence, and bluntness and objectiveness as attributes of skilled players.

“The Gummy Wolves” deliberately formed their identity in opposition to the stereotypical power gamer like those found on EJ. Because we perceived power gamers to have ‘no life’ and to be ‘too focused’, we attempted to balance progress with RL commitments, silliness and friendship – for example by demanding ‘only’ 50 per cent attendance on raids (two out of four nights per week). Our guild was not a think tank and it aimed to be both friendly and silly as well. We found it unthinkable to implement the same kind of moderation and attitude that existed on EJ, since we wanted our conversations to be sporadic, transgressing and humorous. Yet, we also wanted to be successful and found that the bluntness and objectiveness of EJ to be useful. This was particularly visible in the recruitment process.

Like many other raiding guilds, “The Gummy Wolves” required potential recruits to fill out an application detailing their past experience, the state of their avatar and their personal qualifications. Applications were posted in the public section of the forum, and we gave feedback by holding profiles up to theorycrafted standards of excellence. By using theorycrafting to benchmark a standard for new recruits, we signalled to both our own members and to potential applicants that we approached the game with the same ‘objective’ and performance-orientated perspective as did EJ. In this manner, the elitist identity worked as an ordering device to distinguish ‘us’ and ‘them’ in an attempt to weed out the less serious and less skilled players, while at the same time positioning ourselves as experts. This instrumental approach to guild recruitment did not hinge on the use of theorycrafting. However, its use legitimised the feedback to rejected applicants as it was supported by theorycrafted ‘proof’ of their inadequacy. The binary nature of theorycrafting, with clear rights and wrongs,

meant that performance-orientated criticism was not considered elitist; it was stating matters of fact. At least, that was how we understood the situation, we never asked the rejected applicants about it.

Looking at theorycraft and identities showed how knowledge, regardless of its level of abstraction, was connected to specific values and contexts. The identity of “The Gummy Wolves” was shaped in part by theorycrafted knowledge and values, but changed depending on the stage; to outsiders we projected the kind of seriousness found on EJ to attract skilled players, while internally we were more concerned with a person’s ability to dish out politically incorrect jokes as we opposed the power game attitude EJ displayed. More importantly, the analysis of identity indicate that theorycrafting, which describes itself as objective and neutral, is embedded with values of elitism and professionalism, and prescribes an ideal player who takes the game very seriously. This also have consequences for how we talk about play.

### **Making Discourses: Talking Numbers to Prove One’s Skills**

New knowledge may demand new language, and looking at discourses is a way of seeing how knowledge relates to new practices. Analysing discourses is a way to investigate what kind of knowing is enabled and how is it articulated. Theorycrafting introduced several concepts and terminology to understand play, such as ‘soft cap’, ‘diminishing returns’ and ‘exponential scaling’. The production of theorycraft has given new meanings to common mathematical- and game terminology, and familiarity with these are necessary to make sense of theorycrafted like: “Cycle is; keep SnD up, Rupture if it’s down, Evis otherwise”.<sup>30</sup> However, similar to what we saw in the above discussion about identities, the theorycrafting discourse had effects beyond calculating optimized outcomes, it was often used as a way to distinguish between insiders and outsiders, and between skilled and unskilled players. The theorycrafting discourse not only supplied concepts and vernacular, but also shaped the way in which we talked about play more generally.

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<sup>30</sup> “Rogue FAQ” [http://elitistjerks.com/f78/t105659-4\\_0\\_1\\_rogue\\_faq](http://elitistjerks.com/f78/t105659-4_0_1_rogue_faq). Retrieved 09.11.10.

In addition to representing play in terms of numbers, the theorycrafting discourse presented itself in ways that were reminiscent of scientific reporting. Both the guides and the discussions on EJ were flush with theoretical concepts, expert jargon and – perhaps most importantly – a requirement to back up statements with evidence. This meant a side-lining of personal accounts and humorous retelling of the game world as a source of insight. In “The Gummy Wolves”, we never dissuaded jokes or otherwise pointless comments, but we did pick up the evidence-based discourse we had seen on EJ. A statement about this or that being a superior choice was expected to be backed up with something more than ‘because it works for me’. Although the guild was never intended to be a place for ‘serious discussion about the game’, personal experience was subordinate to expert-like explanations of how and why an event happened. Using the terminology of theorycrafting and positioning it as necessary and desirable knowledge in recruitment processes as well as internal debates, “The Gummy Wolves” produced a theorycrafting-like discourse as a voice of authority and validity. However, this does not mean that any members did any actual calculations themselves. All that was required in “The Gummy Wolves” was an understanding of the concepts that were meant to guide game playing, and the ability to find and follow prescribed guides. Instead of providing algorithms or calculations as “proof” to back up our statements, we would link to sites like EJ to give legitimacy to our statements. “The Gummy Wolves” would, in other words, let others do the calculations and focus on how the numbers might be used. Considering theorycrafting’s emphasis on science-like reasoning and evidence, it is ironic that appearing as an insider did not require any actual calculations or algorithms. As Richard pointed out: “I can’t do proper math and scaling of [coefficients; the relation between attributes and outcomes], etc. I just check logs, compare the structure of a spell and link it to the given fight. Some things are obvious.” That we, as a guild, found the rhetoric of theorycraft persuasive and EJs accounts of play trustworthy had little to do with our ability to test theorycrafted statements and a lot with how those statements were made; with numbers.

We tend to perceive numbers as more neutral than language, imbuing them with values of accuracy and truth (Porter, 1995). There is a widespread idea that quantifying and analysing situations through advanced algorithms provides not only new, but better, insight into the state of affairs. Paul (2011) linked the rise of theorycrafting to sports, wherein similar approaches are used. In sports, statistics play an important role – for instance through sabermetrics, the analysis of baseball through ‘objective and empirical means’. Much like theorycrafting, sabermetrics is built on the belief that a subjective and personalised experience of the game prevents the ‘truth’ of play from being ‘revealed’ through statistical analysis. Even if “The Gummy Wolves” did not perform any of these calculations themselves, the discourse of theorycraft is one of accuracy and facts which relies on an understanding that algorithms are a suited way to gain insight into play.

The theorycrafting discourse had its origin in guides and discussions on the EJ forum. However, certain tools and instruments provided by the theorycrafting community were important to the game practice of “The Gummy Wolves”. Similar to the discourse, these remedies highlighted certain aspects of the game, while others were marginalised. What elements of the game world and play did they accentuate, and which were left out of sight?

### **Making Representations: Paratexts for Counting Play**

Representations are used to effectively communicate information and to engage an audience in a given perspective. The investigation of representations may provide insight into the politics of knowledge, since representations are not neutral stand-in’s for the world, but rather framing and sense-making devices that tells part of a story. Broadly speaking, theorycrafting paratexts fell into three categories: (1) guides, (2) simulators and (3) measuring tools. In the following, I show how these representations helped to both spread and stabilise theorycrafted expertise, and how this co-produced a more performance oriented play style.

In WoW, the most basic representations of theorycrafting were the reverse-engineered algorithms, but engaging directly with them required advanced mathematical knowledge. In order to make information accessible to the general

community, as well as to better utilise the knowledge, paratexts were produced to translate the principles of theorycrafting into more practical and accessible instructions and tools. A wide variety of strategy and customisation guides were available on EJ, and these guides provided detailed information on which gear and abilities should be used for optimised performance. The guides were not only public repositories of knowledge that allowed for players from a wide range of communities to access expertise knowledge; their written format also helped to stabilise and standardise this knowledge as it made the same information accessible to a wide range of players. Peer-to-peer learning and informal apprenticeships were still a primary source of game literacy, but theorycrafted guides played an increasingly important role in defining expertise in the game setting. They also co-produced a need for experts and stabilised the hierarchy in which expert statements were superior to personal experience. I return to the way in which this was institutionalised in the next section.

Simulators were either spreadsheets or stand-alone software (such as Rawr) that would let users know the correlation between equipment and output on an item-to-item basis, allowing them a virtual space to test the outcomes of gear and optimisation choices. The most theorycraft-orientated players in “The Gummy Wolves” puzzled around with these from time to time and mentioned these trials in passing during conversations about gear or specialisations, but they had little collective impact. Measurement tools, on the other hand, were a stable feature of our organisation, and the numbers they produced were a hot topic of debate. A recurring question for “The Gummy Wolves” players was if they should trust them. Measurement tools, unlike simulators, recorded, rather than projected, play. Without such tools, the basic game design offered little information on what happened during combat, outside of obvious success (when a monster died) or failure (when all of the avatars died). Through measurement, it was possible to get second by second accounts of the status of all members, including individual breakdowns of each fight, nicely presented as bar or pie charts. Add-ons such as Recount and Damage Meters gave ‘live’ versions of current information and events, and logs from play sessions could be uploaded to websites like

World of Logs and World Wide Stats for more detailed accounts.<sup>31</sup> In addition, these log sites would keep records online over a period of time, and would also host logs from other guilds, allowing for performance comparisons across guilds. The logs could be used to optimise the group's strategies or for individual players to make calculations. However, in "The Gummy Wolves", the primary role of measurement tools was to evaluate performance.

The top players in "The Gummy Wolves" often competed to top meters, bragging when they reached new scores and giving sour comments in back channels about those who fell behind. Yet, at the same time players competed to top meters, they were also critical about the implications of such competition. This was exemplified in an internal guild discussion about how to improve raid performance. In an attempt to encourage the high achieving players in the guild, I suggested on the guild forum that we could set up a 'Hall of Fame' for those who repeatedly performed well on these meters. My suggestion was quickly dismissed as unfair, because (1) it would further encourage a selfish play style (by pitting players against players) and (2) the meters were not to be trusted. Several players were already worried that some people were more concerned with looking good at the meters than supporting the group, while others outright refused meters as proof of quality. As Doug commented: "It may be an interesting idea, but you can't just look at Recount [an in-game measuring tool] and know who performed the best." In the comments following my suggestion, guild members highlighted how there would always be modifying circumstances such as certain fights favouring certain classes, or some players having additional tasks that prevented them from doing damage.

While measurement tools remained one of the primary strategies for evaluating players and were often used as 'proof' when attempting to demote or remove players from the guild, there was also a set of practices intended to limit the skewed picture measurement tools provided. For example, we would compare results from different sources to get a more accurate picture, or over a period of time to make sure poor

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<sup>31</sup> Found at <http://www.worldoflogs.com/>.

performance was not a ‘one time thing’. Furthermore, while the numbers produced by these tools were sometimes used as evidence of a player’s success or failure, this proof would usually go through an internal vetting process amongst the officers, wherein the other qualities of the player would be added. Skills such as awareness, mobility, responsiveness, ability to follow instructions and adherence to social norms were all considered necessary for holding a position in a successful raiding guild, and we were well aware that they did not appear on the measurement tools.

In summary, the representations of theorycrafting were enacted by users as tools for evaluation (rather than analysis) and as flawed but useful representations of play. The objectivist and distanced perspective of play conveyed through theorycrafting was reinforced and stabilised by the operationalisation of theorycrafted knowledge into material representations. These representations made the information easily accessible for players like those in “The Gummy Wolves”, who did not have the necessary skills to access calculations. Stabilisation was also achieved because material qualities were considered less flexible than human practice and values (Latour, 1992). At the same time we see the representations being opposed through local practices where the accuracy of depicting play as numbers is questioned. These tools were central to the institutional aspects of raiding. In particular, evaluation was institutionalised. Measurement tools were not just used to assess and brag about performance; they were also used to organise and train players. In the following, I analyse how ongoing processes of evaluation were co-produced with institutional practices.

### **Making Institutions**

The prominent position of theorycrafting in the WoW culture at the time of my study depended on several institutions. For most players involved in raiding – including myself – the guild was the primary institution through which we defined ourselves and organised play sessions. The guild was also where paratextual practices were formalised and stabilised. In “The Gummy Wolves” this was formalized through several processes starting with the application for membership, which required new players to produce logs from previous play as proof of their skills. We had policy documents that required players to read up on strategies before attending raids, to look

through logs to assess their own performance and to make sure their customisation accorded to theorycrafting standards. Because of “The Gummy Wolves”’ explicit positive stance towards and reliance on theorycrafted expertise, the guild became a nexus for assembling and contextualising paratexts and the knowledge they contained. Perhaps more importantly, the guild and other supporting institutions helped translate and operationalise the complex information found on the EJ forums.

Peer-to-peer learning is central in MMORPG culture, and the use of theorycrafted paratexts was essential for both identifying players who needed additional instruction and for providing suggestions about how they could perform better. As Isak (guild master) stated: “We’re not here to be [the servers’] next “raider prep school”, but if you see someone struggling to keep up, talk to them. Have a look at the WWS’s [measuring tool] to see what they’re doing [wrong] and suggest what they could do different.” The quote indicate how we included representations when dealing with a players who fell short of our set standards, and this was further institutionalized with our strategy to assign an officer as a semi-formal tutor for a period. I tutored some people myself, and the tutelage was largely about teaching the player to conform to theorycrafting ideals. The first step in the process was identifying possible problems in avatar customisation and performance-based issues that were detectable in logs. The second step was talking to the player and referring her to the appropriate EJ guide, with personal tips and encouragement as to exactly what and where focused effort was needed. Necessary skills such as situational awareness, which the officer group agreed was important in discussing member performance, were largely tacitly implied and did not enter much into these discussions. However, this might have been due to the tacit nature of skills like situational awareness, and the readily available externalized information theorycrafting provided, rather than a conscious choice to exclude it.

Another set of institutions that were important for translation and actualisation of theorycrafted information was high-profile guilds. Here, I use the label ‘high-profile guilds’ to designate guilds who were competing with the best in the world while also dedicating themselves to providing guides and information to other raiders. Examples



of such guilds were Ensidia, Tankspot and Vision. These guilds provided a more personal touch to the sometimes fractured and complicated discussion on EJ. Instead of “wasting time” in the many threads and controversies on the EJ forums, “The Gummy Wolves”-member Aaron preferred to use a guide created by a well-known player from the high-profile guild Ensidia:

*Well the problem with EJ is that the amount of information is massive, and there is a lot of people arguing ‘no, this is the best way’, so sometimes I have noticed that finding the proper information from there can be a pain in the ass [...]. With Ensidia’s guides, the good thing is that they are rather short, but still tell you all that you need to know.*

The guide Aaron referred to provided a summary with information likely to have originated from EJ, but Ensidia’s version was coloured with personal arguments and a more practical application of this knowledge. The high-profile guilds’ and players’ versions of the knowledge derived from EJ had a twofold effect: (1) it translated complex analysis into tangible guides and (2) it legitimised theorycrafted knowledge by having the world’s best players use it. The role of institutions was thus threefold; first as organizations that could translate theorycrafting into workable knowledge, secondly as keepers of knowledge and thirdly as standardizers of knowledge.

In the final section of this paper, I return to my original question of the relationship between what we know and how we play.

### **Optimal Play as Co-Production**

My initial fascination with theorycrafting was how it appeared to be at odds with any common understanding of play. Instead of approaching the game world as a place for exploration and fun, engaging with narratives of dragons, heroes or epic treasures, another type of engagement emerged that sees the game as a place of numbers and optimization. Theorycrafting and its enactments doubtlessly represent a hyper-rational approach to play, emphasising numbers and quantification. However, my investigation into the co-production of play and the enactment of theorycrafting demonstrates that this rationality is tempered with concerns for other players and a

sceptical approach to the very numbers that are produced. As the saying goes, ‘In theory, there is no difference between theory and practice. In practice, there is.’<sup>32</sup>

Theorycrafting has had several effects on play, some more obvious than others. First, we saw a standardisation of play along theorycrafting ideals. Through mathematical calculations the many viable options of play styles and preferences were reduced into a ready-made subset of choices, making customization of avatars more about keeping in line with standards, and less about personal expression and preference (Paul, 2011). Secondly, numbers became ‘centralised’. This was due to the way play was made measurable, quantifiable and representable through graphs, simulators or spreadsheets. What may have been less obvious were the many actors (human and non-human) and day-to-day activities that were required for the enactment of theorycrafting where an abstract and theoretical discourse was made workable. Blended by the complexity of calculations, and the surprise of finding them in a player community, it is easy to overlook the efforts that are involved in making algorithms usable. Thus, a recurring theme in my analysis was the work needed to achieve the co-production of knowledge and practice related to game playing. Because theorycrafting is understood as cold, rational and objective, it is easy to forget that even the clearest and most elegant of algorithms is performed and enacted in socio-material contexts rife with values, contradictions and complexities. Above all, numbers were made useable through people, organisations, ideas and artefacts.

The making of identity in “The Gummy Wolves” involved boundary work (Gieryn, 1983) on two fronts: towards non-ambitious as well as hyper-ambitious players. The guild wanted to attract skilled and dedicated players so it projected itself in line with EJ ideals to outsiders, while at the same time opposing and ridiculing ‘no lifers’ for their overstated dedication on the inside. Gatekeeping was also seen to be central in the making of discourse. Only a handful of my fellow guildmates ever made calculations of their own, but the discourse of theorycrafting impacted us none the less and we talked about the game in externalised, non-subjective terms. Thus, the

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<sup>32</sup> Although widely seen and used, a primary source for this saying is unknown. It has frequently been attributed to both Jan L.A van de Snepscheut, a computer scientist, and the baseball player Yogi Berra. [http://todayinsci.com/S/Snepscheut\\_Jan/SnepscheutJan-Quotations.htm](http://todayinsci.com/S/Snepscheut_Jan/SnepscheutJan-Quotations.htm).

enactment of theorycrafting produced a discourse in the guild wherein personal accounts and experiences with play were considered second rate to the testimony of numbers and considered experts. In such we contributed to the demand for player experts and factually-based information about the game, supporting the growing blogosphere and gaming websites with guides, tools and strategies for optimised play.

My guild relied heavily on these expert representations in order to enact theorycrafted knowledge, and representations were key translators of abstract knowledge to useable know-how. “The Gummy Wolves” tracked every play session using evaluation tools and gave much credit to players who continually ‘topped the meters’. In line with the discourse, representations reinforced the orientation towards numbers through material features and helped to spread and stabilise numbers as a measure of quality of play. A link to a guide or an add-on was easy to share, while use of these tools kept theorycrafting stable and central. Still, it was openly acknowledged that numbers were reductionist representations of play, which meant that the use of evaluation tools remained central because their use was institutionalised, but in a moderated fashion. The two major institutions in my data were the EJ forums/community and “The Gummy Wolves”. In the analysis, they were compared through a distinction between the producers (EJ) and the enactors (“The Gummy Wolves”) of theorycrafted knowledge. Of course, a co-production perspective challenges a priori distinctions between producers and users. While there is no doubt that EJ has generated a substantial amount of information about WoW, this knowledge would be largely irrelevant had it not been institutionalised through guilds such as my own. Within guilds like “The Gummy Wolves”, new raiders are instructed on where to find game-related information, how to read it and why appropriating at least some theorycrafting knowledge is important. Institutions are both repositories and stabilisers of knowledge. Theorycrafting was one many knowledges my guild appropriated and kept active, and in the final instance, theorycrafting was as much produced through our enactment as by those making the calculations.

As a whole, theorycrafting is a process of both deconstruction and reconstruction. Where some players uncover the game’s building blocks and subject

them to analysis, other players are enacting them and changing what it means to play in the process. In this paper, I have analysed how the enactment of theorycrafting is interwoven with the making of identities, discourses, representations and institutions of *World of Warcraft*. As we have seen, application of Jasanoff's co-production idiom has shown how the enactment of theorycrafting is largely stabilized through these ordering devices. However, there are two reservations that allow for controversy. First, the making of identity is somewhat ambiguous between being elitist and allowing for a normal life outside the game. Second, the numeric representations can be challenged by more qualitative and broader evaluation criteria. In the long run, this may cause destabilization.

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## **Representations of play: What paratexts can teach us about learning and literacy**

### **Abstract**

*This paper addresses the use of paratexts (surrounding and supplementing texts) by players in World of Warcraft (WoW). Based on a yearlong ethnographic study of an end game/raid community in WoW, I discuss the role of materiality in knowledge production, storing and sharing. The materialization of knowledge has several effects, primarily stabilizing and defining what is “worth knowing” as a WoW player, and consequently what forms of play are considered valuable. Drawing upon Science and Technology Studies, the paper argues that to understand the role of materiality and paratexts it is paramount for a theoretical shift towards knowing as enactment to incorporate the role and effects of non-human actors. The paper concludes that further investigation into the role of paratexts is necessary in order to understand how successful learning happens in and around games.*

### **Keywords**

*Online games, paratexts, enactment, learning, materiality*

### **Introduction**

The rise and interest in Digital Game Based Learning (DGBL) has become an important critique of current educational paradigms, and an inspiration for future ones. Gee’s seminal book *What video games can teach us about learning and literacy* (2007) invites us to think of games as spaces for learning, but more crucially, about play as a source of insight into learning itself. Contributing to studies on “naturally occurring play” to understand processes of learning, I investigate what paratexts in *World of Warcraft* (WoW) might teach us about learning and literacy. Based on a yearlong ethnographic study in the MMORPG (Massive Multiplayer Online Role-playing Game) *World of Warcraft* (Blizzard 2004), this paper discusses the role of materiality in game based learning by giving attention to user-produced content outside the game, also known as paratexts.

Paratexts are described as surrounding and supplementing texts and tools (Gray 2010), and have accompanied digital games since their inception in the form of guides,



reviews, walkthroughs and add-ons. They are frequently used, not only to instruct play, but also to shape what kind of play is considered valuable (Consalvo 2007). Game paratexts can be anything from game reviews to hand-drawn dungeon maps or fully-fledged sub-games. Previous studies on paratexts show how they encourage collaborative problem solving (Squire & Steinkuehler, 2005b), develop scientific habits of mind (Steinkuehler & Duncan, 2008), and increase information literacy (Martin & Steinkuehler, 2010). Players create their own stories and enrich their collective game experience through texts that ‘bolster support and demoralize opponents’ (Carter, 2014). These studies show that games are not solitary artefacts, but rather, networked technologies where the game is not the only material actor to direct and shape what is known about play or how it is known. Game expertise is not only performed by players, but also through paratexts. Thus, in order to understand how players are learning we need to understand what kind of agency and expertise is wielded by artefacts. To do so, we need a theory that includes non-human actors and how their material agency is shaping, and being shaped by, processes of knowing and learning. I propose a theoretical shift towards *knowing as enactment* is needed to account for the material affordances and limitations that shape both what can be known and how it can be known (Law 2000).

In WoW, the prevalence of paratexts and the knowledge intensive collaboration that they facilitate are particularly extensive. The WoW Wiki and WoWpedias boast 102,000 and 124,000 articles respectively, making them among the largest single topic wikis in the world.<sup>33</sup> WoW players have also taken a particularly active role in the co-creation of content, by making software modifications known as ‘add-ons’ (Prax 2012) or by using the game technology to make their own stories through film, known as ‘machinima’ (Lowood 2007). The productivity of these players invites questions about what play is actually about. After all, isn’t play supposed to be “just for fun”?

The engagement and dedication of WoW players contrasts starkly with the idea of play as inherently frivolous or for its own sake (Malaby 2007). Studies of

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<sup>33</sup> From list of Largest Media Wikis [http://wikistats.wmflabs.org/largest\\_html.php?th=0&lines=200](http://wikistats.wmflabs.org/largest_html.php?th=0&lines=200) retrieved 11.12.2014

instrumental play (also known as power gaming or hardcore gaming) have demonstrated that play may include activities we would consider anything but fun, such as crunching spreadsheets or parsing logs, and that these might be highly enjoyable when performed in the context of play (Consalvo et al. 2010; Taylor 2006). Raiding and raid culture, which is the context for this paper, is a type of end game play<sup>34</sup> that is related instrumental play. Raiding is focused on teamwork, camaraderie and challenges. Raiding refers to an activity where large player groups (set to a maximum of 25 players at the time of data gathering) band together to defeat the most challenging monsters the game has to offer in a series of highly complex and co-ordinated battles. Studies of both paratexts, instrumental play and hardcore gamers reminds us that we can neither take “play” or “games” as a priory entities, they are rather the result of certain processes, actors and relationships. However, too often studies of DGBL have framed the instructional relationship between games and players as unilinear, reducing playful learning to merely occur in the interaction between two sole actors: the player and the game. Such an approach ignores the multitude of technologies that becomes embedded through play, and their role in producing, storing and sharing knowledge. The question then becomes how paratexts play into this, and more specifically, how paratexts shape what players know and how they know it. To answer this requires a theoretical approach that includes the material in knowing.

### **Learning in-game: Paratexts and affinity spaces**

Theoretically speaking, DGBL draws heavily on Lave and Wenger’s (1991) Community of Practice (CoP) approach. CoP defines learning as a primarily social activity that happens through membership in communities with shared goals and/or interests. Members of a CoP develop their skills by sharing experience and information with each other, emphasising the importance of peer-to-peer learning and informal learning situations without defined curriculum or instructors. However, CoP emphasises face-to-face interaction and embodied experience as crucial in the learning

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<sup>34</sup> A type of play that is only accessible at “the end” of the game, i.e. when the avatar has reached maximum level.

processes, which is usually not the case in game situations as interactions are virtual and mediated through avatars. Players learn in relationships forged in fluid networks that are geographically distributed and technologically mediated, thus challenging core CoP concepts such as community and membership because they are not based on physical proximity. As an alternative, the concept of “affinity spaces” has been proposed (Gee 2005, Gee & Hayes 2012).

Affinity spaces are places where common endeavours (rather than individual ambitions) are the primary goal, where masters and novices share the same location, and where there are several routes to membership and status. We frequently find examples of affinity spaces in the communities surrounding games, television shows and other pop-culture artefacts. The most striking feature of these spaces, which are often dismissed as frivolous and infantile, is their appreciation and reverence of knowledge and expertise (Gee & Hayes 2012). In MMORPGs, we see that conversations between players are coupled with informal apprenticeships to teach new players the necessary skills and information required to be successful in the game (Steinkuehler 2004). The recurring theme is not only how play and learning is interwoven, but also the ways in which player socialization and learning are intractably linked. Knowledge of game mechanics alone is not enough to access expert player communities. In online games, expertise never exists separately of a player’s social and cultural capital in the game, and one needs to accrue both in order to succeed (Chen 2012). However, in addition to learning from each other, players are also learning from non-human actors in the game world.

A key element of affinity spaces is how portals, or online inroads to paratexts, are encouraging and enabling the sharing of knowledge. Portals may be understood as a way of distributing knowledge (the aggregate of all knowledge possessed by participants) as well as facilitating players’ articulation of tacit knowledge. In affinity spaces, information is linked, distributed and continually rearticulated as players respond to forum questions on how to complete a quest, or reference a strategy site during an afternoon chat, dispersing knowledge across people and localities (Gee &

Hayes 2012). But how should we account for such portals and their material affordances?

### **The inclusion of non-human actors: from scaffolding to enactment of learning**

The material has always played a large part in learning: heavy textbooks dragged to and from school, iconic blackboards or Bunsen burners are common examples of technologies we take for granted in education. There has never been any doubt that these artefacts affect how and what can be learned, and a common way of conceptualizing tools for learning is through “scaffolding”. Scaffolding is a concept in which learning is more effective when it is supported by a set of tools and techniques that help the learner to focus and to model an appropriate behaviour. While originally applied to one-to-one interaction between expert and novice (usually a child), it has recently been used to describe features and functions of technological artefacts (Sherin, Reiser & Edelson 2004). Should paratexts be understood as scaffolding, or are there alternatives to thinking about learning and materiality?

I propose a perspective on learning in games based on *knowing as enactment*. Coming from Science and Technology Studies, knowledge is described as producing both something known (an object) and something or someone that knows (a subject) (Law 2000). In this sense, learning is not primarily a cognitive or social effort, but rather, a reconfiguring of what is known and who knows it. Knowledge is never abstract, but something that takes place in particular locations through specific bodies and artefacts (cf. situated knowledges in Haraway 1991). In these situations, it is neither the players nor the paratexts that in and of themselves define what can be known or how. Instead, they are defined by the enactment that puts a set of actors into play. It is in the moment they are enacted that actors are configured in relation to each other, and it is through these specific enactments that effects are produced (like learning). Admittedly, knowing as enactment is far from as intuitive as scaffolding, making it somewhat unpractical in its application. However, I propose it is more accurate. What is it that this shift might bring about in the study of DGBL, or technologies for learning more broadly? The answer is attention to representations.

Representations are knowledge objects that are created to explain, share and depict an idea or understanding. They are naturally biased since depicting the world in any form requires translation, simplification and explication of knowledge. Representations are in turn used to create new knowledge, new practices and new representations, making it a process of co-production (Jasanoff 2004). Players engage with a range of representations during play, primarily focusing on paratexts. In what ways do paratexts shape not only what players learn, but what can be known? And what may the enactment perspective offer as insights into how players learn? I will return to these questions in the analysis, but first a discussion on methodology and context.

### **Methodology: Playing and researching World of Warcraft**

The paper is based on a yearlong ethnographic study of play and player communities in WoW in 2009 (see Corneliussen and Rettberg 2008; Nardi 2010 for detailed accounts about the game and its culture). In addition to the 20 to 50 hours per week I spent playing in the guild “The Gummy Wolves” over a year, my data also consists of qualitative interviews conducted online and offline with 19 players at varying degrees of progression in the game from 2008 to 2010. This included 6 interviews with players from “The Gummy Wolves”, the rest was with players from both competitive and social guilds. I also spent 2 to 5 hours weekly during 2009 investigating and engaging in the game’s paratexts by participating in the WoW blogosphere, reading and discussing on different forums, testing and talking about add-ons, watching machinima, and reading comics. In other words, I engaged with WoW as a player would, albeit with an approach that was more structured, and utilised more resources given that my primary directive was to study the game (Wolcott 2008).

Doing virtual ethnography has raised some ethical challenges regarding informed consent and positioning/visibility of the researcher (see e.g. Sveningsson 2003). During my fieldwork, I participated in a moderately successful raiding guild (in the top 6-7% of the world’s raiding guilds) taking on multiple roles as a player, an officer and raid leader. This meant that I was a member of the guild’s organizational team and the chief coordinator of raids. Upon joining the guild, I openly stated my

intentions as a researcher as part of my application, and information about my project was available on the guild forum. To maintain privacy, the guild (“The Gummy Wolves”) and its members (mentioned here are “Tim”, “Liam”, “Morgan”, and “Zoran”) have been given pseudonyms for this paper.

The analysis takes a bottom-up approach (cf. grounded theory in Clarke 2005) with the aim of ‘following the actors’ (Latour 2005) through their messy and shifting networks. It is thus heavily directed by my own experience and understandings as an expert player, illustrated here by excerpts from my retelling of a raid night. Like other game study ethnographers, I have emphasised the “participant” side of the participatory-observation methodology (see eg. Chen 2012, Nardi 2010, Taylor 2006). This is not only because of my personal interest in gaming, but also because it is a fruitful way of exploring the multi-technological and multi-sited experience of play. Additionally, my experience and understanding of these raid sessions are shaped by my perspective as one of the leaders of the raid group. However, as I will later demonstrate, it is in the organizational aspects of these events that many of the paratextual elements are made visible and explicit. What technologies are in play, and what kind of knowledge processes are they part of?

### **Representations that shapes play and knowing: What the enactment of paratexts might teach us about learning and literacy**

In order to produce and circulate the needed information for a successful raid, we were highly dependent on a network of paratexts to help us understand, plan and execute our play sessions. Contrary to other game cultures, the uses of external guides or strategies were *not* considered cheating in WoW. In the following section, I will look further into the different types of paratexts that I have identified as 5 forms of representations of play: strategic, factual, evaluational, organizational and motivational. In each of the representations I will display a short excerpt from reworked field notes where I wrote a detailed account of a raid night where we were fighting a monster known as Kologarn, which has been the basis for analysis.

*Strategic representations* can range from guides on how to customize characters and short write-ups of play sessions, to machinima documenting raids with narrating

voice and visual overlays to demonstrate the monsters attack and how players should position themselves. Although the strategic representations were sometimes opposed and criticized, they were in line with the prevalent power gamer ideal where guides and are considered efficient tools that help players achieve their goals quicker.

*The preparation for the raid started a week earlier when I posted two possible strategies for the Kologarn fight on the guild forum. I based my post on videos and strategies I looked up on sites like bosskillers.com, wowwiki.com, and tankspot.com that all hosted strategy guides written by top guilds and players. After posting my suggestions, I was quickly told by Morgan, a player known for his attention to details of game mechanics, that strategy 2 was completely unviable. I was not immediately convinced by this argument and quoted some information from Strat Fu (a WoW strategy site run by the elite guild Fusion). The deciding moment came when Tim explained that they had used strategy 1 in the 10 player version (the instance has both a 10 and 25 player version, and that it worked fine. Apparently all we needed was a bit of focus and practice, and with that we had decided to go with strategy 1. In the evaluation of strategies that were all but theoretical to us, the personal experience that Tim brought to the table was given high value.*

The integral role of strategic representation is exemplified through the “The Gummy Wolves” guild rules, which required all players to read up on strategies before raids. When devising our own strategy for combat they were largely bastards of other write-ups or videos made by other (and more successful) players. The strategic representations gave us access to expert practices that would otherwise be hidden to us, as play tends to be both subjective and tacit. The choice of strategy was not always a given, and in many cases the challenge was to produce a strategy that suited our own playing styles and strengths. In evaluating the trustworthiness of expertise, we drew upon a range of sources to verify expert opinions. As a guild, we had experience with poorly written or misinformed guides, causing us hours of failure (known as “wiping”) and frustration. Because of this, personal experience was allocated high value. If a player stated that a strategy had worked from them during at another point, it was usually adhered to, even if everyone in “The Gummy Wolves” was less experienced and skilled in comparison to authors of those guides.

Whereas all paratexts speak to ideas of “good” and “bad” games or styles of play, strategic representations do so explicitly by giving direct instructions on play. Research into the production and use of these guides indicate that they are normalizing an instrumental approach to play (Karlsen 2013, Paul 2011). At the same time, we see that strategies were flexible, and needed negotiation and local adaptation. Strategic representations then often included personal experiences or validations. This is not the case with factual representations.

*Factual representations* keep track of items, places, quests, game lore and other information about the game world. They are identifiable by their indexical design, but also through how they are made. Popular factual representations include wowwiki.com and wowhead.com, which are created through a combination of datamining (reading the actual game code), game information accessed through add-ons (and later uploaded by players) and expert commentary (provided by players).

*When discussing what strategy to use, we were also trying to figure out how Kologarns “Grip” spell worked. Liam posted a link to WoW head where Kologarns grip spell was listed and copy-pasted the description of the spell: ‘<http://www.wowhead.com/?spell=64702>’ is the spell Kologarn uses to instakill people who are too long in the grip. It’s triggered by a 10 second countdown that starts when Stone Grip is used.’*

Factual representations helped us translate the chaotic mess of information about the game world into neat searchable entries that we could both browse and link. This feature enabled us to discuss and explore minute details the upcoming fights, without having to be actually there ourselves or engaging in the time-consuming effort of testing the game mechanics through trial-and-error. Reorganizing the presentation of the game world’s objects allowed us to plan, assess and explore play in new ways, because we no longer needed the game world as a reference point. Another consequence of the use of factual representations was how the task of remembering details about the game was delegated from expert players to databases and encyclopaedias. Whereas knowledgeable players were still held in high regard in “The Gummy Wolves”, they were not the only source of insight to the game, and their position could be easily usurped through appropriate linking to external sites. This



indicated a shift in the player's necessary skillset from "knowing the game" (game literacy) to also include "knowing how to find information about the game" (information literacy). Unlike the strategic representations, the factual representations were not challenged and remained undisputed facts. While the concept of objective "facts" about the world is problematic at the best of times, WoW is not cumbered with the unpredictability and mess of the physical world. Because WoW is a virtual space, the code determines all interactions, consequences and underlying relationships. The consequence of the being digital the possibility of a type of knowledge that has little room for negotiation, and is simply accepted "as is". This is not to say that it is a neutral type of information, as it is still only a representation of the game, and representations are always selected perspectives.

*Evaluational representations* are tools made to record, visualize and evaluate player performance. Add-ons like Damage Meter makes it possible to get second-by-second accounts of the guild's overall damage output, pie charts detailing the abilities each player had used, tracking deaths, uptime, hits/misses and more. Where play used to be opaque, providing little information about the contribution of each player, the enrolment of damage meters enabled play to be something measurable and comparable.

*When picking out the members for tonight's raid, their previous performances, and more importantly, the logging of their previous performances through services like WWS (World Wide Stats), determined which players I considered strong. My assessment was tempered with personal preferences and relationships, but I could not shake the desire to choose usernames I used to see at the very top of the "Most damage done" list. Because of our extensive use of meters and combat log stats, a "good night" was not solely determined by the number of monsters killed; it was about killing monsters and "pushing out good numbers". Thus, the meters were part of our success criteria.*

Since evaluational tools translate the highly indecipherable combat logs into easily comprehensible graphs and charts, they allow for an analytical and critical approach to our own and others' play sessions. The logs gave insights into our own playing style that would otherwise be closed off to us, as it identified problems we

were not even aware of. One raid night, we learned through parsing of logs that many players had been targeting the left hand of a monster, when we needed to target the right. This issue would have been impossible to detect if it was not for the logs that depicted our play. However, evaluational tools have always had an ambivalent position in WoW because of how they simplified game play. “The Gummy Wolves” were well aware that what role you were filling in the raid, the current power balance in the game, and the specific fight all were highly influential on what numbers were produced.

The irony is that even though it was common knowledge that measurement tools were inaccurate, they were frequently used in the assessment of players; new applicants had to enclose combat logs, while existing members would be benched if they started to slip on the scoreboard. Much like citations are used in academia to assess quality – even though “everyone” agrees it is a poor tool for the job – evaluational tools gave simple answers to complex questions, and simple is alluring.

This is not to say that logs were always taken at face value. Logs were in one instance (during evaluation of players) considered sketchy information and in another (during evaluation of past events) were absolute proof of what happened. When evaluating players, evaluational representations were usually supplemented with complementary logs, personal experience or a critical view of logs all together. However, if we used logs to investigate issues during combat, no such addendums were made. In those instances, evaluational representations provided information we would otherwise not have, and thus had fewer possible complementary tools. This demonstrates not only the interpretative flexibility of this technology and the information provided, but also how the representation and its information changes depending on the context in which it is assembled (Latour, 2005).

*Organizational representations* are technologies employed to organize guild and raid events. This includes tools for communication like Voice Over IP (VOIP), forums for developing and disseminating information about the guild and its goal (i.e. the guild forum), as well as add-ons used to direct and instruct other players during play sessions.

*Most of the active raid-leading during the fight was not done by me, but by the add-on “Deadly Boss Mods”. Its timers counted down to events like the gripping of players, and alerted players targeted by the Eyebeam [an ability that targets one player and follows her around the room doing damage], while my add-on “Heal Me” helped me remember who I had assigned healing tasks to and rebroadcasted these assignments on request.*

Organizing a group of 50 to 60 players for successful 25 player session 4 times a week took up a considerable amount of my time as an officer (at least 4-6 hours a week), and in many ways my role as raid leader felt more like “herding cats” than as the instructor of a team of experts. However, in order for me to perform this “herding”, I was reliant on delegating responsibilities to a range of human and non-human actors. For example, tasks such as keeping track of attendance and distribution of loot were handled by other officers, but their tasks were further delegated to spread sheets and various add-ons to track player attendance and loot priority. Our reliance on paratexts was especially visible to me as the raid leader, because I was deliberately handing over important roles and responsibilities to the technology. This included add-ons like “Boss Mods” that alerted players to special attacks and shift in phases, “Getting things Healed” that helped me delegate (and remember) healing assignments, and the unit frame add-on “GRID” that I had fine-tuned to alert me of certain events, such as when the monster would grip and crush a player.

The frequency and extent to which we used paratexts is of importance. We gave the “Boss Mods” add-on the task of calling out phases and targets, meaning that players who (against guild policy) had not installed “Boss Mods”, or were unable to install/customize the add-on would have a hard time understanding the flow of the battle. In short, mastering an encounter also meant mastery of paratexts. From a socio-technical approach, organizational tools like Boss Mods may be understood as a non-human raid member (Taylor 2009) whose role it is to keep everyone else in line. The organizational representations were practically oriented as tools to coordinate player efforts, and also as technologies that applied information about the game (like a specific encounter) in a context when it was needed. Organizational tools were in effect translators of knowledge, turning a strategy guide of a thousand words into

timed alerts on the screen. However, successful play is dependent on more than applied game expertise.

*Motivational representations* are representations that motivate players and helps stabilize the community through good fellowship. While a substantial number of paratexts are concerned with “how to play better” through guides, calculations and measurements, a substantial amount is not. Many paratexts cater to more creative or community-oriented activities such as recounting play sessions, discussing plans for upcoming patches, or simply linking and sharing the abundance of videos, machinima, cartoons, blogs, fanart, fanfiction and forums that surround WoW.

*A part of my daily routine was to check email, Facebook, and online newspapers and read through new posts on the guild forum. A fellow guild member had posted a drunken rewrite of a rap song in the “Funny stuff” thread, and as usual it [Funny Stuff thread] was the most active section of the forum.*

The international popularity of WoW has brought about the possibility of impressive crowdsourced projects such as the WoW wiki page, theorycrafting communities such as Elitist Jerks, and databases such as WoW head. Being part of an international community is, however, more than just sharing information and knowledge with each other. The same channels used to disseminate information – share links, alert players on upcoming changes, discuss guild policies, or raid strategies – were also used to distribute Internet humour, such as pictures of cats with funny captions. The “Funny Stuff thread” on the guild forum was by far the most used thread with new links and pictures posted every day, giving everyone in the thread a shared social vocabulary. For instance, we could log on to the game and greet each other with responses such as “hey, that picture of Zoren in a paddy hat was totally LOLLOL!” It gave us shared reference points that broadened our common cultural playing field. Informal late night chats about upcoming changes to the game were not primarily about sharing information; they were an expression of our passions and engagement with the game. Asking “have you seen the upcoming patch notes” may be considered the equivalent of “did you see last night’s episode of Idol?” as a way to initiate a conversation about a shared interest. The guild forums were asynchronous

and continuously available, so everyone could catch up in their own time and conversations could continue whenever we were logged on. The guild forum was crucial for crafting a collective identity as a guild, since it was rare that everyone was logged on or playing together at the same time. Like Chen (2009), I found that camaraderie was central in keeping the guild together through hard times, and motivational representations played a huge part in keeping the spirit and morale up.

*The recurring errors made people frustrated, so we tried to remind ourselves that had it been easy everyone would be doing it. Tim posted on the forum: "Anyways, keep in mind, that it's a cockblock of a boss in a very new instance, on our first reset we've still downed a lot of hard crap."*

### **Discussion: An assemblage for learning**

"The Gummy Wolves" is an excellent example of how learning happens in affinity spaces: experts and novices mingle, the sharing of knowledge is integrated into the main activity and being knowledgeable has high social rewards. By investigating paratexts as representations of play and knowing, we see the enactment of knowledge focused around five representations: factual, strategic, evaluational, organizational, and motivational. These five representations played different roles at different times and situations. They were none the less *all* necessary actors in the successful configuration of raiding in "The Gummy Wolves".

Strategic representations provided players with expert knowledge, both on how to deal with specific encounters and how to customize and develop the avatar. When complemented with personal experience, it gave us access to practical expertise from players belonging to other communities and groups. Similarly, factual representations worked as encyclopaedic information enabled indexed searches and new categorizations of knowledge about the game. Thus, configurations of play that were not based on personal progress in the game may emerge. Evaluational representations were highly contested, yet frequently employed as tools for assessing the performance and value of other players. By quantifying play, these tools were setting standards and formalizing play as something measurable and externalized, rather than experienced and personal. Organizational representations played an important role in managing the collective efforts of the players by shaping how information was shared between

players, and the ways in which the collective was held together. Finally, motivational representations were a lighter and less practical aspect of the assemblage, but were nonetheless supporting the shaping of a collective identity, common reference points and a playfulness that the other representations tended to reduce.

In a single night of raiding I would use all five of these representations in order to fill my role as a raid leader, drawing on different features as needed. I used strategic representations to design battle plans, and factual representations to fine tune them. During raids I depended on evaluational tools to tell me what players were dependable and skilled, and I would be lost if I could not delegate alerts to add-ons like “Boss Mods”. Last, but not least, the motivational representations were necessary boosters for morale, and thus key representations for raiding, even though they didn’t explain or inform our raid strategies. In summary, raiding in WoW is dependent on a network of representations that support, inform and motivate play. In the final section of this paper I will return to the question of what paratexts can teach us about learning and literacy.

### **Scaffolding vs Enactment as learning**

These representations clearly play a key role in shaping what kind of play is possible and even desirable. The paratexts used by “The Gummy Wolves” informed our strategies, what we thought of other players, and even what we considered a “win”. The question is then how to conceptualize these texts. In a pedagogical context, it is tempting to think of paratexts as scaffolding, as “para” signifies outside or surrounding, and paratexts differs in shape and format from the game itself. However, thinking of paratexts as scaffolding brings up some issues.

The first concern is temporality. “Fading”, or the eventual removal of the scaffolding, is important as the learner should be independent of (the scaffolded) support as soon as they have acquired new skills (much like with training wheels on a bike). If the scaffolded structure becomes permanent, it might instead be considered distributed cognition, as it becomes a persistent and permanent form of cognitive support (Hutchins 2000, Pea 2004). However, strict adherence to fading requires a pre-defined understanding of what skills are to be developed, possibly excluding the

emergent practices and knowledges that drew attention to play as a space for learning in the first place. In addition, fading requires a pre-defined notion of what technologies should be present in the “end state” (so that only the scaffold is faded). This may be deterministic as scaffolding builds on a premise that would require technology to remain stable in both meaning and practice. However, this is not always the case as technologies may be interpreted in different ways, and uses may change over time as the inclusion of technologies alter the practice at hand (Bijker & Law 1992, Sørensen, Aune & Hatling 2000).

The second problem with scaffolding is boundaries. In computer mediated learning environments, it is difficult to distinguish between technologies – such as between games and paratexts – as they overlap and extend over each other (Tabak 2004). In WoW, there are several add-ons that became integrated into the main design after extended and popular use, making it difficult to draw lines between what is inside and outside the game (Prax 2012).

A third problem is the relationship between materiality and knowing. Both scaffolding and paratexts consider the surrounding technologies as supplementary and supportive to a primary activity, be it learning or playing. However, little attention is given to how material qualities and agencies are shaping learning processes, and how our understanding of materiality shapes our understanding of knowledge. Thus, how do we account for materiality? How do we avoid deterministic approaches that do not work with predefined lines of the inside and outside? I propose that the troubles of temporality, boundaries and materiality can be solved by approaching knowing as a form of enactment.

Firstly, enactment accounts for the interpretative flexibility of technologies (Pinch & Bijker 1987), which does not prescribe functions and meanings to technologies because these functions and meanings are something to be performed – in other words, something that is not innate. Thus, we may avoid technological deterministic approaches where the role and producer of the technology is predefined, and we may be open to emergent socio-technical practices. Secondly, by analysing knowing from an enactment perspective, we avoid a priori statements about what is

inside or outside the game. Instead, we can approach the question of boundaries as an empirical one, as the boundaries of the game are something produced through players' choice of paratexts, situated expertise and affordances in the game. Thirdly, and most importantly, analysing knowing as enactment allows for material semiotics, which may be broadly described as how the material and discursive arranges, reconfigures, and is reconfigured by human and non-human actors. In studying knowledge and materiality, the role of representation becomes central.

What is enacted may be understood as *assemblages of learning*. Assemblages of learning are collectives of tools, practices, meaning, relations and representations that are configured in ways that encourages and enhances the learning potential of the networked actors. The concept's theoretical contribution is removing the distinction between what is known and how it is known, as well as highlighting how knowing as an enactment is distributed through sociomaterial means (Orlikowski 2005).

The take away from this paper is two folded: Firstly, it points to the multi-technological and multi-practiced ways in which players are assembling their own learning experience. In the development of new games for DGBL, the role of paratexts as shaping for play needs to be considered. If games for learning are designed as solitary artefacts, they might miss out on the potential for learning that lies in a rich game environment of paratexts. Secondly, theoretical engagement through enactment and assemblages brings forth attention to the material. While DGBL is highly concerned with the technological, further analysis needs to be done on the material aspects of DGBL. How are the things we make shaping what we know? And what can the things we make tell us about how we know it?

In this paper, I have shown how the use of paratexts are highly relevant for the kinds of play and knowing with which WoW players concern themselves. Raiding has been hailed as an example of play that provides an arena for highly complex, knowledge-intensive and collaborative problem solving. This is achieved through the assemblages of paratexts that scaffolds and aligns actors (both human and non-human) toward successful play.



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