

©Copyright 2010
Mark Chen



This work is licensed under the Creative Commons
Attribution-NonCommercial-ShareAlike 3.0 Unported License.
<http://creativecommons.org/licenses/by-nc-sa/3.0/>

Leet Noobs:
Expertise and Collaboration in a *World of Warcraft* Player Group
as Distributed Sociomaterial Practice

Mark Chen

A dissertation
submitted in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy

University of Washington

2010

Program Authorized to Offer Degree:
College of Education

University of Washington
Graduate School

This is to certify that I have examined this copy of a doctoral dissertation by

Mark Chen

and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by the final
examining committee have been made.

Chair of Supervisory Committee:

Philip Bell

Reading Committee:

Philip Bell

Jennifer C. Stone

Beth E. Kolko

Date: _____

In presenting this dissertation in partial fulfillment of the requirements for the doctoral degree at the University of Washington, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of the dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for copying or reproduction of this dissertation may be referred to ProQuest Information and Learning, 300 North Zeeb Road, Ann Arbor, MI 48106-1346, 1-800-521-0600, to whom the author has granted "the right to reproduce and sell (a) copies of the manuscript in microform and/or (b) printed copies of the manuscript made from microform."

Signature:_____

Date:_____

University of Washington

Abstract

Leet Noobs:
Expertise and Collaboration in a *World of Warcraft* Player Group
as Distributed Sociomaterial Practice

Mark Chen

Chair of the Supervisory Committee:
Associate Professor Philip Bell
College of Education

Group expertise in socially-situated joint tasks requires successful negotiation and distribution of roles and responsibilities among group members and their material resources such that the group is a network of actors all in alignment on shared tasks. Using ethnographic methods, the author documents the life and death of a player group in the online game *World of Warcraft* as it engaged in a 40-person activity called *raiding*, which consisted of highly coordinated battles against difficult game-controlled monsters. The group took 7 months to master an in-game zone known as Molten Core, defeating all of the monsters within, including the last *boss* monster, Ragnaros. Part of the group's success depended on its members' ability to reconfigure their play spaces, enrolling third-party game modifications and external web resources into their activity. Before joining the group, the players had successfully built-up enough social and cultural capital to be recognized as expert players. Once joining the group, however, they had to relearn and adapt their expertise for this new

joint task that required them to specialize, taking on different roles depending on the types of characters they chose to play, and structure themselves for efficient communication and coordination practices. They also needed to align themselves to new group goals and learn to trust each other. Thus, once-expert players became novices or *noobs* to relearn expert or *leet* gameplay, yet they were not true novices because they had a good understanding of the game system and ways to configure their individual play spaces to be successful players. Rather, they were “leet noobs” who needed to reconfigure and adapt their expertise for new norms of sociomaterial practice suited for joint venture. After 10 months, the group experienced lulls in performance due to a change in membership, and the group disbanded as members were unable to renegotiate and agree upon shared goals and responsibilities. Their network had been irreparably disrupted. Understanding how group success depends on alignment of goals and responsibilities helps us plan for future collaborative endeavors across both formal and informal settings.

TABLE OF CONTENTS

List of Figures	iv
List of Tables	vi
Prologue: In the Fiery Depths	1
Introduction	4
Learning and Expertise in Games?.....	4
Social and Cultural Capital	10
Why <i>World of Warcraft</i> ?.....	13
Description of Dissertation Chapters	17
The Major Assertions of the Dissertation	21
A <i>World of Warcraft</i> Primer.....	24
Setting, Group, and Data Collection	28
A Note on Stance and Positionality.....	37
Pugging the Chicken Quest.....	40
Chapter 1: Expertise in <i>World Of Warcraft</i> Players as Distributed Sociomaterial Practice	47
Expertise Understood Through Ethnography.....	47
Stage One: Leveling Up	53
Stage Two: Raiding	62
Reflections on Studying Expert Practice.....	71

Role-Playing Takes So Much Time; We Could Be Killing Things Instead...	74
Chapter 2: Communication, Coordination, and Camaraderie.....	84
(Computer) Game Theory	85
A Typical Night in Molten Core	90
Gathering and Chatting.....	90
Pulling, Coordinated Fighting, and Division-of-Labor Roles	93
Making Encounters Routine by Finding Balance.....	102
Welcoming Failure in Golemagg and Other Boss Fights.....	105
Socially Constructed Social Dilemmas	109
An Atypical Night in Molten Core.....	112
Issues and Conclusion	121
Reflection on Chat	126
Chapter 3: The Enrollment of a New Actor and the Redistribution of Responsibilities	130
Introduction	130
Mangles, Networks, Assemblages, and Arrangements	131
Roles, Responsibilities, and Aggro	139
Threat Management.....	141
KLH Threat Meter (KTM)	148
Using KTM as a Temporary Actor that Diagnosed Problems: April 28, 2006.....	155
Discussion	173

Conclusion.....	177
Walt and Thoguht “Theorycrafting” Amidst a Server Shutdown.....	181
Chapter 4: The Death of a Raid	187
Changing Schedules and Changing Roster	187
The Controversial Forum Thread.....	189
Making Sense of the Meltdown	214
Victory!	222
Glossary	226
References	229
Appendix A: The Pacifist Guild’s Guide to Ragnaros.....	244
Appendix B: Kenco’s Research on Threat.....	260
Appendix C: Functional Pattern Analysis – Synopses	269

LIST OF FIGURES

Figure Number	Page
1. <i>Aquaman</i> and BP Oil Spill Mashup.....	7
2. Raid Battle.	16
3. Raid Battle with Labels.....	17
4. Character Creation.	25
5. User Interface.....	26
6. Molten Core.	31
7. Player-Created Map of Molten Core.....	32
8. Ragnaros	34
9. Example Chat Log with Annotations.....	38
10. Auction House.	41
11. Various Add-ons.	57
12. A Solo Fight.....	58
13. Friends List.	60
14. Ragnaros's Chamber Map.....	67
15. Unsuccessful Raid Fight with Ragnaros.....	69
16. Molten Giants.....	94
17. Unpacking Text Chat	96

18.	Majordomo Executus and His Eight Guards	112
19.	Felwood.....	128
20.	Different Concepts of Threat	145
21.	Ragnaros and Bones.....	147
22.	KLH Threat Meter (KTM).....	149
23.	Ragnaros's Chamber Map, Showing Phase Positions	160
24.	Diagetic and Non-Diagetic Elements.....	165
25.	Caged Arena in Gadgetzan	182
26.	Trophy Screenshot of Ragnaros Kill.....	225

LIST OF TABLES

Table Number	Page
1. Class Roles.....	140
2. Hypothetical Threat Table	142
3. History of Raiding Activity	158/159

ACKNOWLEDGEMENTS

For my committee: Phil Bell, John Bransford, Beth Kolko, and Jen Stone.

For volunteering to be external readers: John Carter McKnight, Aaron Hertzmann, Heiji Horde, Hillary Kolos, Sam Lowry, Amanda Ochsner, and Vanessa Svihla.

For giving very productive feedback over the years: Steve Kerr, Lisa Galarneau, Dan Hunter, Michele Knobel, Jonas Heide Smith, Constance Steinkuehler, Reed Stevens, T. L. Taylor, Doug Thomas, and Sarah Walter.

For continual support to do good scholarly work, fight injustice, and gossip: Everyday Science & Technology Group, LIFE Center, National Science Foundation, Leah Bricker, Lucy Dwyer, Tiffany Lee, Suzanne Perin, Nancy Price, Suzanne Reeve, Amit Saxena, Giovanna Scalone, Andy Shouse, Heather Toomey-Zimmerman, Carrie Tzou, and Katie Van Horne. UW College of Ed, Educators for Social Justice, Cynthia del Rosario, Isaac Gottesman, Theresa Horstman, and Dennis Rudnick.

For teaching me a bit about teaching: my TEP students and Yen-Ling Lee. Sorry it took a while for me to learn!

For ad hoc reviewing my job talk (and generally being cool): GLS: Ben DeVane, Sean Duncan, Liz Ellcessor, Matt Gaydos, Damiana Gibbons, Kevin Harris, Laurie Hartjes, Alecia Magnifico, Crystle Martin, Yoonsin Oh, Meagan Rothschild, Caro Williams, and Moses Wolfenstein.

For being my liaisons at Blizzard Entertainment: Brianne, Sylvia, and Lyndsi.

For geeking out with me at conferences or online: Roger Altizer, Kris Ask, Florence Chee,

Shira Chess, Lauren Cruikshank, Josh Diaz, Nathan Dutton, Debbie Fields, Sara

Grimes, Todd Harper, Erin Hvizdak, Mette Hoybye, Shawna Kelly, Tracy Kennedy,

Sean Lawson, Lisa Nakamura, Casey O'Donnell, Hector Postigo, Rebecca Reynolds,

and Lee Sherlock.

For teaching me a lot about guild leadership and management and giving me grounded

feedback on my writing: “Booty Bay Anglers,” Andrew, Brian, Eric, Erik, Jenn,

Ryan, Scott, Vicki, “Hatfield,” “Hizouse,” “Helio,” “Mandy,” and “Marge.”

For letting me write about their 10 month raiding life: the MC raid group and madrogues.

I miss you guys.

For being a guild of smarty pants: Terror Nova, incl. Alth, Kleo, Hyp, Pala, and Mayoke.

Doing it for the lulz.

For gaming with me for so long: Paly: Andrew, Ari, Brian, Chris, Geoff, Gray, Heather,

Lesley, Obie, Song, and Ted; PDX: Amy, Ben, Chris, Colin, George, and Molly.

For unconditional love: Robin, Mom, Dad, Grandma, Dee, Frances, and my family. CACS.

For enriching my life: Gaming.

For forgiving me my spotty memory: Everyone I've forgotten to include.

THANK YOU!

DEDICATION

To Bill Winn, my inspiration and motivation to help people make connections whenever possible, to do good work, to be excited at novel things, and to be always critical yet hopeful. Your network lives on.

PROLOGUE: IN THE FIERY DEPTHS...

Imagine 40 people grouped together in a dark, hot, volcanic cavern deep beneath the earth. Some of them appear to have been human at one point, but the flesh rotting off their frames clearly points to some supernatural force. Others are muscular, green-skinned brutes or wiry, purple-skinned figures sporting mohawks and tusks. Finally, a few hefty, cow-like, bipedal forms stand much taller than the others. Some in this exotic group are dancing, some are jumping up and down, others are sitting and drinking water and various other liquids, but the majority of them are just standing around, waiting or watching the large, spiky snake-man creature in the middle of the chamber. The humanoids are wearing an assortment of leather or metal armor and/or cloth or silk robes, and they are equipped with glowing swords, maces, and staves. A few of them are discussing the upcoming fight. One of them in particular is talking about the specific positions and roles for the others during the fight. Many of the others are talking privately with each other at the same time, sharing pleasantries or chatting about more mundane events, as if oblivious to their locale and the upcoming fight.

The apparent leader of this raiding party, the one who was summarizing roles and positions, yells, “Get in positions!” and everyone spreads out, running to various parts of the large cavern. A sizeable group of them bunches up near a lava flow, directly across from the snake-man.

“Talk to Domo!” yells the raid leader, and one of the green orcs, decked out in full metal armor, rushes to the snake-man, Majordomo Executus.

Domo, seeing the orc approach, yells, “Impudent whelps! You’ve rushed headlong to your own deaths! See now, the master stirs!” He then summons his boss, the overlord of this intricate cavern system known as Molten Core.

His name is Ragnaros, and he emerges from the center of the chamber, adding to the sweltering heat, his fiery, semi-liquid form towering and massive like no other monster in this harsh land known as Azeroth.

“Behold Ragnaros - the Firelord! He who was ancient when this world was young! Bow before him, mortals! Bow before your ending!”

Surprisingly, Ragnaros bellows, “TOO SOON! YOU HAVE AWAKENED ME TOO SOON, EXECUTUS! WHAT IS THE MEANING OF THIS INTRUSION???”

“These mortal infidels, my lord! They have invaded your sanctum and seek to steal your secrets!”

“FOOL! YOU ALLOWED THESE INSECTS TO RUN RAMPANT THROUGH THE HALLOWED CORE? AND NOW YOU LEAD THEM TO MY VERY LAIR? YOU HAVE FAILED ME, EXECUTUS! JUSTICE SHALL BE MET, INDEED!”

With that, Ragnaros slays Majordomo Executus with a flaming ball of fire.

“NOW FOR YOU, INSECTS! BOLDLY, YOU SOUGHT THE POWER OF RAGNAROS. NOW YOU SHALL SEE IT FIRSTHAND!”

The raid leader, unfazed, yells, “ATTACK!” and a flurry of activity commences.

Within moments, the raiders are all dead.

This event was experienced repeatedly by a group of players in the massively multiplayer online game (MMOG) *World of Warcraft* (WoW; Blizzard Entertainment, 2004a) that delved into an in-game zone known as Molten Core (MC) weekly for a period of about ten months. My dissertation is an ethnography of this group that documents the collaborative learning and expertise development of the group through its use of dynamic communication practices and its successful enrollment—that is, adoption and deployment—of both human and nonhuman resources.

INTRODUCTION

Learning and Expertise in Games?

I subscribe to the notion that the purpose of education is to prepare people to be successful in all areas of life. This includes helping people become engaged in civic life and prepared to take actions towards their personally-meaningful life goals. This means that the role of education is to help people develop critical attitudes in the settings they participate and care about. In other words, I value everyday learning and expertise (Bricker & Bell, 2008), recognizing that people position themselves and get positioned (Holland & Leander, 2004) in deeply situated contexts that require experiential knowledge and specific literacies (Knobel, 1999) about not just how to be, but how to be *successful*.¹ I look at gaming culture and online games as a site for studying the development of everyday expertise, but I see this as part of a larger endeavor in education that looks at informal learning contexts and values any setting in which consequential decisions are made and meaningful actions taken.

The definition of expertise in these socially situated contexts moves away from a cognitivist conceptualization of expertise as individual knowledge and skill acquisition.

Instead expertise is about successfully learning to participate in a *community of practice*

¹ I am definitely influenced by my academic genealogy, having been a part of Philip Bell's research group, the Everyday Science & Technology Group (ESTG), which is a part of the Learning in Informal and Formal Environments Science of Learning Center (LIFE Center), and, before that, as a student of Jennifer Stone's digital literacies corps before she went on to the University of Alaska.

(Lave & Wenger, 1991), and developing expertise is, as Collins and Evans (2007) note, “a matter of socialization into the practices of an expert group” (p. 3).

This definition aligns heavily with new definitions of literacy, in which being literate is no longer just about reading and writing. It matters what kinds of texts are being read and written, which means it matters in what social context or domain of practice the activity is occurring, because different texts are valued in different contexts. Being literate means being able to take on an identity as someone who is part of a larger discourse, affinity group, or particular domain of practice (Gee, 2003; Heath, 1983; Street, 1984). A full or legitimate participant is someone who can produce, consume, remix, and critique the cultural goods and actions of their particular group. In other words, new literacy studies always looks at the social setting in which meaningful interactions and discourse occur.

New literacy studies’ concept of literacy dovetails with both Project New Media Literacies’s (Jenkins et al., 2006) and the National Research Council’s (2010) list of necessary 21st century skills for students to be successful, and I have combined the two lists together to form the one below. While the NRC report focused specifically on science education, its list fits in perfectly with the more general list that Project New Media Literacies came up with while thinking about what it means to be successful in our rapidly changing, digital world—what Henry Jenkins calls a *participatory culture* (Jenkins et al., 2006). To be successful, people should be able to

- *produce, consume, remix, and critique all sorts of media.* This is important for an engaged public (e.g., Figure 1).

- *communicate and coordinate on joint tasks*. This is important for mobilizing our collective resources in solving our world's problems.
- *play and problem solve*. Everyone should be able to act as a scientist and engineer. Everyone should be able to act as a gamer.
- *perform, identity shift, and metacognate (Bransford, Brown, & Cocking, 2000) in all the various settings they participate in*. This ability to play different roles is necessary for thinking about what could be and assessing where we are in relation to that imagined future.
- *think in systems and form social networks*. An awareness of the world as globally connected and comprised of systems upon systems and then being able to take advantage of networks that leverage this understanding is important for radical change.

Many of these skills are developed naturally through game play. Good games inherently provide two main benefits as a backdrop for participation. First, all games, to be considered *games*, present players with a system of rules or constraints that must be recognized, understood, and navigated in order for players to reach predetermined goals (Salen & Zimmerman, 2004; Juul, 2005). Games have predetermined goals and are made up of consistent rules, algorithms, and constraints that players must learn or work around in order to succeed. This is why *Second Life* is not a game but more a platform for user-generated content and interaction. What this means is that, in good games, players have to

see the game as a system and take a playful stance of trying, failing, revising, and retrying various tactics and strategies in order to become expert players and win.

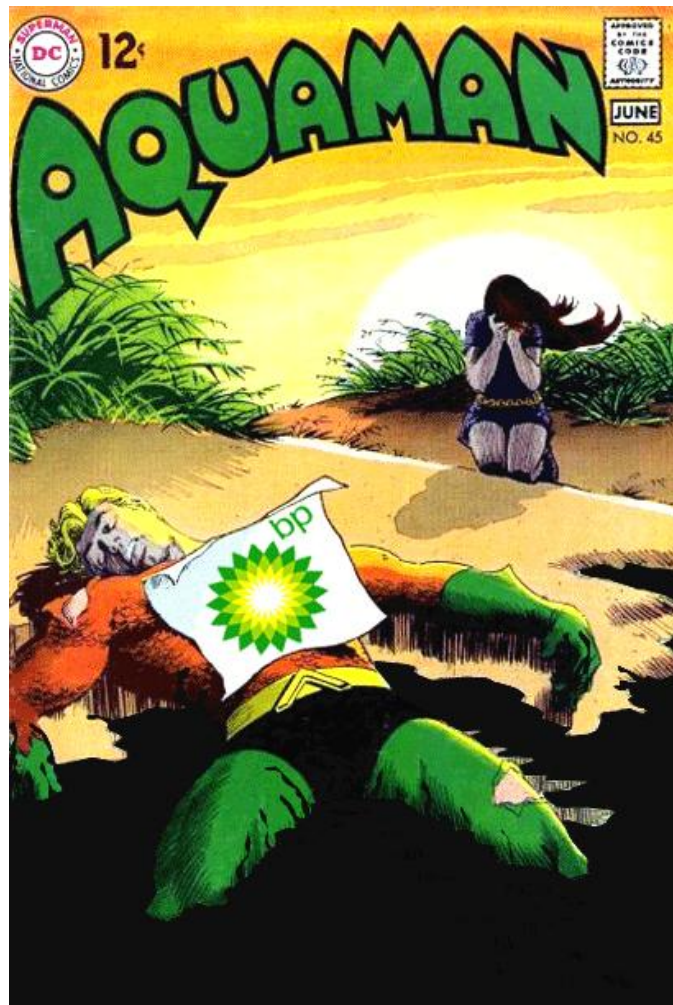


Figure 1. Fake issue of *Aquaman* featuring the titular character's body lying on a beach dead. A sheet of paper featuring the BP logo lays face-up on his chest, and the shore is covered in black oil. A distraught woman, holding her head in her hands, kneels in the background. This serves to illustrate a remixed product, combining imagery from different cultural sources and news events to create new meaning. Original image by Nick Cardy "photoshopped" by Rob Kelly for his blog *The Aquaman Shrine* (<http://www.aquamanshrine.com/2010/05/sg.html>).

Second, many games tell a story or narrative that drives and motivates play, and, actually, in such games it is player decisions and interactions that create an emergent narrative. This requires what Gee calls a *projective identity* (2003), where players must imagine who their hero is and what outcomes should result from their play before making strategic decisions. The imagined future gives players agency, and good games reward them with satisfying stories that players understand through embodied experience.

Games, then, make the perfect site to study how people develop 21st century skills and everyday expertise. More precisely, emergent play that is situated in gaming culture—historically- and socially-based practices, beliefs, and symbolic thought—and with specific games can give us insight into the development of expert practice in personally consequential settings.

Furthermore, the popularity of games makes them an important cultural phenomenon to study. Various news items from the past few years speak to games' popularity: the growth of the games industry far eclipses that of the movie industry (Bangeman, 2008); many big-name games now require huge budgets in the millions of dollars to develop (Briggs, 2010); debates about whether games are an art form have started to hit mainstream circles (Ebert, 2010); and the huge backlash against games as promoting violence or causing addiction seems to have started to subside (Alexander, 2008). Much of this has to do with the rapidly growing base of gamers in all demographics, with the biggest numbers now being women over 25 years old (Cavalli, 2009). Many games are now part of transmedia franchises (Jenkins, 2006), where gamers and fans care about the common story and characters no

matter what form of media they appear in. Gamers extend these stories by producing online fan fiction and fan art (fanfiction.net and deviantart.com), partaking in *cosplay*—dressing up as characters from their favorite games, anime, books, and movies (Wikipedia, 2010a²)—and meet-ups at conventions, debating the meaning behind imagery and plot twists in games, guessing as to what will come next as official story chapters, and by writing amateur reviews and strategy guides (gamefaqs.com). Henry Jenkins (2010) notes that Harry Potter and *Avatar* fans have also started to mobilize around political issues, successfully leveraging or rerouting affinity groups into activist groups, and gamers will soon follow suit. In fact, the serious games movement has also started to blossom, where educators, researchers, activists, and developers make games with political messages (persuasivegames.com) and games to help people lead healthy lives (gamesforhealth.org). There is even the potential for tapping into the collective power of gamers by designing games that require huge numbers of people brainstorming solutions to future problems (Zetter, 2010) or identifying candidate protein strand configurations for biologists to study (Bohannon, 2009). Indeed, gaming has quickly become part of everyday life.

Rather than focusing on the sociocultural nature of gaming practice, however, much of the research on games (for education) comes from researchers conceiving game play as a dialectic relationship between the game and the player. These include looking at media

² In many cases, my choice to use Wikipedia as a source gives readers a quick reference for general terms. Often, these terms are from gaming or fan culture and are new enough that there is no academic text that describes them well enough. In rare cases, I have consciously chosen Wikipedia since I believe the information in a particular article is less biased than existing academic research (e.g., the entry on “media effects”).

effects (Wikipedia, 2010f, for an overview; Cover, 2006, for an argument against the rhetoric of addiction), semiotics (Myers, 2003), individual cognition and *cognitive load* (Low, Jin, & Sweller, 2010), and “game-like” simulation training. Yet there are some scholars who are looking at situated game play, recognizing the social, cultural, and historical nature of gaming (cf. Games Learning Society, 2010).

Social and Cultural Capital

Ironically, sometimes the most resistance I receive when I express the importance of everyday learning (and posit that expertise exists in all settings in which people participate in meaningful ways) comes from gamers themselves. Having grown up accustomed to the idea that what is valued in schools, labeled as “education,” only happens in schools and other formal environments, many people see elective activities, such as gaming or reading comic books, as holding no educational value. I posit, however, that success in life does not necessarily depend on one’s knowledge of decontextualized math. Instead, it depends on knowing how to act and be within one’s everyday activities and communities.

A useful idea here is found in Bourdieu’s writings (1986) on social and cultural capital that are alternative to economic capital as ways of valuing worth. Specifically, social capital is what one accrues through personal relationships such that parties in the relationship have an understanding of reciprocal responsibilities. This is the idea of scratching one another’s backs when someone in the social network has an itch. Making social connections and maintaining the network is important for online gaming (Jakobsson & Taylor, 2003).

As summarized by Malaby (2009), Bourdieu's cultural capital takes on three forms: having embodied knowledge about what is important or how to do things, owning particular artifacts or tools that are important to the culture, and being labeled as an expert by some sort of institution or authority that identifies one as having cultural credentials. What Malaby adds is the idea that relevant contingent acts—performative acts that have a chance of failure—are more valued than trivial acts. By their nature, games present players with spaces in which to routinely make these contingent acts. More to the point, though, any sort of community of practice or cultural domain has a lexicon of contingent acts³, which people can perform to build up embodied cultural capital.

The idea that expertise development is dependent on access to expert practice means that one has to have the ability to accrue social capital and make connections with other people or friends. These friends are more valuable if they can be leveraged or can act as sponsors into an activity space or community of practice, providing social supports that help facilitate moving between spaces (Brandt, 1998). Then, knowing what the actual practice is and how to take part in that practice becomes embodied cultural capital. And, of course, these two forms of capital build on each other. The old saying, "it takes money to make money," can be applied to other forms of capital. It takes capital to make capital.

³ I find the idea of a lexicon of contingent acts similar to Gutiérrez and Rogoff's *repertoires of practice* (2003) and Barron et al.'s extension to *repertoires of collaborative practice* (2009), just as I find the idea of established capital in one's "home" domain similar to González, Moll, and Amanti's *funds of knowledge* (2005).

For elective pursuits, including engaging in gaming culture, both social and cultural capital need to be developed in order for a person to fully participate. This means that everyday settings are definitely sites where meaningful and consequential events and linkages are happening among their participants. To counter the gamer who doesn't value gaming, the cultural production and social bonds that form in informal everyday settings can have great importance to many of the people who are participating in those communities, such that *socially produced value exists as part of these informal settings*. It may be unrecognized by the gamer, but it is there, and the gamer is using it. The educator in me—the human in me—wants to help people in these settings.⁴ Furthermore, if certain people are successful in some settings but not other settings, perhaps this means that the idea of “transfer” should get turned on its head. Instead of trying to help people transfer individual skills from one setting to another, we may want to think about how to help people transfer or convert their social and cultural capital from one setting to another.⁵

⁴ Several years ago, when I had just started what would become my dissertation research, at a bar after a day of conferencing, a fellow games researcher asked me why I felt compelled to help other players in *World of Warcraft*. I told him it was my duty to help others when I could. He replied that it was just a game, and all I could do was shrug, unable to express my tacit understanding of play. Today, however, I realize that I don't consider gaming just interacting with a game. It's never just a game.

⁵ The *Learning Science in Informal Environments* volume (National Research Council, 2009) framed this another way: how do we help learners build on the identities they develop in settings with specific cultural practices to other settings (p. 114)?

Why *World of Warcraft*?

The specific game that the participants in this study played was *World of Warcraft* (WoW, Blizzard Entertainment, 2004a). WoW follows a tradition of role-playing games (Wikipedia, 2010e) where players take on the identities of characters in a fantasy setting full of things like elves, dwarves, and orcs. More specifically, I study a group of gamers and its members' larger gaming circles in WoW engaged in a joint-task called *raiding*. Players each log in to the game from their own computers, and they are represented as avatars in the virtual world. These avatars or characters gather at a location within the game world, fighting a series of formidable monsters as a team. These *raids* normally take place for several hours at a time, often repeated across several weeks or months, before the team is able to accomplish the final goal of defeating every monster within the raid zone.

There are numerous reasons why I chose to study WoW. First, it exploded onto the scene when it was first released in late 2004 and sales quickly skyrocketed, bringing massively multiplayer online games (MMOGs) to a mass audience. To give a sense of scale (all data from mmogchart.com), before WoW, the most popular MMOG in North America was *EverQuest* (EQ) with about 500 thousand subscribers at its peak. The most popular MMOG in the world (mostly due to South Korean gamers) was *Lineage* with about three million subscribers. Both EQ and *Lineage* saw steady growth from their introductions (1999 for EQ, 1998 for *Lineage*) which reached a plateau in about three years. Within a year, WoW gained 6 million subscribers. Today it has over 11.5 million subscribers and seems to have finally started to level off. Whereas previous MMOGs have not been able to successfully

cross continental borders,⁶ WoW has transcended geographic boundaries, gaining popularity on all the continents to which it has been introduced.

Second, *World of Warcraft* has successfully hopped, meme-like (Knobel & Lankshear, 2007), out of gaming culture and into popular culture, and it has secured a spot in popular culture as a representative of gamer chic. Examples of remixed media include *South Park*'s "Make Love Not Warcraft" episode⁷ and TV spots featuring Mr. T and Ozzy Osbourne as a night-elf Mohawk and the Prince of Darkness, respectively.⁸ WoW has also served as a site for the propagation of memes drawn from other settings, such as Chuck Norris jokes⁹ to Rick Rolling¹⁰. Furthermore, terms such as *noob* and *pwn* from gamer speak or *leet speak*¹¹ have started to be picked up as everyday speak, and WoW was a main driver of this diffusion.

Finally, I am a gamer, through and through. I was already playing WoW when I started seeing how influential it was becoming. I also saw, first hand, that players were engaging in cultural production that was deeply meaningful to them while developing significant forms of expertise in this new social space. The emergent nature of these

⁶ It should be noted, however, that even though previous games did not have as much mass appeal across cultural borders as WoW, there did still exist much cultural production in local play settings. Constance Steinkuehler handily demonstrated that field work could be done around English speaking *Lineage* players.

⁷ http://en.wikipedia.org/wiki/Make_Love,_Not_Warcraft

⁸ Mr. T: http://www.youtube.com/watch?v=1bsOKH3_DNo

Ozzy Osbourne: <http://www.youtube.com/watch?v=mT8maUTzE48>

⁹ http://en.wikipedia.org/wiki/Chuck_Norris_facts

¹⁰ <http://www.youtube.com/watch?v=dQw4w9WgXcQ>

¹¹ Leet speak (or l33t sp34k) actually originated from BBS culture, which overlapped significantly with hacker and gamer culture (Wikipedia, 2010b).

developments made it an exciting phenomenon to study, and being there on the ground floor, able to document the early days of WoW gaming and how it rapidly changed over time, gave me compelling reasons to devote my graduate studies to it.

Other ethnographic research on MMO gaming that includes descriptions of general gaming culture (Taylor, 2006; Nardi, 2010) has made the case that games like *World of Warcraft* and the cultural practices that surround the games are rich and meaningful. Work from the learning sciences has included making a case for MMOGs as sites for multiple literacy practices (Steinkuehler, 2007) and the development of leadership skills (Wolfenstein, 2010). As illustrations of the complex symbolic literacy that players need in order to play, see Figures 2 and 3. My research, though, is close to that of Walter's (2009) in that it focuses on collaborative practice using a lens of distributed work and negotiated responsibilities. While Walter looked specifically at how new players are enculturated to existing groups of experts, I look at the formation of a new group of players as they learn to coordinate their efforts with a high-stakes joint task.



Figure 2. A screenshot of a raid battle in *World of Warcraft* showing various screen overlays through the use of third-party add-ons that some players used in order to understand and “read” the happenings in the 3D environment.



Figure 3. The same screenshot of a battle in *World of Warcraft*, this time modified with an external software program to label each screen overlay. Even with the labels, people without more detailed knowledge of WoW gaming have a hard time understanding what these third-party add-ons are showing..

Description of Dissertation Chapters

Chapter 1, based on “The Social Dimensions of Expertise in *World of Warcraft* Players” (Chen, 2009b), represents an exploration of everyday expertise and how its development can be attributed to successfully accruing social and cultural capital. It also describes in more detail the benefits of ethnographic methods by painting a general overview of (a) leveling up and (b) raiding in WoW. This sets the stage for a strong series of points:

expertise is defined through emergent *sociomaterial* (Orlikowski, 2007) practice; it depends on the accrual of social and cultural capital; what counts as capital is also socially governed; and what counted most for the 10-month raid group I studied was “hanging out and having fun.” For this manuscript, I have changed the title of this chapter to “Expertise as Distributed Sociomaterial Practice” and have made several edits to the original content to better reflect the distributed nature of WoW playing, accounting for the importance of technical and material resources.

Chapter 2 documents communication and coordination practice while raiding within the game. Prior to this write-up, which appeared in “Communication, Coordination, and Camaraderie in *World of Warcraft*” (Chen, 2009a), little had been written to describe actual player practice in MMOGs, especially with regard to *endgame* or *high-end* raiding—high-stakes raiding that happened after characters had gained the maximum level. Additionally, some academic literature (cf. Zagal, Rick, & Hsi, 2006) suggests that games and educational software could be designed to promote cooperative behavior, placing emphasis on game design’s effects on player choices. In response to this research, I present a thick description of raiding practice, demonstrating the nuanced nature of play motivations and how decisions players made in the game were not necessarily tied solely to game mechanics. I also make the claim that trust is necessary for group success and that my particular group of players built trust through careful alignment of shared values and motives and emphasis on camaraderie rather than through game-designed incentives.

After the “Expertise” and “Communication” chapters, the next substantial chapter describes the mechanics of combat in *World of Warcraft* and then analyzes raiding through the lens of actor-network theory (ANT; Latour, 1987), distributed cognition (Hutchins, 1995a, 1995b), and other object-oriented ways of looking at systems of activity, taking a cue from science and technology studies (STS) and considering the activity system as a mangle (Pickering, 1993; Steinkuehler, 2006), arrangement (Stevens, Satwicz & McCarthy, 2008), network (Latour, 2005; Giddings, 2007), or assemblage (Deleuze & Guattari; 1987, Taylor, 2009). I am using ANT as an analytical method because I am documenting the emergent practice and relationships among the various objects in circulation in the activity. I am not evaluating the system or identifying fixable flaws, things for which I think other ways of thinking about the situated practice (such as activity theory) are better suited.

Finally, I finish with a write-up on how the raid group under study eventually broke apart due to a change in what players wanted out of their raiding experience. Player goals that were once aligned toward hanging out and having fun eventually became fragmented and more differentiated, in part due to WoW’s continual movement towards normalizing the valuing of magic equipment and gear (known as *loot*). Added to this fragmentation, the leaders of the raid group mishandled the conflict and shut down possible avenues of recourse. Thus, my dissertation really is about the life and death of a raid group and its distribution work over time, having been a participant with the raid group from its inception in late 2005 to its demise mid-2006.

While each chapter could be read independently, when put together they tell a story with a consistent through-line about how playing *World of Warcraft* and participating in raids were situated in a complex network—driven by a mangle of numerous parties, ideas, and values—resulting in socially and historically emergent practice. Expert players became novices or *noobs* again to relearn expert or *leet* gameplay within the context of raiding. Yet they were not true novices because they already had a good understanding of the complexity of gaming practice. Rather, they were “leet noobs” who had to realign and adapt their individual gaming arrangements to new sociomaterial structures, a process that was negotiated through joint venture.

The story also details how the practice emerged out of conflict and trust: conflict between player goals and in-game constraints, as well as conflict among individual players; and trust between players, having resolved their conflicts and negotiated roles and responsibilities through a shared understanding of common culture. Furthermore, the actors in the story are not limited to human players. There was also conflict between players and their nonhuman resources when those nonhumans failed to act or perform their agreed-upon roles. Similarly, there was trust between human and nonhuman actors in the system when things were working. And, like many good stories, this one has an ending that is both compelling and depressing as the group of players I document came to face insurmountable differences that could not be renegotiated.

Between these main chapters are interstitial sections featuring short vignettes of WoW playing to help ground our understanding of the larger context of raiding practice.

Each of these interstitials include an introductory paragraph describing the section and what it illustrates.

The Major Assertions of the Dissertation

- **Expertise in *World of Warcraft* is the ability to configure one's local setting with available sociomaterial resources in a way that supports efficient play.** Expertise is not the ability to remember the exact numbers and “math” underlying the game. Rather, it is the ability to assemble and arrange the play space such that the work required in completing in-game tasks is distributed across all the various objects in the play space.
- **Expertise is socially defined through player practice that emerges from the push-pull relationship between constraints and workarounds.** This emergence builds upon itself with mostly tiny changes in practice based on a history and tradition of raiding that has roots in MMOGs, MUDs, computer role-playing games, tabletop role-playing games, war games, etc. At the same time, developers continue to tweak underlying code for the game, narrowing play towards numbers, normalizing such game practices as *theorycrafting*¹² and *min-maxing*¹³.
- **Therefore becoming an expert really depends on access to the mini-cultures in which these practices emerge.** Without this access, a player is ignorant of emergent

¹² <http://www.wowwiki.com/Theorycraft>

¹³ <http://en.wikipedia.org/wiki/Min-maxing>

raiding and non-raiding norms and the details of their dynamic social and material practice. Access depends on successful build up of social and cultural capital. These two forms of capital build off each other. The emergent culture means that contingent embodied acts that are of value are collectively defined. Without this collective, historical backdrop, social capital cannot accrue. It is the experiences that players have with each other that define the culture and build social capital and social networks.

- **Yet social and cultural reproduction and enculturation continue the narrowing or normalizing aspects of game play.** An example is how certain player-created modifications to the game (known as *add-ons*; I will detail one in the ANT chapter called “threat meter”) serve to give players both better awareness about fights, letting them be more aggressive in their game play, *and* ways to place players under surveillance, pushing them into certain ways of playing.
- **My raid group’s success could be understood through the concept of trust.** We trusted each other to play our agreed-upon roles and be responsible for necessary tasks in our raiding network. Again, this trust was based on our collectively accrued social and cultural capital.
- **Thinking about how roles and responsibilities were distributed lends itself to an object-oriented ontological way of analyzing the setting.** Actor-network theory, the mangle of practice / play, and distributed cognition—all of these were useful for

understanding the ecology of raiding and group expertise. The emergent practice was a collective social and material endeavor.

- **Disruptions and failures required repair work and renegotiation of roles and responsibilities.** This repair work was done through multiple communication channels over various timescales. Disruptions also helped me trace associations between actors in the network.
- **Over time, as raiding became more mature and more narrowly defined by standard sociomaterial practices, the basis of trust changed from trusting others to play their roles to trusting others to use communal technomaterial objects—to distribute certain responsibilities of raiding to a common set of nonhuman actors.** In other words, the cultural capital changed from embodied knowledge to capital in the form of artifacts and credentials. This was still based on our emergent practice, but the shift to number crunching possibly had a lasting effect on the family-feel of the group.
- **Shared, negotiated goals are necessary for the continued existence of an online team.** Eventually the raid group broke up. We lost our collective goal of hanging out and having fun. How this happened could be explained in a few different ways, but, primarily, it is possible that the narrowing ways to play the game changed the goals of some of the players to gaining loot and maximizing progress with raid fights, and these differing player motivations could not be reconciled

A *World of Warcraft* Primer

As mentioned before, *World of Warcraft* follows a tradition of role-playing games loosely based on *Dungeons & Dragons* (Gygax & Arneson, 1974; Wizards of the Coast, 2008) set in a Tolkien-inspired fantasy world (Tolkien, 1954/1955) full of exotic locales, aggressive monsters, and glory to be had (Blizzard Entertainment, 2004b). Each player chooses a type of character class to play (e.g., a brawny warrior, a backstabbing rogue) and the race of his or her character (e.g., orc, human), which in turn determines which of the two opposing factions his or her character is aligned with (Alliance or Horde; see Figure 4). Character class and race also determine one's initial attribute values (Strength, Agility, etc.) and the available abilities or actions one can perform (such as the rogue ability Sinister Strike; see Figure 5). The abilities from one class complement those from a different class, encouraging players to team up and cooperate. As a player journeys through the land with his or her character, completing quests and defeating monsters, the character accrues experience points (XP). After a certain amount of XP, the character advances an experience level and becomes more powerful through a rise in his or her attribute values and access to new abilities. Additionally, the corpses of defeated monsters can be searched for loot that help characters outfit themselves and be better prepared for future encounters. Some loot, for example, is enchanted and gives additional bonuses to a character's attributes.



Figure 4. World of Warcraft character creation screenshot showing a male orc rogue.

During the time of data collection for this project, WoW had a level cap of 60, which means that characters started out at level one and could only advance to level 60, at which point no more XP could be gained. (The level cap at the time of this writing is now 80.) Eventually, most players discovered that to continue to advance efficiently, they needed to team up with other players who were working on completing the same quests and defeating the same monsters.



Figure 5. World of Warcraft user interface showing the character panel (inset) with a mouse-over tooltip detailing the Agility attribute and the ability buttons on the bottom-right with a tooltip detailing the Sinister Strike ability.

To team up, the player-character joined a *party*, a group of up to five characters. Once reaching the level cap, the only way to improve one's character was to join a raid group—composed of several parties, making a larger group of up to 40 players—that could go to high-end dungeons to kill the monsters within for the loot they dropped. For some of the encounters a group will face, it is important to compose the party or raid with favorable proportions of the different character classes. For example, it is often useful to have a warrior

in the party to take the brunt of the blows from the monsters because warriors have high Stamina and are allowed by the game to wear plate armor, and it is also important to have someone who can heal the other party members when they take damage. Some encounters are much easier with certain group compositions.

Often a character was invited or allowed to join a raid group only if he or she met the raid's requirements in terms of his or her character class in relation to the existing composition of the raid. This worked under the assumption that the player was skilled and familiar with the game mechanics to play effectively (i.e., had relevant cultural capital). It was not the only factor, however. Preference was also often given to players via their standing social capital (e.g., based on their relationships with others in the group). Generally, players who had formed friendships or at least knew each other or were connected via their social networks joined up together. Two brothers joined together, for example, the older one getting the younger an invite when the older was originally invited to the raid group based off of his reputation as a skillful player. Players also gained access through affiliation to reputable guilds—in-game organizations that let players more easily communicate with others while playing—or through sponsorship from guildmates who were already part of the raid group. A common misconception is that raiding groups are synonymous with guild groups. Although this may be true in most cases, it was definitely not true on my server. In fact, of the raid groups I personally knew about, only a handful were guild-exclusive. It is true, however, that the roles players assume in the game were as much determined by their character classes and personal skills as by their social relationships.

Setting, Group, and Data Collection

World of Warcraft subscribers were divided up by region (North America, Asia, etc.) and time zone. Each of these zones had separate computer servers, running different instances of the game, so that each server had about three thousand players. Blizzard Entertainment decided to create different types of servers for players to log into, catering to different play styles, thus, some research findings may not be universal to all who engage in WoW play. The server that some existing friends of mine and I joined was a North American role-play (RP) server, where players agreed to use character names that stayed within the fantasy lore of Warcraft. We chose an RP server because players also agreed to restrict the content of their communication to in-game topics and limit their use of leet speak—a way of communicating using substituted characters and shorthand commonly associated with gaming culture, sometimes similar to the shorthand found in texting or instant messaging. In reality, there did seem a tendency for more in-character talk and less leet speak, but out-of-game references and abbreviated forms of communication still occurred, especially in private back channels and during moments where efficient, combat-specific talk (such as "rez pls") needed to happen (see "Role-Playing" interstitial). Our assumption was that less leet speak made for a more mature player base that valued effective communication skills.

In the spirit of joining an RP server, I created Thoguht, an orc rogue, and thought of a back-story featuring him as a "stabby stabby," cutthroat character who had reluctantly joined

the Horde in its battle against the oppressive Alliance.¹⁴ My friends and I quickly formed one of the server's first guilds, the Booty Bay Anglers. In the game, we (that is, the guild) had our own chat channel and interface panel to help us see who else was online, so we could form groups or share newly discovered information. Out of the game, we created our own website, with forums where we planned play times and events, discussed strategies, argued about character strengths and weaknesses, made “your mom” jokes, and posted links to *World of Warcraft* machinima¹⁵ and Internet memes.

The first few months of my playing time were spent leveling up, completing quests, and learning the rules of the game. Over the course of playing, our guild gained members and reputation and formed alliances with other guilds. About a year after I first started playing the game, I was able to join a raid group for endgame content through one of these alliances. It was a newly forming 40-person raid group that met up each week to delve into the dungeon known as Molten Core (MC) for a period of about 10 months (October 2005 through July

¹⁴ His description, as written in 2006 for an RP add-on called FlagRSP:

Thoguht appears short and stocky for an orc, but his movements are graceful and efficient. When he has his hood off, it is clear that the braids of his beard are well-groomed. With his hood on, you can still see the scowl on his face betrayed by the frown around his eyes. His is a life of violence having been born into demonic slavery. The demons taught him well, however, and when he joined Thrall for freedom, he was able to ply his knowledge of the shadowed path against his former oppressors. Unfortunately, since gaining his freedom and attempting to stake out a farm, he has found new oppression from the Alliance who understandably want revenge for years of war and pain suffered at the hands of the enslaved orcs. And so, he takes up arms again but, rather than fighting against the Alliance, he seeks common enemies in the hopes that they will unite the two ever disparate factions.

¹⁵ <http://www.machinima.com/>

2006). For the 8 months after I had leveled up but had not joined a raid, I participated in smaller five-person group activities in a sort of transition or training period meant to get powerful enough equipment for the larger high-end activities.

Molten Core was a volcanic cave deep below Blackrock Spire, located in a fiery, barren landscape (see Figure 6). The sounds of lava flows and rushing hot air provided steady background noise as we delved and fought the monsters inside. These monsters included a bevy of generic monsters like rocky Molten Giants and two headed Core Hounds and several big *bosses*—unique monsters with carefully scripted combat sequences, providing players greater technical challenge, with names like Majordomo Executus and Ragnaros (see Figure 7). Like all *World of Warcraft* monsters, each monster in MC had a set of abilities they used when fighting. For example, Molten Giants had a Stomp ability that damaged everyone around them. Part of successfully raiding a dungeon meant learning effective approaches to each encounter.



Figure 6. World of Warcraft screenshot from Molten Core, a fiery cave system full of monsters such as Lava Elementals, Core Hounds, Lava Surgeurs, and Molten Giants.

Over the months, the membership of this raid group fluctuated. We had a core of about 20 players from several guilds who had shown up every week since the formation of the group, another pool of 30 or 40 who were regulars for two or three months, and another 20 or so who showed up either just once or sporadically. On any given night, we would start forming up about an hour before actually going into the dungeon. If we were short a few players that night, we needed to invite others who were not regulars by having raid members ask their respective guilds if anyone was available to join us. I did not analyze any chat data from non-regulars to the group, but I did look at online message postings from all players, as it was a public forum.



Figure 7. Player-created map taken from web strategy guides of Molten Core for the game *World of Warcraft*. Each dot represents a different monster. Clusters of dots represent monsters that would have to be fought in groups. Larger dots show the location of boss monsters.

The raid group met twice a week for roughly 7 months and then just once a week for 3 months as they became more efficient in their monster killing. Each session lasted about 5

hours, and each week the group would attempt to kill as many of the boss monsters as possible before the dungeon reset every Tuesday. That is to say, every week the group would start anew because MC would be set back to its initial state and all of the bosses and other monsters would reappear. This mechanic was deliberately designed into the game to allow groups to achieve progress through iterative attempts to clear the dungeon. Some of the regular monsters, however, reappeared (known as *repopping* or *respawning*) after a few hours making backtracking during a session difficult. Only after 7 or 8 months of attempts was the group able to clear the dungeon completely before it reset the following week.

The last 3 months of this 7-8 month period were spent achieving the ultimate goal of raiding MC, defeating the last boss monster, Ragnaros and collecting the epic loot he dropped (see Figure 8). In sum, then, it took the group 5 months of regular practice in MC to learn how to kill efficiently the monsters before Ragnaros. Then it took another 3 months to learn how to execute successfully the Ragnaros fight. Like most WoW boss monsters, when he died, Ragnaros only dropped three or four items. This meant that raid groups typically continued to visit the dungeon to defeat Ragnaros multiple times even after they had solved the complex problem of his defeat so that every raid member, in theory, at least, could receive a loot reward. Various incentives were used by different groups in order to insure that raid members did not just leave the group once they received the loot they were personally after. One common method was to award points for participation that could then be spent during in-group loot auctions. The most famous of this system is called *dragon kill points* (DKP; Malone, 2009). Another method, a “laid back” one used by the group under study,

was by randomly awarding raid members with loot, giving veteran raiders weighted chances of winning, and emphasizing the group's values of friendship over loot (Chen, 2009a).



Figure 8. Ragnaros, the final boss in the Molten Core cave system in *World of Warcraft*. Three rogues in the foreground, listening to the raid group discuss fight strategies, passed the time by cracking jokes.

I collected raid data in the form of text chat logs during the whole 10 month period (about 600 hours of chat). It should be noted, however, that I did not get human subjects

research approval until about 3 months in to my raid group's life, so I have limited my chat analysis to just the spring of 2006. During this time, though, I was also able to collect about 80 hours of video data that includes our voice chat for certain key battles. Even though my discourse analysis has been limited, much of my insights come from my overall experience with the game community across several years of play, and some of the quotes I use come from publicly available web message board posts or in-game chat in public, non-raid channels. When I started collecting video data, I asked for permission and asked the raid members to tell me if they were below 18 years of age so I could exclude their chat from my analysis. Only one told me he was below 18, which supports my suspicion that most players of WoW on RP servers who get into high-end raid groups were adults. This was partially because of the time commitment required of high-end raiding and leveling a character up to 60 (Ducheneaut, Yee, Nickell, & Moore, 2006b). There were certainly many minors playing the game, in general, but I did not normally have much interaction with them once I was involved with the endgame content.

World of Warcraft had several default in-game text chat channels. These channels were color-coded and included the following:

- say—which only displayed talk from other players if they are near enough;
- yell—displayed talk that is broadcast to a large region;
- emote—displayed text for in-game character animations;
- whisper—displayed personal chat between two players;
- [Party]—for up to five players who had teamed up to complete quests or tasks;

- **[Guild]**—to send messages to guild members no matter where they were in-game;
- **[Officer]**—for the officers of a guild;
- **[Raid]**—for up to 40 players, consisting of eight parties of five players each.

There were also optional channels that most players in the raid group, including me, unsubscribed from because it was too daunting a task to keep track of that many channels and because the talk found on those channels was irrelevant to the raid. Any player could, however, also define custom chat channels to share with other players. My MC raid group used six custom channels, broken down by character class/role in the group. These were as follows:

- **[healsting]**—for the healer classes to talk about who to heal;
- **[madtankin]**—for the warriors to talk about who would play certain roles;
- **[splittranq]**—for the hunters in a specific fight in MC;
- **[madsheep]**—for the mages to coordinate who would cast polymorph spells in certain encounters;
- **[soulburn]**—for the warlocks to talk about who to support and which monsters to banish;
- **[madrogues]**—for the rogues to talk about general rogue strategy like when to use poisons on our weapons.

Normally, each player only subscribed to one of these channels depending on his or her character class. For much of the spring of 2006, I subscribed to all these channels so I could see the simultaneous coordination going on during our raid excursions.

The text chat from all my subscribed-to channels was recorded to external text files using a player-created add-on to the game. The raid group also used third-party voice chat software, and I was able to record movies of my computer video and audio, including their voice chat during certain boss fights. I then coded portions of the chat that I thought were evidence of various forms of learning or were particularly representative or meaningful to the group, such as chat from the same boss fights in which I recorded voice chat or from other moments that included strategy talk (see Figure 9).

A Note on Stance and Positionality

Similar to the work of other games scholars who write about their gaming groups (Steinkuehler, 2007; Taylor, 2006), this research brings a disciplined perception (Stevens & Hall, 1998) of gaming to orient to the kinds of activities and meaning-making taking place in and around the game. It attempts to document the practices of the raid group through a distributed cognition (Hutchins, 1995b) lens, mapping the learning pathways of the group as systemic wholes, which includes their use of technological / material resources.

19:30:00.953 : [2. madrogues] Rebecca: good... poison up... assist wei	- 'good' refers to the fact that no Rogues said they have not done this fight. Even so, Rebecca clarifies our role—use poisons on our weapons and focus-fire on Wei's target.
19:30:02.484 : [5. madtankin] William: where is wallace tonight?	-madtankin channel for the Warriors. wallace is a character who usually comes to our raids.
19:30:07.703 : [Raid] Maxwell: Henry peels to Marcie	-role assignment
19:30:10.468 : [3. healsting] Drusella: *runs around like crazy people*	-Druids are getting a little silly now...
19:30:12.656 : [3. healsting] Sven: We could... DPS shaman, Holy Nova priests?	-more suggestions on turning certain healers into damage dealers instead
19:30:15.312 : [5. madtankin] Wallace: I didn't make it in time. Rawr!	-Wallace is still subscribed to the madtankin channel even though he is not part of the raid. These custom chat channels exist independently from any other channels in the game.
19:30:17.453 : To Lori: May I have a healthstone pretty please?	-Healthstones made by different Warlocks sometimes have different amounts of healing they can do (depending on how a player has 'spec'd' the character) which means they can be stored in one's inventory at the same time. In this case, I know Larry and Lori create different types of healthstones, so I've requested one from each.
19:30:17.687 : [Raid] Maxwell: Horace peels to Mary	-role assignment
19:30:19.640 : [4. soulburn] Lori: Les-for this fight you will be ssing Derek.	-what to do with that one soulstone that Lester has available

Figure 9. Example chat log with annotations that I later added to help make sense of the data.

When it seems appropriate, I write in the first person and refer to the raid group as *my* group. I may say that *we* accomplished certain goals rather than *they* accomplished the goals. I do this as a way to emphasize my role as a participant—as an actor in the network. Additionally, I may give a personal account of my change in thinking during our raiding activities.

I cannot possibly—no one can possibly—know what is going on in the mind of another person. Therefore, there is no way I can ever fully understand someone else and what

they feel or what they are thinking. Following Latour (2005), all I can do is infer; I can make very good guesses as to what people were doing and why and trace how they did what they did. Furthermore, I do have systematic data on the chat and interaction behavior of members of my raid group and chat data from general WoW playing. I believe I analyzed these data with some epistemic authority, having lived so much of my life in the game's culture.

Even though I never knew most of my participants' offscreen names, all character and guild names have been changed to further protect participants' identities. I took this opportunity, however, to code meaning into my character aliases by using ones that start with the same letter as the character's classes (e.g., "Roger" is a rogue, "Maxwell" is a mage, etc.). The only exception is for warlocks. To disambiguate from warriors, I used the player shorthand for warlocks (*locks*) and gave all the locks in my group aliases that started with "L."

In the chat and message board data that I will be presenting, I did not correct for grammar or misspellings, as I sometimes found them indications of whether a player was being mindful of what he or she was typing. The communities I participated in valued proper English sentence formation, grammar, and spelling, even if they also used common game-specific terms. Finally, lines of chat has been color-coded to help differentiate the chat channel that was used by the players to communicate.

PUGGING THE CHICKEN QUEST

The following interstitial section describes a play session while leveling up: conversing and meeting up with a friend, followed by forming a group with a stranger to cooperate on a quest. This is meant to illustrate typical, non-raiding gameplay and the different norms that existed for public and private chat channels on a role-play server.

While leveling up, I'd often log onto *World of Warcraft* as soon as I woke up. Another guild officer for the Booty Bay Anglers, Meep, was often already online since he lived in the Eastern Time zone. The officers normally partied together whenever we could, so Meep sent me a party invite as soon as I logged on without asking if I wanted to join first. We quickly decided to do the chicken escort quest in Tanaris and agreed to meet at the quest start location, but my character, Thoguht, had to train some new rogue abilities first (after having leveled up the night before) and then check something in the Auction House—an in-game market driven by players similar to eBay (see Figure 10).



Figure 10. World of Warcraft's in-game auction house.

While I was checking the Auction House, I asked Meep if he could wait 15 minutes, but I ended up making him wait for about an hour due to travel time (it took a good 10-12 minutes to fly from Orgrimmar to Gadgetzan¹⁶ and then another 5 minutes to run over to the quest location) and going afk (*away from keys* or *away from keyboard*, indicating that I was not at the computer) for 30 minutes to take care of some offscreen, “in real life (IRL),” errands. After finally getting to the deserts of Tanaris and marveling at how oppressive the visuals and art design for the arid heat could be during my run, I met up with Meep. When I

¹⁶ Key cities had game-controlled non-player characters called Flight Masters who offered player-characters a sort of airline service on the backs of wyverns that flew from city to city. This was much faster and less laborious than manual navigation by the player on foot or using mounted transport.

got there and we accepted the quest, however, we came across another Horde player, a priest named Powder:

[Thoguht] says: Hi.

[Powder] says: hey you guys going to save the Chicken

Powder greets everyone with a hearty hello!

[Thoguht] says: Yes. want to join us?

[Powder] says: sure

[Party] [Meep]: ready

[Thoguht] says: Meep is the party leader and he is currently daydreaming for one sec...

[Powder] says: lol

Powder joins the party.

[Party] [Powder]: hey

[Thoguht] says: Ready?

[Party] [Meep]: Hve you done this before Powder?

[Meep] says: Animus Arcanus!

[Meep] says: Animus Arcanus!

[Party] [Powder]: nope i tried once by myself

[Party] [Meep]: Well, the key is to hang way back

[Party] [Powder]: but that was just no good

[Party] [Meep]: And dont attack ANYTHING unless the chicken attacks it
first

[Party] [Powder]: right

[Thoguht] says: Ah right. etiquette. Let the chicken attack first. Do not attack
anything unless the chicken attacks.

[Party] [Powder]: did the one in Feralas too

[Party] [Meep]: Righto.

[Party] [Meep]: I'm ready

[Party] [Powder]: stupid Chikens

[Party] [Powder]: rdy

[Thoguht] says: yes.

Grouping with people who were strangers was known as participating in a *pick-up group* (PUG). As was common in the early days of WoW playing on a role-play (RP) server, Meep and I would keep our “says” in character. That is, we would type out full sentences and pretend we were really in Azeroth. This is why when Meep—or, more precisely, the player who controlled Meep—was afk, I explained that he was daydreaming. It also explains why Meep’s player felt compelled to include a chant in the say channel while casting certain spells (“Animus Arcanus!”). Since we had never met Powder before, we spent some time up front to greet each other and make sure we were working on the same quest before joining forces. Contrast this with Meep’s instant invite to me as soon as I logged on. Once we were

all in the same party, we used the party chat channel to talk about strategy more informally, without having to adhere to RP standards.

The three of us activated the quest, and, with a start, the mechanical chicken woke up and announced, “Homing Robot OOX-17/TN says: Emergency power activated! Initializing ambulatory motor! CLUCK!” It then took off running Northeast. For the next few minutes, the three Hordies ran after the robot chicken, letting it attract the attention of local predators before jumping in to rescue it from harm. Unfortunately, we became overrun with monsters, losing the chicken to a large-dog-sized Basilisk. We had failed the escort quest and had to try again, but while running back to the start location of the quest, Meep took the time to reflect on what went wrong and how to improve our strategy with, “I shoulda AoEd em.”

As will be evident in the next chapter, this time to reflect on performance was important for raiding. This case with Meep shows that reflecting and learning from failures was part of standard WoW practice, not just raiding practice. *AoE* stands for *area of effect*. and to AoE someone was to activate abilities or cast spells that did damage to an area rather than to an individual target. Meep realized that when we got mobbed by many enemies, he could have hurt them all at once instead of one at a time.

On our second attempt, Meep used the private officer channel for our guild to talk to me, but our side conversation was interrupted by the chicken who had seemed to attract the attention of some specially spawned, quest-specific enemies:

[Officer] [Meep]: can't priests do any offence? :)

[Officer] [Thoguht]: depends on the spec

Homing Robot OOX-17/TN says: CLUCK! Sensors detect spatial anomaly --
danger imminent! CLUCK!

Wastewander Scofflaw says: No one challenges the Wastewander nomads --
not even robotic chickens! ATTACK!

After the three of us defeated the Wastewander Scofflaw and his nomad friends, we successfully escorted the chicken back to base. Powder seemed to be aware of how little help he had been and said, “thanks guys sry about the no help,” to which Meep replied, “No prob :)”

While the mechanical chicken despawned (“Homing Robot OOX-17/TN says: Cloaking systems online! CLUCK! Engaging cloak for transport to Booty Bay!”), Thoguht, Meep, and Powder said goodbye and thanks to each other:

[Thoguht] says: K thanks.

[Party] [Powder]: later thanks a lot

[Thoguht] says: Bye.

Powder leaves the party.

Powder waves goodbye to everyone. Farewell!

Meep bows before Powder.

Powder bows before you.

Powder bows before Meep.

[Party] [Meep]: What now?

We used a combination of chat and in-game animations called *emotes*, even though typing the emote commands took time. Our desire to be cordial to each other was well within the norms of playing on an RP server. The norms that were being set were not explicit, however, as it is clear that Meep and I adhered to syntactically correct English more so than Powder. Meep and I were mostly careful about capitalizing first letters in sentences and ending our sentences with periods when we were talking with strangers. Powder brought with him his own notions of communicative norms and chose not to adhere to the same rules that Meep and I were using.. Norms and etiquette were emergent and dynamic through player interaction and not completely standardized. The following chapter unpacks this notion, describing the emergent sociomaterial nature of expertise development in *World of Warcraft*.

CHAPTER 1: EXPERTISE IN *WORLD OF WARCRAFT* PLAYERS AS DISTRIBUTED SOCIOMATERIAL PRACTICE

Expertise Understood Through Ethnography

A recent increasing interest in the use of digital games for education has included a look at designed games or virtual environments for specific content learning (cf. Holland et al., 2003) as well as a look at what players can learn from non-education-specific games (Prensky, 2000; Gee, 2003). Researchers in the latter field argue that there are certain algorithmic processes or methods (such as using trial and error found in inquiry-based activity) to be learned through playing in a rule-based system, and the value of learning these processes may outweigh subject area knowledge acquisition. Yet other researchers look at game players and their literacy practices (cf. Hawisher & Selfe, 2007). This increasing interest among educational researchers in digital games¹⁷ touches on a larger scholarly movement that includes humanistic debates on whether games are essentially narratives, allowing for literary analyses, or essentially systems with goals and constraints, begging for process-oriented analyses. This movement also includes sociological / anthropological examinations of the culture and players around games (cf. Games Learning Society, 2010). I take a cue from this latter aspect of the movement to reframe educational inquiry into the learning that happens with digital games by considering the *sociomaterial* (Orlikowski, 2007)

¹⁷ See, for example, the archives of the Digital Games Researchers Association (DiGRA) conferences (<http://www.digra.org>), the online journal *Game Studies* (<http://gamestudies.org>), and *Games and Culture* (<http://gac.sagepub.com>).

settings in which learning occurs. When one thinks about learning, it cannot be disassociated from specific contexts, and in fact, learning is only meaningful if it helps people participate in their activities of choice. One way to examine learning trajectories for participation is to approach it as expertise development.

Expertise development is not limited to professional or classroom settings and may occur in all the domains of activity in which people participate. In other words, one can be an expert outside traditionally considered domains, and looking at expertise development in these various settings is important for understanding consequential learning across settings. This way of looking at the development of expertise considers it a sociocultural process rather than an individual experience. In other words, individuals participate within a larger social context, and acquiring expertise is, as Collins and Evans (2007) note, “a matter of socialization into the practices of an expert group” (p. 3). As Bricker and Bell (2008) further note

Learning is therefore deeply bound up in an account of expertise development because one must learn what expertise means within the confines of the groups to which he/she belongs, learn what practices and other, possibly tacit, understandings are associated with that expertise, and learn which networks of people and resources are best able to socialize one into these practices and understandings.

Other educational researchers have looked at “possibly tacit” forms of expertise using ethnographic methods (Lave, 1988; Hutchins, 1995a; Goodwin, 1994). The social and material aspects of expert practices need to be directly observed to get an accurate picture of the interaction that goes into making expertise. This is similar to cultural or social anthropology, which considers *culture* as social relations of meaning-making and not just embodied knowledge in individuals. Boellstorff (2006) states

If culture, in Goodenough’s (1964) terms, “consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members,” then it is hard to explain why men and women, who both can operate acceptably, are nonetheless unequal. Rich and poor people can both speak language, but framing culture on the model of a language elides issues of inequality that can be found in most cultures worldwide. In game studies to date, the relative absence of feminist, political economic, queer, and other theories of culture is striking, particularly given the importance of profit, consumerism, and capitalism more generally in gaming (p. 31).

The idea that learning and expertise development occur within particular sociocultural settings complicates educational research, since it is therefore important to understand how people within these various settings display and develop expertise, using their own contextualized notions of what constitutes legitimate practice. On top of this, it is important to pay particular attention to inequities and issues of power in the various local settings under

study. To do this, it is helpful to participate in local expert practices to better understand their meaning and value from real experience.

In an effort to do this, I participated with and write about groups of players in *World of Warcraft*. Since I was a fellow player before I had any intention of studying the game or its players, my eventual research participants saw me as a comrade-in-arms rather than as an observer. After playing WoW for a while, I came to realize this was a site where people attach deep meanings to their activities and experiences with the game and other players. It became clear that social relationships and connections have a profound effect on an individual player's experience with the game and the social and cultural world of the game make playing it feel very different than playing a single-player game.

For example, access to in-game content was often limited by a player's ability to align him or herself with a larger group of expert players, since at higher levels, monsters and quests were not easy enough to overcome alone. This, in turn, depended on successful networking and possessing a high enough reputation, similar to what Jakobsson and Taylor (2003) saw with successful players of *EverQuest* (Sony Online, 1999), an MMOG that preceded WoW. Access also depended on the possession of social and cultural capital (Bourdieu, 1986; Malaby, 2006).

These gateways to expert groups are not clearly revealed in existing literature based on survey data such as the research of Ducheneaut et al. (2006a). Through longitudinal census data, they found that players tended to form more groups once they had reached level 55 (at the time, level 60 was the highest a character could be in the game). They write

Therefore WoW seems like a game where the endgame is social, not the game as a whole. One player summarized this situation nicely by saying that WoW's subscribers tend to be "alone together:" they play surrounded by others instead of playing with them (p. 410).

There is no doubt about the usefulness of these large-scale surveys, and in fact they complement other methods very well as a way to triangulate and validate findings. Yet Ducheneaut et al. did not capture the ways players actually group together and the barriers to entry that prevent some players from finding stable groups when they reach the higher levels.

I was able to see and experience these barriers firsthand by reaching these higher levels and facing the real difficulty of joining and forming raid groups. In fact, I only became privy to the endgame stage of *World of Warcraft* after playing for over a year and attempting to join a large raid group for over half a year. This was largely due to constraints imposed by the game, such as requiring 40 players to band together and play at the same time, sometimes for up to 15 hours a week. Many players could not find groups that matched their schedules. This frustration with the high-end raiding requirements meant that many players decided to stop playing once they got to level 60. These players are not captured in surveys that draw on current players as their pool of participants.

Ducheneaut et al. also don't capture the ways in which players may communicate with others through methods such as in-game chat channels or out-of-game voice chat with third-party software or telephones. In other words, players often find themselves mired in a

myriad of different communication and co-presence practices, which include the assemblage of various social and material resources, even when their characters are neither physically in the same game spaces nor in the same in-game group. These were details that were made clear to me through ethnography.

Expertise development in *World of Warcraft* was not limited to an individual player's ability to grasp the underlying mechanics of the game. The social aspects—social and cultural capital, social networking—played a tremendous role in whether a particular player was successful and could engage in the various seemingly equally accessible game activities. It was these social aspects that determined whether players were included as participants determining the ever changing sociomaterial practices that defined expertise. Playing *World of Warcraft* occurred in roughly two stages: (a) progression through more forgiving early game content and (b) engaging in technically difficult endgame content. Both stages included disciplined assemblage of social and technical resources to success.

It should be noted that looking at expertise development in these two stages is relatively artificial because most players were involved in many activities and group memberships throughout their game-playing lifetimes. Many players, however, likened WoW to two different games, divided by the level cap. Thus, treating these two parts of the game as two different stages with different player practices that emphasized different skills is useful for separating game rules or mechanics-based expertise from socially and culturally relevant forms of expertise. Players saw rules-based or content-based knowledge as what defined expertise in WoW, especially in the first stage, but in actuality, partaking of expert

practice that included distributing the work of playing across multiple resources defined expertise. Ultimately, if the gamers I played with wanted to succeed in their endgame or stage two endeavors, their social networks and social capital were as important as their game-content knowledge because it gave them access to a community of sociomaterial practice.

Stage One: Leveling Up

Expertise depended highly on social interaction, yet many players held onto traditional notions of expertise and saw expertise while leveling up as defined by a player's ability to kill monsters efficiently. This necessitated knowledge of the multitude of actions available to a particular character class and the underlying math behind those actions. In other words, to these players, an expert had to be able to recognize and understand the game mechanics under the narrative. This essentially is what defines expert status in any single-player game: games are inherently systems of rules that need to be understood to win. *World of Warcraft*, however, is a multiplayer game, and therefore it provides a social setting where success was dynamically defined through consensus on expert practice. This was new for many of us who had spent most of our gaming lives playing single-player games. In fact, the game presented different players with hugely varying experiences, much of it depending on their ability to navigate the social world and gain access to expert groups, a process initiated in this first stage of play.

With WoW, as with most digital games, a player could go about learning the rules in different ways. The focus for new players tended to be on solving quests and leveling up

their characters. To do this, it was possible to simply interact directly with the game and use whatever the game provided for solving quests and killing monsters. It was much easier, however, to reference third-party material like online quest guides to learn how the game worked. Once WoW was out for a few years, for example, most players referenced websites such as Wowhead (<http://wowhead.com>) and Thottbot (<http://thottbot.com>) to read about quests and to plan an efficient process for completing them. Wowhead and Thottbot are both community driven in that the hints and tips for each quest or item listing are written as comments by users of those sites. The use of these sites was eventually considered expert practice. *World of Warcraft*'s lead designer confirmed this when he said, "The people that don't go to Thottbot are the casual players" (Edge Staff, 2006). That is, supplementing the in-game resources with third-party tools was the norm for expert or hardcore players, and non-experts, or casual players, tended just to use what was available in the game. This is an early example of expertise being socially dependent, as usage of these sites is propagated through word of mouth. Casual players or players who did not communicate much with others could have been oblivious to these outside resources.

When my guild first began to play, however, these sites did not yet exist. In fact, our experiences in those early days were very different and filled with a sense of new exploration and discovery. By the time we hit level 40 or so, Thottbot came into existence, and its use became our standard whenever we were unclear about new quests, but only after we attempted to discover for ourselves how to conquer them. In the early days, the other guild founders and I also tended to group together to work on shared quests as a party. Sometimes

we would join a party together even though we were in different game regions and working on our own separate quests or killing different sets of monsters. We did this so we could use the party chat channel, making communication easy across great distances, akin to a radio channel or an Internet relay chat (IRC) channel. The ability to work on different quests simultaneously allowed players to gain levels at different paces, accommodating varying schedules.

Being able to quest alone or in a small party also simplified monster encounters because it was usually best done by *spamming* certain abilities. While in a small party, each player focused on whatever role their character class was meant to play. A warrior, for example, was meant to take the brunt of the monster blows (called *tanking*), while a priest was supposed to heal the other party members, and a rogue was meant to focus on dealing as much damage per second (DPS) as possible. An able player knew which abilities were efficient at tanking, healing, or DPSing during most situations. Learning about these abilities when leveling up for the first time was usually a process of trial and error. Characters could learn new abilities at every even-numbered level, which could then be tested in future encounters to get a sense of their usefulness. Players could then build mental models of the combat mechanics underlying the game and then share these models with other players, making scientific arguments about the most efficient way to play. I remember going to an in-game area, the cage found in Gadgetzan, for example, with a warrior friend to test out different abilities, weapons, and shields while dueling each other to help us determine which combination of items and abilities was most effective and to help us understand the

underlying math of the game (see “Theorycrafting” interstitial). We later would learn that this practice of testing out different variables under different conditions was called *theorycrafting* (WoWWiki, 2010b). Our mental models did not need to be perfect, though, as there was a lot of lenience in the monster fights during this first stage of WoW. Successfully killing monsters and leveling up, in other words, depended on only a general knowledge of game mechanics.

When my guild and I were leveling up our second characters, common practice was to use third-party add-ons or extensions to the in-game interface that had not yet existed for our first characters. Most add-ons revealed some of the underlying mechanics of the game. Blizzard Entertainment has always allowed the use of these add-ons—found on clearinghouse websites such as [Curse.com](https://www.curse.com)—by including a way to edit the user interface through a simple scripting language. For example, many players used an add-on that displayed information about the math behind a particular ability when one hovered the mouse over that ability (see Figure 11). This helped players evaluate and determine the effectiveness of their various abilities and plan accordingly.



Figure 11. World of Warcraft game interface showing the Sinister Strike ability and the underlying math involved as revealed by a third-party add-on. Other add-ons have changed the user interface such as button position and a top bar keeping track of various pieces of information.

Additional add-ons were often used by experienced players to make fights more transparent. Many of these player-created add-ons helped lessen the cognitive load (Sweller, 1988) a player needed to maintain his or her mental model of the fight by visually displaying relevant information that the player could reference quickly, thus allowing the player to concentrate on decision making. In other words, becoming a better player meant continually

reassembling or rearranging the player's personal network of responsible objects—continually enrolling new resources into the network. A typical fight from this leveling-up stage of *World of Warcraft* might have featured many of these resources (see Figure 12).



Figure 12. Example of a solo fight in *World of Warcraft*. Individual skill and understanding of the game was all that mattered here. Note the use of third-party add-ons that keep track of things like active abilities (Slice and Dice, Lightning Bolt) and the current Health of both the character and the monster (a Deadwind Ogre Mage).

Since each player needed to understand the system, even if just in a gross sense rather than the exact numbers behind the different actions he or she could perform, this first stage of *World of Warcraft* could be viewed as one of individual arrangements. Through the process of leveling up, players acquired a sense of the effectiveness of all the different abilities for the particular characters they were playing, so by the time they hit level 60, they could loosely be deemed competent players. This did not necessarily make them expert players, however, as it was actually relatively easy to level up. In other words, it was difficult to determine expertise by simply looking at the level of a player's character. Instead, using third-party add-ons and outside websites was a good indication of expertise as it was an indication of being able to draw on skills and resources beyond the ones provided by the game, something that was defined by the player community as being expert practice.

Leveling up to 60 took a rough average of two or three months for people who played about 40 hours a week and were leveling their first character. Meanwhile, players gained reputation and social capital and built their social networks during this leveling-up process through interacting with other players whom they came across while traveling the lands (see “PUGging” interstitial). By the time players hit level 60, they had built up a pool of friends they could call on for help or company, as well as a list of players to avoid. Players could designate other players as “friends,” which then put their names on a list within the game interface that could be used to quickly see if any of them were online (see Figure 13). Working together in a party, also known as *grouping*, was the most effective way to determine whether another player was competent and worthy of being placed in the friends

list. In this way, players could display expertise through their performance, rather than just relying on their character level.



Figure 13. *World of Warcraft* friends list, part of the social panel built into the game.

In his ethnography of Linden Labs, Malaby (2009) describes the concept of *contingency* and how contingent acts—that is, actions that have a chance of failure—hold more value, generate more cultural capital, than less contingent acts. Displaying expertise through performance is essentially showing that one belongs to a particular cultural group by performing contingent acts. This was a sure way for WoW players to position themselves as experts. Character level was another form of cultural capital—institutionalized credentials

that labeled a player as an expert. The problem, as stated earlier, though, was that it was relatively easy to get this form of certificate. It was easy to reach maximum level.

Grouping was also useful to determine how sociable other players were. In other words, no matter how knowledgeable a player was, it was possible he or she could be ostracized by certain gaming circles for lacking social skills or, even worse, being outright antisocial. Surprisingly, many players seemed to be antisocial, as it was generally agreed that participating in a pick-up group (PUG) was often an unsatisfactory experience since there was no guarantee that the players in the party would all be sociable or competent. Often, the sociable people were also the competent ones. It was assumed that players who took the time to be conscious of their talk and actions also paid attention to and learned from how others behaved.

Expert practice in this first stage of playing was the sum of using external websites and add-ons as well as learning the mechanics of the game well enough to play in a team. These were all skills propagated through effective communication and networking. The development of expertise came out of participating and building social capital through normalized communication practices. Learning about the various external resources available to players and about the pros and cons of certain character abilities was facilitated through participation in player communities, both in the game and out of the game.

Stage Two: Raiding

If the first stage of *World of Warcraft* depended on individual arrangements and expertise, the second stage required players to transition to a collective model of expertise where roles and responsibilities became specialized and distributed among multiple players and their material resources. The social nature of WoW was important in both stages of the game, but endgame activities made it take on a new light and more clearly showed how social interactions and social and cultural capital contributed to success. This next stage mostly consisted of dungeon-specific settings that required up to 40 players to team up if they were to defeat the monsters inside. It was useful, then, to have an established pool of players to draw from for this new activity.

For some of the encounters our raid faced, it was crucially important to have specific character classes in the group composition. For example, it was usually necessary to have a warrior in the party to take the brunt of the blows from the monsters, and it was equally important to have people who could heal the other party members when they took damage. Some encounters were much easier with certain group compositions. This was very important for new bosses, when everything that could be tilted in the raid's favor mattered.

Often, however, whom we invited was fully grounded in the various social networks and friends lists of existing raid members. In fact, we sometimes prided ourselves in trying to defeat certain endgame encounters without the optimal group composition. When we were first forming, our raid leader wrote, "As for class balance, I'm not going to tell people who to bring. We're here to have fun, not be forced to do something, after all."

Instead, we were more open than some other raiding groups to making sure our friends were being included in our activities. This social obligation we felt was evidence of the importance of social capital and reciprocal friendships, but valuing social skills was not necessarily a given for all players. We needed to negotiate this as a norm for our group by priming players for socialization. In response to troubles my guild was having with a particular player who was not fitting in, I wrote on my guild's discussion board:

So, realize that *World of Warcraft* is NOT a single-player game. The things that make someone a good player in a single-player game do not hold the same value here. In a single-player game, for example, you could concentrate on working the system and maximizing your efficiency in winning the game. In WoW, things work a little differently. The first thought most players have is that to be a good player and work well with a party is to know your class. I would argue that it is only a part of what makes you a good player. This is because a MMOG is a social game. You have to deal with other people who may or may not be as adept as you. They have different personalities, goals, motivations. Sometimes they are having a really great day, sometimes a really bad day. All the players form a social network and community in which certain behaviors are considered normal and others deviant. So, my point is that just because you are good at your class, doesn't mean you are a good player. We value you as a player, not as a class.

As stated earlier, however, the friendships we formed were, in part, due to successful displays of competence with the game. On top of this, we also had a wealth of common experiences to reference, and we had developed a shared culture over the months of play. Referencing “Barrens Chat,” for example, elicited a collective groan from any person who had gone through the experience of leveling a character in the Barrens region (WoWWiki, 2010a).

Our knowledge of game mechanics and the usage of add-ons from the first stage of *World of Warcraft* was a solid foundation, but raiding focused on highly technical encounters that were uniquely scripted with various events or phases in which monsters activated powerful abilities, and the group could only be successful if players learned to adapt and relearn the ways they played the game. The old method of spamming abilities no longer worked, because raid monsters hit back much harder than previous monsters. Only tanks could take the hits and survive, so their role was to maintain the monsters’ attention or aggravation (*aggro*). Meanwhile healer classes needed to continually replenish the tanks’ Health while other classes dealt as much damage as possible to the monsters without drawing aggro to themselves.¹⁸

Similar to the *distributed cognition* that Hutchins (1995a) writes about on a naval vessel among its crew and their material resources, the raid as a whole succeeded when simultaneous specialized actions were performed by players who may have only been knowledgeable about their individual roles. For Hutchins, the ship can be seen as an entity

¹⁸ I describe what a fight in Molten Core looked like in the next chapter.

whose behavior is completed through collective action and distributed responsibilities. This distribution of specialized roles was built into *World of Warcraft* raiding through its use of specialized character classes. Thus, to succeed, raid members had to trust each other and be confident in each other's knowledge and ability to stay coordinated throughout a fight. This trust was such that the raid members identified with the group, treating the raid as a single entity.

Successful simultaneous role-playing included using specialized chat channels that only players of specific roles could see. For example, in my game play, general raid talk was done using the raid channel while all the rogues used a user-created channel called "madrogues" for talk about rogue-specific strategies.

The talk in all of these channels included questions and answers, conjectures on different strategies, off-task joking around, and pleasantries. Most of this talk was done during planning before an encounter, followed by assessment and reflection time after the encounter. For example, when the raid group was first learning how to defeat Ragnaros, the last boss in Molten Core, preplanning took as much as an hour. This time was mostly spent listening to our raid leader and other players (who had read about or done the fight before) summarize the different phases of the encounter, where each type of character class needed to be standing at each phase, Ragnaros's various abilities and actions, and our instructions during those moments. During their summary, some players would ask clarifying questions or make suggestions for other strategies to use given our particular raid composition. In addition to this in-game preplanning time, we were expected to have read online strategy

guides such as The Pacifists Guild's guide to Ragnaros, which is a good 14 pages long (see Appendix A).

Whether it was before, during, or after an encounter, the talk was full of task-specific lingo. Utterances such as, "Remember, ss target will change at Domo, but until then, your rezzer is to be ssed at all times" made complete sense to our group of players. Like any group of people who spend a lot of time together on a shared activity, *World of Warcraft* players developed their own communication shortcuts full of activity-specific references. This was necessary both as a way of communicating efficiently and as a way of affirming and strengthening our cultural production.

Being a successful player meant participating in a larger shared culture. Players were indoctrinated to WoW's culture during stage one, and their display of cultural knowledge during stage two became more a part of expert practice, though this, of course, is a rough, arbitrary distinction, as cultural capital was continually built on and displayed throughout the full course of playing the game.



Figure 14. An overhead map—created outside the game—of Ragnaros’s chamber in Molten Core, a dungeon found in *World of Warcraft*, showing example positions raid members took while fighting Ragnaros, the large icon in the middle. Each smaller icon represents a player, with the type of icon indicating character class.

All this communication may have served to make the task of dungeon delving seem less like work. Unlike in stage one fights while leveling, players assumed new responsibilities to other players in stage two fights. Consequently, these encounters had to be

planned carefully and were serious business. Group fights while leveling needed planning too, but not to the degree found in endgame raids. Physical position mattered (see Figure 14). Often, for example, rogues needed to be standing behind a monster's back, while mages and other spell casters needed to be spread out around the fight's locus. Many endgame bosses had abilities that affected all characters in front of them or all characters in a tight bunch. This was unlike most non-dungeon monsters, where a fight was often between just one character and the monster, and players could not get behind the monster as it would always be facing that one character.

Additionally, executing the same abilities used in a basic fight during a raid fight often resulted in catastrophic failure. With rogues, for example, it was important to play a careful balancing game using good, steady damage rather than sharp spikes of damage, as was normally the case for pre-raid monsters. This was because spikes during a raid fight could pose enough of a threat to a monster that it would decide to focus its attention on the character that had spiked. Each character class has to adapt to new parameters like these for raid encounters. Failure to do so resulted in death (see Figure 15), making the rest of the fight more difficult. If a critical number of characters died, the fight soon ended in a *wipe*, where all the characters died because they could not sustain enough damage before the monster(s) killed everyone. When this happened to my group, we would have to respawn or resurrect ourselves and try again, costing us precious time.



Figure 15. An example of an unsuccessful raid fight with Ragnaros, the final boss in the *World of Warcraft* dungeon Molten Core.

Given how varied the fights are in *World of Warcraft*, all successful players exhibited adaptive expertise (Hatano & Inagaki, 1986)—the ability to generate new procedures to solve novel problems—to some degree in that they were able to adjust to specific monster abilities and choose which personal abilities were most suitable to execute. For raiding, however, the adaptation necessary was in how players thought about fights, including a change in player expectations and stance. Some players were able to adapt faster than others.

Indeed, the step up in difficulty of boss encounters could sometimes be a shock for new players to raiding, and part of socializing new players included aligning them to new attitudes. One player wrote on my guild's forums about frustrations over failing at some early raid encounters:

Now I hope no one's getting frustrated. This is how raids go. It's normal: You fight and fight and fight until your gear is broken, repair and do it again. Once you finally get it down you can farm them for loots.¹⁹ It can take a while to master these encounters but we're doing good work!

To help do this "good work," my raid group used a common set of third-party add-ons. One add-on, which I detail in the "ANT" chapter, for example, kept track of the threat each character posed to whichever monster was being fought at any given time so that we could be sure not to generate more threat than the main tank. Another add-on kept track of the various abilities boss monsters had available and notified raid members when those abilities were being activated so that we could take appropriate countermeasures. The use of add-ons was part of our common expert practice and exemplified how we used material resources to help with our memory and decision-making processes. In other words, our responsibilities and memory were distributed among the raid members and collective and

¹⁹ The term *farming* is used when certain monsters are killed over and over again for the loot they drop.

individual material resources. Installation of these add-ons was required for any new players if they wanted to participate in the raid.

In summary, access to expert groups in WoW was done mostly by leveraging existing social bonds. Players' subsequent experience with tasks that depended on position and synergy of distributed specialized roles was the core of the endgame expertise development. Part of this development was an induction into a normalized way of communicating—framing work (Goffman, 1986) was done by veterans to help align teams to new expectations on in-game encounters. Players who did not have or could not gain access to these groups were dependent on PUGs and, I surmise, were less likely to keep a sustained interest in the game. It was through these expert groups that players shared knowledge about new add-ons and new strategies to use on raid encounters.

Reflections on Studying Expert Practice

The social nature of *World of Warcraft* was a given, but a player's experience depended more on his or her social and cultural capital development than his or her personal game-content knowledge. Thus, mastering WoW was more than simply mastering a particular character class; it also meant being able to move in various social circles and communicate effectively. It meant being able to use third-party tools and other resources that had been taken up by expert players as common practice.

The practices we participated in were constantly changing, affected by new information about the game, new developments or patches to the game (tweaking the rules

slightly or addressing balance and fairness issues), and new players constantly joining the player base. In addition to using certain add-ons, a new practice when I joined was the use of outside websites to discuss in extreme detail the strategies, abilities, and effectiveness of particular ways of playing specific character classes and how to improve one's performance and value for a raid group. The theorycrafting for rogues on Elitist Jerks' website (Elitists Jerks, 2008), for example, was aimed at helping rogues maximize a steady damage stream specifically for raiding. The high-level talk found on this web forum, with all of its shortcuts and jargon, was more readily understandable to people with an intimate knowledge of the rogue class. The best way to gain this knowledge was by playing the game as a rogue.

When I decided to study *World of Warcraft*, it was with a relatively new culture. WoW had only been around for a year, and the player community around the game was in its infancy. The early months felt like a new frontier to me and the gamers I played with. Social norms and etiquette had not yet stabilized, and players were still figuring out the underlying mechanics of the game. In the early days, for example, meeting another character in a remote locale in the game was sometimes awkward. We had not yet established the proper way to greet each other or even if we were supposed to greet each other. This was exacerbated by being on a role-play server where it seemed as if, in keeping with the fantasy of the game, one would definitely at least say hello to someone found in the middle of nowhere. Sometimes it seemed obvious that the other character was working on common quest objectives, but it was unclear whether we should group up to do them together. I tended to

befriend those who were receptive to greetings and talk, which might have slowed down their leveling but showed that they were willing to be social.

Understanding the social nature of *World of Warcraft* through ethnographic methods is crucial for mapping out an accurate picture of expertise development within the game. Learning with digital games in this case meant learning *with people* in a game where the game itself served as a setting or backdrop for group work. Gaining access to expert player groups and learning from them, accruing social and cultural capital, and building one's social network affect a player's learning trajectory far more than simply grasping the game's mechanics. Expertise development within WoW, then, was tied inextricably to a player's ability to learn social skills.

ROLE-PLAYING TAKES SO MUCH TIME; WE COULD BE KILLING THINGS INSTEAD...

The account below attempts to demonstrate how interleaved in-character (IC) talk was with out-of-character (OOC) talk—that is, it shows how a few players maintained their role-playing practices in a world where not all players were role playing. To better disambiguate the fantasy and imagination involved in role-playing from OOC talk, I have rewritten the IC chat as prose and kept the OOC talk in chat log format. Footnotes are used to make editorial comments.

Hannah, a dark, slender orc, was sitting on the dock inside Orgrimmar, next to the orphanages where Matron Battlewail kept house. She sighed a bit, eagerly waiting, as she noted the boy approaching with Leon's imp and said, “Ah... and... you do need this back.”

Leon, a graying orc, dressed in fine robes marked with intricate glowing sigils, glanced over to the young boy to make sure he still was in tow. He then asked his usual companion, “Grim, you didn't light him on fire did you?”

Hannah, getting ready to leave, rustled with amazing dexterity, able to place her very scantily clad armor on without being too revealing.

Leon, undistracted, watched the imp's needled teeth form into a smile, congealed with old blood. Then it merrily hopped about and shook its head. No. The boy was fine.

[05/01/05] [21:41] [Takai²⁰] says: would any of you know where warriors guild hall might be ?

[05/01/05] [21:41] [Takai] says: Know*²¹

Leon waved at Takai, as Hannah said, "I do not, troll."²²

"Ask any guard," Leon added.

[05/01/05] [21:41] Takai waves at Leon.

To clarify, Hannah told the troll, "They will point the way to your trainer."

[05/01/05] [21:41] [Takai] says: ok thank you very much

Another orc, this one dressed in black leather, knives sheathed at his sides, came into view. On his way to the orphanage, he spotted Hannah and waved at her.

As Leon nodded to Takai and the troll ran off, this new orc approached Hannah and noted, "It has been a long time Hannah."

Leon, recognizing the break in conversation, subtly excused himself and headed to towards The Drag, Grim leaping after him but leaving the boy with Hannah.

Hannah briefly stared at the boy; the boy's eyes were illuminated with interest as he watched the imp excitedly. She frowned at this. Damn; he was interested in the demon now.

²⁰ "Takai" is an alias but my chat logs did not capture his character class, so I chose a name starting with "T" to signify that he was a troll.

²¹ Though Takai was not engaged in role-playing, he still took the time to correct the spelling of one of his typos. He could have been attempting to conform to RP standards of talk where proper English spelling was the norm. Alternatively, it is possible he considered his talk undecipherable without this correction.

²² Leon and Hannah continued to stay in character as they responded to Takai.

No time to try to get his attention, though. A stranger addressed her. Facing him, Hannah greeted him with, “Throm'ka.”

She then saluted him with respect as she said, “I regret... I've... forgotten your name...”

“I'm Thoguht,²³ friend of Hizouse,” the stout orc said as he bowed down graciously. Then, nodding towards the young boy, noted, “Not sure I like these orphans under foot,” to which Hannah quickly replied, “They've nowhere else to go... though this one behind me...”

Hannah frowned again, glancing down with a slight tightness to her jaw, knitted brows meant to chastise.

“You... I will speak to you in a moment about that imp,” she addressed the boy, “Now go play.”

The boy immediately obeyed and scurried away.

Watching the young orc chase after Leon and his imp, Thoguht said with a change of heart, “Well, I suppose it is for a good cause.”

With a smile, Hannah said, “Well met, Thoguht. I didn't think any knew me... Or even my name for that matter...”

“I remember you had a pet wolf who let me pet him,” replied Thoguht.

“Paws...” Hannah nodded slowly.

“But it was a few moons ago,” Thoguht continued.

[05/01/05][21:44][Lara] has come online.²⁴

²³ Thoguht was played by me, remember.

Hannah sighed, gruffly lowering down to flop onto her bottom, elbows propped onto her waiting knees.

“We were much younger then,” said Thoguht.

“He is dead.”

Looking surprised, Thoguht replied, “Oh! I am sorry.”

[05/01/05][21:44]Lara joins the party.²⁵

[05/01/05][21:45][Party] [Lara]: Wow, the old crew
is together again!

[05/01/05][21:45][Party] [Thoguht]: ha

Hannah shook her head, nodding downward a bit to signify mourning. Her eyes were briefly turbulent, showing a great pain... the female loved her animals. It did not last long however.

[05/01/05][21:45][Party] [Wilma]: Laaaarraaaa!²⁶

[05/01/05][21:45][Party] [Thoguht]: I'm tied up with
Hannah.

[05/01/05][21:45][Party] [Wilma]: How was the movie?

²⁴ I was notified by the game whenever one of my friends or guildmates logged into the game. Lara was another officer of my guild.

²⁵ As described in the “Pugging” interstitial, common practice among the officers of my guild was to invite each other to group up without asking for availability first.

²⁶ Wilma was already in the group with me. Wilma and Lara have been playing online games together since well before WoW’s time. By comparison, I was a late addition to their normal gaming group.

[05/01/05][21:45][Party] [Lara]: i connect to alliance in the inn.

[05/01/05][21:45][Party] [Lara]: staring at me hatefully since they can't attack me.

Looking up, Hannah said, “He was a very valiant companion though...”

[05/01/05][21:45][Party] [Wilma]: ...What are you doing to Hannah?

“Never fled from a single beast I commanded him to attack. And for this reason he is now dead.”

[05/01/05][21:45][Party] [Thoguht]: I said hi, but you know that can take forever with her.

[05/01/05][21:46]Jester is also dead.... it's not so bad!²⁷

Hannah glanced at Jester, the goofy intrusion to her and Thoguht’s conversation noted, and wondered if the Forsaken corpse knew his jaw was hanging slack.

[05/01/05][21:46]Jester cackles maniacally at the situation.

Thoguht continued consoling Hannah, “Well, loyalty places him in the highest honor.” He then gave Jester the evil eye and loudly remarked, “Those damned undead!”

²⁷ Another player running by saw our IC role-playing and decided to comment.

Hannah sighed yet again, tongue licking her tusks as the undead man cackled then escaped.

“I was just discussing the subject of them with Leon. Do you know him? He's the orc I was talking with... a warlock though...”

“No, I do not... there are a lot of us... I am sorry if I interrupted.”

“It's fine... My apologies for my mood... I set him off on accident with something I said...”

“Ah.” Thoguht nodded thoughtfully.

Hannah lifted her chin and smiled, pale eyes gazing about the cliffy surroundings of the Valley of Honor. She used to fear this place so much, but she was beginning to get used to Orgrimmar...

Thoguht, steering the topic back to the orphans, said, “Well, I suppose I should look into this adoption thing.”

Almost immediately, Hannah replied, “They won't allow us to adopt... I already asked. I nearly got into a scuffle with the one in the dress over there.” She pointed at Matron Battlewail with a snort.

“Oh?”

Large hands falling back down into her lap, Hannah continued, “I wanted a girl to adopt and she would have none of it. She dared challenge me on the matter, saying my armor was not appropriate... I didn't make this armor!”

“Well... ahem...,” Thoguht yammered while trying not to stare.

Hannah then growled a bit, making eye contact with the pink dressed Orphan Matron. Blah... Battlewail allowed her to be with the children, but not to have one as her own.

“They won't allow adoption, the children will be trained as grunts. ‘Produce your own,’ she told me.”

Trying to understand Hannah's desire to be a permanent parent, Thoguht replied, “I see. Well, I honestly didn't know we had any children running about until today.”

“The Warchief has kept them safely guarded... I had no idea either.”

Hannah smiled a bit, thick lips pulling into a rather pretty display upon her strong and lovely face.

“Imagine my joy when I thought I could adopt one. I wanted to train her to use a bow and speak with beasts...,” she said with a chuckle

“But instead, you get to babysit for a few days for free,” Thoguht rationalized.

Hannah nodded and said, “Which... I don't mind.”

Trying to further calculate the utility of taking care of an orphan for a day, Thoguht continued, “Well, I hear it's good politically.”

Looking towards where the young boy took off, Hannah remarked, “Though I'm a bit worried about my charge... he seemed really eager about that Imp that was skirting Leon.”

Deciding that there was no rational reason to take on a charge, Thoguht finally said, “I say, let him learn the hard way. He should experience life and learn his own lessons.” Perhaps Thoguht was bitter about his own hard life.

Changing topics, Hannah refaced Thoguht and asked, “Tell me... Thoguht... how is Hizouse? I've not seen him in such a long long time.”

“Hizouse is good. He and his brother Hatfield are often fighting the Scarlet Crusade lately on the other continent.”

“Yes well... I would not want him to become a crazed orc like Ooluhtek.”

“Hmm, I do not know Ooluhtek, but I'll take your word for it.”

[05/01/05][21:55]To [Hannah]: ((Hizouse and Hatfield might be quitting after this month))²⁸

[05/01/05][21:56][Hannah] whispers: Yeah I know [realname] told me.

“Blah...”

[05/01/05][21:56]To [Hannah]: Ah, yeah they are seeing if Battlegrounds help.

Hannah smiled a bit, running a rough hand over the slick top of her head before chuckling. “I should be off... I didn't even get to say goodbye to Leon. He eluded me.”

[05/01/05][21:56][Hannah] whispers: they need DSL is what they need.

“Alright, you take care. I am glad you are starting to like the big city.”

[05/01/05][21:57]To [Hannah]: :)

²⁸ Double parentheses (()) were used by role players to mark OOC talk.

[05/01/05][21:57][Hannah] whispers: IC weddings are
freaking hilarious omg.

[05/01/05][21:57][Hannah] whispers: *reading
Rosemary's post*

Hannah nodded curtly, bright eyes flashing. Then she gave a low bow and said,
“Lok'tar, Thoguht.”

Thoguht replied, “Good bye!”

[05/01/05][21:58][Hannah] whispers: lack of priests
in PVP pisses me off.

[05/01/05][21:58]To [Hannah]: Yeah... isn't Hannah
an alt of yours?

[05/01/05][21:59][Hannah] whispers: yes.

[05/01/05][21:59][Hannah] whispers: she's my horde
main thoguh.

[05/01/05][21:59]To [Hannah]: Walt stopped playing
to concentrate on a priest alt.

[05/01/05][21:59][Hannah] whispers: I'm starting a
troll mage and I have a priest alt.

[05/01/05][22:00]To [Hannah]: If I see Hiz, I'll say
hi to him for you.

[05/01/05][22:01][Hannah] whispers: thanks babe ^^

It is clear that different norms existed for different chat channels. Strict role-players recognized this and used private channels for non-RP talk. Additionally, this account shows how conversing in WoW was sometimes an act of “backwards talk” where players replied to another’s previous utterance instead of the current one. This is because the nature of the chat is semi-asynchronous or syncopated even though players were online simultaneously. They could all be typing in responses, unaware of the new line(s) that were being typed.

Finally, as MacCallum-Stewart and Parsler (2008) point out, role-playing in WoW took a considerable amount of time and effort: “To the vast majority of *World of Warcraft* players a significant part of the game’s appeal involves advancing their character, and role-playing does not facilitate this—indeed, it takes up valuable time and actually *slows* progression” (p. 227). Yet a player who chose to join an RP server and engaged in RP practice saw benefits in the collaborative construction of a persistent fantasy in which his or her character “transcend[ed] the mechanic of the game and [took] on a plausible, defined reality of its own” (p. 226). As described in the next chapter, one of the common values for players in the raid group I studied was a desire to build on relationships through shared experience, but, by playing on an RP server, I could have been seeing an uncommon motivation for raiding. Many other players who raid (on non-RP servers) do it for character advancement and do not engage in role-playing practices.

CHAPTER 2: COMMUNICATION, COORDINATION, AND CAMARADERIE

In this chapter, I aim to describe the communication and coordination practices of my group of players in *World of Warcraft* by contrasting two nights of game playing—one successful, one unsuccessful. This first night was chosen as it depicts representative practice for the group; the second lets us examine a poor performing night and the repair work the raid group engaged in to recover from the resulting drop in morale. This paper also contrasts the practices of this group against the generally conceived notion of how a group like this operates. This group of players—including myself—gathered twice a week to defeat the monsters in a high-end dungeon known as Molten Core (MC). We went through a process of trial and error with many failures—a norm in gaming practice (Squire, 2005)—before we finally succeeded in defeating all the monsters in MC. Success depended on the ability of our group members to coordinate our efforts and maximize group efficiency by having each member take on a specialized role as determined by game mechanics, specific contextual details of the battles, and group norms. To achieve the desired level of group coordination, my group used a variety of communication channels, including specialized text chat channels for specific teams within the group. The general notion is that most players who participate with others to go into MC need to have characters that are specified in a certain way to maximize the efficiency of the group. It is also assumed that most players do this because they want valuable in-game equipment, which they can loot off of the monsters after defeating them. This particular group, however, was able to adapt and refine strategies and

adjust to relatively nonstandard group compositions and nonstandard character specifications. I argue that the success of this group was because of its members' trust in each other and their shared goal of having fun rather than a collection of individual goals emphasizing loot. This approach of giving preference to friendships might be a way to think about how people can be encouraged to cooperate and participate in other types of groups.

(Computer) Game Theory

I have a long history with computer games, and I approach this research from a gamer's perspective. My motivation for writing about what I do comes from my desire to help people learn to be active participants in their communities. I see social problems all around me, and I think games could be a powerful tool in exploring these social problems. Games are inherently interactive in the sense that they require players to make choices—to progress a narrative—and this choice-making process has the potential to challenge people to think reflectively about moral, ethical, and social problems.

One prominent line of research about player behavior includes those focused on games from a perspective emphasizing incentives and decision making (Smith, 2005; Zagal, Rick, & Hsi, 2006)—a line of research from economics known as game theory—where an examination of game rules leads to ideas about how people will behave and, therefore, how designing games in certain ways can construct certain types of communities.

My interest in game theory literature stemmed from an experience I had while playing through *Star Wars: Knights of the Old Republic* (KotOR; Bioware, 2003) twice a few

years ago (in a galaxy far, far away). *Knights of the Old Republic* is a computer role-playing game, which lets players make moral choices as a Jedi Knight. I wanted to play once making all the Light Side choices and once making all the Dark Side choices, so I could see the whole set of outcomes for the progression of the story that the developers designed into the game. While I was playing a Dark Jedi, I noticed that sometimes the choices I made were the same ones I made as a Light Jedi. For example, in the game, I was presented with the classic game theory model, the prisoner's dilemma (PD; Felkins, 2001b)—only in KotOR it had Star Wars trappings. I had to choose whether to betray a friend (a Wookiee warrior) for selfish reasons, and he had to make the same decision of whether to betray me. In both cases, I chose to stand by my hairy friend. I would never betray a friend as a Light Jedi, of course, because I was being selfless. As a Dark Jedi, I reasoned that if I betrayed my friend for immediate benefit, we would not be able to use each other for mutual personal gain in the future, so I actually ended up standing by him in my second play-through, too.

Making a selfless choice and making a selfish choice actually lead to the same decision. Game theory simulates considering future interactions between participants by modeling iterated versions of the PD (Felkins, 2001b). In this model, it has been demonstrated that mutual cooperation can be both stable and attractive, even for selfish players. Yet KotOR did not present this scenario as a recurring one. It could be argued that I brought my knowledge about the game's world and imaginings of future interactions with my evil henchman to the decision-making point in the game. In other words, my choices were motivated by how I saw myself playing a particular character situated in a specific

setting rather than by “rational” thought as presented in the game developers’ traditional game theory model.

The PD is part of a larger set of situations that economists and game theorists call social dilemmas (SDs; Axelrod, 1985; Felkins, 2001a; Hardin, 1968), wherein many people, rather than just two, are making choices of whether to cooperate or defect. Basically, a situation is considered a SD when an individual’s immediate self-serving choice is not the same as the choice he or she would make to benefit the community as a whole. A common feature of many models of SDs is that the whole community benefits when a certain *critical* number of people cooperate.

What this means is that someone could defect—make the self-serving choice by free riding—so long as enough other people are cooperating, but if too many people free ride, the whole community loses any benefits. It is relatively easy to show how two people can rationalize cooperating with each other (by not betraying each other and maximizing their benefit over time). It is much harder to convince someone who belongs to a larger community that cooperating makes sense.

The body of literature from people looking at SDs in games has mostly focused on how different games support cooperation through various game mechanics and rules. If a team of players is trying to figure out how to most efficiently beat another team of players or a set scenario in the game, they will choose to do such and such because of certain game rules and how the game works. I found, however, that my experiences with games, in general, and with KotOR and WoW, in particular, showed that the choices being made in

certain situations were not so tied to game rules. Instead, they were more complex and tied to how I saw myself playing a particular person in a socially situated world.

This mirrors Gee (2003) when he writes about players role-playing what they want their characters to be. His look comes from a multiliteracies perspective where a player's multiple identities is grounded in the social discourses he or she participates in. The greatest power for role-playing games in education is the way in which players can think or take on a certain perspective by being someone with that perspective. This perspective shifting allows understanding through situational experience.

In WoW, many norms and rules have emerged from the player community. Taylor (2006) documents this very well with her experiences in another MMOG, *EverQuest* (EQ), recognizing that game culture that emerges in and around a game is co-constructed between all the various authors, including both developers of the game and its players. Players start with the base game but need to develop myriad social norms, etiquette, and practices that ultimately help define what it means to be a player of a particular game. The same thing has happened with WoW, and some of these norms or rules could be looked on as socially constructed SDs. These emergent situations are ignored when looked at through a game mechanics lens. Additionally, even in situations that could clearly map onto SD models, the choices I saw being made by both me and other players were not so cut-and-dried and rational. They were contextually contingent.

One could argue about game mechanics all one wanted, but in doing so, a sense of actual game playing behavior in a real game context rather than some sort of construct will

never be realized. Smith (2005, p. 7) made this same comment, and I would take that argument further by saying real social situations—like the ones I experienced in WoW—are messy and complex and problematize the very notion of constructs as convenient ways of modeling player behavior. Instead of starting with game mechanics, Taylor has been taking a different approach to looking at game behavior by looking closely at player practice. When one looks closely at practice, common assumptions are dispelled. All ethnography is about exceptions, about teasing out differences, about attending to the local pragmatics of situations. Taylor paints a rich world and is joined by other scholars doing ethnographic research in MMOGs—relating it, for example, to literacy and learning discourse (Steinkuehler, 2004) and social learning theory and emergent social networks (Galarneau, 2005). One thing to note from Taylor is that some players of EQ have the distinction between work and play blurred. I also see this happening in WoW, but there are definite differences in how some players take on responsibility in-game and out-of-game. These responsibilities—to the group, to friends, to the self—are intricately tied to game mechanics, the emergent game culture, and personal beliefs taken up by the players about what it means to play and have fun. I follow in this ethnographic tradition and discover that social norms and responsibilities defined by social contexts can play a large role in providing incentives and consequences for player behavior in a way that mechanics-based motivations fail to do.

A Typical Night in Molten Core

Gathering and Chatting

At about 5:15 p.m. server time on Friday, April 14, 2006, my raid group started forming up, as it had been doing every Wednesday and Friday for the past 6 months. Our raid leader, Maxwell, was inviting the rest of us into the group, and I was invited early this night. Meanwhile, the rest of us were all over the game world—working on other quests or PvPing or whatever—or just logging into the game after getting home from work or school. Once invited, we knew we were supposed to make our way to the entrance of the dungeon, but getting everyone there so we could start took a while, as usual. Our official forming-up time was 5:30 p.m., and our official start time was 6:00 p.m., but we usually ended up starting at around 6:15 p.m. because some people tended to show up late. That night we started fighting monsters at around 6:10 p.m. In other words, I was in this raid group for almost an hour before the group actually started fighting monsters in MC. The task of forming a new raid group started by finding enough people who wanted to go at a certain time. Once that was done (which took several weeks because friends wanted to be invited with each other and it was difficult to find a time that fitted the schedules of 40 different people), the raid leader still had to deal with the task of getting everyone in the group together at the agreed on time every week, twice a week.

Some of us resented the fact that we sat around for upward of an hour before actually fighting, and this is evidence of the tension some players had between their expectations of what it meant to play a game—that video and computer games are thought of as immediate

gratifications—and the reality of playing—where participating in a shared activity required administrative overhead (i.e., work). Others of us, however, did not mind the initial wait time and used it to greet each other and catch up with old friends.

We discussed new things about the game, new discoveries about the game, and new strategies to try out, or otherwise engaged in small talk, and most of this talk was laid-back with a lot of joking around. For example, here is a snippet of what the rogues were talking about that night while we were gathering:

18:00:46.484: [Party] Rita: You guys have become familiar faces—I'm glad I'm with you all:).

18:01:04.734: [Party] Thoguht: Thanks! you too!

18:01:05.921: [Party] Rebecca: Hi Rita!

18:01:34.468: [Party] Thoguht: We've been having some crazy rogues nights recently.

18:01:37.578: [Party] Rebecca: What's everyone's best unbuffed FR?

18:01:43.234: [Party] Rita: 137.

18:01:52.468: [Party] Thoguht: I feel lame.

18:02:03.734: [Party] Roger: 92.

18:02:13.375: [Party] Thoguht: I feel cool!

18:02:18.937: [Party] Rita: I feel sexy!

Here one rogue, Rita, was just invited to the group that night. Then, as a way of greeting the other rogues who were in her party, at about 6:00 p.m., she made an explicit comment about how much joy has come out of being part of our group. Rebecca and I responded and greeted back. I echoed that the last few sessions in the group have been really good to us rogues. What I meant was both that rogue loot had dropped and that we had had good success as a subgroup in the raid in terms of performing our roles well by dealing out good damage during fights and minimizing our deaths. Implied in my utterance was that the rogues, and the raid in general, had a healthy attitude, and morale was high. Then, changing topics, Rebecca asked what each rogue's fire resistance was.²⁹ By talking to other players in other raid groups and reading strategies online, we knew that most people suggest that rogues have at least 180 fire resistance during the fight with the last boss in MC, Ragnaros. When Rita said 137, I wrote that I felt lame because my fire resistance was low by comparison, but then Roger replied with a 92. I felt not so lame anymore (I had a fire resistance of 120). Playing off of my phrases, Rita said she felt sexy. This is a good example of the light atmosphere in our chat even when on-task strategies and assessments were talked about. It is also easy to see that we felt beholden to our fellow adventurers in a way that falls outside of normal game theory incentives and consequences.

²⁹ When characters took or dealt damage, the damage was of a certain type, one of which was fire damage. Along with building up resistances to the other types of damage, characters could acquire items that protected them from fire damage. These resistances were quantified in-game, like almost every in-game attribute, on a number scale with no theoretical maximum. In practice, because resistances are gained through equipment worn and temporary spells, for rogues the maximum tended to be around 250 to 300.

Pulling, Coordinated Fighting, and Division-of-Labor Roles

After we all sufficiently gathered, we buffed up and started pulling. *Buffing* is the term used to describe the act of casting beneficial spells on other characters. *Debuffing*, placing curses on enemies, is the opposite of buffing. *Pulling* is used to describe grabbing the initial attention of monsters that are found standing around at preset locations in the world. Once their attention was caught, they charged toward whoever did the pulling. The first encounter in MC is with two Molten Giants who guard a bridge into the rest of the dungeon (see Figure 16). Like most encounters in WoW, we initially had to learn how to approach the fight and what roles each different character class should play. For example, usually warriors were assigned tank duty where they drew and kept the attention (aggro) of the monsters they were fighting so that healer classes could concentrate on healing the warriors rather than having to keep track of every raid member's Health. The warrior class was designed to play the role of holding aggro effectively. They can activate abilities that are specifically for angering enemies and keeping aggro (e.g., Taunt and Intimidating Shout)—abilities that other character classes lack. We usually had about five warriors in our raid group. Because most encounters in MC involve just one or two monsters, we learned to designate two of our warriors to be main tanks (MTs), so that all the warriors were not competing for aggro. The healers could then concentrate even more on these two warriors instead of all the warriors equally. Because we had multiple healers, too, we usually divided healing duty among them so that only a set of them were healing the MTs while the rest were either spot-healing the rest of the raid group when necessary or were assigned to heal specific parties in the raid.

Furthermore, monsters in WoW also have special abilities that they can activate against the players, and part of what we had to learn was the kinds of abilities to expect from each type of monster.



Figure 16. The first pair of Molten Giants, a raid encounter in Molten Core, the fiery cave system found in the game *World of Warcraft*.

To aid us in this coordination, each role in the raid had a specialized chat channel. For example, the healers had a channel in which they managed the assignment of healing and buff duties:

18:21:48.843: [3. healsting] Paula: how about Pod 1, 2, . . . Paula 3, 4, 5 . . .

and Peter 6, 7, 8? For DS buff

Here, the priests and other healers used the healsting channel. Paula was suggesting that each priest be assigned certain parties in the raid (there are eight parties in a raid group, remember) on which to cast the Divine Spirit (DS) buff, which increases the party members' Spirit attribute, which in turn determines how fast spell casters regain spell points (each spell costs a certain amount of Mana). This assignment of roles was common among all channels. Here is an example from the warlock channel (see Figure 17):

18:11:20.421: [4. soulburn] Lori: Remember, ss target will change at Domo,
but until then, your rezzer is to be ssed at all times.

Lori was reminding the other warlocks that one of their unique warlock abilities—to create a soulstone (SS) and apply it on other characters—should be active at all times. A SS allows whoever it is applied on to resurrect himself or herself after dying. This was important to keep active on characters who could resurrect others (*rezzers*). In this way, if the whole raid group died (wiped), our rezzers could come back to life and revive everyone else in the raid.

Note that in the above examples, Paula and Lori were in charge of their respective classes or channels. These leadership roles were consistent from week to week and were sometimes established on demonstrated leadership ability in previous raiding activities. What mattered more often, however, were previous relationships before the raid began, including rank in the main guild organizing the raid and friendships out-of-game. As stated in the previous chapter, these existing social obligations (i.e., our built-up social capital) were

important to the group because we had established a norm of valuing players for their social skills rather than just game-content knowledge.

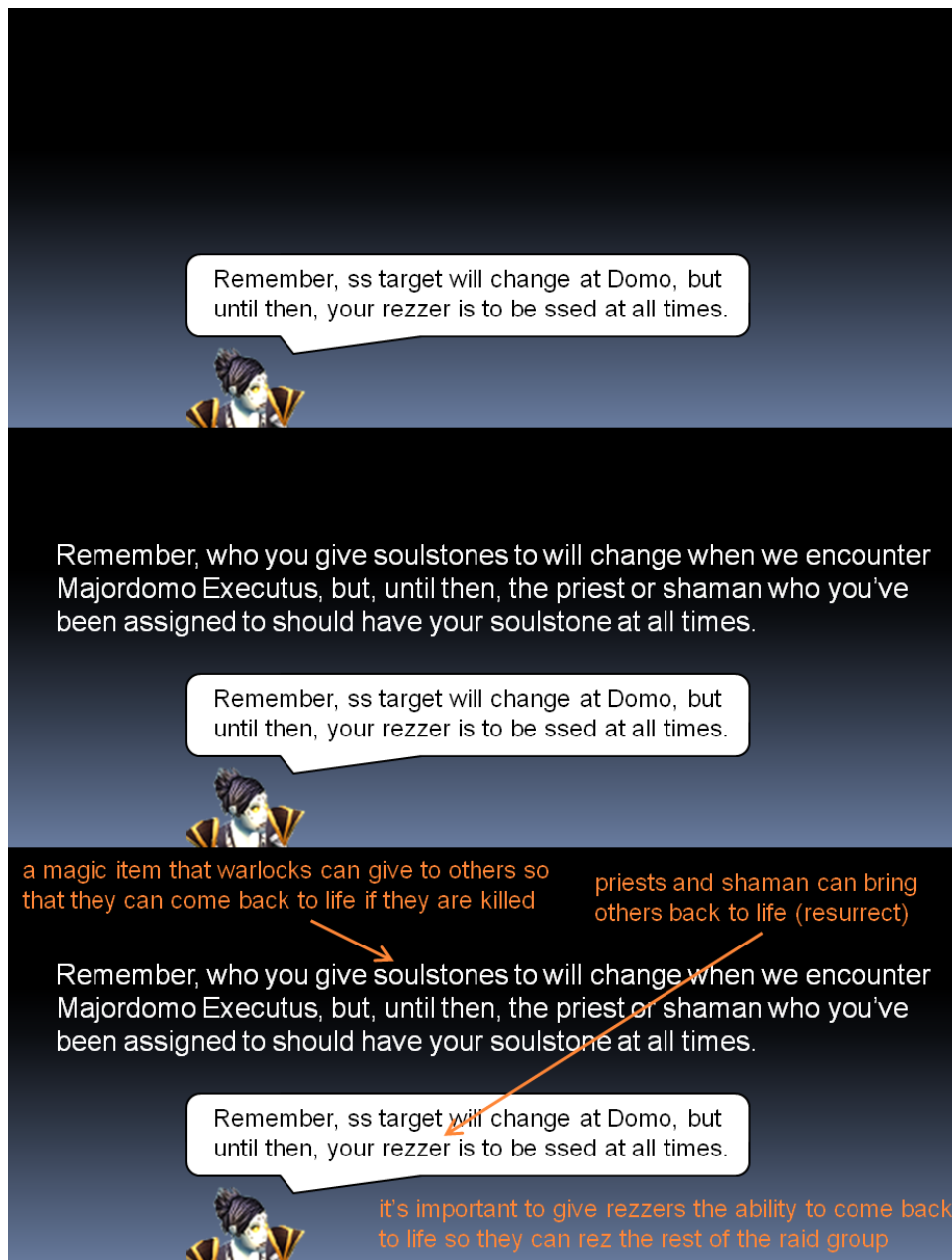


Figure 17. Unpacking text chat found in the game *World of Warcraft*.

Roles were also assigned by character class. These roles were generally determined by what each class was designed to do (e.g., priests tended to heal others). Most “serious” raid groups take these game-defined roles at face value and require that players design their characters to most efficiently take advantage of their class’ roles. In other words, these roles were based on specialized function within the group, akin to distributing responsibilities according to specialized expertise. This raid group I was with, however, valued diversity and accepted variation in how people defined their character’s abilities. In WoW, players can differentiate their characters by choosing special talents every time their characters gain an experience level. Priests could specialize even further into healing, for example, but they could also choose talents that let them be very capable damage dealers as shadow priests. In general, though, even shadow priests could heal, and instead of mandating that a priest’s abilities were maximized for healing, this raid group accepted any sort of priest, so long as there was *enough* total healing ability across the whole raid.

At other times, a player was assigned a role because he or she had participated in an encounter that no one else in the raid had taken part in before. If no clear candidates were suited for encounter-specific roles, these roles were taken up by players who had established themselves as capable of managing their cognitive load either through some competency or, more likely, through the use of add-ons. Cognitive load theory (Cooper, 1998; Sweller, 1988) suggests that people have a finite capacity of working memory. In terms of instructional design, and all information design in general, elements of design and interface take up some of this working memory, thereby increasing cognitive load. Confusing elements put on more

load than otherwise necessary, taking away people's ability to work with the content to be learned or the actual information being conveyed. Many players supplement WoW's built-in interface with user-created add-ons, which replace or augment certain design elements to help them keep track of all the information in the world. A player having an add-on that notified him or her of specific events during an in-game encounter (e.g., the add-on called CEnemyCastBar) was sometimes the deciding factor when roles were being assigned or taken up.

All these different roles that people assumed—leadership, class, and fight-specific—were divided through a combination of game mechanics and emerged social practice. This division of labor process mirrors that found in work and school settings by Strauss (1985) and Stevens (2000), where the different tasks associated with a particular project are assumed by different people depending on social factors and emerged practice, which included the enrollment of various technomaterial resources that were distributed among the raid system. In WoW, at the very least, those factors included game mechanics, players' understanding of the mechanics, players' ability and skill, and relationships of trust.

While chat was happening in these specialized channels, concurrent chat might have been happening in the raid channel, the party channel, the guild channel, and any other channel that a particular player was subscribed to. Managing all the information coming from these various sources was challenging, especially when one had to concentrate on and navigate through the physicality of the virtual world at the same time. In fact, reading through some of my transcripts shows pretty clearly that I missed some utterances that were

directed at me (see “Chat” interstitial). Also, sometimes, the chat in one channel referenced chat in another channel.

In this way, chat could be—and often was—interwoven and layered. Furthermore, on top of the text chat, there was voice chat that was also sometimes running parallel to and sometimes interwoven with the text chat. Those who were not using voice chat were often exposed to non sequiturs in text chat. On the flip side, some people responded to the threads in a specialized text channel through voice, which was confusing to those not participating in the particular specialized channel.

To start off our night in MC, we pulled a couple of Molten Giants (after sitting and talking and gathering together for an hour). Our fight with the Giants was routine and only lasted a little more than a minute. The text chat was relatively sparse because we all were familiar with the encounter and knew what to do. Even so, it was steeped in meaning. Here’s the chat from it:

18:11:34.671: [Raid] Willy: INCOMING Molten Giant!

18:11:34.687: Willy yells: INCOMING Molten Giant!

18:11:36.187: Larry thanks Mary.

18:11:40.640: [Raid] Lester: Pat is Soul Stoned.

18:11:45.203: Marcie hugs Lev.

18:11:45.562: [Raid] Roger: rebroadcast ct please?

18:11:49.343: Willy yells: ATTACK!

18:11:49.453: [Raid] Willy: ATTACK!

18:12:57.359: [Raid] Sherrie: This whole only shaman group is amazing!

First, Willy, who was the second in command, alerted the raid that we were pulling the Molten Giants. When this happened, the Giants charged our group and our two MTs grabbed their attention. The MTs then ran in opposite directions and positioned the Giants so that the Giants' area of effect (AoE) damage from their Stomp ability was not overlapping. This way we could kill one Giant without taking damage from the other Giant. While this was happening, Larry thanked Mary for something. What we cannot see in the text chat is that Mary, who was a mage, gave some water to Larry. Spell casters, like Larry, used up a certain amount of Mana with each spell cast. Casters had a finite reserve of Mana (depending on their class, level, and equipment), so after casting enough spells, they ran out and were no longer effective participants in a fight until their Mana reserves replenished. In between fights, however, they could consume water or other liquids to regain their Mana at a quicker rate. These drinks could be purchased in towns or cities from certain vendors. Mages, like Mary, however, could conjure up water and share it with other characters, thus, saving them from having to buy water.

Next we see that Pat had a SS applied to her by Lester, so we had a safe rezzer in case something went horribly wrong. Then Marcie hugged Lev. In addition to SSES, Warlocks like Lev could create healthstones and pass them out to other characters. Consuming a healthstone would heal some damage, giving players a way to regain Health in an emergency during a fight if, for example, the healers had run out of Mana or if they were occupied

healing the MTs. Lev had just given Marcie one of these healthstones, and she returned the favor with a hug.

Roger then asked if “ct” could be rebroadcast. Many of this raid group’s players used an add-on called CT_RaidAssist (CT Raid), which among other things, allowed raid leaders to designate MTs. Once designated, little windows showing who the MTs were and what the MTs had targeted appeared on every CT Raid user’s screen. The CT Raid add-on worked by using its own specialized, hidden chat channel usually given a comical name by the raid leader. Anyone who used CT Raid would automatically be subscribed to that channel so long as the raid leaders synched everyone up by broadcasting in raid chat a certain key phrase that CT Raid recognized. Players who joined the raid group late or who somehow temporarily lost connection to the game often had to be resynchronized by having the raid leaders rebroadcast. CT Raid was the most popular add-on for raiding groups in 2005/2006, and using it was often required or highly suggested by raid groups. Thus, game experience and practice within the game was not defined just by the developers of the game. The practice around raiding and the coordinated work required for raiding allowed a common tool to be developed and propagated such that it was hard to imagine playing the end game without the CT Raid add-on.

About 4 seconds after Roger asked for the CT Raid channel to be rebroadcast, and about 15 seconds after pulling and separating the Molten Giants and then letting the MTs build up aggro, Willy called the rest of the raid group to attack. It took us about a minute after that to kill the Giants, at which point Sherrie announced that she liked being in a

shaman-only party. Shaman could place (“drop”) totems on the ground, which gave some sort of benefit to party members standing near them, but each shaman could only drop two unique totems, so they often had to weigh the pros and cons of which totems to drop. By having five shamans in one party, they were able to drop a very effective combination of totems because the party was no longer limited to only two totems.

Making Encounters Routine by Finding Balance

After this fight, we prepared for the next pull by making sure our casters had regained Mana and that people were healed. The next fight was with another kind of monster, which had different abilities, but it was just as easy with little danger of failure or of having lots of people die. In fact, our MC experience had become a series of routine fights where we got ready, pulled, and killed in a systematic way until we reached a boss. These monsters were made so routine that the gaming community had come to know them as *trash mobs*. They were “trash” in that they did not pose a threat, and the loot they dropped was often worthless in terms of making our characters more powerful but could sometimes be sold for in-game currency (gold). This loot was also known as *vendor trash*. The term *mob* stands for monster object, which is how developers of MMOGs refer to game-controlled monsters or enemies.

Making these trash fights a routine activity took us several weeks. For me, a rogue, it took time finding the right balance between doing a lot of DPS and not taking aggro away from the tanks. The problem was that if I did too much DPS, the Molten Giant or Lava Annihilator or whichever mob we were fighting would consider me its greatest threat and

start attacking me instead of paying attention to the warrior who was tanking it. As soon as this happened, in most cases, I died. Early on, this happened to me often. After 6 months, one or two of us still had a difficult time of finding that balance, and drawing aggro happened to just about everyone in the raid at least a few times.³⁰ Even non-DPS classes had to find the right balance of abilities versus aggro. Healers, for example, drew aggro by healing the warriors. The monster would suddenly consider a healer more of a threat than the warrior in front of it. If enough of us attracted the attention of the mob we were fighting during a single encounter, the monster would “bounce” from person to person, moving to and killing whoever was the next highest threat. When this happened, usually we wiped—enough of us died that there was no hope of defeating the mob before it killed the whole raid group.

Learning each encounter involved many wipes, and when it happened, it took time for our healers to resurrect themselves and then resurrect everyone else. If we did not have any safe rezzers, we all had to release our *ghosts* in the game at the nearest graveyard and then run back to the entrance of the dungeon to reclaim our bodies and reappear in the world. Although it could be frustrating to wipe over and over again, many of us in the raid, including the raid leader, took this opportunity (the time it took to either rez everyone or run back to the entrance from the nearest graveyard) to reflect about what happened and suggested things to change about our approach or suggested completely new strategies to try. This mirrors the practice of another successful raid group that Sarah Walter wrote about in a

³⁰ Grabbing aggro from the main tanks and dying in such routine pulls was met with laughter and people who did it were only jokingly chastised. Some even felt a bit of pride when it happened because it meant they were “out-DPSing” others in the raid.

different MMOG (2009), suggesting that it is perhaps a necessary practice for successful raiding.

This practice of failing multiple times on new encounters might be unique to raid groups whose members are all relatively new to the raid encounters. Many players, after they hit 60, attempt to find memberships in mature raid groups, often joining guilds that concentrate on endgame raiding. It is possible for these players to never experience multiple wipes. Unfortunately, I cannot speak to this experience much. It should be clear by now that raiding takes an enormous time commitment, so even if I had access to a mature raid group, I would not have been able to join both groups. My choice of participating with a new raid group, however, allowed me to see group learning and talk around shared understanding of encounters and the game world. As Walter demonstrated in her dissertation about newcomers to established groups (2009), learning happened in a mature raid, but it was of a more individual nature where a newcomer learned the predefined role the raid group had established for him or her. In contrast, the raid group I participated with was not a mature one, and so the local instantiation of broader raiding practice was still being defined and shaped heavily by the collective endeavors of the group members.

A raid that had progressed enough to treat trash mobs as routine was one venue in which a SD was present. Individual players may have been tempted to free ride off of the efforts of the other raid members. In a mature raid, to defeat a monster, a critical mass of raid members must have known what they were doing; it was often not necessary for all players to play their best. In fact, when I spoke to a member of a raiding guild that had put Molten

Core on farm status, he confided in me that he and other raid members tended to play *Tetris* or *Breakout* or other casual minigames during the raid sessions. To combat this free riding, some raid leaders used certain add-ons that kept track of the individual performances of raid members and then reviewed the logs after each gaming session. The raid group I was in only used a common damage and healing meter to help troubleshoot times when we were failing and trusted that raid members were paying attention. We had established a social norm of trust in each other that served as a powerful disincentive to free riding.

Welcoming Failure in Golemagg and Other Boss Fights

Because this night was several months into our raid instead of when we first started, we did not wipe on trash mobs. Also, we were not wiping on the early bosses. Our goal this night was to make an attempt on the last boss in the instance, Ragnaros. The way the dungeon is set up, our raid group had to kill all the other bosses before Ragnaros's lieutenant, Majordomo Executus (Domo), would appear. Then after we defeated Domo's guards, he would teleport away to Ragnaros's chamber and summon his lord. This was a Friday night, so we had already been in the instance once this week and had already cleared out some of the dungeon, including many of the early bosses, but we still had to defeat a unique Giant named Golemagg and his two Core Hound guards before reaching Domo. Boss monsters were special ones with more Health and more abilities. To fight one was to engage in an extended fight requiring more careful strategy. Boss monsters often had minions or guards

near them, and challenging a boss in these cases was a matter of tanking each guard along with the boss then figuring out which ones to kill first.

We reached Golemagg a little after 7:00 p.m., about an hour after our first pull and about 1 hour and 45 minutes after we first started forming up for the evening. That is, we spent a good chunk of time just getting to a significant fight.

Our strategy for Golemagg was to kill him before his Hounds because, once he was down, his Hounds would automatically die too. To defeat Golemagg meant we had three warriors assigned to tank him and his two Hounds. While some healers were keeping the tanks alive, everyone else focused their attention on Golemagg. Golemagg had an ability that gave players *damage over time* debuffs (dots), and he could apply this effect over and over again on anyone within melee range. A rogue's role was to run in, hit Golemagg a few times, run out of melee range when he or she had received enough dots, wait for the dots to wear off (because applying bandages could only be done when not receiving damage), bandage or otherwise heal (e.g., with a healthstone) himself or herself, then run back in to do more damage, backing off as needed. Again, learning the encounter was a balancing issue for rogues, maximizing DPS without getting too many dots. If I stayed within melee range to raise my DPS a little, I might have received more dots than I could wait out after retreating. The dots would kill me before wearing out, preventing me from applying bandages.

Learning how to engage in the encounter for the raid meant we had to know the overall strategy of concentrating on Golemagg. We knew this because some of us had been in a fight with him before with different raid groups, and some of us had read strategies online

for the bosses in MC. Golemagg had a plentiful amount of Health, and this night, killing him took us almost 8 minutes (in contrast, the two normal Molten Giants earlier took us a little more than 1 minute). In long “endurance” fights such as this, it was common for healers and other casters to run out of Mana. If enough of our healers ran out, the warriors were no longer getting healed. They would die, causing the rest of the raid to die soon thereafter because all the other classes could not take more than one or two hits from Golemagg. The first few times we did this fight, like the first few times we did any of our boss fights, we wiped. This was not seen as a bad event but rather as a necessary component of learning the strategy and finding the balance or “groove” needed to succeed. A raid member, commenting on a different boss fight, put it best:

Now I hope no one’s getting frustrated. This is how raids go. It’s normal: You fight and fight and fight until your gear is broken, repair and do it again. Once you finally get it down you can farm them for loots. It can take a while to master these encounters but we’re doing good work!

Each time a character died, his or her equipment suffered a durability loss. When enough deaths happened, the equipment broke and could no longer be used. Repairing equipment required a trip to a blacksmith in town who could repair items for gold. This raid member was reinforcing the idea that dying over and over again, to the point of having equipment break, was normal and no cause to become frustrated. He was giving those unfamiliar with raiding context in which to compare their experience, thereby managing their

expectations through explicitly naming what was happening as a normal thing (reification), which could then be understood through lived experience (participation) in a reification–participation duality (Wenger, 1998) taken on by the newer raiders. Raiding took time and many attempts but eventually rewarded us with loot. Another raid member had this to say:

Ultimately each of us can only control our own character; so the most important job we each have to do is make sure we are doing our part both effectively and efficiently. . . . [S]moothly executing a kill on a boss that used to kick our tail is very gratifying, I think.:)

For this person, the sense of accomplishment is very gratifying, and most members of the raid shared his sentiment. It was not just loot we were after. We enjoyed the challenge and success that came with the hard work of failing multiple times. To succeed, each of us had to learn to play our role effectively. We also had to trust each other to take on this responsibility. It is very clear that, just as Taylor saw in EQ (2006), some players took on responsibilities very seriously and that fun and pleasure were not so easily defined.

Generally, each player decided when to play and when to quit based on personal goals and ways of seeing fun. For most players, this fun came from a (sometimes obsessive) desire to improve their characters through what one of my fellow raiders calls “itemization”—the act of acquiring better and better equipment. Time and again, however, the various members of the raid I participated in reiterated their desire to do raids as a way of doing an activity *together* to sustain and strengthen relationships. For them, deep bonds were forming around

shared experiences, and they recognized engaging in these participatory acts as a way to deepen trust and friendships.

Socially Constructed Social Dilemmas

This night, we killed Golemagg relatively easily, and therefore, we could loot his body for valuable equipment. This was standard action according to in-game mechanics, which rewarded player participation through valuable loot when a group of players defeated high-end monsters. Each monster that a group killed only dropped a handful of items, though, so only some of the group's members were to receive this in-game reward. Setting up high-end rewards as scarce commodities caused player groups to come up with rules on how to fairly distribute the loot.

This practice was so prevalent that almost all groups clearly define loot rules before they set foot in a high-end dungeon, and many players had come to see endgame practice as only participating in these high-end encounters and winning loot. The most common way of dividing loot was through the DKP system where participating in certain monster kills netted a player a certain number of points (Malone, 2009; Wikipedia, 2010c). When loot was distributed, a player then bid his or her points in an auction against other players to win a particular item that would benefit his or her character. Winning an auction subtracted however many points were bid, thereby limiting how many points the player could bid on a future item, thus, giving someone else in the group a chance to win it. This can be likened to a SD, in that many players' bidding practices were motivated by selfish, individual benefits. Yet a particular player could win an item that would actually benefit the whole group more if

someone else won the item. This is because not everyone had the same equipment, and someone else's character might have been more effective in combat than the winning player's character. From a more general perspective, no matter what kind of loot rules a group used (see Wikipedia, 2010c, for many examples of other loot systems), the social dilemma of "who gets the loot?" existed. The addition of using a DKP system on top of the basic game structure reinforced the dilemma by more explicitly making the situation competitive.

Actions within this socially constructed SD are not so easy to explain through SD modeling, however. Other factors came into play, such as a player's relationship with others in the group. For example, two of the group members were brothers in offscreen life, and they tended to play games together, joining and leaving player groups together. Tight bonds like these were sometimes the cause for one player deferring to another when it came down to loot distribution. Additional factors also played a role: the attachment and commitment a player had with his or her character (Filiciak, 2003), how long the player planned on continuing to play the character, the fiction and role or identity he or she saw the character taking on (Gee, 2003), and personal values about what was an important goal and what constituted fun. This last point is important because if the group, as a whole, valued other things besides loot, the whole looting system itself had to be reanalyzed. The group that I played with, for example, took a completely different approach to loot rules—one which reinforced their approach to high-end content as opportunity for shared experience. The loot was an added bonus to the more valued experience itself.

The system this raid group used included a random element, and it was not always clear who would receive a particular item. The group used a weighted loot-roll system in which players initially “rolled” a random number from 1-100. For each session that a character was present but did not win anything, he or she subtracted 10 from his or her roll range (e.g., after two sessions without winning anything, a character would roll from 1-80). The lowest number won the item and the winning character’s range would reset to 1-100. Probabilistically speaking, those who had a history with the raid group had a better chance at winning something they wanted, but there was always the chance that someone who was relatively new could win an item. The raid’s leaders, informed by a long, open discussion in the group’s online message board (three different threads spanning dozens of pages), decided that they wanted this informal, slightly chaotic, loot system to reinforce the raid’s desire to forge friendships and hang out with each other.

This night was a good night. After dividing loot, our raid succeeded in killing some trash mobs and then successfully defeated Domo and his eight guards (see Figure 18). Frustratingly, we then moved onto three failed attempts at killing Ragnaros. He proved frustrating because his encounter became “buggy,” where he was activating abilities at odd times. We eventually gave up, and by the time we were done for the evening, it was almost 10:00 p.m. Our gaming session was almost 5 hours and, other than Ragnaros, was relatively successful.



Figure 18. Majordomo Executus and his eight guards, the second-to-last boss fight in Molten Core from the game *World of Warcraft*.

An Atypical Night in Molten Core

In contrast to our good night that Friday, the following week on April 19, 2006, we had an atypical night in MC. It was atypical in that a series of events unfolded that caused us many wipes and generally gave us poor morale, which almost culminated in a *meltdown*, where enough raid members fervently opposed each other on an issue that irreparable damage occurred to their friendships, effectively disbanding the raid. I believe it started with having enough people in the raid feeling stressed about other things happening in their offscreen lives. For example, about 30 minutes before the raid session started, a member of my guild made it known that she was depressed and contemplating committing suicide. As an officer and friend, I was compelled to attend to her as best I could without knowing who she was offscreen. This meant I was engaged in a private conversation with her in-game, forcing me to miss some of the other chat that was happening.

We also decided that night to try using two different warriors as our MTs for the first time, and it was clear that the warriors who were not used to tanking were not sure where to

position their monsters. Furthermore, the warriors who were normally our MTs did not know which abilities they should be using and which weapons they should be using while playing DPS roles. To add to this, we had an abnormal group composition that night, with more shaman and hunters and fewer warlocks and rogues than we were used to. Though our raid did not strictly proscribe the exact composition of our group, it was still a combination of character classes that we were not familiar with. Additionally, some of the players expressed concern about people bringing characters who were not their primary characters. Instead, a few players were trying their *alts* in this night's raid session. This uncertainty manifested itself in our chat. At various times in certain specialized channels, raid members were bickering with each other:

18:46:17.640 : [2. healsting] Pod: Poll: Best Knockback

18:48:13.906 : [2. healsting] Pod: a) The Beast

18:48:23.453 : [2. healsting] Pod: b) The Fish Boss in ZG

18:48:31.296 : [2. healsting] Sven: Hmmm?

18:48:45.625 : [2. healsting] Pod: c) Garr's Lt.'s

18:49:01.062 : [2. healsting] Pod: d) other

18:49:06.296 : [2. healsting] Sven: Shaun's breath.

18:49:40.093 : [2. healsting] Shaun: you know, if you want to be the next shaun, it might serve you well not to always insult me

18:49:51.593 : [2. healsting] Shaun: i mean, why would you want to be just like somebody with bad breath?

18:49:54.515 : [2. healsting] Sven: I don't want to be "the next Shaun!"

18:50:08.218 : [2. healsting] Sven: You are simply going down. I shall overcome your shortcomings.

This tension between Shaun and Sven continued later into a disagreement about where Sven was standing during the fight with the first boss monster, Lucifron:

19:00:02.468 : [2. healsting] Sven: I'm ranged for Will healing

19:00:10.515 : [2. healsting] Shaun:

19:00:17.578 : [2. healsting] Shaun: Sven, you are fired.

19:00:21.484 : [2. healsting] Sven: Hey, most people avoid you, Shaunny!

19:00:24.312 : [2. healsting] Sven: It's the breath

19:00:32.218 : [2. healsting] Sven: I'm giving an alternative!

19:00:46.406 : [2. healsting] Shaun: an option that is closer to the caves.

19:00:49.015 : [2. healsting] Shaun: you...

19:00:55.625 : [2. healsting] Shaun: you are trying to kill us all....

19:01:00.625 : [2. healsting] Sven: Well?

19:01:05.109 : [2. healsting] Sven: It hasn't happened, now has it??

19:01:17.703 : [2. healsting] Sven: Stop being so paranoid!

Sven was positioning himself away from the main group of players, dangerously close to an adjoining cave with monsters the raid was not yet ready to battle. Shaun thought that Sven

should have moved to the rest of the group, just in case those other monsters noticed Sven and attacked the whole group. This interchange gave more evidence that there was a distinct lack of trust this night, which did not help motivate raid members to concentrate.

We ended up wiping three times on trash mobs because too many of us were either distracted or consciously free riding. After our third wipe, no one said anything in text chat for 8 minutes. That is, no chat was happening in the raid channel, none in the party channel, none in the say channel, and none happening in the various specialized channels for 8 whole minutes. The longest idle time from our typical good night was 2 minutes. Those who were not already feeling less than 100% became frustrated from our three wipes and the bickering that they were seeing in their specialized channels. At one point, the raid leader asked the raid if we should continue:

19:10:10.046 : [Raid] Maxwell: as fun as it is to goof around, we can't wipe to trivial stuff at the same time

19:10:43.937 : [Raid] Heather: What? We can't?

19:10:55.093 : [Raid] Pod: Yeah. I kind of need to make a profit tonight. Just spent most of my cash.

19:10:57.375 : [Raid] Roger: well, maybe hunters can.

19:11:12.937 : [Raid] Maxwell: time to be mean. If you are not all willing to focus and have a polished run I -know- we are capable of, let me know now and I'll find something better to do with my time.

19:11:25.578 : [Raid] Maxwell: do you want to raid MC tonight?

We decided to continue, which in hindsight was probably a mistake because a few minutes later we had an argument break out over loot rules. One of the regular druids, Dierdre, had to take an emergency phone call during a boss fight. When we killed the monster and looted it, an argument broke out whether she should be allowed to roll for a druid item that dropped. This argument proved a shock to many of our raid members. What's more, Dierdre was not even one of the vocal participants in the argument. She did not care either way, but other raid members (who were also druids and potential winners of the loot item) argued that she should not be eligible to win the item. This caused other raid members to jump to her defense, citing the core values of the group. Some heated exchanges took place over voice chat, followed by some heated text chat exchanges. It ended with some people, including our raid leader, retiring for the night. A partial excerpt (prior to this, Shaun, the target of Sven's insults and Dierdre's offscreen partner, had already logged off in disgust):

21:06:29.656 : [Raid] Maxwell: all right, Dierdre is passing and I am giving the hammer to Sam, but I have something to say about all this

21:07:37.953 : [Raid] Maxwell: this is a somewhat unconventional raid in many ways

21:08:04.500 : [Raid] Maxwell: I don't do dkp, I don't dock people for only showing up for part of the evening

21:08:11.156 : [Raid] Maxwell: loot has never been the main focus of this

21:08:49.562 : [Raid] Maxwell: I find it disturbing that this much drama³¹

was raised over something like this

21:09:31.343 : [Raid] Wei: wasnt like it wasnt fueled

21:09:43.156 : [Raid] Maxwell: I am sorry that some of you feel this strongly about loot, but Dierdre has contributed as much to tonight as any of it

21:10:22.734 : [Raid] Maxwell: I am not having the best evening, I'm recovering from food poisoning and I feel like shit, so I am sorry if I seem a little out of sorts

21:10:46.265 : [Raid] Maxwell: but I am quite disappointed and will be taking a break from leading raids for awhile

21:11:23.343 : [Raid] Maxwell: this has been too much pressure on me, and I'm having a hard time with this right now

21:13:03.328 : [Raid] Maxwell: I just ask that you think about why you are all on these raids. I do this for all of you, not for any pieces of loot and I hope you all realize it's the people that make this worth it

21:13:06.156 : [Raid] Maxwell: good night

21:17:20.468 : [Raid] Sven: On this depressing note, I'm tired and depressed. I'm going to call it a night.

21:17:33.250 : [Raid] Iskaral: Ok guys I think I'm off for the night

³¹ *Drama* occurred when players had to deal with stress and arguments with other players.

21:17:45.953 : [Raid] Dierdre: i have to log guys...i am really upset right now, and am not thinking clearly. i am sorry i caused an issue while not even at my own keyboard. i shall see you all again tomorrow perhaps when the day is new

Maxwell was already feeling “a little out of sorts” when the dispute over Dierdre’s eligibility came up. In the moment, he attempted to remind the raid members of the values that went into the formation of the raid, but he had to retire for the evening and possibly take a break from future raid events, too. This precipitated a chain of players quitting for the evening. The group decided to continue but eventually ended the session for good when the remaining players realized they couldn’t defeat the next boss with so few raiders.

For many of the raid members, the meltdown came as a shock because they did not see the entirety of the chat that was happening in the various channels. It also came as a shock to me because I was not paying as much attention as I should have to the chat while it was happening. I was dealing with some particularly stressful situations in my own guild. This was similar to Barron’s observation that groups working on specific projects are often more successful if the group’s members are able to maintain their attention on their discourse of problem-solving strategies (Barron, 2003, p. 332). The following day, many of us discussed what happened on the raid’s web discussion board.

The raid members’ values of friendship and ability to reflect and realign were clearly evident on the forums the next day because the events that happened that night were seen as a

fluke. One raid member said, “I personal find what happened tonight to be just plane old rotten luck. We had a bad run tonight and people where getting tired and a situation accrued.” In light of this view, players were emphasizing the family nature of our raid group and how it is natural for people to sometimes disagree with each other. Another player said

I love our raid. I know we are all going to get burned out at times and frustrated and upset and disagree with one another. It is part of being human.

We are like brothers and sisters really. Stuff like this is going to happen.

However I think we have all been playing long enough to know that we have a pretty great group of people going here and truly we care about and try to do what is best for one another.

This person framed the events as normal disputes a family would have and then emphasized the uniqueness of the group’s collegial nature. We also talked about how we should treat each other in the future. One raid member said, “Stress, it happens. We have a wonderful group of people here and we should always keep in mind that every last one of these people has feelings.” What mattered most was that we learned from this experience that conflict is normal, and people should be careful not to hurt each other while trying to resolve the conflict. In other words, the raid group was treating this as cause for reflection by trying to identify the problem (or at least symptoms of it) and solve it. I then suggested that we needed to consciously make the effort to lighten the mood:

I noticed that not many people were actually joking around with each other like we normally do. I think a lot of us were sick or tired or having a crappy day, and when we got together, we had enough people who weren't feeling 100% that it showed itself in chat, in our performance, and in our stress levels. It might seem artificial but if I notice that happening again in the future . . . I'm going to start making jokes.

Another raid member echoed my sentiments:

I also noticed the lack of joking around in raid chat, and vent was totally silent for the time [I] was on it. I agree hun . . . I will be right there with you making a nerd of myself to try and lighten the mood ☺.

To sum up, our lack of camaraderie was an indication that many people in the raid were feeling stressed more than usual and that some of them did not trust themselves or others to play their roles in the raid effectively. Somehow the underlying goals of the raid as a whole became diluted or lost during our bad night. The fact that the ultimate dispute was over loot suggests that the goals of building relationships became eclipsed by individual motivations for progressing and winning loot—incentives that are built into the underlying mechanics of the game. In this instance, the effectiveness of the group was compromised when the motivations for cooperating with each other came from selfish sources. In other words, whereas one argument about how to address SDs is to appeal to people's selfish,

“rational” nature, the experiences of this night for my raid introduces doubt into this approach’s power.

One alternative way to address this issue was through explicitly reiterating the group members’ goals and how they emphasized our experience together much like the reification / participation work that had been done before. Reiteration of assumed goals and expectations could only have served to strengthen bonds. Free riding that may have been occurring because players saw their efforts as work or obligation might have been lessened if players had seen their efforts as play or participation in hanging out. Additionally, players were not at their most attentive during this night, and it is possible that a look at how labor could have been divided differently would have helped. Finally, even though camaraderie in this raid group was just an indicator for effectiveness rather than the cause of effectiveness, one way to fix poor performance and wavering trust may have been for members of the raid to attempt to lighten the mood and be supportive of each other when trying new things.

Issues and Conclusion

Learning for this group of players occurred through iterative attempts to perform in-game tasks together. Failure was seen as progress so long as the raid group was given time to reflect on strategies and form new strategies. This poses two problems. First, failure is not often thought about in games where more attention has been paid to how games allow imaginary actions to become realized and/or how games allow players to reach a state of *flow* (Csikszentmihalyi, 1991), where players never fail in such an absolute sense. When failure is

considered, it is usually associated with skill-based failure at a specific task rather than instances of non-coordination, which may stem from a lack of trust. This could be thought of using a distributed cognition view of failure as moments when the system of distributed roles and responsibilities fails to be in alignment (Hutchins, 1995a). I make the claim, like Iacono and Weisband (1997) when they wrote about developing *swift trust* in virtual teams, that trust is closely tied to communication practices, and specifically, the frequency of communication turns along with the kinds of communication happening might be a good indicator of the level of trust in a group.

Second, time to reflect on failure and, more generally, time to talk, think, coordinate, and prepare for the actual in-game activity can represent much of players' actual experience. This also is not often the picture one conjures up while thinking about games as immediate gratification. As Walter (2009) demonstrates in her dissertation research on a different raiding group, the time to reflect was needed for any meaningful learning to occur, and time to talk through this reflection was necessary for group learning.

Frustrations for my group emerged not from actual failure but through the emerged social understanding of a particular night's gaming. We had failed many times before, over and over again, but in those cases we were "in it together." On our poor performing night, the raid collectively momentarily lost track of its goals, but it was able to reaffirm them on the web forums the day after in a bottom-up approach to management. These goals were of maintaining friendships and having fun (i.e., socially constructed goals) over the more traditional purpose of receiving loot to improve or progress (i.e., game mechanics goals). The

raid's realignment with these shared-experience goals after a bad night was done through reflection and the ability to see that it had strayed and the ability to make suggestions for finding the path again. In a sense, the raid was metacognitive (Bransford, Brown, & Cocking, 2000)—able to assess itself and determine how to get where it needed to be in order to reach its stated goals. The raid was made up of 40 different players on any given night, however, and it was those people who thought and acted. It is difficult to say whether everyone in the raid valued the same goals, and it is clear that they did not always agree; otherwise, there would have been no strife. Yet the majority of members felt very strongly about the familial nature of our group. In contrast to this, I have heard and read about other raiding groups in WoW permanently breaking up after a meltdown. It is possible that those groups did not establish the same kinds of goals, and the individuals in those groups valued raiding as a means to an end rather than the end itself.

Looking at game mechanics and systems to guess how players will behave can lead one to suppose that changing the rules of a game can encourage cooperation within situations that resemble SDs. Actual player behavior, however, is complex. The concept of SDs cannot model all the different social aspects that go into the choices players make in their situated experiences. If one were to look at these decision-making points not as a series of rational choices but rather as points where players act out of emotion and role-playing—identity-taking and action in a social discourse—it becomes clear that the issue of trust is more complicated than merely thinking that one's peers will also think rationally. The raid group I was in was able to foster a different kind of trust in its members by ensuring that they were in

it for the sake of the group and having fun rather than for individual, self-serving loot collection, and this trust was enforced through our social norm of camaraderie and coordinated communication. Our social norms and communication practices allowed us to exist without other game-induced incentives such as guild affiliation. This could be a new way of looking at the problem of trust in SDs (Felkins, 1999). My raid group ensured this trust first by only recruiting players with whom other members had already established a friendly relationship. Second, the raid group explicitly stated its goals in in-game chat and in the web forums and then reflected on its behavior in relation to these goals. Finally, the raid loot rules—socially established criteria for regulating group actions around collective goals relative to individual interests—were *collaboratively agreed upon* through its web forums—one of the key components Kollock and Smith (1996) claim is needed for creating a sustainable online community.

The approach this group took may suggest a way that teams in other settings (like work or school) can also take when working on a new task. Rather than focusing on the goal of doing the task right and reaping the rewards, teams can concentrate on building friendships and learning how to complete the task together. An analogy to schools, for example, could liken getting good grades to winning loot and that grades represent an individualistic notion of how students should approach school. If learning is the goal of school, however, and one thinks of learning as socially constructed meaning from practice, more emphasis should be placed on fostering self-sustaining cooperation in the context of individual and collective goals. To aid in this, dividing the labor up into specialized roles

allows each individual to contribute to the shared experience, and developing efficient communication channels is necessary for coordinated work. This could only happen, however, in environments that allow the right kind of trust to be established among group members. The trust must be based on valuing the shared experience and forging relationships rather than individual grades. Fostering trust among group members in this way may actually lead to a more coordinated group, which is better prepared to handle future tasks and changing situations. Additionally, a group formed on friendship is able to rebound from instances of poor performance and realign or rally itself for future tasks.

By examining player practice, I conclude with this: Good communication and coordination is necessary for a team to succeed. Good communication and coordination happens when team members trust each other in their specialized roles. For the raid group I participated in, trust based on shared goals and well-established relationships was stronger than trust based on individual incentives.

REFLECTION ON CHAT

The following interstitial describes a moment of tension between my expectations for normal behavior on the RP server I was playing on and the lack of communication coming from a stranger I met in a remote, secluded in-game zone. I knew that many players did not role-play—that is, they did not engage in in-character talk—but most players on my server did at least say, “hello,” and were cordial to strangers, so when this event occurred, I needed to reflect on why it happened. This section is written as if for another WoW player, using footnotes to explain game-specific terms for non-players.

Once while I was soloing³² Felwood³³, I came across another player who was also soloing. At the time I was working on killing Treants for a specific drop³⁴ but I was making my way to a thorium vein³⁵. When I saw the other player, I unstealthed³⁶ and greeted him. I

³² adventuring by myself rather than with a group of players

³³ The continents in *World of Warcraft* were divided into regions that were set to be a certain difficulty level so that players could go to their level-appropriate area without worrying about dying too often. Felwood was one of the higher-level regions (see Figure 19).

³⁴ When monsters were killed, their bodies were lootable. Different monsters dropped different items. I was searching for a specific item that only the Treants dropped. There were many slang uses for words (“drop”) and even new words (*lootable*) in the context of gaming.

³⁵ One of the resources to gather in WoW was ore of different types. Each character chose early-on which kind of resource he or she would focus on by choosing the appropriate profession.

³⁶ I played a rogue class, and one of the rogue’s abilities was to stealth or become invisible to other players.

then asked if he was a miner³⁷ before mining the thorium as a courtesy to him since I didn't want to prevent him from getting the skill-up.³⁸ I talked to this other player in character³⁹ because we were on an RP server,⁴⁰ but his reply was a terse "no." I then told him what I was hunting for and asked if he was doing the same in the hopes that we could party together.⁴¹ His reply was an equally terse "blood amber". I then asked who dropped those and he said that he wasn't sure and asking a few people atm.⁴² After a while thinking about it, I then said that I think they were to the east in a cave south of the road a bit. He didn't reply, so I left

³⁷ Miners were those who could collect ore. The other choices for gathering professions were Herbalists and Skinners.

³⁸ Each profession a character had was rated from 1 to 300 to represent how proficient they were in that skill. Each time that skill was used there was a chance to move up one point in that skill. When one mined an ore deposit until it was depleted, the deposit disappeared preventing other miners from gathering from the same location. Most deposits could stand at least two mining actions before being depleted, but a character could only get one skill-up from a single deposit. I was going to mine the mineral once to get the skill-up and then offer it to this other player if he was a miner so he could also get a skill-up.

³⁹ I talked "in character" as opposed to "out of character". *World of Warcraft* was a role-playing game. Out-of-character speech was typified both by the way sentences were written as well as the content of the sentences. For example, leet speak was considered out of character as was talking about the Iraq war.

⁴⁰ a server specifically for players who wanted to role-play. In this case, leet speak was not only out of character, it was expressly forbidden and frowned upon by the server's regulations and populace. In fact, proper grammatically correct sentences were the norm rather than the exception.

⁴¹ To "party together" meant to "form a party together". The item I was looking for was a rare drop. If he was searching for the same item and therefore also killing Treants, we would have made it more difficult than it already was for each other because players could only loot from bodies that they or their party members had killed, and there were a limited number of Treants to kill.

⁴² at the moment

and continued killing Treants. After 3 minutes or so, I sent him a whisper⁴³ asking if I was right, but he never replied.



Figure 19. The Felwood region in World of Warcraft.

At the time I felt slightly jilted. Here was someone to whom I was being courteous, even considerate, but I felt he clearly did not want to talk to me; so much so, in fact, that he did not even want to acknowledge my help. The more I think about this, though, the more I am willing to believe he just did not have time to talk to me or he just did not understand the situation's social norms. It was possible he was having an off day. It was even possible he

⁴³ a personal message sent directly to a player who could be anywhere in the game world

didn't see my whisper. I have known players who play while at the workplace, so they divide their time between the game and their actual work. How they could possibly do their work efficiently, without missing things, is beyond me, since it is obvious they miss things in-game. Often their characters are just standing around while the rest of the players are asking them questions or wondering why they aren't moving.

A few days later, I went to an in-game party. There were so many players at the same place in-game that the contents of the chat window was scrolling by faster than anyone could read it. It was only days later, when I took the time to go over my chat logs, when I realized that I missed at least a couple of whispers to me! In face-to-face speech *and* in instant messaging or texting, it is pretty easy to repair missing messages since you are limited to a few participants and it is clear when one of the participants has missed something. In this game, and I suppose in online chat rooms, directed chat that was missed sometimes never got addressed / repaired or even recognized as missed. Managing and filtering chat and all the other streams of information available in the game was even more important for raiding. As described in the next chapter, this was one reason why players installed add-ons or found other ways of configuring the game to be successful.

CHAPTER 3: THE ENROLLMENT OF A NEW ACTOR AND THE REDISTRIBUTION OF RESPONSIBILITIES

Introduction

In *World of Warcraft*, each individual actor in a raid group is in charge of certain tasks and responsibilities. At one point in the life of the raid group I studied, a new actor was allowed into the group. The newbie served the raid players by rating the actions of the others in the group—that is, assigning a specified number value to their actions—and then remembering who did what to add up the ratings from each particular player. This newbie, though, did not actually care if these services were used by the others, but if a player decided to use them, and thus have his or her rating displayed, that player had to abide by new rules associated with these new services. The newbie would not verbally announce others' ratings. Instead, a sign was held up and players had to make a point of look over to read what their ratings were. In that way, not only did the newbie serve, but it also demanded; not only did it take on the burdens assigned with this new role, but it also prescribed new responsibilities on the others. Yet others in the raid group, first slowly then readily, came to adopt the use of these new services into their practice as the services' benefits became increasingly clear. The group came to consider the new tasks as essential parts of its raiding activity, and players could barely remember raiding without the rating-remembering services. The newbie became one of them—not a newbie but a veteran—and the group merrily went on its way. But this

veteran was not one of them. In fact, it was not even human. It was a technological device, a program, a construct, an *add-on* modification to the game.

This chapter documents the enrollment of this nonhuman actor and its history within the raid group that I studied. The add-on was instrumental in helping the raid group become efficient and successful with many in-game battles. Interestingly, the add-on played only a temporary role in the raid group's assessment of a specific encounter, the last monster, Ragnaros, in a fiery cave system known as Molten Core. It helped the group by testing and ruling out a possible diagnosis of the problems with the group's strategy. After eliminating that possible diagnosis, its use was no longer necessary, since its original intended role never needed to be filled in the fight against Ragnaros.

The analysis in this chapter helps us see that, within a learning space or network, people and their material resources collectively share responsibilities, and that the distribution of these roles and responsibilities changes over time as the network encounters new challenges and as new actors enter the network. This is a story, in other words, of how unexpected events disrupted a network and of the reassembly and redistribution work done by the network's dynamic, adaptable actors to overcome those events.

Mangles, Networks, Assemblages, and Arrangements

In a nod to Pickering, Steinkuehler (2006) wrote a paper in the fledgling *Games and Culture*, titled "The Mangle of Play." In it she described the push-pull relationship game developers have with game players. The practice of gaming is an emergent one with multiple

contentious parties attempting to steer what it means to play in certain directions, such that gaming is a complex arena of activity—a mangle (Chen et al., 2010). Pickering’s mangle (1993) described the dialectic of resistance and accommodation that scientists engage in with the natural world, constantly tweaking their instruments and mental models of how the world works when existing measurements produce puzzling results. Both of these concepts about how gaming or scientific practice works come from a view of these practices as existing in specific settings and circumstances. They recognize that authentic practice “in the wild” includes a multiplicity of parts or parties, acting separately yet collectively, such that collective roles and responsibilities that make the practice what it is are distributed across all of them.

I’ve lumped *parts* and *parties* together because these words mean the same thing within this way of looking at an activity system. The activity is composed of multiple objects or actors that act upon other actors and the relationships between actors determines what the network of activity—i.e., practice—looks like.

Note that this takes Hutchins’s view of distributed cognition (1995a, 1995b) one step further. In his descriptions of how a naval vessel navigates (1995a) and how an airplane cockpit remembers its speeds (1995b), the people in those activities offload many of their cognitive tasks onto their material resources, such as using pencil and paper to jot down numbers. Not only are these external material resources being used to help people remember certain things in the activity, but they are also, therefore, assuming certain responsibilities. The material resources are not only helping; they are actually *doing*. The further step flattens

or equalizes the view of the various actors in the activity, such that the distinction between whether an actor is human or nonhuman has no bearing on how specific tasks within an activity are accomplished. Ian Bogost (2009) calls this line of thinking *object-oriented ontology*, where:

Ontology is the philosophical study of existence. Object-oriented ontology (“OOO” for short) puts *things* at the center of this study. Its proponents contend that nothing has special status, but that everything exists equally—plumbers, cotton, bonobos, DVD players, and sandstone, for example. In contemporary thought, things are usually taken either as the aggregation of ever smaller bits (scientific naturalism) or as constructions of human behavior and society (social relativism). OOO steers a path between the two, drawing attention to things at all scales (from atoms to alpacas, bits to blinis), and pondering their nature and relations with one another as much with ourselves.

This is one of the main tenets of actor-network theory (ANT) (Latour, 1987, 2005; Callon, 1986; Law & Hassard, 1999). The roles and responsibilities within a network of activity are assumed by both human and nonhuman actors, or, in more precise language that foregoes the human / nonhuman distinction, the roles and responsibilities within a network are distributed across multiple actors. It should be noted that the various parts that can act and be acted upon are not necessarily objects or characters in the strict sense. Instead, known as *actants*, individual objects, a collection of objects, or parts of objects can be assembled to

have one function that is related to or associated with other actants. Furthermore, these actants can be both material *and* semiotic; they can be the physical stuff in the mangle *and* the ideas, values, and structures involved in the mangle, such as those found to be embodied or encapsulated in an organization or institution. For the purposes of this chapter, I will be referring to *actors* in the actor-network of raiding activity. In describing some of the “nodes” in the network, though, such as Blizzard Entertainment as an official group with certain values that force it to act, it may be more appropriate to use *actants*.

A network stabilizes when all the actors within it are in agreement on how the responsibilities are distributed (Sismondo, 2003). New actors—such as the new add-on my raid group adopted into its sociomaterial practice—are added to the network through a process of *translation* whereby they are *enrolled* into assuming certain roles and responsibilities (and agree to let others take on the other roles and responsibilities that are needed for the activity to work).

How can nonhuman actors *agree* to anything? I think this is partly why Kaptelinin and Nardi (2006) argue so vehemently against actor-network theory and the idea that actors create and expand networks by manipulating others into their activity akin to Machiavellian Princes. That these princes might be nonhumans yet so agentive seems bizarre to Kaptelinin and Nardi. One way of thinking about the kind of agency nonhuman actors have is by thinking of them as *delegates* for intentional work. Ultimately, a human designed and created the nonhuman to do something. In a way, as demonstrated in Latour’s (1988) discussion of a

door closer, both human and nonhuman actors take on the roles and responsibilities imbued onto them by other actors.

Confused? Perhaps a better way of explaining the enrollment / translation process in ANT can be taken from positioning theory (Harré et al., 2009; Holland & Leander, 2004), which posits that people are both positioning themselves and being positioned by others into certain roles across their lifetimes of activity. If we expand the word *people* to the generic *actors*, we can think of actors within a network as objects that are acted upon by other actors / objects such that they are positioned into assuming certain roles and responsibilities. Actors are, therefore, sometimes compelled into acting or agreeing yet are sometimes forced or positioned into agreement.

A network becomes destabilized or is disrupted when an actor rebels or when a new situation within the setting arises such that the current stable system is not sufficient to continue accomplishing its joint task. This necessitates a change in how roles and responsibilities are distributed. Sometimes this is a matter of reassigning them. One example of this is when a timer add-on for my raid group became out of sync with our activity. One of our human actors then took on the role of timekeeper and announced to the rest of us when certain events would occur during a fight. Sometimes disruptions require a new actor to become enrolled into the network.

Again, how can a nonhuman rebel? Does that not imply agency? Is it not more appropriate to just say that the object broke or stopped working? To these questions, actor-network theory questions why intent matters. All that matters is what can be observed, so

ANT makes a point of this by using agentic language for both human and nonhumans. ANT and its ilk shine as ways of analyzing an activity system without assuming agency or intent.

Nicholas Taylor (2009) explained ANT very succinctly (pp. 99-100):

Latour's project in elucidating actor-network theory is to propose an alternative social theory that preserves what he calls the "basic intuition" of conventional sociology: that humans are acted on by forces outside of their "local contexts" in which they go about their day to day lives. At the same time, actor-network theory resists explanations that reduce these forces to abstract theoretical constructs (Latour, 2005, p. 47). The task, instead, is to "trace associations" between and among assemblages of individuals, tools, and the material world, and to document the technologically- and institutionally-mediated relations that suture local contexts together across time and space (p. 65). In order to accomplish this task, Latour asserts, it is necessary to expand sociology's traditional notions around what kinds of entities can be considered as having agency. Instead of placing humans exclusively in the foreground of sociological accounts and relegating entire realms of material and technological objects to the context 'in which' humans act, Latour urges us to recognize the ways non-human objects act *upon* us, enabling, compelling, eliciting or demanding certain activities and practices while disabling, preventing or making difficult others (Latour, 2005, pp. 63-86).

All that matters is that certain objects / actors act and are acted upon. It's these relationships actors have with each other—process-based, time-dependent (due to the fact that something needs to be happening for the network to exist), dynamic relationships—that matter. Actor-network theory, as a methodology, then, is about tracing these relationships (or associations) to make the network visible.

Other ways of framing an activity that assume human intent, such as activity theory (Engeström, 1999), can definitely help researchers understand why certain systems are arranged the way they are and then identify mismatches between the intent of the human actors and their chosen tools and processes for the activity they mean to do. This way of framing an activity, however, assumes that researchers are in a privileged position such that they know or can reliably infer the intent of the activity's human actors. It also seems to place emphasis on activities as endeavors that are progressive and purposeful, without allowing for the fact that multiple actors within the system may have competing positions and attitudes about what it is they are doing. By flattening the activity and treating all objects within it equally, OOO (and ANT) begins with evidence-based observations about the details of what's going on in a setting.

Flattening the setting allows T. L. Taylor (2009) to say, “we do not simply play but are played. We do not simply configure but are configured (Akrich 1995; Woolgar 1991)” (p. 6), emphasizing the fact that objects in a network exist in such a way as to be compelled to act or be acted upon. She calls these configurations assemblages, partially invoking Deleuze & Guattari (1987) who considered their *A Thousand Plateaus* to be rhizomatic, with the

ability for the chapters to be read in any order, taking on multiple configurations or assemblages.

Open-ended and partially open-ended games, like WoW, are emblematic of the idea that any given player's history of activity is made up of a collection of units (Bogost, 2006), arranged together into particular patterns (Stevens, Satwicz, & McCarthy, 2008), constrained by the game's underlying rule systems and the player's deepening understanding of those systems. A good gamer is someone who can recognize these patterns and understand the rules governing them well enough to exploit them to succeed in his or her in-game goals (Koster, 2004).

With a multiplayer game, many of these rules are tacit conditions of participating in a community of other players. As Malaby (2009) notes, the existence of rules about how to be or act is what makes online gaming spaces nontrivial. They are *contingent* spaces where players build up cultural capital by performing or acting successfully. The more contingent an act—that is, the more risk involved—the more the act is meaningful and a marker of expertise. Though Malaby comes from cultural anthropology, what he says aligns very well with Lave and Wenger's (1991) ideas about how novices to a setting can go through a process of *legitimate peripheral participation* within a *community of practice*.

This process of learning the game, or, more precisely, learning legitimate gaming practice, occurs on multiple timescales. Much like Lemke's (2000) example of change in classroom practice, changes in gaming practice can be seen on multiple levels, ranging from scales that measure from month-to-month, showing relatively slow changes, to scales that

measure from minute-to-minute, showing split-second decision making based on in-the-moment changes to a given gaming session's configuration. These split-second decisions and the experiences that result from these decisions have a way of narrowing-down and tightening-up future performance where players have learned what works and what doesn't work for particular patterns of arrangements. This process is interdiscursive (Silverstein, 2005) and social: Players share their experiences with each other, make arguments about what they think is happening, and refer to previously shared experiences to help them manage and negotiate their dynamic roles.

Roles, Responsibilities, and Aggro

Each character in WoW fitted into an archetypal role based off of historical precedent in the fantasy role-playing game and MMOG genres. In representation, characters were warriors, priests, rogues, etc., but for the purposes of the underlying game mechanics, these various hero classes could be roughly categorized into a function-based tripartite consisting of tank, healer, and DPS (see Table 1). Each of these categories had specific duties and responsibilities to carry in a raid battle. Tanks, with their plentiful Health points and massive armor, had to keep the monsters occupied and focused on them while healers continually spent Mana, casting spells to make sure the tanks stayed alive. DPS (shorthand for damage per second, a way of valuing damage dealers) could then go about actually killing the monsters.

Each category of roles in the tripartite was therefore necessary to be filled for a raid group to be successful. Without tanks, the healers could not possibly cast spells fast enough to keep whoever was being attacked alive, and the monsters would kill everyone rather quickly. Without healers, the tanks would die, and the monsters would, again, chain-kill everyone. Without DPS, the healers would eventually run out of Mana, the tanks would die, and the monsters would ultimately kill everyone.

Table 1

Roles in World of Warcraft by Character Class (Horde-side, Spring 2006)

Role	Classes
Tank	Warrior (defensive stance), Druid (bear form)
Healer	Priest, Shaman, Druid
DPS	Rogue, Warrior (non-defensive stance), Druid, Hunter, Mage, Warlock, Priest (shadow form), Shaman (elemental spec)

The problem was that a monster generally attacked whomever it deemed the most threatening to its survival. If a DPS player hit a monster particularly hard or a healer healed too effectively, the monster could have taken notice and decide to hit back. Whoever had the monster's attention was said to have *aggro*, and the monster switched targets when players *stole aggro* from others. Tanks could try to prevent this by activating various abilities meant to maintain aggro, while the DPS and healers tried to keep their performance at an even, consistent, predictable level without "spikes" that would make the monster take notice. In other words, many of the encounters in WoW, and indeed most MMOGs, were a balancing

game where the three roles of the tripartite worked to maximize their efficiency while keeping the tanks the focus of the monsters' attention. The fights, therefore, were engineered by the game developers to test and destabilize the tripartite. This was a core dynamic that drove the mangle of play.

Each role in the tripartite (tank, healer, DPS) had specific responsibilities in a fight, yet healers and DPS could not “go nuts” with their abilities, “spamming” their most powerful ability over and over again. Rather, they were constrained by the need to make sure the tanks maintained aggro.

Threat Management

These games must obey some sort of algorithm, and, in this case, the way in which a monster decided who to attack was completely reactionary to the actions of the raid members. One way to think about how the underlying “brain” of the game calculated monster behavior is to imagine that it created a table that included a row for each raid member, and in each row was a number that started off at zero and increased a certain amount every time that particular raider activated an ability (see Table 2). The amount increased depended on the ability. This number was called the *threat level*. One of the jobs of the raiders, then, was to make sure that the tank(s)'s threat level was higher than everyone else's.

Table 2

Hypothetical Threat Table

Time 1				
Player	Ability Activated	Threat Generated (hypothetical)	Existing Threat	Total Threat (hypothetical)
Wendy (tank)	Sunder	260	780	1040
Rand (DPS)	Sinister Strike	140	560	700
Shaun (healer)	L. Healing Wave	400	400	800
Mandy (DPS)	Frostbolt	500	0	500
Time 2				
Player	Ability Activated	Threat Generated (hypothetical)	Existing Threat	Total Threat (hypothetical)
Wendy (tank)	Sunder	260	1040	1300
Rand (DPS)	Sinister Strike	140	700	840
Shaun (healer)	L. Healing Wave	400	800	1200
Mandy (DPS)	Frostbolt	500	500	1000

Note: Hypothetical table at two different points in time (Time 1 and Time 2) that the underlying algorithm of the game created during a battle, keeping track of how threatening characters were to the monster being fought. Monsters attacked whoever had the highest threat, which was generated whenever players activated character abilities.

When the raid group I was part of first started, we each had to internalize our threat level and “play it by ear,” so to speak. There was no common resource or explicit knowledge of specific numbers associated with specific abilities. In fact, many of us did not really know that threat was based on a constant cumulative number. This is important to note: We surmised that threat was loosely based off of damage dealt, but we did not know that it was a cumulative count of all damage over the course of a fight, no matter how long that fight lasted. All we knew was that sometimes we would do too much damage and gain aggro. We knew from experience that some abilities generated more threat than others, and we had to

weigh their costs against the benefits of the abilities. Very often, when a player died, it was because he or she stole aggro from the tank(s). That is, he or she misjudged how much threat was being generated and accidentally raised his or her threat to a higher level than the tank(s)'s threat level. If this happened enough times during an encounter, it usually ended up as a raid wipe.

Looking at rogues in particular, since I know the game best from their point of view, having played a rogue during my time with the raid group, I can say that, although we did not know exactly how much threat each of our abilities generated, we did know that certain abilities generated much more threat than others. We believed that these were roughly correlated to the damage output of the various abilities. For example, we knew that our main attack, Sinister Strike (SS), generated a consistent, predictable amount of threat that was safe to use, whereas, Eviscerate generated much more threat since generally its damage output was much higher. Even though it did much more damage, the use of Eviscerate was limited by the fact that we could not use it as often as Sinister Strike.

Rogues operated on a mechanic of building up or chaining *main* attacks that enabled the activation of what are known as *finishing* moves. Sinister Strike was one of these main attacks that could be activated in a sort of rhythmic fashion every three seconds or so, building up a *combo point* with each successful hit. Rogues could build up to five combo points with these main attacks. Eviscerate was a finishing move that spent or used up the built-up combo points, and it did more damage with more combo points, giving rogues incentive to build up five combo points before using Eviscerate. Thus, Eviscerate was

generally used less often than SS, in a more syncopated rhythm, but when it did get activated, it did more damage.

Going along with how the rogues conceived of threat, if we were to graph the damage output of a rogue using SS and Eviscerate over time, we would see a baseline level of damage from SS and spikes in the graph every twenty seconds or so from Eviscerate (see Figure 20). As illustrated by the left-hand graph in Figure 20, this way of thinking about damage meant that threat was also a baseline that fluctuated over time. This threat model was closely related to DPS, as a raider's DPS tended to be flat with fluctuations. If instead, threat was to be graphed as a by-product of total damage over the course of a fight, the graph we would see more closely matches the second one in Figure 20. Since we were conditioned to thinking about damage as DPS and not thinking about accumulated damage, many of us had the misconception that threat looked like the left-hand graph with periodic spikes whenever a hard-hitting ability was activated.

These spikes in threat generation were known as danger zones where we needed to be cautious and alert in case the mob aggroed on us. It was general consensus, however, that for certain fights, especially with boss mobs, we shouldn't use Eviscerate at all. Instead we used Slice and Dice (SnD), a different finishing move that did not output damage in spike form. Rather, SnD made our non-activated attacks faster.

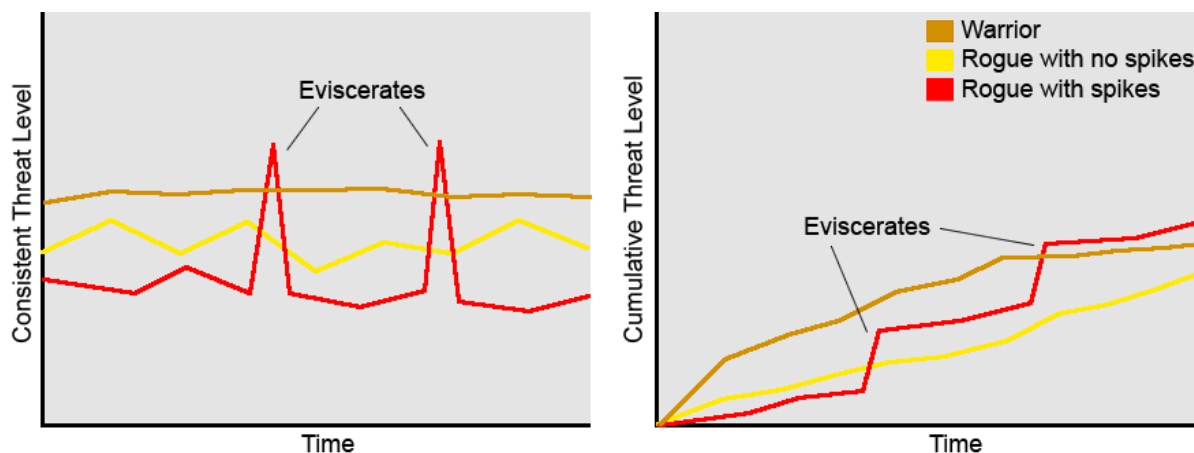


Figure 20. Two hypothetical charts showing different concepts about how threat worked in *World of Warcraft* created to illustrate this chapter's analysis. The chart on the left displays threat as a consistent level such that performing certain high-damaging abilities like a rogue's Eviscerate would cause a spike in the graph that would cause monsters to aggro since those spikes surpassed a warrior tank's threat level. The chart on the right displays threat as a cumulative value over the duration of a battle. Note that in this second view, the first "spike" is not enough to gain aggro.

Every character had a default attack that didn't require any input from the player. The level of damage from this default or *white damage* (so called because it was displayed in white in the in-game combat logs) attack from rogues was determined by the speed of how often a rogue swung his or her weapons, which was determined by the speed factor or attribute of each weapon, multiplied by how much damage the particular weapons could do with each hit. The resulting number was known as the weapons' damage per second or DPS, a term that, as mentioned earlier, had been co-opted as the name of the role rogues and other damage dealing classes assumed. So, the baseline in the graph in Figure 20 was actually a combination of the white damage plus the consistent damage from SS (a form of *yellow damage*, the color of damage coming from activated abilities in the combat logs).

Slice and Dice temporarily sped up a rogue's default attack frequency, thereby raising the baseline damage by increasing white damage without adding spike yellow damage to the graph. Therefore, for many boss fights, the rogues would generally avoid using Eviscerate and instead use SnD because we did not want to have spiky damage graphs for fear of having spiky threat graphs.

The concept of threat was present, yet it was not fully understood, so using SnD was not strictly adhered to by all rogue players. This was especially true while we were learning new boss fights. To succeed, we frequently had to push the limits and continuously ride on the edge of too much damage / threat. If we were not on the edge of our ability, like an Olympic skier, then we were under performing, which could lead to a raid wipe if the raid healers were going to run out of Mana trying to maintain our current (s)low DPS. Yet, like all the Olympic skiers who wipe out, which happens quite frequently, we were always in danger of going over the edge or pushing too hard.

The first few times we encountered a new fight, raid wipes were expected. This allowed us to learn what mechanics were involved with the new monsters. Just like the aforementioned skier, who when learning a course for the first time would need to adjust speed when first attempts were too fast or too slow, our first attempts at a fight allowed us to test the limits of how much damage or threat we could generate. This is not to say that failure was always welcome, though. Even though early wipes were seen as learning opportunities, it was frustrating to wipe over and over again in the same game session (see "Communication" chapter for more on failure).

All this lead up to our fight with the last boss in Molten Core, Ragnaros (see Figure 21). When we first encountered him, it was generally agreed upon by the rogues in the raid that we should stick with using SnD to maintain a consistent, predictable level of threat. As we were learning the fight, however, something completely new changed raiding in *World of Warcraft* forever.



Figure 21. Ragnaros, the last boss monster in Molten Core in the game *World of Warcraft*. The raid's skeletal remains littering the floor around him are good indicators of his size.

KLH Threat Meter (KTM)

About four months into our raid's life, in March of 2006, we started using a new add-on called "KLH Threat Meter" or "KTM." Created by a player named Kenco, KTM did the work of keeping track of which abilities a particular player used while fighting a monster, how much threat those abilities generated, and then visually displayed that information to that player. What's more, any instance of KTM could talk to other instances of KTM installed on other people's machines and thereby aggregate all of the threat data for all players who had the add-on installed, displaying relational charts of everyone's threat level to each player (see Figure 22). This allowed the offloading of human cognition to a nonhuman resource, effectively eliminating much of the guess work that went into *World of Warcraft* threat mechanics.

Before the add-on, my raid group had progressed to the last boss in Molten Core. The write-up about our practice found in the "Communication" chapter describes how our chat was multi-threaded and interleaved, hierarchical and specialized, roughly divided by class role. Among many other things, one thing this configuration allowed us to do was to be highly coordinated in our tactical take-down of a raid boss. By the time KTM was introduced, we had become quite proficient in dividing up our attentional resources and communicating along certain channels, escalating which channels were in use when necessary. After KTM became the standard, the necessity of using those chat channels was not as acute as before. Suddenly, any player of any class could keep track of the threat generated of all the other players. Not only did the add-on help us with our cognition, its use

also changed who communicated with whom and about what, most notably allowing raid leaders to caution specific raiders about their threat generation. This effectively substituted knowledge-based trust in others with a technological advancement where trust or faith in other players' ability to manage their threat didn't matter. Yet, at the same time, KTM let us be much more efficient in our monster killing. We could ride the moguls much more effectively, thereby taking down monsters faster than we had been before, which also lowered the learning curve associated with new encounters.



Figure 22. A section of my user interface during a raid battle, showing various add-ons in use. KLH Threat Meter (KTM) can be seen on the left side, displaying the top ten current threat levels of various members of the raid group. Warren and Wendy, colored in brown, are the main tanks for the group. Roger, in yellow, is a rogue. Thoguht, my character, is in red only because the color red was used to display the player's personal threat. If this screenshot was taken on someone else's computer, Thoguht's threat level would appear in yellow like Roger's.

KTM is an interesting example of Latour's recognition that objects within an activity system may have multi-layered complex histories. The emergent network or arrangement of

the objects in circulation, likewise, is complex and multi-layered, both in a micro to macro scale of physical closeness and across multiple timescales. Thus, in Latour's (2005) words, it "is the assemblage of all the *other* local interactions distributed elsewhere in time and space, which have been brought to bear on the scene through relays of various non-human actors" (p. 194). KTM's history is rooted in a gaming tradition of decoding the underlying mechanics or math of a game, which, as a practice, has probably been around for as long as games have. Games, after all, essentially present players with some sort of system of rules or algorithmic simulation to uncover. Pattern recognition is the main learning activity a gamer does (Koster, 2004). Early widespread understanding and taking advantage of the game rules probably came about with the rise in table-top role-playing games, most notably *Dungeons & Dragons*, where the practice of creating a character that exploited the game mechanics was called min-maxing—minimizing resources spent on relatively useless abilities and skills to maximize resources spent on the most effective abilities and skills (Wikipedia, 2010d). This was only possible after a player was able to grasp the underlying mechanics and figure out particularly effective combinations of abilities for specific situations. With the rise of digital role-playing and strategy games (particularly *Starcraft*; Blizzard Entertainment, 1998) and access to web forums where players could discuss, debate, and co-construct their models about various game mechanics, the practice became known as *theorycrafting*.

Kenco was one of the early theorycrafters for *World of Warcraft*. In January 2006, he posted to the WoW European web forums that he thought it was possible to run a number of in-game tests, systematically accounting for different variables, to uncover how WoW

calculated threat. At the time of his posting, in fact, he had run several of these simulations, and he proceeded to discuss his findings, dispelling quite a few myths about threat generation. This was counter to the general thought that exact threat mechanics were forever going to be hidden from the player community. His full post can be found in Appendix B. An excerpt (Kenco, 2006):

It's often said that we will never be able to work out the way threat and hate lists and mobs' AI works, because it's too complicated and unknowable, that we'll only ever have crude approximations and guesses. I've conducted some decent, rigorous tests, and i have what i believe is a good list of hate values and explanations of gaining and losing aggro and the behaviour of taunt. I am also able to debunk a few myths about how threat works.

After carefully describing his major findings, he gave a list of suggestions for strategies to use in future fights and then ended his post (Kenco, 2006) with this:

There's no amazing super secret randomised blizzard aggro algorithm. The concepts are simple and the values can be fitted with nice numbers. Even formulas for threat-reducing knockbacks can conceivably be worked out, if threat values are carefully monitored.

In February, players started testing out Kenco's first stabs at a threat meter add-on, and on March 1, 2006 (according to Curse's records), he released the first public version of KTM to Curse.com, a website devoted to hosting a *World of Warcraft* add-on repository.

In the years since then, theorycrafting became common practice, probably most popularized by the site ElitistJerks.com, where class-based discussion boards devoted to damage and threat calculations feature players using sophisticated spreadsheets and custom tools to model and number-crunch every known in-game variable. Figuring out threat and then exposing the underlying model to all players via the add-on became so successful and so widely adopted into common raiding practice that for a few years Blizzard Entertainment designed new raid encounters to depend even more on players' ability to manage their threat and aggro levels. Blizzard Entertainment also made changes to the default user interface to include many of the tools the add-on community had created such as showing who monsters were targeting at any given moment and making threat gain transparent. The game designers, in other words (as a coherent actant), became enrolled into the network, compelled to change the basic game and forced to agree with the player community.

Soon, a new in-game practice came about. Raids began using the threat meter as a metric for performance and efficiency monitoring. If DPSers were nowhere close to generating as much threat as the tanks, for example, they knew they could "lay down the smack" without fear of gaining aggro and therefore be more efficient with their fights. The damage meter, a precursor to the threat meter add-on already existed for at least half a year, but it was not widely adopted into raiding practice. The damage meter kept track of the

damage output of various players, which was easily calculable since WoW explicitly let players know how much damage each of their successful hits did. All Kenco did was figure out the hidden (but, again, very correlated) threat values of those abilities and include threat generation from non-damaging abilities. Saying “all” implies it was an easy task. It was not necessarily difficult but the running the simulations involved in figuring out the correct numbers must have been time consuming (see Appendix B).

Using KTM for its designed role to keep track of threat, I was able to monitor my threat gain against the diminishing Health bar of the monster we were fighting and determine whether it was safe to go “b2twdps” (balls to the walls DPS) or if I should hold back a little. The actual decision depended in part on how much DPS the monster could do to me if I gained aggro. Gaining aggro was fine so long as the raid could kill the monster before it killed me, which is why I needed to estimate how long the monster could survive given our current performance.

If I was generating threat too fast, such that I would gain aggro long before we could kill the monster, I needed to hold back. The most common way for most players to reduce threat generation is to simply stop attacking. Everyone else would continue to generate threat so an individual player would become less threatening in the meter. Some character classes, like rogues, have abilities that reduce threat (Feint) or erase threat level completely (Vanish).

To add to this, rogues have an ability called Evasion that makes it harder for opponents to hit them. If I gained aggro purposefully or unavoidably—for example, when the tanks died—sometimes instead of hitting Vanish to clear my threat, causing the monster to

go after someone else, I would hit Evasion since I knew the next person in line on the threat meter was not a tank either. When it caused us to avoid a wipe, this move was generally appreciated by the rest of the raid with words of cheer: “evasion tanking, ftw!”⁴⁴

Managing threat, relying on the tripartite class roles, was the paradigm for how fights worked in most fantasy MMOGs. There were variations to the fights, however, such as presenting players with multiple monsters to fight at once, necessitating the use of multiple tanks or the use of crowd control (CC) abilities like the mage’s Sheep spell, which temporarily takes a monster out of the fight by turning it into a sheep. Blizzard Entertainment, to their credit, has been relatively creative in trying to alter or escape from this paradigm. It seemed like with each new encounter, especially with the raid locations from the second expansion, *Wrath of the Lich King*, the game developers asked themselves, “how can we nuance the paradigm and change things up a bit so that players have to adapt quickly, adjusting to different dynamics that they aren’t expecting?”⁴⁵

Even before the threat meter existed, though, Blizzard Entertainment was already designing encounters that tested out different ways to alter threat mechanics. One example is the Ragnaros fight that my raid was learning when KTM came out, in which Ragnaros would Knockback all melee characters and then throw fireballs at random ranged players. This

⁴⁴ “FTW” means “for the win.”

⁴⁵ *World of Warcraft*’s first expansion, *The Burning Crusade*, included raid battles that raised the coordination level required for its threat-paradigm fights. *Wrath of the Lich King*, while moving away from the paradigm, ended up putting more emphasis on reacting to tightly scripted events. This, ironically, required less sophisticated coordination work of raiders, replacing it with raiders’ ability to memorize routines and “one right way of doing things.”

specific mechanic was unexpected, and what I find most interesting is not how KTM became incorporated into our practice but how it played a temporary role in helping us diagnose problems we were having with the fight. In other words, for the encounter with Ragnaros, KTM's instrumental role was not, in fact, its designed role.⁴⁶ Instead, once the problems of our tactics were fixed, we practically didn't need to use KTM during the fight at all, since we discovered that keeping track of threat in that fight was superfluous.

Using KTM as a Temporary Actor that Diagnosed Problems: April 28, 2006

Figuring out how KTM was enrolled into our system is an exercise of inferences due to the nature of my data collection and how multi-layered the game-playing experience was. For one thing, there's the normal problem of human existence as being isolated yet communal. On that layer, I existed as an individual within a physical setting, interpreting things through my eyes, attempting to understand the meaning-making of other participants through shared experience. The fact that everyone sees things differently is something ethnographers in general always have to grapple with.

Yet participating in an online space forced me to see things with an additional mediated lens or layer. My screen was both a window to the world but also a surface with a head's up display (HUD). These 2D unit frames that gave me an augmented view of the 3D space were only available to me, just as another player's HUD was only available to that

⁴⁶ Users adopting new technologies in ways that were not originally intended by the designers is a story that is played over and over again (cf. Oudshoorn & Pinch, 2003).

other player. The shared experience occurred in the 3D physicality of the virtual space while the Health bars, minimap, action bars, etc. were all extra-diagetic elements to my experience—that is, elements that were not part of the fantasy world within the frame of the game but instead came from outside of the frame to add to the experience of engaging with the media.

As a shared tool, each player used an instantiated version of KTM. We trusted that we were all seeing the same chart values, but each player had control over the add-on's size, location, and KTM specific settings such as the number of raiders to display in the chart, the colors to use for each character type, whether to show cumulative values on the meters or difference values between raiders' current threat level, etc.

KTM's adoption was a slow process and spanned several weeks across multiple raid zones and groups. It was difficult to understand KTM's usefulness without seeing it in action, and, even then, the demonstration would only be convincing if a critical mass of people were using it. At first, Warren, our main tank, learned about it through the *World of Warcraft* forums and add-on communities, but it was still in beta, so many of the raiders did not feel comfortable installing it, initially. The first time KTM appears in chat logs is not when we first started using it but when we were just talking about using it. This occurred on February 25, 2006, in the Ruins of Ahn'Qiraj (AQ20), a 20-person zone located in the arid deserts of Silithus, while we were first encountering a boss named Kurinnaxx:

21:54 [Raid] Thoguht: ((that threat meter would come in handy here))

21:54 [Raid] Wallace: ((Yeah, Thog.))

In other words, KTM was first mentioned in a different raid zone than Molten Core, but the 20-person raid group was a sub-group of the MC group. The next day, February 26, 2006, two rogues had decided to test out KTM's usefulness with our fight in yet another raid zone. It was during our encounter with Onyxia, a black dragon broodmother, sister to the Black Dragonflight faction leader Nefarian. Two of us had installed it, but, without any tanks or healers having also installed it, the threat meter was not of much use, since it was only able to show threat generation from the two of us rogues. The lack of uptake at this point may have been because the raid group had already successfully killed Onyxia in the two prior weeks. Onyxia was effectively on farm status. Since it was pointless to be the only players with KTM, we uninstalled the add-on. After the add-on was officially released on Curse.com on March 1, 2006, another attempt at getting people to try it happened on March 8, when four of us had it installed for our MC run. Still, there were not enough instances of KTM to be useful, but we could see how including the add-on to our network of activity would be useful for fights we were still struggling with. During the following month, most of the MC raid group would install KTM (see Table 3). By April 2, 2006, starting with our fight with Onyxia for that week because the previous week, we actually suffered from some aggro problems with her, most of us were using KTM. Later, it was instrumental in helping us diagnose problems the group was having with the fight with Ragnaros.

Table 3

History of Raiding Activity with Regular Raid Group and Separate Guild Group

Week	Date	Zone	Boss Wall	Notes
1	10/19/2005	MC		first time regular raid group in Molten Core (MC)
	10/21/2005	MC	Gehennas, 29%	first time Thoguht got in MC with regular raid group
2	10/26/2005	MC		second time Thoguht in MC, maybe a regular now
	10/28/2005	MC	Baron Geddon	
3	11/2/2005	MC		
	11/4/2005	MC	Baron Geddon	
4	11/9/2005	MC		
	11/11/2005	MC	Baron Geddon	
5	11/16/2005	MC		
	11/18/2005	MC	Golemagg	Baron Geddon down! Shazzrah down!
6	11/23/2005	MC		
	11/25/2005	MC	Golemagg	Thanksgiving weekend
7	11/30/2005	MC		
	12/2/2005	MC	Baron Geddon	raid ended after Garr
8	12/7/2005	MC		
	12/9/2005	MC	Garr	only had one warlock = death with Garr
9	12/14/2005	MC		first madroques usage
	12/16/2005	MC	Baron Geddon	raid ended after Garr
10	12/21/2005	MC	Golemagg	
11	1/4/2006	MC		
	1/6/2006	MC	Golemagg	
	1/8/2006	Onyxia	Onyxia	first time in Onyxia's Lair (Ony) with raid group
12	1/11/2006	MC		
	1/13/2006	MC	Domo	first Majordomo Executus (Domo) encounter
	1/15/2006	Onyxia	Onyxia	
13	1/18/2006	MC		
	1/20/2006	MC	Domo	
	1/22/2006	Onyxia	Onyxia	
14	1/25/2006	MC		
	1/27/2006	MC	Domo	
	1/29/2006	Onyxia	Onyxia	
15	2/1/2006	MC		
	2/3/2006	MC	Domo	raid ended after Golemagg
	2/5/2006	Onyxia	Onyxia	
16	2/8/2006	MC		
	2/10/2006	MC	Rags	first Domo kill, first Ragnaros (Rags) encounter; not serious
	2/12/2006	Onyxia	Onyxia	first Onyxia kill
17	2/15/2006	MC		
	2/17/2006	MC	Rags	not a serious attempt at Rags
	2/19/2006	Onyxia	Onyxia	Onyxia on farm status
18	2/22/2006	MC		
	2/24/2006	MC	Rags	first serious attempt at killing Rags
	2/25/2006	AQ20		first time in Ruins of Ahn'Qiraj with raid group, first mention of KTM
	2/26/2006	Onyxia	Onyxia	first use of KTM in Onyxia by Rand and Thoguht
19	3/1/2006	MC		
	3/3/2006	MC		first use of KTM in MC, only Thoguht

	3/5/2006	Ony		stopped using KTM
20	3/6/2006	ZG		first time in Zul'Gurub with the Booty Bay Anglers; didn't use KTM
	3/8/2006	MC		first use of KTM in MC by Rebecca, Rand, Thoguht, and Pliance
	3/10/2006	MC		
	3/12/2006	Ony		
21	3/15/2006	MC		
	3/17/2006	MC		
	3/19/2006	Ony		
22	3/20/2006	ZG		Anglers ZG with no KTM
	3/22/2006	MC		
	3/24/2006	MC		
	3/26/2006	Ony		
23	3/27/2006	ZG		Anglers ZG with no KTM
	3/29/2006	MC		
	3/31/2006	MC	Rags	Ragnaros fight wouldn't reset properly
	4/2/2006	Ony		now tanks, raid leaders, and some others using KTM regularly
24	4/3/2006	ZG		Anglers ZG with no KTM
	4/5/2006	MC		
	4/7/2006	MC	Rags	KTM part of standard practice now
	4/9/2006	Ony		
25	4/10/2006	ZG		Anglers ZG with no KTM
	4/12/2006	MC		
	4/14/2006	MC	Rags	Ragnaros fight buggy
	4/16/2006	Ony		
26	4/17/2006	ZG	Panther	first use of KTM in ZG with Anglers
	4/19/2006	MC		
	4/21/2006	MC		
	4/23/2006	Ony		
27	4/24/2006	ZG	Raptor	
	4/26/2006	MC		
	4/28/2006	MC	Rags	diagnose rogues' aggro problem with KTM
	4/30/2006	Ony		
28	5/1/2006	ZG		Panther down!
	5/3/2006	MC		
	5/5/2006	MC		Wendy leaves raid
	5/7/2006	Ony		
29	5/8/2006	ZG		
	5/10/2006	MC		
	5/12/2006	MC		no data, but first Ragnaros kill
	5/14/2006	Ony		
30	5/15/2006	ZG		
	5/17/2006	MC		
	5/19/2006	MC		Ragnaros killed on 3rd attempt
	5/21/2006	Ony		

Note: The “Boss Wall” column details which boss we were attempting to kill that night. If none is listed, the raid was not attempting a new boss and ended after routine fights. The “Notes” column displays significant moments when a boss was killed for the first time and/or when the groups started using KTM. Raiding activity ramped up over thirty weeks, starting from two nights a week and ending at four nights a week by the time the regular group completed Molten Core.

Presented next is a description of the Ragnaros encounter and how the raid group used KTM to diagnose a problem the raid was having with the fight on April 28, 2006.

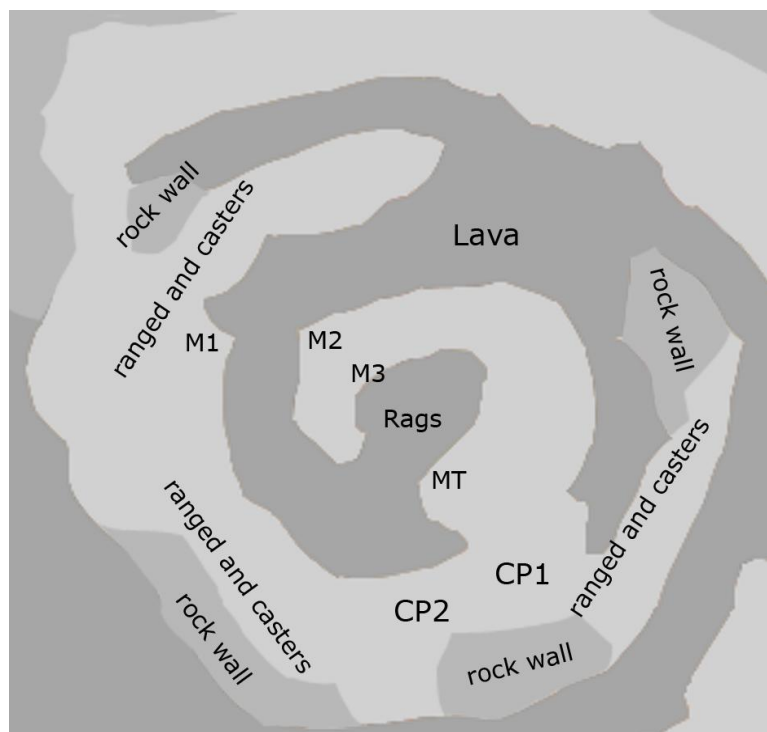


Figure 23. Overhead map of Ragnaros's chamber in Molten Core, a fiery cave system in *World of Warcraft*, detailing the positions of players during the fight with Ragnaros. M1, M2, and M3 are melee positions. MT is where the main tanks stand. CP1 and CP2 are the collapse points for the players during Phase 2 of the Ragnaros fight.

The fight with Ragnaros had two phases to it. In the first phase, he emerged from a pool of lava in the center of the cavern chamber and engaged in melee combat against those close to him while throwing fireballs at raiders who were at range. In phase two, he hid under the lava surface and sent eight of his Sons of Flame to battle us instead. This process was repeated until either he died or killed all of the raiders. Here's a more detailed summary of

how the fight worked and the strategic moves of my particular raid group (see Figure 23; taken from Walter & Chen, in progress):

1. Ranged and casters spread out.
2. We call the attack and begin the encounter.
3. Warren and Wendy, our main tanks (MTs), rotate tanking Ragnaros (Rags). Warren is the main tank while Wendy stands off to the side. If Warren gets knocked back, Wendy immediately runs in and grabs aggro from Rags and tanks him until Warren can get back into position.
4. Ranged and casters start attacking immediately as Warren tanks. Melee runs and jumps into position, from M1 to M2.
5. After the first Knockback, the melee DPS starts attacking (M3), periodically moving back out of melee range (M2) right before Rags does his Knockbacks and then moving back into range once a Knockback occurred.
6. This happens for about two and half minutes when the raid leader calls for ranged and casters to collapse to a common point (CP1), followed by the melee collapsing at the same point.
7. At the 3 minute mark, Ragnaros submerges himself back into the lava and summons eight Sons of Flame who rush the raid group and start attacking.

8. The melee grab aggro from the Sons and then the ranged and casters run to a different point (known in the raid as the Caster Pit [CP2]). This is because the Sons do AoE damage and Mana burn.
9. Some of the Sons get banished by our warlocks, just to help limit the number we have to handle initially to a manageable level.
10. We focus fire and kill all the Sons in methodical order.
11. Rags reemerges and we go back to our phase 1 positions.
12. Rinse and repeat until Rags is dead.

We knew how the fight was supposed to work from reading online strategy guides about it. Actually, only a few of us had read the guides; the rest of us depended on the raid leader to summarize the fight for us (Walter & Chen, in progress). Reading about the fight did not directly translate into successfully enacting the fight, though. It took embodied knowledge—visceral, physical, rhythmic knowledge—coordinated knowledge developed through gaming. In fact, the word “knowledge” seems an odd way of describing it. Saying, “I know how the fight works” doesn’t seem like enough. I know how the fight feels. I’ve felt how the fight works. To gain this type of knowledge required practice. It took time to get a sense of the groove—the rhythm of well-coordinated action—we needed to be in. To illustrate this, here’s an excerpt from one of my fight synopses using Rogoff et al.’s (2002) *functional pattern analysis* (for a full account see Appendix C):

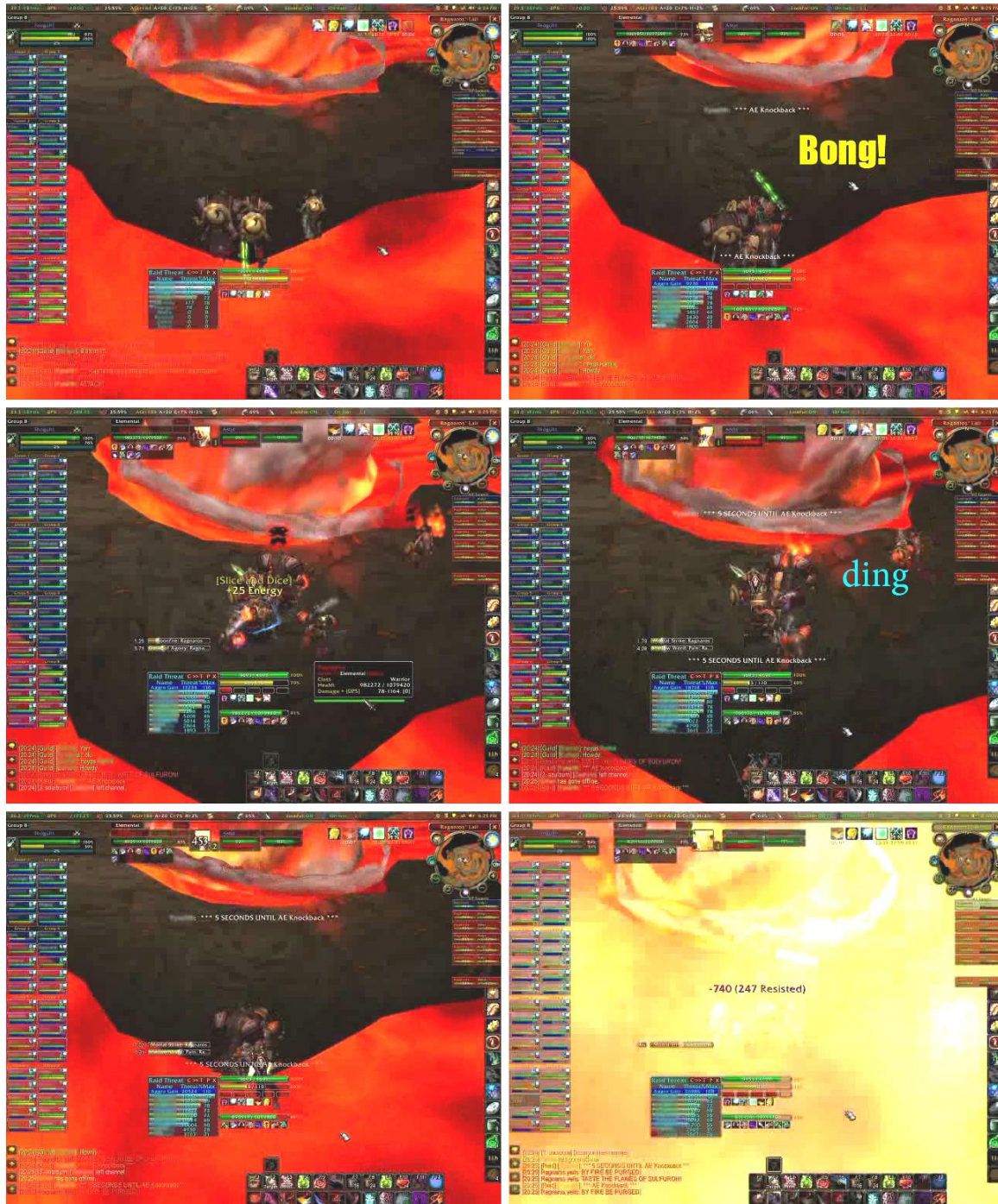
A lot of information floods my senses once the fight starts. Both visual and audio indicators come at me. Furthermore, these are both diagetic (such as the animation of all of us swinging our weapons or the grunt of my character as he attacks) and non-diagetic (such as various panels and buttons on my screen representing the game's UI or the various alert sounds coming from our installed add-ons).

Some of this info (see Figure 24): The Bong sound from our CT Raid add-on that happens in sync with the words "AE Knockback" appearing in the center of my screen. The raid leader's "Melee attack!" command issued in several text channels, also facilitated by CT Raid. SCT (another add-on) sending a constant stream of text up as I gain energy, take damage, activate abilities, etc. My custom timer bars popping up (from yet another add-on) letting me know how long dots and other effects last. KLHTM, the threat meter add-on, keeping track of all our threat levels. Custom UI enhancements (yep; add-on) showing me the Health and Mana of the whole raid, showing me my Health and energy gain and CP build-up, Ragnaros's Health and all of our buffs / debuffs. Specific windows showing MTs (CT Raid) and their targets. The screen flashes with lava bursts and waves every once in a while. The snick snick whoosh of Sinister Strike and a miss. The sound effects of other abilities including those of the raiders around me. When I mistimed something, my character, Thoguht, saying "not enough energy." The dingier

sound of incoming Knockback and the melee DPS backing up as a group to our corner of the spiral peninsula. After the next Bong, rushing back in with the group.

A semi-regular sequence of indicators and my reactions to them emerges from the chaos bracketed by the Bongs of Knockback. The first time we fought Ragnaros, this pattern was noisy, but this night it is getting refined and less noisy. A month from this night, the pattern starts to stabilize, and I start to feel a rhythm to the fight. SS, SnD, SS, SS, SS, Feint, SS, SnD, ad infinitum. Sometimes an Eviscerate thrown in there if SnD hasn't expired. This goes on until the ding. Move back. Bong. Move forward. SS, SnD, SS, SS, SS, Feint... Rinse and repeat. In forums, other players have used another way of visualizing the actions rogues take, referencing the keyboard buttons needed for the actions: 2422262242262223 repeated.

But in this particular iteration of the fight, we don't yet know the pattern, haven't yet found our groove or gotten into the flow.



There's an addictive quality to this embodied knowledge once the groove is found and enacted / experienced time and time again, though I would hesitate to call it "addiction" from the media effects standpoint: It is not a sinister, time-sinking, life-destroying activity. Instead, the knowledge is so much a part of me now that I can slip into reenacting the activity very easily, using what Norman (1993) calls *experiential cognition*—a form of automated or routine thinking and acting made possible through expert knowledge. The physicality of my thinking-acting gives support to the idea that cognition is situated and cannot be separated from the body (Wilson, 2002). Moreover, I long for it; it sustains me. It has become part of who I am. My identity depends on this cultural knowing of what it feels like to be raiding in Molten Core. But rather than taking away from my life, it enriches my life. My identity is built-up in layers that are semi-transparent such that underlying layers are still visible and a part of the whole—what Holland and Leander (2004) call laminated—by all my gaming experiences through a lifetime of *being*. Through gaming, I know nostalgia and melancholy, joy and triumph, success and failure, sadness and anger, and the physical, inexplicable-through-words, embodied, muscular-impulse knowledge of specific game-playing activities. Gravitating towards these activities is only addiction in the sense that people are compelled to engage in the activities that define who they are—activities that build up cultural capital by taking place in contingent spaces and that are born out of bone-deep understandings of being in the world.

Gamers bring our cultural-practice-informed identities, both laminated through other gaming experiences and non-gaming experiences, to new play spaces, as Andrew at Little Bo Beep (2010) says

When we play a game, no matter how ornate or simple, we are automatically imbricating it with layers of personal meaning and inherited signification. The game occurs therefore in a non-linear sequence of events that extends back to the beginning of our lives, and even beyond that to the earliest inception of consciousness.

....

We are who we are in the becoming of ourselves. By engaging with the world and its manifold variations we are simultaneously defining who we are.

Games contribute to this definition in more ways than I can describe.

This is true of everyone. Everyone engages in activities in everyday life that is locally meaningful. People care about their pursuits that are consequential to their cultural identities and positions in the world. People's identities—people's activities—can be beautifully, sometimes exquisitely, complex, such that to call any of it addiction without deeply examining the meaning behind the actual practices, actions, and relationships in people's lives shortchanges them as humans. Obviously some people spend a lot of time with games and gaming, but that does not necessarily pose a danger to their offscreen / nongaming lives nor are their gaming activities meaningless. For my participants, these activities gave them

the feeling of achievement, strong camaraderie and friendships, success in a contingent space, and deep bliss in finding the groove of raiding.

Unfortunately, for this particular night of raiding, the rogues had not yet experienced the embodied groove of making the fight routine. We knew what was supposed to happen in the Ragnaros fight. Yet, for some reason, we kept dying. Ragnaros would, once in a while, focus his attention on one of us and hit us. This resulted in almost instantaneous death (“insta-death”) for a rogue.

Naturally, we thought that our dying meant we had an aggro problem, leading Roger to tell the other rogues how to play:

this is a steady high dps fight, no bursting, bursting will get you aggro, in my experience, anything over 1000 gets rags to say hi to ya unless you are feint everytime its up, and a split second after your burst.

It seems like Roger believed, however, that threat was not an additive measure and that gaining aggro was simply a matter of moment-to-moment damage output (see Figure 20). If damage output was ever too high in a particular instant in time (e.g., over 1000), aggro would be gained. This goes against the tests done by Kenco that resulted in his relatively accurate threat meter—accurate because it treated threat as a persistent, cumulative number representing the sum of all threat generated with all abilities used during a particular fight.

Since I had the threat meter add-on installed, I had an idea that it wasn't our threat generation that was the problem. Yet my personal understanding of how threat and aggro

were calculated was still forming, so I could not recognize Roger's misconception. Also, all I knew was that *some* of our threat levels were nowhere near the tanks' levels, but since not all of the rogues had installed the add-on at that point, I could not say for sure if it was true for all rogues. So when the shaman in our party mentioned that he could buff us with a totem that reduced our threat generation, I suggested to the rogues that I thought we could do more sustained damage if we didn't have to use Feint, which used up our valuable Energy that our main attacks also used. Roger, unfortunately, misunderstood me. Unfortunate because he had a tendency to being curt and had little patience for others who disagreed with him. Thinking that I was complaining about not being able to skillfully and efficiently activate my abilities, his reply was, "well, lern2manage ?"

After our second attempt at killing Ragnaros for the evening, Rand said, "I got aggro on that one. Not sure how, was using the same technique as last time." To this, I replied

so, I have threatmeter on... noticed I wasnt very high up and did a cold blood
evis just fine.

I strongly suggest you get the mod... so you can judge how good you are on
aggro

This response was further indication that I could not say for sure that Rand did not have a threat level problem, but I did confirm that aggro was not gained simply by doing burst damage. It is interesting to note that, at this point, I had already enrolled KTM into my personal actor-network, placing my whole trust into this nonhuman actor for certain

responsibilities. I knew that my previous practice of keeping the *feeling* of threat in my head was inexact, and I assumed that this blackbox of a tool could do it better than me. KTM, in turn, gave me permission to push the limits of DPS, and it also let me enroll it as evidence for why threat wasn't the rogues' problem.

During our third attempt for the evening, Roger himself gained aggro and died after the first Knockback event, responding to the other rogues with, "lol. he must dump most agg at Knockback. i think i got to him quicker then the tanks." He assumed that Ragnaros reset his threat table when Knockback occurred, thus getting to Ragnaros before a tank meant it would have been easy for a rogue to generate more threat than a tank since he or she had more time to generate threat.

Eventually, on our fourth attempt, it became clear that the rogues were pulling aggro even though they were nowhere near the threat level as the tanks. This was demonstrated when Roger again died after the first Knockback. When Roger used the general raid channel (instead of just commenting to the private rogue channel) to say, "i hit him once. that made no sense," the raid leader, Maxwell, replied with

Roger, they [the tanks] may have been out of position for just a second which is enough for anyone else to get aggro who is in melee range.

Elevating his talk to the larger chat channel elicited new information from Maxwell that further helped the rogues to diagnose our aggro problems. Maxwell was correct. Ragnaros attacked whoever had the highest threat within melee range, and the reason why

rogues were being killed was because they were running into position and getting within Ragnaros's melee range before any tanks had gotten in range. Roger's (and the other rogues') misconception was not quite dispelled, yet, though, as Roger replied with

wtf. i didnt even hit him, it was a miss. lol.

“Your sinister strike misses Ragnaros”

This indicates that Roger was still working under the assumption that threat by way of damage level had anything to do with why he was hit by Ragnaros when all that mattered was that he was in range when no one else was.

By the end of this gaming session, the rogues *almost* realized that Ragnaros hit whoever had the most threat *within range*. This new information from Maxwell added to the information that I presented to the other rogues in the previous fight from the threat meter add-on, such that, by the time we fought Ragnaros again the following month, we had put it all together and delayed our approach to Ragnaros after a Knockback so that a tank got within melee range first.

By using KTM to see that our threat level wasn't high enough to theoretically pull aggro, we had to think of other possible reasons why we were being targeted for attack by Ragnaros. Thus, KTM played a role as a temporary actor within this raid encounter. We only used KTM to diagnose problems, not to actually alert us of threat level dangers throughout the fight. Once we figured out that threat wasn't the problem, we essentially no longer

needed KTM for the Ragnaros fight. A month later when we were starting to kill Ragnaros routinely, our raid leader gave this as part of his pre-battle speech:

get in poisiotn on the pull, but DO NOT ATTACK until AFTER tank is back
on Rags after a knockback

While this does not specifically say “do not get in range” it may be implied, given how the players had come to understand the mechanics of the fight from the previous attempts.

In summary, the raid group I played with had reached Ragnaros by the time the new threat meter add-on KTM arrived on the WoW gaming scene. It took us several weeks, however, to incorporate it into our assemblage of play. It completely changed how the task of keeping track of threat was distributed in our system. Yet the Knockback events in the Ragnaros fight forced us in-the-moment to reconfigure or renegotiate how KTM was enrolled into our network. It added to our body of evidence that threat was not actually the reason rogues were gaining aggro, and, weeks later, we were able to incorporate this new knowledge into our successful strategy.

The idea that we assigned a new role to KTM in-the-moment may seem to complicate actor-network theory’s concept of *delegation* where nonhuman actors are meant to take on specific responsibilities by their creators. Instead, we see that this actor-network was dynamic and the translation process—the negotiation and agreement process—necessitated constant reworking and retranslating. Latour (2005) understood actor-networks as ever-changing, though, which is why the work of the actors within the network leave traces of

their associations to be followed and examined and why, once described, the network *as described* may no longer exist.

Discussion

Actor-network theory is an attempt to describe how an arrangement of objects in a network are acting on others and are acted upon by others so that the activity does what it does. It tells a story about practice within situated contexts, involving historically-based interrelated actors. At the basic level, this network ANT describes is an assemblage of parts, but it is also dynamic. This dynamism is what makes it a mangle with vying interests and constantly renegotiated relationships and distributions of responsibilities. The reassembling occurs across multiple layers of complexity and multiple timescales.

On the surface level, the whole landscape of *World of Warcraft* play was determined by designed constraints from the game developers, who were, in turn, affected by the historical evolution of MMOG play. Digging deep, individual players assemble and arrange the objects and resources in their specific in-room, on-screen settings. KTM is just one of these objects.

Between the work that occurred on the surface level and the deeper individual player level lays the mangle that Steinkuehler (2006) wrote about: a messy set of practices emerging from the constant clash and negotiation between the designed experience, players' exploration and meaning-making in that experience, and all the ways in which various parties exploit, modify, and change the system. In the larger WoW community, KTM and other player-created add-ons that helped raids manage raiding was becoming so normative that

Blizzard Entertainment was forced to incorporate many of their user interface tweaks into future iterations of the base game.

My raid group and its activity across the locations in which it assembled represent one tiny sub-mess—a microcosm of the mangle—and yet this small mess could be broken down further. Each character class was grouped together and those groups independently assigned internal roles and responsibilities, engaged in scientific argumentation about strategies and tactics, and theorycrafted with a larger class-based WoW community. Furthermore, as stated earlier, each player had his or her own local configuration to manage. Just as Stevens, Satwicz, and McCarthy found with their young gamers (2008), these arrangements would sometimes extend beyond the computer screen and into the room. I personally distributed bits of info onto sticky notes on my desk to help me remember, for example, how much fire resistance I should have.

The existence of networks within networks is something Latour spoke of when he described the anatomy of a door-closer (1988), but as Lemke (2000) notes, different measurement scales can be used to look at time in addition to size.

KTM was designed by a player in Europe within an emerging theorycrafting community of WoW players. He then released it to the larger WoW community. Specific to my raiding experience, the use of KTM started off in one raid zone with one group of players who were a sub-group of the larger Molten Core raid group. Its use then migrated over to MC. It took about two months for the diffusion of KTM to reach some sort of critical point of usage so that it was accurate enough to help raiders keep track of threat and predict aggro

gains. This was slow, at first, because its effectiveness was difficult to demonstrate without enough people using it to begin with. Partly, it was the situated knowledge problem of trying to describe a bicycle to a fish (Bransford, Brown, & Cocking, 2000). The very idea of a bar chart showing threat level was completely new to some players. Roger and most of the rest of the rogues had the misconception that threat level wasn't additive, for example (see Figure 20).

The two months can be broken down into weeks, each week representing a fresh start in Zul'Gurub (with the Booty Bay Anglers), the Ruins of Ahn'Qiraj, Onyxia's Lair, and Molten Core. From week to week, we can see that a sub-group of players were using KTM and, at least, managing threat effectively within the sub-group. When aggro was stolen by another player during a threat-dependent fight, it was done so by a player without the add-on, reinforcing the importance of having more and more players use it.

In a given week, such as the week of April 28, 2006, we can see how the rogue class group used KTM to diagnose problems with Ragnaros. Not all the rogues had KTM installed, but enough had installed it to start to see that threat wasn't the problem with gaining aggro in that particular fight. This diagnosis was actually done on a single night across multiple attempts at confronting Ragnaros. Each attempt lasted about 6 minutes plus about 20 minutes of pre-planning and post-debriefing—time reserved for reflective thought (as opposed to experiential thought) that helped us learn (Bransford, Brown, & Cocking, 2000; Norman, 1993).

Each attempt can be looked at using a scale of seconds identifying specific chat utterances that show changes in conceptual thought about how to successfully fight Ragnaros. These individual utterances, sporadically spread out over a single attempt and even more sporadically spread across multiple attempts, occurred on multiple communication levels, interwoven between the rogue chat channel and the larger general raid group chat channel.

The actual practice we were engaged in was informed by a raiding tradition in the MMOG genre that spanned at least a decade (e.g., raiding in *EverQuest*). The instantiated version in WoW was affected by players' understanding of the particular mechanics of WoW raiding, but this was affected by what players knew about general WoW encounters, which they learned after months of leveling up and participating in smaller player groups. I think it also matters that we were on a role-play server, in that players tended to type in full proper English, to not stand on top of each other, to wave and greet each other, to make comments about the game world, etc. One of our raid members, Wallace, for example, in thinking that someone in the game world would not needlessly exert energy, would sometimes walk from fight to fight (see Figure 7), making us wait for him to catch up before we pulled. It also mattered that the raid group's membership was not from one guild because this added another layer of negotiation and management that needed to occur to align players from multiple guilds and affiliations who brought with them their particular practices and norms into those of the raid group. All these different levels and timescales of experience serve to position and frame future work of individual actors *and* groups.

Conclusion

In summary, the enrollment of KTM can be broken down into several stages:

1. We raided without KTM for 4 months, keeping track of threat on our own.
2. When we first tried KTM, it proved ineffective and its affordances were unseen when only two of us had it installed.
3. A couple of months later, KTM reached a critical mass of use and was starting to be used in MC, mostly because we had installed it for non-MC fights.
4. KTM became temporarily in-the-moment enrolled to diagnose Ragnaros fight problems that the rogues were having.
5. Once we diagnosed the problems, KTM no longer was needed for the Ragnaros fight, though KTM was still useful for other fights that required careful threat monitoring.
6. KTM became a surveillance tool for raiding in general.

The enrollment of KTM into my raid's standard practice brings up a number of issues. First, though it was nominally being incorporated to an existing network, it took on a sort of agency itself by imposing new responsibilities to the other actors in the network (e.g., it shifted communication patterns, it drove changes in strategy). Giddings (2007) uses Dennett's (1971) concept of *intentional systems* to describe the key difference between agency ascribed to humans versus nonhumans:

So this intentionality does not assume that complex systems have beliefs and desires in the way humans do, but that their behaviour can, indeed often must, be understood *as if* they did. Or perhaps, and Dennett hints at this, their “beliefs” and “desires” are not so much metaphorical as analogical.

This “unmetaphysical” notion of the intentional system both resonates with Latour’s nonhuman delegations and suggests ways in which we might theorise our material *and conceptual* engagement with complex computer-based media, sidestepping a whole range of largely unhelpful speculations on imminent realisation of actual machine consciousness. It suggests that the experience of playing (with) these game/machines be theorised as one of engagement with artificial intelligence without slipping into naive anthropomorphism or frenzied futurology (p. 122).

KTM, on a micro level, required us to give it attention and then adjust our behavior based on what it displayed. It did not care, of course, whether we actually changed our behavior, and neither did it enforce its use. Yet, by being a transparent tool, showing everyone’s threat level to all players, it did not need to enforce its use. We did that on our own. This is both good and bad. Its benefit was clear: some of the players appreciated being reminded by others to be cautious about their threat level. Yet this came with a price. While KTM served as a threat meter add-on to warn us of impending aggro change, it also served as a surveillance tool that we could use to make sure each of us was playing efficiently to help

the common task. Some players from my guild, for example, used a backchannel once to discuss the low performance of a “problem” player in our weekly Zul’Gurub runs, citing threat and damage meters as evidence for her free riding. What used to be monitored individually had become distributed to the collective, making it as open as Thomas More’s houses in *Utopia* and as transparent as Bentham’s Panopticon. Furthermore, on a more macro-historical level, KTM helped narrow the legitimate experience of playing *World of Warcraft* by reinforcing the threat paradigm and the tank-healer-DPS tripartite found in MMOG encounters. Playing WoW has consistently become more and more a game of numbers, efficiency, and theorycrafting, buying into the notion that the end goal of playing is to win loot and progress.

The second issue brought to light in analyzing KTM’s adoption is the issue of communication levels. The rogues were internally attempting to make sense of Ragnaros’s aggro changes, but it was only after Roger voiced his dissonance in the general raid chat channel that the rogues began to understand what was happening. This occurred when Maxwell replied to Roger, letting him know that the melee DPS needed to wait for tanks to be in position before getting in range. Indeed, it seemed like Maxwell, a non-rogue, already knew about Ragnaros’s melee targeting preferences. If it is necessary for group members to make available to others their misconceptions before the group can become aligned or translated to a common understanding, how do individual players become compelled to speak up? The raid assumed character class-specific expertise in all its members. Displaying evidence of a lack of understanding could have been seen as a risky move. What’s more, this

assumes the rogues could identify and be metacognitive about their lack of understanding and need to elevate their talk from their private rogue channel to the larger raid channel. Yet the onus of opening up appropriate communication channels so the raid could repair itself seemed to be taken up by happenstance through flabbergast and flailing. What do we make of this? In future endeavors or other group work, some way to insure recognition of micro dissonance that needs to be elevated to the whole group would be necessary.

Still, the raid's eventual adoption of a new actor into the network is an example of how local practice is emergent and dynamic and heavily dependent on available technomaterial resources, which are assembled and configured in and around the activity. This example helps us redefine expertise development not as changes in practice, but rather, as changes in how the assemblage is configured, which necessitates the successful negotiation among actors in a network about distributed roles and responsibilities and a shared understanding about the local task at hand. What's more, the shared understanding and the actual roles and responsibilities that need to be distributed also changes over time. The enrollment and translation process reconfigures all involved. The reconfigured network is then stable and successful—that is, until a new disruption occurs.

WALT AND THOGUHT “THEORYCRAFTING” AMIDST A SERVER SHUTDOWN

While not as thorough or well-informed as Kenco’s theorycrafting practice described in the previous chapter, this interstitial describes an instance of rudimentary “theorycrafting” done by a guildmate and me before we knew it was called theorycrafting. It is also an example of limitations imposed by the game apparatus, clearly evident when the server needed to be rebooted by the game developers for maintenance.

Before websites like Elitist Jerks (<http://elitistjerks.com/>) and WoWWiki (<http://wowwiki.com/>) existed, my friends and I would do some rudimentary simulations when we needed to choose between two different weapons or armor pieces. These tests were held in the battle cage found in Gadgetzan (see Figure 25). In the transcript below, taken from January 2005, color-coded channels demonstrate the interleaved chat. Much of the switching from channel to channel was to distinguish the combat analysis chat from other talk that was happening in previously used channels. Distracting talk from guild chat and from other party members who were not at the same in-game location as Walt and Thoguht has been removed.

[18:4][4319][Walt] says: Let’s do this!

[18:4][4321][Thoguht] says: Ok.

[18:4][4335]Walt cheers!



*Figure 25. The caged arena in Gadgetzan in *World of Warcraft*, where my guildmates and I would go to test out equipment and “theorycraft.”*

[18:4][4337][Thoguht] says: Like my daggers?

[18:4][4345][Walt] says: Oh my yes.

[18:4][4352][Party] [Thoguht]: [Dirk]

[18:4][4368][Walt] says: Now... I’m going to go into Defensive Stance.

[18:5][4372][Party] [Thoguht]: I get more attacks with them but do the same amount of dps as unarmed.

[18:5][4382][Walt] says: I want you to hit me as hard as you can.

[18:5][4400][Walt] says: Aah! I found block.

[18:5][4405][Thoguht] says: No, you want me to hit as often as I can... well maybe as hard... we'll see what this block is about.

[18:5][4413][Thoguht] says: Oh yeah?

[18:5][4420][Party] [Walt]: I'm currently at 12.4%

[18:6][4435][Party] [Walt]: Now at 10.4%...

[18:6][4440][Party] [Thoguht]: and with the new shield 10.4.... hmmm

[18:6][4440][Party] [Walt]: Okay, that doesn't tell us much.

[18:6][4441][SERVER] Shutdown in 15:00

[18:6][4446][Party] [Walt]: Oh for pete's sake!

[18:6][4447][Party] [Thoguht]: damn!

[18:6][4453][Party] [Thoguht]: fight!

[18:6][4456]Duel starting: 3

[18:6][4457]Duel starting: 2

[18:6][4458]Duel starting: 1

[18:6][4483][Party] [Thoguht]: switch shields about halfway thru

[18:7][4501][SERVER] Shutdown in 14:00

[18:7][4512][Party] [Walt]: getting ready to switch shields!

[18:7][4517][Party] [Walt]: switching!

[18:8][4555][Walt] says: Hurt me! Yeah!

[18:8][4561][SERVER] Shutdown in 13:00

[18:8][4568]Thoguht has defeated Walt in a duel

[18:8][4571]Walt cheers!

[18:8][4589]You cheer!

[18:8][4593][Walt] says: What did we learn?

[18:8][4597][Party] [Thoguht]: now to read the log!

[18:8][4598][Party] [Walt]: Booyah!

[18:9][4620][SERVER] Shutdown in 12:00

[18:9][4628][Party] [Thoguht]: sometimes it says Walt blocks.

[18:9][4641][Party] [Thoguht]: sometimes it says You hit Walt for 1. (24 blocked)

[18:9][4649][Party] [Walt]: Hmmm.

[18:10][4674][Party] [Walt]: \”Strength\” says \”Increases the amount of damage you can block with a shield.

[18:10][4680][SERVER] Shutdown in 11:00

[18:11][4741][SERVER] Shutdown in 10:00

[18:12][4801][SERVER] Shutdown in 9:00

[18:13][4861][SERVER] Shutdown in 8:00

[18:13][4908][Officer] [Thoguht]: Ok. Well it seems that the first shield i missed more often, but the second blocked for higher amounts.

[18:14][4921][SERVER] Shutdown in 7:00

[18:14][4925][Officer] [Walt]: would my defense rating have an effect on your missing?

[18:14][4940][Officer] [Walt]: er, AC

[18:14][4943][Officer] [Thoguht]: except that the actual difference was 23 vs. 24... so maybe I need to use higher damage weapons to see a bigger diff.

[18:14][4961][Officer] [Thoguht]: dunno

[18:15][4976][Officer] [Walt]: willing to go again!

[18:15][4981][SERVER] Shutdown in 6:00

[18:15][4982][Officer] [Thoguht]: if the server goes down for a while, maybe I'll try to research attack and AC and all that crap

[18:15][4986][Officer] [Burgrosh]: I think the defense skill might, against his attack skill? In theory, the armor rating is just soak.

[18:16][5040][SERVER] Shutdown in 5:00

[18:16][5046]You have requested a duel.

[18:16][5052]Duel starting: 3

[18:16][5053]Duel starting: 2

[18:16][5054]Duel starting: 1

[18:16][5055][SERVER] Shutdown in 4:45

[18:16][5070][SERVER] Shutdown in 4:30

[18:16][5085][SERVER] Shutdown in 4:15

[18:16][5089][Walt] says: switch!

[18:17][5101][SERVER] Shutdown in 4:00

[18:17][5116][SERVER] Shutdown in 3:45

[18:17][5122]Thoguht has defeated Walt in a duel

[18:17][5131][SERVER] Shutdown in 3:30

[18:17][5131][Thoguht] says: 3 min to decipher!

[18:17][5146][SERVER] Shutdown in 3:15

[18:18][5157]Walt cheers!

[18:18][5161][SERVER] Shutdown in 3:00

[18:18][5176][SERVER] Shutdown in 2:45

[18:18][5191][SERVER] Shutdown in 2:30

[18:18][5206][SERVER] Shutdown in 2:15

[18:19][5221][SERVER] Shutdown in 2:00

[18:19][5236][SERVER] Shutdown in 1:45

[18:19][5247][Thoguht] says: Ok here's the deal.

[18:19][5251][SERVER] Shutdown in 1:30

[18:19][5255][Walt] says: Deal?

[18:19][5266][SERVER] Shutdown in 1:15

[18:20][5281][SERVER] Shutdown in 1:00

[18:20][5286][Officer] [Thoguht]: It looks like the second shield that time
blocked more often, but the difference is negligible!

CHAPTER 4: THE DEATH OF A RAID

Changing Schedules and Changing Roster

After our raid group had stabilized its strategy and defeated Ragnaros several times, the raid leaders decided that the group should progress further with *World of Warcraft* by moving Molten Core (MC) to just one night a week: Fridays instead of Wednesdays and Fridays. Our intent was to free up the raid to then delve into a new dungeon called Blackwing Lair (BWL) on Wednesdays. There were several complex, sometimes overlapping motivations for this move. Some raid members were starting to align themselves more with game-mechanics-based goals—goals that were designed into the game, as opposed to socially emergent goals (see “Communication” chapter)—and saw raid progression as a way to gain better loot, making their characters more powerful. Some raiders wanted to move on to new game content so that they could experience more of the designed events in the game. Finally, some were fine with whatever activities the raid decided to attempt since they just wanted to continue engaging in shared experiences.

This change to one night per week in Molten Core and one night in Blackwing Lair came too late for some of the regular raid members. About a dozen of our group of about sixty players decided to leave the raid group to join other groups that were more focused on quick progression and using more standard DKP loot rules (Malone, 2009) to incentivize cooperative behavior (see “Communication” chapter). Though we had a regular pool of about sixty players, roughly thirty of those were considered the “core” group who came every

week. Most of the players who left the raid group were from this core group of raiders, necessitating changes to our group strategy and structure.

Because we had larger numbers of players who were not yet regular raid members starting to show up each week, raid leaders had to spend time explaining how this raid group approached certain boss fights, how the raid divided loot, etc. Additionally, these new members required some time to learn the norms of the group and become enculturated to our common raiding practice. Some players, for example, needed to install and set up the external voice chat program, Ventrilo (known as “vent”), that we used to complement the communication afforded by the in-game text chat. This meant that often we could not fully complete all of MC in one night.

Another reason we could not reach the end of MC each week was that one of our main tanks, Wendy, quit the raid in early-May, the same week we killed Ragnaros for the first time. Usually a tipping point was reached once a boss monster was killed. Before killing it, the task could seem insurmountable, but, after killing it for the first time, having a combination of the right strategy, coordination level, and powerful enough equipment meant killing the monster became a frequent occurrence—put on farm status. Once a boss was on farm status, most raid members wanted to stay with the raid because they knew the raid would succeed in winning valuable loot. Wendy, however, was likely motivated by a falling out with the raid leader with whom she had an off-screen relationship. I never interviewed or collected data for my studies that was outside of regular game chat and activity, though, so I cannot say for certain why she left and joined a different raid group. Regardless, this example

highlights how outside factors could impact the success of in-game activities, mirroring what scholars have come to realize about the importance of out-of-school life for students (Heath, 1983; Lee, Spencer, & Harpalani, 2003; González, Moll, & Amanti, 2005).

There were also technical reasons why we did not progress as far into MC as we had done previously. The Molten Core raid zone sometimes suffered from software bugs where planned events would not trigger. This happened twice to our raid group. For example, one time Ragnaros did not reset correctly after a raid wipe, meaning we had to wait until the following week after the server was refreshed on Tuesday to try to kill him again.

All of these issues—both technical and social—made our progression in MC, as well as our progression with BWL, slow going. This frustrated a subset of our core group of raiders. The purpose of raiding for a growing number of players was to progress through game content efficiently and win loot rather than stated earlier goals of hanging out and having fun. With these tensions in place, the raid finally broke up in September 2006 after suffering an irreparable *meltdown*—a permanent dissolution of the raid group.

The Controversial Forum Thread

As mentioned in earlier sections, this raid group was composed of players from many different guilds. One of the guilds, The 7/10 Split, however, did play a leadership role with members of The 7/10 Split (“Splitters”) in charge of management and administration. Our raid leader, Maxwell, was from The 7/10 Split, and he along with another guildmate were the ones who originally gathered all of us together, crossing guild boundaries to form the

alliance. They used their guild's online space, a web message board, to post schedules and discuss preferred start days and times, inviting potential raiders to create an account with their message board system and participate in the discussion. This was supplemented with in-game chat between players, plying their existing social network to advertise that a new raid group was forming. This initial planning work took several weeks of negotiations to figure out which days worked best for the highest number of potential raid members.

On September 10, 2006, one member of the raid group, a mage named Matt, from one of the allied guilds, Eat at Chaos, noticed that many of the raid members from the management guild were all in Molten Core. He could see this because the game lets anyone see whether others are online and which zone they are playing in when they are on. The problem was that they were all in the cave system on a Sunday, during a non-scheduled raiding time. He also noticed that many other non-raid affiliated players from The 7/10 Split were also in the dungeon with the regular raiders. In other words, the raid group had reformed without many of the allied-guild raiders for an additional outing. Matt feared that the Splitters were planning to sever ties with their allied guilds, so he posted a question about it on the raid's online forum the next day, Monday, September 11, 2006:

Matt <Eat at Chaos> (12:07 p.m.)

So, the Molten Core raid is happening on Sundays now? I have been told that it was posted on the forum but I must be just missing it.

I logged in on Sunday and saw all of you in MC and wondered what was going on. Apparently there was a discussion about this in vent that I missed and a post on the forums that I also missed and still can't find. Seems the rest of Eat at Chaos missed it too, along

with some Booty Bay Anglers people that I have spoken with.

Obviously I'm missing something here but I still have to ask...am I missing something?

This prompted a response from a sub-leader, Lori, and our main tank, Warren:

Lori <The 7/10 Split> (12:13 p.m.)

I think it was discussed on Friday

Warren <The 7/10 Split> (12:18 p.m.)

our calendar was not updated ..so I managed to do it fastlike on sundat morning.

It was discussed on friday. That was it. It wont happen again 😊
sorry for the confusion folks. It happens sometimes.

Warren framed it as a mistake in communication, leading to some confusion from raid regulars. He then noted that “it” would not happen again, but it is unclear if he was referring to the miscommunication or to holding a raid event without regular raid members. Another raid member from the Booty Bay Anglers, Marge, countered this official word, prompting a reply from the raid leader, Maxwell:

Marge <Booty Bay Anglers> (12:24 p.m.)

I don't remember it being discussed on Friday...

Maxwell <The 7/10 Split> (12:28 p.m.)

This was discussed at Friday's BWL, but basically, here's the deal:

Recently, due to a bunch of people either not showing up or showing up very late, I have had to start raids rather late. This has also been aggravated by a few people leaving to join Battle Wounds/Judgment. Also, people are having a hard time doing MC in a single night, and for new folks who are taking the spots of those who left, it's difficult to have the gear to do a single night run. I had set aside Sundays for MC part 2 for Domo/Rags, OR if we decide to put in more time on BWL, use Sunday as a run to get as far as we can to gear up new folks.

It comes down to this, I'm pretty unhappy at being forced to take a step back from BWL right after we killed Vael [the second boss in BWL]. I would have preferred to keep our old schedule, but if making some changes to gear up new people is the only way to make it work, so be it. Wednesday will continue to be BWL night, and Friday will be either more BWL or MC, depending on progress, with Sunday as an additional day to finish a clear or start one.

Maxwell had assumed some clarification about the future of the raid group needed to be made. He had been particularly unhappy with the raid group's step back in progress and thought that pushing for an additional raid session on Sundays would help make up for the fact that we had so many new raiders who needed to "gear up." This explained why there was a group in Molten Core on a Sunday. Unfortunately, he did not clarify why regular raid members were not invited to the added raid event, only stating that the event was discussed on Friday. This backed up what Lori and Warren had provided: that it was discussed over Ventrilo and that they forgot to update the message board until Sunday morning.

A few posts later, a relatively new raid member from The 7/10 Split, Todd, posted a clarification, supporting Maxwell's statements and giving evidence that there was definitely talk about Sunday's Molten Core run during Friday night's voice chat:

Todd <The 7/10 Split> (2:02 p.m.)

We had talk on Vent for very long time on Friday. I am not sure who were there on vent but we had discussion there.

We did BWL on Wenseday and Friday last week. which means there wasnt actual MC this week but, Alot of us needed MC for gears to actually make diffrence in BWL.

That is why Max and our officer made quick few boss clear on MC before our regular Onyxia raid.

W = BWL

F = BWL or MC (Depends on how we do on W)

S = (Also Depends on How we do on W and F)

I dont think you missed any we just got few new 60s few gears here and there.

This finally triggered what was the root of the problem for Matt:

Matt <Eat at Chaos> (2:25 p.m.)

Thank you Todd for leading into my next question. How is it that a "few new 60's" knew about this but a lot of the LOYAL regulars did not? Was any effort made to invite the non-Split regulars who were online at the time?

If you guys want to run a purely Split raid, that's fine...but you need to tell the non-Splitters so we aren't wasting our time. I did a /who The 7/10 Split on Sunday when I saw you were all in MC and noticed a lot of names I've never seen before. New Splitters I'm

assuming. Is your goal to start running a completely Split raid?

On a side note, I had people in Eat at Chaos cancel plans to go to MC last week and that raid got cancelled at the zero hour in favor of an AQ40 raid. These same people didn't even get notice of this past Sunday's raid into MC in which a bunch of new 60's participated. I think I speak for more than just myself when I say WTF.

Matt's ultimate worry was that the regular raid members from his guild, Eat at Chaos, and other allied guilds would have to find another raid group to join because The 7/10 Split was working on making the raid a Split-only raid. He believed this to be happening because of previous rumors he had heard (which he mentions later in the thread) combined with the fact that he saw that many non-regular Split members were in the Molten Core run on Sunday.

Warren quickly replied, but he responded to an earlier concern about whether the raid event had been announced on the message boards:

Warren <The 7/10 Split> (2:25 p.m.)

Matt there was no post for this past sundays run. It was talked about friday. That was it. I locked that one post cause I didnt want people to confuse with who was gonna go . The calendar was not updated till sunday morning, and I should have made a post about it too. I was being lazy though and thought someone else was gonna do it.

EDIT: Last weeks MC was cancelled becuase not enough people showed up. Thus we decided to see what AQ40 was like.

Warren mentioned a thread on the message board that discussed the previous Sunday's run. Since it was not up to date, Warren locked that thread. He also mentioned that instead of creating a new post, he updated a shared calendar that could also be found on The 7/10 Split website. It should be noted, however, that many raiders had not incorporated visiting the calendar page into their regular activity—the calendar had only been installed the week before—so it is possible that Matt did not see the calendar change when he noticed the Molten Core run on Sunday.

Looking at the timestamp, this post came in the same minute as Matt's previous post. Likely, Warren did not read Matt's post until after he had already posted. When he did read Matt's post, rather than address Matt's main concern—fears that The 7/10 Split was planning on running a Split-only raid—Warren focused on explaining why the raid group visited AQ40 the previous week.

Matt wanted clarification because of the different accounts he was hearing:

Matt <Eat at Chaos> (2:48 p.m.)

Ok...let's all get on the same page here. Warren, I was told directly by your guild leader on Sunday that the change was posted on the forum. That's where I got the idea that it might be....you know...actually posted somewhere here.

That aside, and I know you don't OWE me any answers, but what about my other questions? All the new people in the raid....all the missing regulars....regulars not knowing about the raid taking place on Sunday...etc. You say you discussed in on Friday in vent but when? No one in Chaos heard any of this conversation and I'll again point to the fact that it was not posted on the forum.

I hope you can understand my frustration with this, I don't feel like

I'm getting the straight story here.

It seems clear that Matt was beginning to be frustrated with the lack of “being on the same page” to all of his questions. He then pointed out that the raid leaders did not “OWE” him any answers, which shows that he perceived an inequitable power relationship between The 7/10 Split and non-Split raid members.

Sven, another Splitter, and Warren reiterated that there was a failure in general communication and getting the word out about the additional raid on Sunday. The communication problems may have stemmed from not all raiders belonging to the same guild. Guilds had several in-game tools that could be used to broadcast messages to all guild members. The group members, however, had become so familiar with each other over the last 10 months that it was probably easy to assume that news of raid events would spread as if the raiders were all in the same guild.

Warren recognized that guildmates could communicate with each other more effectively and posted his response to Matt. Unfortunately, Warren tended to post ambiguous messages without reading them over first, perhaps exacerbated by the asynchronous, textual web medium, and this time was no different:

Warren <The 7/10 Split> (3:29 p.m.)

Why did Split peopel know about the raid? Cause it was mentioned during a guild meeting on saturday. So of course there were lotsa new Split folks. Who do you think is gonna replace the peopel who left us? BB Anglers? Chaos? Theyr were on..other folsk werent. We also got alot fo new folks from other guild as well like Talking aint easy. I would reckon to say we had more new OOGers than

new Split people show up.

Was just a lack of communication on the boards.

First, Warren stated that The 7/10 Split had a guild meeting on Saturday in which a raid to Molten Core was mentioned for Sunday. To him this explained why many Splitters were online and were invited to the raid event. Warren then asked who else would fill in the raid roster. With this question, he was probably referring to the exodus that had occurred in the previous couple of months (“the peopel who left us”) and was asking who would become new regular raid members. In the next statement, however, he moved back to the topic at hand, referring again to Sunday’s raid: “Theyr were on..other folsk werent.” He was using this to justify new Split invites. Splitters were online; other players who were regular raid members were not online. He also said, however, that the raid group had to fill in most of the empty spots on Sunday with out-of-guild (OOG) players.

Due to Warren’s rapid move from Sunday-specific talk to general raid composition and back to Sunday, Matt misinterpreted the middle question about who would fill in the raid:

Matt <Eat at Chaos> (3:52 p.m.)

Why yes, I WOULD expect you to invite Anglers and Chaos regulars over new Splitters or people from other guilds....silly me. Is there a problem with that? If there is, change the name of the damn raid to the “Split Raid” and we’ll find a new raid. I’m only speaking for my guild but I’ve heard from others that there were other regulars on that didn’t get invited. Do you think I’m just being an ass here?

Don't answer that.

Lori stepped in with reassurances that The 7/10 Split had no intention of moving to a Split only raid. She felt the need to play a mediation role, trying to quell accusatory posts and apologizing for the miscommunication:

Lori <The 7/10 Split> (5:47 p.m.)

Serioulsy, let's stop with the accussions that we're trying to out a bunch of people not in The 7/10 Split. That is simply not true nor do we have any intentions of ever doing that.

This is simply a misunderstanding and obviously poor communication on our part. I wasn't even in Friday's raid, but I was in vent and I did hear this being discussed. Some people apparently did not. We should have posted the change to the schedule that night, but that did not happen. As far as Sunday invites go, I'm not sure exactly how those were handled. I do know that I showed up late, there were plenty of spots, and plenty of non-splitters there at the time. Because of those empty spots were turned to the people we knew were waiting.

If the altered time was not properly communicated, then Sunday was a mistake on our part, simply put.

So please, let's learn from the mistakes and move on and not make this into a bigger deal than it really is.

Lori also took this time to reiterate that there was a misunderstanding going on, born from the assumption by those who were in the voice chat that talking about the raid there was sufficient to spread the word to all regular raid members. She then mentioned that the

organizers should follow a set protocol for announcing raid events and implied that this lesson was learned and future events would be handled differently.

Perhaps detecting that Matt was suspicious of the motivations of The 7/10 Split leadership, Maxwell created a lengthy post, arguing that he had been continually considerate of out-of-guild raiders:

Maxwell <The 7/10 Split> (6:17 p.m.)

Interesting. I know for a fact I mentioned this at least a couple times during Friday's raid, and then there was a long discussion following the raid that I know you were present for at least part of, Matt. How do I know? I alt-tabbed out to see who was in channel to make sure people were still around to hear it. If you were afk, my apologies, but from my perspective, there was adequate warning. Also, this was discussed the previous week as well.

Furthermore, the raid -I- run was recently handed a bunch of traumatic changes that I am not to happy about (namely people leaving for Battle Wounds/Judgment/Enemy, or just not coming) that have forced me to try new things with the schedule AND find new people for their slots in order to make things happen. This is not easy to do, and has been TREMENDOUSLY stressful for me. My apologies if I have been absent-minded about some things, but I am doing what I can.

You guys have been very constant, and in return, I usually invite Eat at Chaos and Booty Bay Anglers before my own Splitters. Have you never noticed I tend to grab you all before anyone else? Matt, have you forgotten I hold spots for you and Rapa even when you're 30 minutes late? I apologize if you think I am intentionally excluding you, but nothing could be further from the truth, and if you cannot believe this, then I do not know what to tell you.

I believe there was some miscommunication here, and I think this has been blown way out of proportion, but please do not accuse me of trying to get rid of you. I have worked my ass off to make this raid work, and I feel I have gone to great lengths to include Eat at Chaos and other guilds and make the raid welcoming and fair to

them, even when it has been to The 7/10 Split's disadvantage. I may be a lot of things, but I don't lie, and I try to treat people fairly. If you still feel there is an issue, please take it up with me directly.

It is clear Maxwell was feeling stress from the last few weeks of organizing a faltering raid group, dealing with newcomers and attendance issues. As the raid leader, he felt the onus of management, assuming responsibility to do all the organizing. A different raid leader might have just given up where Maxwell was compelled to continue. Maxwell also began to point out actions of his that might have been unnoticed or underappreciated by Matt and other raiders (e.g., “grabbing” non-Splitters first and “holding spots” for them instead of filling up the group to 40 players before engaging monsters).

After Maxwell invited him to talk privately, possibly because he did not want this thread to become more stressful or possibly because he was frustrated with the asynchronous nature of the forum, Matt instead chose to reply publicly:

Matt <Eat at Chaos> (9:01 p.m.)

Interesting indeed. I know I was on your vent server that evening, I may or may not have been there during your “discussion” of this. But that’s beside the point, I did take it up with you personally when I logged in on Sunday and was told, by you, that it was posted on your forums. I have yet to see this post. Other regulars have yet to see this post or hear about the changes in vent.

Yes, -you- have been very generous in asking us into -your- raid. I’ll try to avoid making comparisons to a certain warlock raid leader with your tone there but the thought did come to mind. I’d just like to remind you though that I had to constantly ask you to save Rapa a spot even after he proved he would show up consistently. Even then I usually got “maybe” type answers from you. It wasn’t until I started pressing on the issue that you started consistently saving

him a spot. I recall a couple of times where I left the raid to give Rapa my spot because you wouldn't save him one....so please don't hold that over my head as some shining example of your benevolence. /sarcasm

Yes, now I have noticed that we're some of the first to be invited, but shouldn't you be inviting the people who show up consistently and stay until the end? All I know is that you ran an MC raid on Sunday and a lot of non-Split regulars weren't there while a lot of newbie Splitters were. That doesn't look good to a few people who have noticed.

No, I don't believe that you're intentionally excluding us right now, but I do believe that is eventually the plan. I've heard from someone that I trust that it's your goal to keep things "in house" to avoid future problems with other guilds. Problems like the one I'm creating now I'll wager. It's just my opinion but I think you'll be better off sticking with people who have been loyal friends to the Splitters instead of gearing up a bunch of new people you don't even know will stick around.

If you do intend to clean house, you need to be up front about it and tell the other guilds now instead of leading them on until you have enough people to run a full Split Raid.

Oh, and I'd rather keep this discussion on the forum. If I have something to say, I don't mind stating it publically.

This post was clearly confrontational, highlighting language that framed opposing positions (e.g., putting quotes around "discussion," emphasizing Maxwell's egocentrism: "Yes, -you- have been very generous in asking us into -your- raid," and using the /sarcasm marker). Matt believed he was fighting for his and other raid members' rights to be rewarded for loyalty and friendship. He was worried that the social capital between non-Splitters and Splitters was of little value.

The next morning, Tuesday, September 12, 2006, Lori, sensing the escalation in talk, posted a message meant to clarify positions, defend Maxwell, and calm things down:

Lori <The 7/10 Split> (7:25 a.m.)

For all the people who are confused by Sunday, all I can say that has already been said is that we did not communicate enough and we NEVER had the intention to not include anyone. We thought the vent chat would be enough warning, but apparently it was not. This was not a stealth run or any sort of test run to see if we could handle things on our own, as we have been so accused.

Furthermore, we DO NOT have any intention of using anyone outside of The 7/10 Split for our personal gain only to dump them after a year of hard work. We are NOT trying to transition the raid to “keep things in house”, and unless you can sit there and tell me, “Yes, Maxwell, on our jolly jont through the plaguelands, told me he’s gonna dump these mo fos and move things completely in house,” then I really, REALLY don’t want to hear that claim anymore. It is baseless, unfair, and completely hurtful. We have never thought of anyone outside the guild as extras.

I don’t know what else can be said to appease anyone. I have a feeling we’re being backed into a corner. We’re either liars or dirty scumbags and that was already determined before this thread was even started. Next time, check the facts before you start flinging poo and quit relying on “trustworthy” sources.. This raid has already been through enough drama and setbacks, and I don’t think it takes a genius to figure out that we’re sick of it.

Lori recognized that raiding was “hard work” and that raid members had put in almost a year of this effort it took to make a successful raid. She was also the first raider to use the word “drama,” which may have served to frame the whole thread as another drama event that the raid group had to endure. By doing so, she may have prematurely signaled the end of the raid. Given enough drama, eventually, any raid group would collapse.

Maxwell also defended himself with another lengthy post. In it he denied that he ever said that he wanted to “keep things in house” and claimed that in the private officer section of the message boards, many conversations had occurred where he argued for The 7/10 Split’s continual loyalty to out-of-guild raiders, recognizing that the raid would never have been possible without them.

The following few posts took a more light-hearted tone. It appeared that most raid members who commented had learned enough about the situation to be satisfied that it was just a momentary break in communication and trusted the raid leaders when they said that they acknowledged the mistake and would endeavor to prevent it from happening again. The tension and worries over whether The 7/10 Split were planning on dropping non-Splitters from the group were unfounded, exacerbated by recent attendance issues.

A common occurrence with asynchronous media is to read topic threads, whether they are message board posts or email threads, sporadically throughout the day or week, as time allows. The message board software that The 7/10 Split used (phpbb) defaulted to showing new posts in chronological order. The problem with this was that readers could be compelled to reply to a post before having a chance to read the rest of the message thread. Whether this was true of Warren is unclear, but what came next in the thread was a post from him that clearly did not recognize the cooling down of the thread. He posted:

Warren <The 7/10 Split> (12:14 p.m.)

I dont know whats going on Matt..or who told you..but I think you’re being poisoned by someone with the intent of sabotaging our raids.

You feel like you're being lied to and distrust people.. welcome to our world..welcome to ours.

Matt, who had stated earlier that he was done posting to this thread, needed to defend his accusations and replied:

Matt <Eat at Chaos> (1:26 p.m.)

I'm not a glib idiot, Warren. I've formed my own opinion of the situation over several months and several incidents, not from one person telling me the Splitters are bad people. This past Sunday is just the straw that broke the camels back.

I think it's great that you Splitters stick together and defend each other. Loyalty is a good thing. Loyalty to the point of denial or discounting legitimate concerns is not. Seriously, do you guys think I just woke up one morning and said "Gee, I think I'll \$#@* with the Splitters today"?

This post angered Warren who was already prone to sending rapid-fire missives. Notably irate, he posted:

Warren <The 7/10 Split> (2:12 p.m.)

ok Heres the deal. I am posting this for all to see. I dot care how pissed Max will be at me, I dont care if he kicks me out of the guild. This is retarded. Its a game. I am done with you drama queens

Last week, I was FURIOUS at certain things that went down. I told all the officers, Max, Lucy and Will (lori wasnt there).. I was done doing 40 mans. I am sick of OOGers using US to gear up and leave. I went so far as to tell Max to find himself another MT becasue unless it was a Split raid, I wasnt gonna do it anymore.

You know what he said? He asked me if I felt Eat at Chaos was

part of the OOGers I refused to play with anymore. I said Yes... I made NO exceptions. It wasnt because I was POed at Chaos or even the Anglers..but because I was done being made a workhorse for people who dont appreciate the amount of effort that goes into leading a raid.

I drew a line in the sand. Max, I think got pissed at me. He went sofar as to convince me that I need to allow for Chaos as an exception to my Split only rule. That was for now and into the expansion. I relented. Eventually.. I realized that Chaos, BB Anglers and some other guilds really werent out to get us, but to have fun and progress and really just play and see what happens after the expansion hit.

But because of all this, I would like to thank you Matt..for showing me that line I drew. Its back.

Every OOGer. You guys wanna raid with us? Fine..find a new MT. You wanna take a step back and apologize for calling Max a tyrannical read leader..fine, i'll come back and tank for you and treat you like a brother again.

I'm done.

Warren was clearly feeling frustrated with the slow progress of the Molten Core raid group and with recent departures from the group (“last week”). He also saw the effort that he and Maxwell put into organizing and taking on in-game responsibilities (main tanking, for Warren) as real work that was underappreciated. His post exemplified a tension many players had with thinking about *World of Warcraft* as a game (e.g., “Its a game”) versus the amount of management and social negotiation needed in order to be in a successful group (e.g., the effort that Maxwell had been eluding to). For Warren, successful raiding should not have required drama. Drama came out of conflict players had with each other while trying to come to a shared understanding of group goals and the purposes for raiding. If too much work—too

much drama—was required for a group to maintain its identity, many players including Warren could not see the value of sticking with that group, opting instead to quit and possibly attempt to join a different group.

Helio, a member of the Booty Bay Anglers who had contributed to the more light-hearted banter before noon, gave evidence of a change in how out-of-guild raiders felt about the raid group after reading Warren's message. He posted:

Helio <Booty Bay Anglers> (2:47 p.m.)

Wow, things got a whole lot more real while I was getting my burrito.

I'd just like to take this moment to sympathize with Warren. I know and understand the frustration of seeing people join, and leave, even though it is part of the life cycle of a raid.

To lower that burden - and also because we really don't care to raid where we're not wanted - Marge and I wish Split all the best in MC and BWL and with Ony. You guys are a strong guild and will do well, I have no doubt.

For myself, thanks for letting me see the most end-game in WoW I have to date. If you ever need me for Ony, I'll come along (got to pay back that hood a bit, eh?). Other than that.. good luck, and thanks for all the fish.

See you on the flip side.

Like Warren, Helio began to recognize that there was too much drama happening. He understood and sympathized with Warren's frustrations. In an effort to lessen the group drama and to avoid dealing with it, he and his girlfriend, Marge, decided to leave the group. He also recognized, however, that leaving so suddenly could be construed as shortchanging

the raid group since he had recently won the loot roll for a hood that Onyxia dropped. He felt like he owed the raid group his time and labor to pay for the hood that he had won.

Less sympathetic, Matt saw resentment in Warren's tone and decided to focus on it in his next post. Matt believed that Warren was positioning himself as performing a service to other raid members, and he didn't think this was necessarily accurate. He then highlighted Warren's use of language, similar to how he emphasized Maxwell's use of first person in an earlier post. Matt's post:

Matt <Eat at Chaos> (3:19 p.m.)

Sorry Warren that you think we're so unappreciative of your god like tanking abilities. Perhaps we should pay homage to you for lending your valuable time to us peons? After all, your efforts far outweigh anyone elses and for that, you deserve special treatment.

"We" did this for "you", or "We're" tired of being taken advantage of by "you" or my favorite "All OOG'ers. You guys wanna raid with us? Fine...find a new MT". GG.

This whole thread isn't about ME, Warren....I couldn't give a damn if I EVER go on another MC raid. I wasn't angry that -I- missed the raid if you haven't gathered that by now.

I already knew there has been discussion about forming a completely Split MC/BWL raid. That's no surprise to me but thank you for at least affirming what others in The 7/10 Split have been denying.

This thread began to affect the raid group's chances of retaining new regulars that had recently been recruited. Min, a new member to the raid group from the Booty Bay Anglers

demonstrated how easily these new linkages could be severed when she also wrote a response to Warren:

Min <Booty Bay Anglers> (3:33 p.m.)

Hey Warren... Eff you. I tried to stay neutral. But that's too damn much. If I'm not wanted, either, then I'll go the way of Helio and Marge and wish y'all luck. Find me if you change your mind. I refuse to stick around with this kind of drama. I'm gonna go have fun now.

Min had originally been invited due to the social and cultural capital she possessed by virtue of her guild affiliation. This capital came with obligations and responsibilities, as demonstrated above with Helio who was also from the Booty Bay Anglers. Min, however, felt betrayed by Warren and her obligations to the raid group were not compelling enough for her to stay. Warren, after all, was a former Angler and had clearly decided to relinquish his capital with the rest of the Anglers. People move in and out of social circles over time, so it was not surprising when he had chosen to leave the Booty Bay Anglers and join The 7/10 Split, but it was surprising to see a complete disregard of his year-long history with the Anglers.

The three responses to Warren from out-of-guild raid members signaled the end of the raid. Maxwell recognized this with his next post:

Maxwell <The 7/10 Split> (4:52 p.m.)

Matt, I don't know what the hell your problem is. I'm serious, I don't understand this. Every time we have ever talked privately you have commended me on how I was doing as a raid leader. I never heard

a word of negativity out of you, and you'd been supportive of just about everything I've done. In fact, you were usually the first person to offer support in a whisper any time anything came up. Every time I've talked to you you've told me how Chaos was behind me 100%. Now over a misunderstanding over a single raid which I DID tell people about you're freaking out and calling me a liar to my face? Well, in all honesty, to me now it looks like you were the dishonest one, the one who has been two-faced. I did everything I could to include you and your guild and this is how you treat me? Last week Lester gave me his phone number to call him and chat any time, as he thought of me and the splitters as friends, so where did all this animosity come from? I thought of you as a friend, and now you treat me like this? Insult me to my face? I don't understand it.

....

You're helping destroy a raid a lot of people have put a lot of time and love into over some paranoid delusion that only exists in your own head, and honestly, it looks as though you're intentionally ignoring what I have said here to continue spewing venom. Again, this is not the Matt I know, and I do not understand.

So Matt, I am telling you here and now, and finally. You are wrong in your assumptions here. I know that in your current frame of mind this will only anger you more, but it's true. If you wish to continue ignoring what I and others have said here, so be it. If you wish to call me a liar, so be it. How can I argue with you, defend myself to you when you won't listen to reason? I can tell you until I am blue in the face what the reality of the situation is, but unless you open yourself to reason, you won't even hear it.

Helio and Marge, Min, I've really enjoyed having you here and despite what others have said here in an emotional, I do welcome you, and bear no ill will towards you whatsoever, but if you do not want to stay, I understand and that's cool.

Everyone else from other guilds, thank you for your efforts and for everything you've done, but I doubt that the 40 man raids will be able to run now. See Matt? Watch our roster, see if we'll have 40 people in MC or BWL. We won't, ever. I don't know why you've done this rather than try to rationally discuss problems, but it

seems to have had the desired effect.

Maxwell began by emphasizing his confusion and astonishment at Matt's accusations and suspicions about The 7/10 Split's future plans for non-Splitters. He then retaliated by blaming Matt for the destruction of the raid group ("You're helping destroy a raid"), followed by a last hopeless attempt at reason ("I know that in your current state of mind this will only anger you more, but it's true."). Maxwell then took the time to say goodbyes to the out-of-guilders who were leaving the raid, and then, understanding that the raid group was dissolving completely, said goodbye to every out-of-guilders. Finally, he put blame on Matt again before ending his post.

After this post, the forum administrators—the raid leaders—opted to lock down the thread so new posts could not be made. Ostensibly, they did this to prevent people from irreparably damaging their relationships with each other, but the unfortunate side-effect was the silencing of legitimate concerns, especially from raiders who may have missed checking the forums within this 29 hour period. In reality, blaming Matt one last time and then locking down the thread may have been a deliberate (but completely understandable) exercise in power. The raid leaders' fear of "drama" led them to shut down communication paths. Unfortunately, this was an act that served to alienate the various parties in the discussion even more.

I was one of the raiders who did not see this whole meltdown thread until the next day. I learned through my guild's web forum—Booty Bay Anglers forum, not The 7/10 Split's forum where this meltdown discussion was occurring—that many of my guildmates

were upset. The biggest concern was that Warren's blanket attack on non-Splitters was hurtful and not countered by any of the Split leaders. In a different thread that I had started a week earlier (announcing my temporary resignation from the raid group starting in the fall due to my conflicting class schedule), I posted on Wednesday, September 13, 2006:

Thoguht <Booty Bay Anglers> (11:45 a.m.)

I've decided to leave this raid now rather than wait until the end of the month. Why? Because of this:

Warren <The 7/10 Split> wrote:

ok Heres the deal. I am posting this for all to see. I dot care how pissed Max will be at me, I dont care if he kicks me out of the guild. This is retarded. Its a game. I am done with you drama queens

....

I'm done.

I have no clue what the hell Warren is talking about with regards to Chaos and Anglers... I was not aware that I've been in this raid since the BEGINNING just to get loot and run. I don't *think* that is what Helio and Marge were thinking when they joined a few months ago. The reason Sam, Hizouse, and Hatfield left a while back has nothing to do with them getting gear and USING you guys. WTF?

It is ironic that Warren basically geared Lotharia with us and then ditched while our GMOTD still said grats on 60.

But do we actually care that much? Not really. People move in and out of circles of friends. It happens. People become busy or not busy at different times in their lives. It happens. Sheesh. To think that our social movements are planned just to affect your life,

Warren... wow that is quite vain.

If any of you read my paper, you would have seen how highly I praised this raiding group's ability to emphasize having fun and hanging out. I am not certain what happened over the summer but I believe the falling out going on right now is emotional and NOT due to loot, but rather due to the fact that we're just getting slightly tired of each other and the difficulties with Vael/Rags.

My suggestion is to take a breather. Come back refreshed. I will follow my own advice. The Fall quarter ends in December. I hope to see you all then or in-game before then.

As an officer for the Booty Bay Anglers, I saw the need to defend each of them who were regular MC raid members, noting that none of them had used the raid group for personal gain and that some of them who had left had done so amicably and for good reasons. The summer was a particularly tumultuous time when many regular members had to change their gaming schedules due to offscreen seasonal schedules

I also saw the need to point out that Warren was being hypocritical. When the raid group first started in late 2005, Warren was a member of the Booty Bay Anglers. He switched over to The 7/10 Split in early 2006 but had left one of his alternate characters, Lotharia, with the Anglers. Warren had been taking Lotharia to the Anglers' Zul'Gurub raids on Mondays, gaining many useful equipment upgrades, and had recently leveled up to 60. As was customary, guild officers congratulated Lotharia for reaching level 60 by posting it on our guild message of the day (GMOTD). It is unclear whether he had planned the timing, but shortly after reaching 60, Warren took Lotharia over to The 7/10 Split. Yet the Anglers did not mind. They understood that affiliations were transient.

At the time I was trying to grapple with the fact that I had just finished my first paper on the group, citing their collegial nature and camaraderie as their basis for trust and success. I could not believe that the raid group was breaking apart because of changing player motivations, and my recommendation was to “take a breather” and “come back refreshed.”

Warren replied to my post ambiguously:

Warren <The 7/10 Split> (12:00 p.m.)

Thog I'll clue you in..it wanst Anglers or Chaos

This was universally confusing to all the Anglers I talked to. Why, if we were not the problem, did Warren name us as problems in his original post? Before I could ask for clarification, however, the forum administrators decided to lock this thread as well:

Lucy <The 7/10 Split> (12:01 p.m.)

We dont need more fuel to this or any fire. Thoguht, emotions are running very high due to several issues right now. You have not been present for some of the latest fireworks and perhaps do not know the entire story. Regardless, in the spirit of forward thinking, I will not let this thread turn into another "who said what to whom"

Locked.

Again, rather than explain to me and other raiders who may have not been present during “the latest fireworks,” the forum administrators chose to sever communication lines.

Making Sense of the Meltdown

The way the raid group dissolved clearly shows how quickly a group meltdown could occur. Two months of frustrations had already existed, but the critical moment in which the raid died was sudden and full of spite, anger, and paranoia. It was so sudden, in fact, that many raid members did not even know what was happening on the message boards until a few days after the fact. This let a vocal minority dictate the tone of the argument, which was on the verge of becoming an all-out flame war—when disagreements turn into verbal abuse and ad hominem attacks, a type of discourse commonly associated with web message boards.

Contrast this with the previous alignment work done by the raid group following the poor-performing night, about five months prior, detailed in the “Communication” chapter. In that case, the group was able to realign itself after that night’s dispute over loot the in a thread on the web forum—the same web forum where this final meltdown discussion happened. Members of the group were able to remind others that they were in it because they were “family” and that conflict was expected, just as with off-screen families, noting that those conflicts were temporary and not grounds for dissolving the group. Furthermore, most of that alignment work came from a regular raid members who were not in leadership positions. One key difference between the talk in that previous forum thread and this one was the use of “drama” as a framing point (Goffman, 1986). In the previous case, the forum was used to repair the raid through restating group goals and framing the setback as simply a to-be-expected temporary clash between family members. This time, however, multiple raiders (e.g., Lori, Warren, Min) had positioned the raid amidst drama.

The raid members needed to play a meta-game of learning how to resolve conflicts born of the differences between individual goals and expectations versus group goals and expectations. By the time the raid group finally broke apart, many players had moved away from the group's stated goals of "hanging out and having fun" and onto more individualistic goals of obtaining loot and progressing with raid encounters. It is possible that these motives and goals were a natural change after the group became successful with completing Molten Core. Perhaps, it was necessary for the group to have a new shared task that had not been mastered—to have an external threat to the group that required collaboration and coordination among group members—for the group to build and maintain a strong group identity and trust between members. Even though Blackwing Lair was new, the fact that the group was struggling with Molten Core, which had previously been made routine, represented a step backwards for the group. If, as Malaby (2009) claims, successful performance of contingent actions nets people cultural capital, failure while performing an act that was not supposed to be contingent anymore could be seen as a blow to the group's self-esteem and did not add anything to its members' cultural capital.

The cost of raiding without progress and dealing with drama was too much for some players, since the loot rewards were not coming quickly enough to offset these costs. Mandy, long before the meltdown, had calculated the cost of raiding in U.S. dollars. She posted on the Booty Bay Anglers' forum:

Mandy <Booty Bay Anglers> (June 10, 2006 5:39 p.m.)

Let's consider that the Split raid can do six bosses in a 4 hour MC run. This is a minimum of 8 BoP epics⁴⁷ (probably closer to 10), plus associated BoEs, greens, mats, etc. Let's call it a total of 12 epics, plus 500g worth of materials (cores, essences, etc.) and another 400g in flat cash. The greens, mats,⁴⁸ etc. are effectively the property of the raid (and go for repairs, potions, enchants, or improved raiding gear). The 400g means each raider gets about 10 gold per run (seems high but I'm basing it on getting about 1.4g per boss plus trash cash), which doesn't quite cover the cost of raiding.

This means that each epic takes 3.33 people 4 hours of work. At an assigned cost of \$10 per person per hour, an epic is worth \$133 in labor alone. This doesn't include raid leader time, guild officer time, farming time outside the raid for materials, etc. This is with a mature raid that normally one shots⁴⁹ bosses and is looking at being able to condense all of MC into a 5-7 hour run. The labor cost per epic in a new raid is much, much higher. Thus, loot drama, and the reason for DKP and any number of other loot distribution systems that concentrate very hard on being "fair", or oriented toward "raid efficiency."

While the raid group prided itself in using an informal loot system and emphasizing a laid-back attitude where relationships mattered more, it was clear that the cost of raiding (e.g., "\$133 in labor alone") was starting to take its toll and erode the stability of the raid group.

⁴⁷ Item names in WoW were color-coded depending on rarity and power. Regular non-magic items were colored white, common magic items were green, rarer items were blue, and *epic* items were purple. *BoP* items *bound* to a character as soon as they were picked-up by a character, which meant they could not be traded to another character. *BoE* items bound once they were equipped.

⁴⁸ Raw materials needed to brew potions and create other consumable items that buffed the raid before a fight.

⁴⁹ Killing a monster on the first attempt.

After the raid meltdown, the Booty Bay Anglers started a thread on their web forum theorizing about why the group dissolved. In it, Helio noted that even family raids must have raided for loot and progression:

Helio <Booty Bay Anglers> (Sep 13, 2006 6:10 a.m.)

As to my own theories on failure, I think Maxwell said it best when he said "Vael breaks raids".

This is just one boss in one instance, but the deeper truth is this. If you are not PROGRESSING.. if you are just beating your head against the same boss for an extended period.. stress levels rise. Cost levels rise. Thoughts of "why the hell am I going to X dungeon tonight to spend 15g in repairs to see nothing.. I could be with the missus or playing with my kid or getting some REALLY GOOD PORNOGRAPHY downloaded.." spring to mind. (The last one is mine).

If you are either progressing or clearing content, the stress level is much lower and as a result, people have more stamina to roll with the punches. When we were working on panther, I think we did it the smartest way. We worked on her, then went to do something we COULD do (Snakey), so it didn't feel like a total waste of time. If all we had done was go to Panther for 5 hours and then go home, I think people would have been a lot more stressy.

Let's face it. You can have fun with your guild while fishing, or PvPing, or 5 man BRD demolition runs (hoot). You do not need 40man instances to have fun. You go to those places for 2 reasons.

1) See content.

2) Get loot.

If neither one is being achieved, the questions start coming up.

Now, as to Split in particular, I feel really bad for them, and Maxwell in particular who is in my opinion a really stand up solid guy and a

great leader. But I think they lost sight of a fundamental point. They were trying to raid like they were a BWL raid guild with MC on farm, when in fact, they have not cleared (or even been capable of clearing) Rags in over a MONTH. The reality check is due.

....

I think some 'family guilds' fool themselves when raiding in a way that 'Hardcore guilds' do not.

Family guild : Oh we're all friends and this is no stress and we're just here to enjoy the game and if we get loot, great'.

Hardcore guild : People want loot. Here's how you get loot. You are not a bad person if you go somewhere just for loot.

I think one expectation of human motive is more honest than the other, when push comes to shove.

Helio makes a point that a raid is always about loot and progression to some degree. Some “hardcore” groups may be more explicit about those goals, but if they were not goals to begin with, the group could elect to do some other activity together. Note that Helio holds Maxwell in high regard, seeing that a “stand up guy” was placed in a stressful position. Note also that Helio is conflating “guilds” with “raids,” as is often done, even though he was a member of the non-guild specific MC raid group.

An alternative explanation could just be the simple fact that the raid group had been engaged in MC / BWL / Onyxia raiding for almost a whole year at 15 hours a week. I sometimes find it difficult to hang out with the same people for an extended period of time, and rarely do I spend that amount of time with off-screen friends engaged in joint activity. It

is possible others are like me and we were just tiring of each other. When I asked if this was true of other Anglers, Sam replied:

Sam <Booty Bay Anglers> (Sep 13, 2006 7:16 a.m.)

I think tired of each other is definitely part of it Thoguht. Part -- like most things, it is a large combination of factors. I maintain my argument that no matter how much people protest, it is to at least some degree about the loot -- who isn't happy to get upgraded gear? That doesn't mean that the overriding interest isn't to 'see content' and beat new bosses, have new accomplishments while hanging out with friends. Certainly I think Helio is on to some important points re: held up / backwards moving progression.

....

Sam recognized that many factors played a role in why the group dissolved. Part of it was that we were getting tired of each other, but he agrees with Helio that the biggest reason was that raiding was at least in part fueled by the desire to gain better equipment and make progress with new bosses. It seemed that over the summer of 2006, more and more raiders were focusing on this aspect of their motivation for engaging in raid activity. When the raid failed to progress and, in fact, actually regress, the raid was bound to dissolve.

The work that goes into constantly repairing the network of the raid—renegotiating responsibilities, enrolling new actors, aligning members to a group identity—was so effortful for some players that it became extremely emotional. Maxwell hit upon this with his last post: “I thought of you as a friend, and now you treat me like this? Insult me to my face? I don't understand it.” Matt’s attacks were seen as betrayals to their friendship and trust. They were unexpected and could not be understood, ending only in sadness and confusion.

This sequence of events also played an emotional toll for me. I had just finished writing my first paper, arguing that the success of the raid group depended on its ability to align its members to the group goals of hanging out and having fun. I did not know how to interpret the raid's meltdown, and it seemed hypocritical of me to be publishing something that lauded the group's success while simultaneously watching its sudden downfall. The speed and finality of it came as a complete shock, and I admit writing this account was cathartic. I am perhaps following a path tread by other researchers, such as Kolko and Reid Steere (1998) when they write in a paper describing the dissolution of an academic online community: "this story comes down perhaps too heavily on the participant side of the participant-observer relationship. This chapter grew out of nearly 3 years of trying to make sense of what happened during those months" (p. 215). Like Kolko and Reid Steere, it took me several years before I could start making sense of my raid group's meltdown.

Ultimately, the raid meltdown was a combination of many factors. There was increasing tension between different player goals, certain players were tiring of each other, and frustrations existed from our changing roster of regular players and slow progression in dungeons where we had previously been successful. Eventually, all raid groups end. Whether the end is amicable or is brought about by too much drama does not matter. Both of these conditions represent the raid network's inability to "repair" itself. They both exist when group members are not in agreement on how roles and responsibilities should be distributed and who should be included in the network. In other words, even when the break up is

amicable, the various members of a raid group are no longer a network into which all actors have been translated; there is no longer a shared understanding of roles and responsibilities.

--

Years later, all of the raid members have moved on. I know that later in 2006, about half of the members of The 7/10 Split decided to switch servers. My guild, the Booty Bay Anglers continued to delve into smaller raid zones and was relatively successful with organizing a new raid group for the 25-person endgame content in WoW's first expansion, *The Burning Crusade* (BC). I stopped playing for half a year, started again with a new raid group in Karazhan (one of the new raid zones in BC), quit "for reals" for another half a year, and now play sporadically with a new guild on a different server. Thus, the microcosm of the mangle, represented by my original Molten Core raid group, exploded to be absorbed by the macro mangle of play.

VICTORY!

Text chat log from the first recorded Ragnaros kill (starting mid-fight), May 19, 2006:

21:12:54.984 : [Raid] Maxwell: *** 15 seconds until Ragnaros emerges. ***

21:13:02.171 : Maxwell yells: ATTACK!

21:13:02.171 : [Raid] Maxwell: ATTACK!

21:13:03.000 : Maxwell yells: ATTACK!

21:13:03.140 : [Raid] Maxwell: ATTACK!

21:13:07.421 : Ragnaros yells: TASTE THE FLAMES OF SULFURON!

21:13:07.671 : [Raid] Maxwell: *** AE Knockback ***

21:13:10.250 : [Raid] Maxwell: *** Ragnaros has Emerged. 3 minutes until submerge. ***

21:13:12.484 : Ragnaros yells: DIE, INSECT!

21:13:12.734 : [Raid] Roger: 33%

21:13:20.937 : [1. madroques] Roger: dump on him, just dont draw aggro.

21:13:24.328 : Rand has died.

21:13:38.343 : Ragnaros yells: BY FIRE BE PURGED!

21:13:38.890 : [Raid] Pall: out of mana

21:13:41.671 : Ragnaros yells: TASTE THE FLAMES OF SULFURON!

21:13:42.312 : [Raid] Maxwell: *** AE Knockback ***

21:13:56.921 : [Raid] Paula: down

21:13:57.671 : [Raid] Mandy: 1m 42

21:14:00.093 : Ragnaros yells: DIE, INSECT!

21:14:02.515 : Ragnaros yells: BY FIRE BE PURGED!

21:14:04.703 : [1. madroques] Roger: pay attention to the knockback.

21:14:05.015 : [Raid] Maxwell: *** 5 SECONDS UNTIL AE Knockback

21:14:05.890 : [Raid] Dierdre: oom

21:14:10.687 : Ragnaros yells: TASTE THE FLAMES OF SULFURON!

21:14:11.234 : [Raid] Maxwell: *** AE Knockback ***

21:14:14.218 : Ragnaros yells: BY FIRE BE PURGED!

21:14:23.703 : [Raid] Mandy: We're good

21:14:32.828 : [Raid] Pall: Will's healers are down!

21:14:34.109 : [Raid] Maxwell: *** 5 SECONDS UNTIL AE Knockback

21:14:37.609 : [Raid] Paula: 5%!!!!

21:14:41.000 : Ragnaros yells: TASTE THE FLAMES OF SULFURON!

21:14:41.437 : [Raid] Maxwell: *** AE Knockback ***

21:14:41.671 : [Raid] Woz: Go go go!

21:14:41.906 : Rapa calls out for healing!

21:14:44.625 : [Raid] Thoguht: Ironically, I have two healthstones.

21:14:48.906 : [Raid] Roger: its not over yet.

21:14:52.593 : [Raid] Paula: 1!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

21:14:52.859 : Ragnaros yells: DIE, INSECT!

21:14:53.921 : [Raid] Woz: *Cheers from the deathpile* GO!

21:15:00.093 : [Raid] Pall: nice

21:15:01.781 : [Raid] Helga: phew

21:15:01.843 : [Raid] Mandy: WOO!

21:15:02.656 : [Raid] Heather: yaaaaaaaaaay

21:15:03.093 : [Raid] Maxwell: WOOOOO!

21:15:04.734 : [Raid] Shaun: jesus

21:15:04.734 : [Raid] Roger: thank fucking god.

21:15:08.671 : [Raid] Shaun: JESUS

21:15:11.078 : [Raid] Wong: YARRRR!!

21:15:11.296 : [Raid] Shaun: MY HEART

21:15:13.359 : [Raid] Roger: <3 Shaun

21:15:15.265 : [Raid] Shaun: I'M DYING

21:15:18.171 : [Raid] Matt: /cheer

21:15:22.578 : [Raid] Shaun: MY HEART IS LITERALLY OUT OF MY
CHEST

21:15:26.734 : [Raid] Shaun: I BOTH HATE AND LOVE YOU ALL

21:15:28.687 : [Raid] Shaun: hahahah

21:15:29.609 : [Raid] Shaun: <3



Figure 26. A trophy screenshot of one of the raid group's first Ragnaros kills in *World of Warcraft*, May 19, 2006.

GLOSSARY

add-on – third-party modifications to *World of Warcraft*'s user interface

AoE – *area of effect* damage that was spread out over an area instead of directed at a single target

afk – *away from keyboard* or *away from keys*

aggro – Short for *aggravation*; monsters attacked whichever character had aggro, usually gained by having the highest threat level. Can be used as a verb (e.g., “He aggroed the monster.”).

AQ20 – Ruins of Ahn'Qiraj, a 20-person raid zone

AQ40 – Temple of Ahn'Qiraj, a 40-person raid zone

buff – a temporary boost to a character's power; opposite of debuff

BWL – Blackwing Lair, a 40-person raid zone, usually done after Molten Core

CT Raid – CT_RaidAssist or CTRA, an add-on that helped with raiding

DPS – *damage per second*, a statistic valuing items and performance and a term used to classify characters whose role is to do damage to a monster

debuff – a temporary decrease to a character's power; opposite of buff

dot – a debuff that did *damage over time*

IC – in-character, used to describe talk that was done while role-playing; opposite of OOC

KTM – KLH Threat Meter, an add-on that kept track of threat

leet – *elite* or expert

leet speak – gamer lingo originating from hacker culture

loot – equipment that was “lootable” from monsters that “dropped” them after they died

Mana – magic energy reserves that spell casters used to cast each of their spells

MC – Molten Core, a 40-person raid zone that was the focus of the group in this manuscript

min-maxing – minimizing resources spent on useless attributes to free them up and maximize spending on useful ones

MMOG – massively multiplayer online game

mob – monster object, shorthand for monster or game-controlled enemy

MT – main tank, the primary tank for a fight that receives priority healing

noob – *newbie* or novice

OOC – out-of-character, used to describe talk that was not limited to the fantasy of the in-game setting; opposite of IC

SD – social dilemma, a hypothetical situation in which multiple participants decide to either cooperate or defect / free ride

party – a small group of up to five players

PD – prisoner’s dilemma, a hypothetical social dilemma in which two prisoners must decide whether to testify against the other

PUG – pick-up group. Can also be used as a verb (e.g., “I went pugging with some strangers.”)

raid – also, *raid group*, a large group of players, composed of up to eight parties.

raiding – a high-stakes, joint-task activity that required careful coordination

repop – also *respawn*. When a monster died, it would get reinstantiated by the game server in a few minutes. In raid zones, repopping usually happened after a longer period of time, such as an hour.

rez – *resurrect*

solo – as opposed to party, used as a verb to mean playing alone (e.g., “I’m going to solo that dungeon.”)

spam – to activate an ability over and over again in rapid succession

tank – a character role meant to maintain aggro from monsters during a fight

theorycraft – modeling and testing theories about the underlying mechanics of a game

threat – Each ability activated during a fight generated a threat value. The total threat usually determined who had aggro.

WoW – *World of Warcraft*

ZG – Zul’Gurub, a 20-person raid zone

REFERENCES

- Akrich, M. (1995). User representations: Practices, methods and sociology. In A. Rip, T. J. Misa, & J. Schot (Eds.), *Managing technology in society: The approach of constructive technology assessment*. London: Pinter Publishers.
- Alexander, L. (2008). Inside the 169-page Thompson report: Judge recommends \$43k fine also. *Kotaku*. Retrieved July 31, 2010, from <http://kotaku.com/5023506/inside-the-169+page-thompson-report-judge-recommends-43k-fine-also>
- Andrew. (2010). Video games and consciousness. *Little Bo Beep*. Retrieved July 31, 2010, from <http://littlebo beep.com/2010/video-games-consciousness/>
- Axelrod, R. (1985). *The evolution of cooperation*. New York: Basic Books.
- Bangeman, E. (2008). Growth of gaming in 2007 far outpaces movies, music. *Ars Technica*. Retrieved July 31, 2010, from <http://arstechnica.com/gaming/news/2008/01/growth-of-gaming-in-2007-far-outpaces-movies-music.ars>
- Barron, B. (2003). When smart groups fail. *The Journal of the Learning Sciences*, 12(3), 307-359.
- Barron, B., Martin, C. K., Mercier, E., Pea, R., Steinbock, D., Walter, S. E., Herrenkohl, L., Mertl, V., & Tyson, K. (2009). Repertoires of collaborative practice. In *Proceedings of the Ninth International Conference on Computer Supported Collaborative Learning – Volume 2*.
- Bioware Corporation. (2003). *Star Wars: Knights of the Old Republic* [Computer game].

- Blizzard Entertainment. (1998). *Starcraft* [Computer game].
- Blizzard Entertainment. (2004a). *World of Warcraft* [Computer game].
- Blizzard Entertainment. (2004b). *World of Warcraft* guide. Retrieved July 31, 2010, from <http://www.worldofwarcraft.com/info/basics/guide.html>
- Boellstorff, T. (2006). A ludicrous discipline? Ethnography and game studies. *Games and Culture*, 1(1), 29–35.
- Bogost, I. (2006). *Unit operations: An approach to videogame criticism*. Cambridge, MA: The MIT Press.
- Bogost, I. (2009). What is object-oriented ontology? A definition for ordinary folk. Retrieved July 31, 2010, from <http://bogo.st/32>
- Bohannon, J. (2009). Gamers unravel the secret life of protein. *Wired*, 17(5). Retrieved July 31, 2010, from http://www.wired.com/medtech/genetics/magazine/17-05/ff_protein
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York: Greenwood Press.
- Brandt, D. (1998). Sponsors of literacy. *College Composition and Communication*, 49(2), 165-185.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school: Expanded edition*. Commission on Behavioral and Social Sciences and Education, National Research Council. National Academy Press.
- Bricker, L. A., & Bell, P. (2008). Mapping the learning pathways and processes associated with the development of expertise and learner identities. In P. A. Kirschner, J. van

- Merriënboer & T. de Jong (Eds.), *Proceedings of the Eighth International Conference of the Learning Sciences*.
- Briggs, M. (2010). Top 10 most expensive video games budgets ever. *Digital Battle*. Retrieved July 31, 2010, from <http://www.digitalbattle.com/2010/02/20/top-10-most-expensive-video-games-budgets-ever/>
- Callon, M. (1986). Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (ed.), *Power, action and belief: A new sociology of knowledge*. London: Routledge & Kegan Paul.
- Cavalli, E. (2009). Female demographic is PC gaming's largest, says Nielsen report. *Wired*. Retrieved July 31, 2010, from <http://www.wired.com/gamelife/2009/04/female-demograp/>
- Chen, M. (2009a). Communication, coordination, and camaraderie in *World of Warcraft*. *Games and Culture*, 4(1), 47-73. <http://dx.doi.org/10.1177/1555412008325478>
- Chen, M. (2009b). Social dimensions of expertise in *World of Warcraft* players. *Transformative Works and Cultures*, 2. <http://dx.doi.org/10.3983/twc.2009.0072>
- Chen, M., DeVane, B., Grimes, S. M., Walter, S. E., & Wolfenstein, M. (2010). The mangle of play: Game challenges and player workarounds. Presentation at the Digital Media and Learning Conference (DML), La Jolla, CA.
- Collins, H., & Evans, R. (2007). *Rethinking expertise*. Chicago: Chicago University Press.
- Cooper, G. (1998). Research into cognitive load theory and instructional design at UNSW. Retrieved July 31, 2010, from <http://dwb4.unl.edu/Diss/Cooper/UNSW.htm>

- Cover, R. (2006). Gaming (ad)diction: Discourse, identity, time and play in the production of the gamer addiction myth. *Game Studies*, 6(1). Retrieved July 31, 2010, from <http://gamestudies.org/0601/articles/cover>
- Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience*. New York: Harper Perennial.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. (B. Massumi, Trans.). University of Minnesota Press. (Original work published 1980).
- Dennet, D. C. (1971). Intentional systems. *The Journal of Philosophy*, 68(4), 87-106.
- Ducheneaut, N., Yee, N., Nickell, E., & Moore, R. J. (2006a). Alone together? Exploring the social dynamics of massively multiplayer games. In *Proceedings of CHI 2006* (pp. 407–416). New York: ACM Press.
- Ducheneaut, N., Yee, N., Nickell, E., & Moore, R. J. (2006b). Building an MMO with mass appeal: A look at gameplay in *World of Warcraft*. *Games and Culture*, 1(4), 281-317.
- Ebert, S. (2010). Okay, kids, play on my lawn. *Chicago Sun-Times*. Retrieved July 31, 2010, from http://blogs.suntimes.com/ebert/2010/07/okay_kids_play_on_my_lawn.html
- Edge Staff. (2006). Austin: Secrets of WoW design. *Edge Online*, November 6. Retrieved July 31, 2010, from <http://www.edge-online.com/news/austin-secrets-wow-design>
- Elitist Jerks. (2010). Rogue: PvE DPS. In *Theorycrafting Think Tank* section on Elitist Jerks' web forums. Retrieved July 31, 2010, from http://elitistjerks.com/f47/t24301-rogue_pve_dps

Engeström, Y. (1999). Activity theory and individual and social transformation. In Y.

Engeström, R. Miettinen, & R. Punamäki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge: Cambridge University Press.

Felkins, L. (1999). A rational justification for ethical behavior. Retrieved July 31, 2010, from <http://perspicuity.net/common/moral3.html>

Felkins, L. (2001a). An introduction to the theory of social dilemmas. Retrieved July 31, 2010, from <http://perspicuity.net/sd/sd-1.html>

Felkins, L. (2001b). The prisoner's dilemma. Retrieved July 31, 2010, from <http://perspicuity.net/sd/pd-brf.html>

Filiciak, M. (2003). Hyperidentities: Postmodern identity patterns in massively multiplayer online role-playing games. In M.J.P. Wolf & B. Perron (eds.), *The video game theory reader* (pp. 87-102), New York: Routledge.

Galarneau, L. (2005). Spontaneous communities of learning: Learning ecosystems in massively multiplayer online gaming environments. *Proceedings of DiGRA 2005 conference: Changing views – worlds in play*. Vancouver, British Columbia, Canada. Retrieved July 31, 2010, from <http://ir.lib.sfu.ca/handle/1892/1629>

Games Learning Society. (2010). Games Learning Society: About us. Retrieved July 31, 2010, from <http://www.gameslearningsociety.org/about-us>

Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.

- Giddings, S. (2007). Playing with nonhumans: Digital games as technocultural form. In S. de Castells & J. Jenson (Eds.), *Worlds in play: International perspectives on digital games research* (pp. 115-128). New York: Peter Lang Publishing.
- Goffman, E. (1986). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.
- González, N., Moll, L., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Goodenough, W. H. (1964). Cultural anthropology. In D. Hymes (Ed.), *Language in culture and society* (pp. 36–39). Bombay, India: Allied Publishers Private.
- Goodwin, C. (1994). Professional vision. *American Anthropologist*, 96(3), 606–633.
- Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, 32(5), 19-25.
- Gygax, G., & Arneson, D. (1974). *Dungeons & Dragons* [table-top game]. Published under Tactical Studies Rules, Inc. (TSR)
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, 1243-1248.
- Harré, R., Moghaddam, F. M., Pilkerton Cairnie, T., Rothbart, D., & Sabat, S. R. (2009). Recent advances in positioning theory. *Theory & Psychology*, 19(1), 5-31.
- Hatano, G., & Inagaki, K. (1986). Two courses of expertise. In H. A. H. Stevenson, H. Azuma, & K. Hakuta (Eds.), *Child development and education in Japan* (pp. 262–272). New York: Freeman.

- Hawisher, G. E., & Selfe, C. L. (2007). *Gaming lives in the twenty-first century: Literate connections*. New York: Palgrave Macmillan.
- Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge: Cambridge University Press.
- Holland, D., & Leander, K. (2004). Ethnographic studies of positioning and subjectivity: An introduction. *Ethos*, 32(2), 127-139.
- Holland, W., Jenkins, H., & Squire, K. (2003). Theory by design. In M. J. P. Wolf & B. Perron (Eds.), *The video game theory reader* (pp. 25–46). New York: Routledge.
- Hutchins, E. (1995a). *Cognition in the wild*. Cambridge, MA: MIT Press.
- Hutchins, E. (1995b). How a cockpit remembers its speeds. *Cognitive Science*, 19, 265-288.
- Iacono, C. S., & Weisband, S. (1997). Developing trust in virtual teams. *Proceedings of the 30th annual Hawaii International Conference on System Sciences (HICSS)*, 2, 412-420.
- Jakobsson, M., & Taylor, T. L. (2003). The Sopranos meets *EverQuest*: Social networking in massively multiplayer online games. MelbourneDAC, the 5th International Digital Arts and Culture Conference, Melbourne, Australia. Retrieved July 31, 2010, from <http://hypertext.rmit.edu.au/dac/papers/Jakobsson.pdf>
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Jenkins, H. (2010). No longer bowling alone: When fans and gamers become activists. Keynote given at Games Learning Society conference, Madison, WI.

Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & Robison, A. J. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*.

MacArthur report.

Juul, J. (2005). *Half-real: Video games between real rules and fictional worlds*. Cambridge, MA: The MIT Press.

Kaptelinin, V., & Nardi, B. A. (2006). *Acting with technology: Activity theory and interaction design*. Cambridge, MA: The MIT Press.

Kenco. (2006). Kenco's research on threat. Archived on WoWWiki. Retrieved July 31, 2010, from http://www.wowwiki.com/Kenco's_research_on_threat

Knobel, M. (1999). *Everyday literacies: Students, discourse, and social practice*. New York: Peter Lang.

Knobel, M., & Lankshear, C. (2007). Online memes, affinities, and cultural production. In M. Knobel & C. Lankshear (Eds.), *A new literacies sampler* (pp. 199-227). New York: Peter Lang Publishing.

Kolko, B., & Reid Steere, E. (1998). Dissolution and fragmentation: Problems in online communities. In S. Jones (Ed.), *Cybersociety 2.0* (pp. 212-229). Thousand Oaks, CA: Sage Press.

Kollock, P., & Smith, M. (1996). Managing the virtual commons: Cooperation and conflict in computer communities. In S. Herring (Ed.), *Computer-mediated communication: Linguistic, social, and cross-cultural perspectives* (pp. 109-128). Amsterdam: John Benjamins.

- Koster, R. (2004). *A theory of fun for game design*. Scottsdale, AZ: Paraglyph Press, Inc.
- Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- Latour, B. (as J. Johnson). (1988). Mixing humans and nonhumans together: The sociology of a door-closer. *Social Problems*, 35(3), 298-310.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network theory*. New York: Oxford University Press.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge: Cambridge Univ. Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Law, J., & Hassard, J. (Eds.). (1999). *Actor network theory and after*. Oxford and Keele: Blackwell and the Sociological Review.
- Leander, K. M., & Lavvorn, J. F. (2006). Literacy networks: Following the circulation of texts, bodies, and objects in the schooling and online gaming of one youth. *Cognition and Instruction*, 24(3), 291-340.
- Lee, C. D., Spencer, M. B., & Harpalani, V. (2003). "Every shut eye ain't sleep": Studying how people live culturally. *Educational Researcher*, 32(5), 6-13.
- Lemke, J. L. (2000). Across the scales of time: Artifacts, activities, and meanings in ecosocial systems. *Mind, Culture, and Activity*, 7(4), 273-290.

- Low, R., Jin, P., & Sweller, J. (2010). Learners' cognitive load when using educational technology. In R. Van Eck (Ed.), *Gaming and cognition: Theories and practice from the learning sciences* (pp. 169-188). IGI Global.
- MacCallum-Stewart, E., & Parsler, J. (2008). The difficulties of playing a role in *World of Warcraft*. In H. G. Corneliussen & J. W. Rettberg (Eds.), *Digital culture, play, and identity: A World of Warcraft reader* (pp. 225-246). Cambridge, MA: The MIT Press.
- Malaby, T. (2006). Parlaying value: Capital in and beyond virtual worlds. *Games and Culture*, 1(2), 141–162.
- Malaby, T. (2009). *Making virtual worlds: Linden Lab and Second Life*. Ithaca, NY: Cornell University Press.
- Malone, K. M. (2009). Dragon kill points: The economics of power gamers. *Games and Culture*, 4(3), 296-316.
- Myers, D. (2003). *The nature of computer games: Play as semiosis*. New York: Peter Lang Publishing.
- Nardi, B.A. (2010). *My life as a Night-elf priest: An anthropological account of World of Warcraft*. USA: University of Michigan Press.
- National Research Council. (2009). *Learning science in informal environments: People, places, and pursuits*. Committee on Learning Science in Informal Environments. P. Bell, B. Lewenstein, A. W. Shouse, & M. A. Feder, (Eds.). Board on Science Education, Center for Education. Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

- National Research Council. (2010). *Exploring the intersection of science education and 21st century skills: A workshop summary*. M. Hilton, (Rapporteur). Board on Science Education, Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Norman, D. A. (1993). *Things that make us smart: Defending human attributes in the age of the machine*. USA: Basic Books.
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies*, 28(9), 1435-1448.
- Oudshoorn, N., & Pinch, T. (Eds.). (2003). *How users matter: The co-construction of users and technology*. Cambridge, MA: The MIT Press.
- Pickering, A. (1993). The mangle of practice: Agency and emergence in the sociology of science. *American Journal of Sociology*, 99(3), 559-589.
- Prensky, M. (2000). *Digital game-based learning*. New York: McGraw-Hill.
- Rogoff, B., Topping, K., Baker-Sennett, J., & Lacasa, P. (2002). Mutual contributions of individuals, partners, and institutions: Planning to remember in girl scout cookie sales. *Social Development*, 11(1), 266-289.
- Salen, K. (2008). Toward an ecology of gaming. In *The ecology of games: Connecting youth, games, and learning* (pp. 1–17). Cambridge, MA: The MIT Press.
- Salen, K., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*. Cambridge, MA: The MIT Press.

- Silverstein, M. (2005). Axes of evals: Token versus type interdiscursivity. *Journal of Linguistic Anthropology*, 15(1), 6-22.
- Sismondo, S. (2003). Actor-network theory. In *An introduction to science and technology studies* (pp. 65-74). Hoboken, NJ: Wiley-Blackwell.
- Smith, J. H. (2005). The problem of other players: In-game cooperation as collective action. *Proceedings of DiGRA 2005 conference: Changing views – worlds in play*. Vancouver, British Columbia, Canada. Retrieved July 31, 2010, from <http://www.digra.org/dl/db/06276.16354.pdf>
- Squire, K. D. (2005). Changing the game: What happens when video games enter the classroom? *Innovate*, 1(6).
- Steinkuehler, C. A. (2004). A discourse analysis of MMOG talk. In M. Sicart & J. H. Smith (Eds.), *Proceedings from the Other Players conference*. Copenhagen, Denmark. Retrieved July 31, 2010, from http://website.education.wisc.edu/steinkuehler/papers/Steinkuehler_OP2004.pdf
- Steinkuehler, C. A. (2006). The mangle of play. *Games and Culture*, 1(3), 199-213.
- Steinkuehler, C. A. (2007). Massively multiplayer online gaming as a constellation of literacy practices. *E-Learning*, 4(3), 297-318.
- Stevens, R. (2000). Divisions of labor in school and in the workplace: Comparing computer and paper-supported activities across settings. *The Journal of the Learning Sciences*, 9(4), 373-401.

- Stevens, R., & Hall, R. (1998). Disciplined perception: Learning to see in technoscience. In M. Lampert & M. L. Blunk (Eds.), *Talking mathematics in school: Studies of teaching and learning* (pp. 107-149). Cambridge: Cambridge University Press.
- Stevens, R., Satwicz, T., & McCarthy, L. (2008). In-game, in-room, in-world: Reconnecting video game play to the rest of kids' lives. In K. Salen (Ed.), *The ecology of games: Connecting youth, games, and learning* (pp. 41-66). Cambridge, MA: The MIT Press.
- Strauss, A. (1985). Work and the division of labor. *The Sociological Quarterly*, 26(1), 1-19.
- Street, B. V. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Taylor, N. T. (2009). *Power play: Digital gaming goes pro* (Doctoral dissertation, York University, 2009).
- Taylor, T. L. (2006). *Play between worlds: Exploring online game culture*. Cambridge, MA: The MIT Press.
- Taylor, T. L. (2009). The assemblage of play. *Games and Culture*, 4(4), 331-339.
- Tolkien, J. R. R. (1954/1955) *The lord of the rings*.
- Walter, S. E. (2009). *Raiding virtual middle earth: Collaborative practices in a community of gamers* (Doctoral dissertation, Stanford University, 2009).

- Walter, S., & Chen, M. (2009). A comparison of collaboration across two game contexts: *Lord of the Rings Online* and *World of Warcraft*. Presentation at the 10th Annual Association of Internet Researchers Conference (IR10), Milwaukee, WI.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wikipedia. (2010a). Cosplay. Retrieved July 31, 2010, from <http://en.wikipedia.org/wiki/Cosplay>
- Wikipedia. (2010b). Leet. Retrieved July 31, 2010, from <http://en.wikipedia.org/wiki/Leet>
- Wikipedia. (2010c). Loot system. Retrieved July 31, 2010, from http://en.wikipedia.org/wiki/Loot_System
- Wikipedia. (2010d). Min-maxing. Retrieved July 31, 2010, from <http://en.wikipedia.org/wiki/Min-maxing>
- Wikipedia. (2010e). Role-playing game. Retrieved July 31, 2010, from http://en.wikipedia.org/wiki/Role-playing_game
- Wikipedia. (2010f). Video game behavioral effects. Retrieved July 31, 2010, from http://en.wikipedia.org/wiki/Video_game_behavioral_effects
- Williams, D., Ducheneaut, N., Xiong, L., Zhang, Y., Yee, N., & Nickell, E. (2006). From tree house to barracks: The social life of guilds in *World of Warcraft*. *Games and Culture*, 1(4), 338-361.
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic Bulletin and Review*, 9(4), 625-636.

- Wizards of the Coast. (2008). *Dungeons & Dragons*, 4th Ed. [table-top game].
- Wolfenstein, M. (2010). Serious play: Exploring virtual leadership practices in the MMO *World of Warcraft*. Presentation at the Annual meeting of the American Educational Research Association (AERA), Denver, CO.
- Woolgar, S. (1991). Configuring the user: The case of usability trials. In J. Law (Ed.), *A sociology of monsters: Essays on power, technology and domination*. London: Routledge.
- WoWWiki. (2010a). Barrens chat. Retrieved July 31, 2010, from http://www.wowwiki.com/Barrens_Chats
- WoWWiki. (2010b). Theorcraft. Retrieved July 31, 2010, from <http://www.wowwiki.com/Theorcraft>
- Zagal, J., Rick, J., & Hsi, I. (2006). Collaborative games: Lessons learned from board games. *Simulation & Gaming*, 37(1), 24-40.
- Zetter, K. (2010). TED 2010: Reality is broken. Game designers must fix it. *Wired*. Retrieved July 31, 2010, from <http://www.wired.com/epicenter/2010/02/jane-mcgonigal/>

APPENDIX A: THE PACIFIST GUILD'S GUIDE TO RAGNAROS

Many strategy guides for the various boss encounters in WoW can be found on the BossKillers collaborative website (<http://www.bosskillers.com>). This site did not exist when my group was in Molten Core, but though rarer and harder to find, similar write-ups were online at the time. The Pacifists Guild's guide to Ragnaros (<http://pacifistguild.org/ragnaros>), which no longer exists online but can still be found using the Wayback Machine (http://web.archive.org/web/20071213075344rn_1/pacifistguild.org/ragnaros), was the main one most raiding groups referenced for the last boss in Molten Core. Below is the guide in its entirety.

Dr. Ragnaros 3.0 **or: How I Learned to Stop Worrying and Love the Big** **Elemental Head** **(Last Updated: 09-01-05)**

Update: New video using this exact strat

Mods/Software:

- CT_RaidAssist - [Official Site](#)
- Ventrilo - [Official Site](#)

CT_RaidAssist is only needed for the built in Ragnaros timers. It will warn you 5 seconds before each Wrath of Ragnaros, and it will tell you when it actually happens.

Facts:

Friendly-Domo will reset after standing in Ragnaros' Lair for a while. Never seen him despawn myself, but it's at least 30 minutes, probably longer. You can not, for example, kill Domo on Friday and then spawn Rag on Saturday without killing Domo again.

Ragnaros despawns 2 hours after you talk to Domo and spawn him. He will not despawn while in combat; he will wait until you wipe if the 2 hour mark comes mid battle.

He has a rather small agro radius but puts everyone in the zone into combat when agroed. His Magma Blasts (discussed below) hit everyone in the zone.

Preparation:

Equipment-wise, FR is very important overall but less important for certain people. All melee should have 150 unbuffed FR, both MTs should have over 300 buffed FR, everyone else (ranged dps and healers) should be aiming for 80+ unbuffed, but don't gimp your mana pool.

Equipment is a hot discussion on the raid/dungeons forums, everyone seems to have their own opinion. I asked my guild what they used for equipment vs. Rag and here is what they have to say.

All of this potion stuff below becomes optional once your entire raid is extremely familiar with the encounter, plays the top of their game, and has good equipment/FR. If your raid is just starting Rag or having problems, definitely invest in all of these things, they make the fight much easier.

Get a big stockpile of this stuff: Greater Fire Protection Potion, Elixir of the Mongoose, Greater Arcane Elixir, Elemental Sharpening Stones, and Winterfall Firewater.

Every person present should have what they need. Don't skimp on the potions. All melee should get at least 3 Fire Prot. potions because they are a million times better than healing pots for this. If you're preparing correctly, a couple hundred gold worth of potions should be used in every serious attempt. I don't suggest using any potions or anything special until you are getting him under 40% pre-sons and 25% pre-wipe because it is quite expensive to do all out runs.

Another great and likely-to-be-nerfed crutch is heading to LBRS and MCing a Scarshield Spellbinder (you'll find one quickly in the first few pulls of LBRS) who can buff you with +83 FR. Take into consideration Rag is only up for 2 hours if you decide to go down this shameful path. **Update:** MCing Spellbinders to get their FR buff has been declared an exploit by at least one GM. There is no official word on the forums yet.

0:00 - 2:59 - Ragnaros

Special Attacks:

Wrath of Ragnaros ("Taste the Flames of Sulfuron!")

Problem	Solution
<ul style="list-style-type: none"> • 25 second cool down melee range fire based attack that attempts to knock multiple in-range targets back. • Agro doesn't exactly reset, but the MT's threat is definitely reduced. 	<ul style="list-style-type: none"> • Every 23 seconds all melee players get out of melee range except for the MT. CT_RaidAssist monitors this. • Give the MT a few seconds of building threat before re attacking. • Sometimes the MT is knocked back. This is discussed below in The Plan.

Wrath of Ragnaros extends just slightly past melee range. When your melee players are backing out, they need to get as far away as possible. In the west and north sides of Rag, you have to back out to the lava. The east side has more room to get out of melee range.

Random Explosions ("By fire be purged!")

Problem	Solution
<ul style="list-style-type: none"> • Every 20-30 seconds he will turn and shoot a fireball type thing at a single random target who takes no damage, but damages and knocks back players near him. 	<ul style="list-style-type: none"> • Everyone needs to spread out (as discussed in positioning below) to reduce the number of people knocked back. • Proper positioning with backs against available walls will prevent people from being knocked back into the lava.

It's important to understand that there are 2 types of knockbacks. Make sure you know the difference between them. The "random explosions" seem to have no official name according to combat logs and wowrunes, so I'll be calling them "random explosions" throughout this writeup.

Elemental Fire

Problem	Solution
<ul style="list-style-type: none"> • Whoever has Rag's agro will get hit with elemental fire that does a few thousand 	<ul style="list-style-type: none"> • Heal it and live with it, there's not much you can do. We usually use this debuff as an

damage over time.

idiot beacon; if you have it
you pulled agro and are fired.

Lava Splash

Problem	Solution
<ul style="list-style-type: none"> Every 10-30 seconds the lava will get quite disagreeable and hit everyone near it. 	<ul style="list-style-type: none"> Decent FR reduces the damage quite a bit; 100FR will take around 400dmg, 200FR will take around 200. Only melee players should be hit by this, and they should have good healing. Resistable too, overall not a big deal.

Magma Blast

Problem	Solution
<ul style="list-style-type: none"> He will hit random targets everywhere in the zone for 6000+dmg if no one is in melee range. 	<ul style="list-style-type: none"> Always have someone in melee range.

Melt Weapon

Problem	Solution
<ul style="list-style-type: none"> Every time a melee player hits Ragnaros, their weapon is damaged. 	<ul style="list-style-type: none"> http://thottbot.com/?n=509428

Group Setup:

Assume I say Shaman everywhere I say Paladin if you are Horde. But no Horde will ever read this guide since 4 Shaman chain casting frost shock can drop Rag no problem, right.

Melee groups and ranged groups is the general idea. MTs, MT healers, and melee groups should get priority on Paladins because they will need FR aura more than ranged. Always use FR aura/totems.

Groups 1 and 2 are MT groups and should consist of: MT1/MT2/Paladin/Druid/Priest and Paladin/Priest/Rangedx3. Healing on MT should be 2 Priests, 2 Paladins, and 1 Druid. The 3 random ranged filling up group 2 need special attention from the designated ranged healers since their in group healers will be entirely focused on the MTs.

Then around 3 groups of melee setup like so: Warrior/Rogue/Rogue/Paladin/Priest for aura and battle shout. Give melee groups Priests because they will take AE damage from Lava Splashes and Prayer of Healing comes in very handy.

And the last 3 groups or so are Mages and Hunters, likely with no Paladin and a Druid healing them. They definitely take damage from random explosions that needs to be healed, but they shouldn't be close enough to the lava to take Lava Splash damage.

You will have a warrior MA for the sons. Set that up ahead of time and make sure he has good healers.

Here's a example raid group screen shot.

CT_RaidAssist b 1.17

Options

☐ Check All Groups

☐ Group 1

2	Rithriaem	60	Warrior
	Kilranin	60	Paladin
1	Jalia	60	Warrior
	Katithra	60	Druid
	Hocken	60	Priest

☐ Group 2

	Ntume	60	Warlock
	Aldo	60	Warlock
	Sanguinus	60	Hunter
	Sitzen	60	Priest
	Naffer	60	Mage

☐ Group 3

	Mschevio...	60	Priest
	Spoon	60	Rogue
3	Hazardous	60	Warrior
	Mneika	60	Rogue
	Aquila	60	Paladin

☐ Group 4

4	Roirraw	60	Warrior
	Saucy	60	Paladin
	Graffias	60	Rogue
	Exe	60	Priest
	Redstar	60	Rogue

☐ Group 5

	Rince	60	Priest
5	Trailmix	60	Warrior
	Hel	60	Rogue
	Khulshalk...	60	Rogue
	Solanthan...	60	Paladin

☐ Group 6

	Caitsith	60	Warrior
	Chase	60	Hunter
	Xivia	60	Priest
	Davie	60	Mage
	Wuzzle	60	Mage

☐ Group 7

	Mize	60	Warlock
	Faedia	60	Hunter
	Breaca	60	Priest
	Wuzzy	60	Mage
	Mark	60	Mage

☐ Group 8

	Artymes	60	Druid
	Floral		Hunter
	Siana	60	Hunter
	Taliababa	60	Hunter
	Nexus	60	Paladin

Positioning:

This is going to look really confusing at first but it's quite simple.



R - Ranged DPS and their healers

M-H - Melee Healers. Some melee healers will have to jump across the lava to get in range.

M-1 - Where melee players start before the MT agros.

M-2 - Where melee players run to the second the MT agros. Melee (or anyone for that matter) should not get within 15 yards of MT1 or MT2 or they might knock them back with a random explosion.

MT1 - Main Tank #1. The position of MT1 has to be exact so that he doesn't get thrown into the lava when he gets knocked back. Trust the red blob.

MT2 - Main Tank #2. At least 15 yards to the right of MT1 so that they don't knock each other back with random explosions.

P - Paladin giving FR aura to main tanks. Stay as far away as possible, you don't want to knock them back on accident.

MT-H - Main Tank Healers. Keep your back against that wall and tell anyone near you that's not healing the MT to go away. Spread out a bit along that wall.

Here is another view of this setup from the mini map.



Ranged should be spread out in that huge area marked green, but still grouped enough so that their healer has range.

Melee is going to start at M-1 and then jump across the lava (marked by white arrow) the second the MT aggroes Rag. Melee should then be spread all around Rag but at least 15 yards away from MT1 and MT2 at all times. Don't cluster up on top of each other. Spread out all the way down the hook.

Melee healers can try to stand across the lava (marked M-H), but they will likely have to jump across (or get knocked across) to stay in range of their group. Plus, Prayer is going to work a lot better if they jump across.

The MT positioning is very important. They should never be within 15 yards of each other. One of the two should always be within melee range of Rag. Eventually MT1 is going to be knocked back and MT2 will have to immediately run in and get aggro. After MT2 has aggro, he moves to MT1's position and MT1 moves to where MT2 was. They rotate.

The MT's healers have it pretty easy. Put your back against that wall and spam heals nonstop on the tank. They can and will take 4000+ dmg instantly. The MT needs constant spamming of flash heals with druids and paladins padding or they are going to die.

You are going to be knocked out of position by a random explosion at least once. Just immediately run back to where you were. You are often thrown into the lava so make sure you are capable of getting out. Go practice.

Before you even spawn Rag get into the position described. Get everyone exactly where they should be while fighting. Look for people that could be spread out more, people who aren't in range of their healer or aura/totem, and other easily corrected mistakes. Practice the position and be 100% sure your entire raid knows exactly where they need to be.

When practicing, make your melee players jump from M-1 into M-2. If you jump in the lava correctly, you won't take any lava damage what so ever.

This entire 3 minutes is all about positioning. Know it, practice it, and execute it correctly.

Plan:

Buff. Buff like you've never buffed before. Every single melee should have bok/might/salv/light. Every single caster should have bok/salv/bow. Everyone should have MoTW/AI/PW:F. A fully, completely, totally buffed raid is a happy raid. We like to buff up in the west (like in the positioning screen shot above). Once you get blessings, move into position.

If you're going all out, remember to drink your FR potions 2 minutes before engaging since they are on the global potion timer cool down.

Rag is up. MT1, MT2, and their healers are all hugging the south wall. All the melee players are in M-1. All the ranged are spread out in the west near their healers.

0:00 - MT1 runs into position and gets agro. CT_RaidAssist should start giving you information the second Rag turns around to attack.

0:01 - MT2 and all the melee players run/jump into position and start attacking. They are nicely spread out, in range of their healers, and doing excellent DPS without pulling agro from the MT, all within a few seconds.

0:23: The first Wrath of Ragnaros is about to happen. *Everyone* except MT1 moves out of melee range. Ranged keeps attacking.

0:25: Wrath has hit MT1.

One of two things has now happened. Either MT1 did not resist wrath and has been knocked back, or he did resist it and is still happily tanking away.

If MT1 has been knocked back, here's what needs to happen: MT2 (who has backed off like all the other melee) needs to immediately run in, get agro, and move to MT1's position. He will spend a moment building threat and call when melee can resume attacking. He should be #2 on the hate list because he was attacking for that first 23 seconds like everyone else.

Once MT2 calls the attack, all melee resume attacking. Ranged never really need to back off, but they should not be doing any big damage for that 5-10 seconds around a wrath. Ranged really doesn't want to pull agro.

While MT2 is getting into his new position, the knocked back MT1 should run back and go to MT2's old position. They just rotate after a knock back.

Fortunately, most of the time a MT with 350+ FR will resist the knock back.

If the MT does not get knocked back, melee can resume attacking in about 2 seconds. Wrath definitely reduces everyone's threat on Rag's hate list, but it does not completely wipe. Just give the MT a couple seconds before resuming good DPS after a resisted wrath.

That's all there is to it folks. Cycle through this pattern over and over until 2:50 into the fight.

Wrath->check for knock back->move MT2 in if needed->wait a few seconds for MT to call the attack->attack good DPS for around 20 seconds->move out of melee range->repeat!

Wrath is on a 25 second cool down but he will not use it exactly every 25 seconds. More like every 25-30 seconds. Wrath will hit several targets within melee range. You only want 1 person in melee range (your current MT) when wrath happens.

Your MTs have to be on the ball, ready to transfer the job after one of them gets knocked back. If the MT1 is knocked back and MT2 doesn't get into melee range immediately, Rag is going to start Magma Blast oneshotting random people since no one is in melee range.

MT healers need to be ready to switch targets very quickly. The guy does a ton of damage and if one of your MTs dies, you're wiping.

Your melee players have to be ready to move. Don't wait that 2 seconds for that 20 energy tick to do your last ability. Get the hell out of melee range the second the script tells you to. You have to stay alive.

Mind your DPS but do a lot of it as safely as you can. If you pull agro, you will die. Rag's target requires several healers constantly spamming heals to keep them alive. You will not live if you pull agro, period.

At 2:50 (10 seconds until Sons) ranged collapses into sons position. Hunters lay frost traps pretty much anywhere along the lava if you can. At 2:55, melee collapses. The MT and his healers do not collapse until Rag actually goes underground and the Sons spawn since someone has to be in melee range at all times.

Ramblings:

There should be very few deaths during this phase because nobody but the MTs have been eating wrath, and healers have been keeping HP topped off from AE fire damage. If more than 3 people are dying in the first 3 minutes, there are problems with positioning or healing (or simply a lack of FR).

There is an unfortunate amount of luck involved with this "phase" of Rag. There will be runs when the MT is getting knocked back all the damn time and your DPS sucks because you have too much downtime switching MTs. Or maybe your MT healers will eat like 5 random explosions in a row and waste all their mana healing things that aren't the MT. Or maybe a random explosion hits all your melee players at 2:58 as they are clustered up collapsing for the sons. Sometimes the lava splashes are just out of control and all your melee healers get cooked with the melee players dying shortly after to AE damage that adds up.

We've seen it all happen. Our typical runs will see the MT knocked back 1-2 times and not be a big deal. We'll lose a few precious seconds of DPS when we have to switch MTs, but if it's only a couple times, it's not bad.

A few people (usually melee) are going to get owned with some random and disgusting combo like: explosion->lava splash mid-air->land in lava->take a lavadmng tick->dead. It happens but it shouldn't be happening to more than 2-3 people, sometimes not at all.

Biggest problem will always be getting melee players on the ball and out of melee range the second they are told to get out. It's simple, if you get Wrath and you are not the MT, you have made a mistake and are going to die.

Typically he goes under at around 30% if we are going to kill him that run.

3:00 - Sons of Flame

Special Attacks:

- Mana burn Aura - About a 10 yard radius evil mana burn. Solution: If you have mana, stay away from sons. Do not fear sons, they might run into people with mana.

Positioning:

At 2:50 ranged should start collapsing to the green spots.

At 2:55 melee should start collapsing to the red area. Jump across the lava if it's closer. Stay away from the MT while collapsing.



Black dots = Approximate son spawn location points. They all spawn around Rag and run south, right into the melee waiting at the red blob.

They should end up in a position like this:



R - Ranged/mana users, safely away from aura.

M - Anyone without mana, tanking and focus-fire killing sons, keeping them away from mana users.

X - Frost traps, if you can get them down, they help keep the sons together.

The positioning is pretty simple. The execution is hard.

When you're practicing "phase 1" positions, practice collapsing into sons positions. Have ranged collapse and melee go 5 seconds later. Watch for melee running too close to the MT when running south, they don't want a random explosion to hit them and knock back the MT. Have your hunters FD and lay traps. Make sure mana users are far away from the bulk of melee ready to tank.

The Plan:

Sons are 100% fire based damage. No melee damage what so ever.

Rag is going to re spawn in 1 minute 30 seconds or when all the sons are dead, whatever happens first.

You want your melee players, mostly the warriors, protecting people with mana. Ranged collapsed first so that the melee are closer to the sons when they spawn. They will spawn all around Rag in a circle and rush south where everyone should be.

One warrior is designated MA. We use a warrior because the sons hit pretty hard and assisting is absolutely essential. The MA must stay alive. He picks a target.

All other warriors pick random sons to tank.

Frost traps are laid so they are slowed. A mage runs in and novas to help keep them together. Warlocks should banish once. One banish. No more than 3 total things banished. They should choose sons that are in the back and not good candidates for killing first. The last thing you want is the MA's target to get banished. Banishing is dangerous. Don't ever fear, you'll probably fear them right into the casters and screw them over.

Logically all the sons are being tanked and killed in the middle while mana users are off to the sides. They will die fast. Just think of it as an 8 pull in baron strat with a nasty mana burn aura.

Everyone has to assist. These need to die very quickly if you want to survive. DPS focus fire, warriors keep them away from casters.

Sons are going to get a little out of control. If you have mana, move around, get away from that aura. You need that mana to kill Rag. If you are a warrior (and not the MA), make sure all the sons are accounted for and there isn't one pestering the casters.

Put Judgment of Wisdom up on a random son that isn't being killed. Announce it and tell your priests to assist. Priests should wand the judged mob to help regain mana.

Keep the tanks alive. Number one problem is tanks dropping too fast, then having a couple sons run around wild destroying casters. If your tanks are dying to sons, they are either pulling too many onto them at the start, or their FR sucks, or their healers suck. This is largely the job of paladins/shaman/druids, the priests need to regen to keep you alive when Rag re spawns. With decent FR the sons won't do all that much damage to the warriors, and no damage at all to melee because they have no mana, and no damage to mana users because they are out of range of the aura.

Take them down one at a time. Rag will re spawn when they are all dead (or when 1:30 is up but if sons aren't down within 1:30, you are probably going to wipe). We have seen him re spawn when we had sons left but all of the sons were banished or otherwise crowd controlled. It may be true he re spawns when they are all dead *or* otherwise incapacitated, but I can't confirm this. We usually have our MT grab 1 son and just tank it the entire time. That is the last son to die. It's usually the one that gets judgment of wisdom too.

When only 1 son is left the MTs and MT healers need to move back into their original position. Rag is going to re spawn and the MT better be in melee range with heals available.

Kill the last son and get ready to finish the job.

Ramblings:

Another 3-4 people can have died and you'll be okay. Remember you need to stretch yourself another 30%+ of his HP after these are dead. Don't drain yourself on the sons,

but don't let people die. It's sad to have a great "phase 1" then get owned by sons and not have the DPS to take Rag down when he re spawns.

Sons really aren't that bad if your warriors are good and they get heals. Initial positioning is the most important part. You want the sons to run right into the melee, not right into the casters. Sons definitely take practice, but you'll start destroying them after everybody gets a feel for it and knows their job.

When the positioning gets all screwed up there are problems. The casters have a designated area, keep sons out of it at all costs. There needs to be safe places for mana users. Even 1 son can completely drain half your casters' mana and leave them dead or with very low HP. Get into the correct position from the start and hold it.

They become exponentially harder if you lose people during the first 3 minutes. You need 95% of your raid up to deal with the sons, or you're going to lose a lot of people and lack the DPS to finish off Rag.

Post-Sons

Positioning, special attacks, everything is the same as the first 3 minutes. Nothing has changed.

MTs are back into position before the last son is dead so that someone is in melee range when he re spawns. Healers drink mana potions and get to the heals.

Last son dies and Rag re spawns. Same thing as the first part. Get into position, start attacking after giving the MT 3-4 seconds, back off 23 seconds after every wrath, and keep the DPS going. Drink FR potions if you can, your healers will be low on mana and love you for it.

There really isn't much more to say at this point. Keep people alive, maintain good positioning, MTs stay on the ball, keep the MTs alive, and get him under 20%. He doesn't have that much HP overall so it should really start dropping once the warriors can execute. Save your ragepot+recklessness until like 7%.

The last 1% is brutal. Get him down before 3 minutes are up.

There's a slight possibility you will stay alive but not kill him within 3 minutes of him re spawning. Prepare for a second wave of sons 3 minutes after he re spawns.

If he goes under at like 2% and a second wave of sons spawns to destroy your severely crippled raid group, fear, nova, banish, traps, stun, keep them busy for a minute thirty. Stay alive for 1 minute 30 seconds. Do not focus killing sons, you probably don't have the people or resources to handle them. Keep them from killing all of your ranged DPS for 1:30 and you just might get that last 1-2% off when he re spawns even with 8 sons running around. It's happened before.

You're probably going to wipe if you get a second wave of sons, but don't give up right away, especially if he goes under very low.

Videos/Images

Rag 3.0 kill video - **Added 9-1-05**

This video uses the exact strategy described above, but there is only 1 MT knockback. Every week I take a video and hope to get some really good knockback action, but our tanks' FR is just too damn high. I would still suggest watching this video if you are using this guide to kill him.

Rag 2.0 kill video

Kel'thuzad's First Ragnaros Kill

Credits

Thanks to all of Pacifist for sticking around through dozens of Rag wipes, being nice people, and great players.

This guide was made by Hocken <Pacifist>

Contact

(specific questions will likely not be answered, please use the forums for that)

"He's done for and he doesn't even know" -- Rithriaem

APPENDIX B: KENCO'S RESEARCH ON THREAT

[Copied from WoWWiki's archive: http://www.wowwiki.com/Kenco's_research_on_threat]

This is a copy-paste of the EU repost of Kenco's (<Unity>) original post from the official forums from January 2006 with his research on Aggro/Threat levels called "Some Threat Values and Formulas".

Some Threat Values and Formulas

It's often said that we will never be able to work out the way threat and hate lists and mobs' AI works, because it's too complicated and unknowable, that we'll only ever have crude approximations and guesses. I've conducted some decent, rigorous tests, and i have what i believe is a good list of hate values and explanations of gaining and losing aggro and the behaviour of taunt. I am also able to debunk a few myths about how threat works.

Definitions

We define "aggro" to be who the mob is attacking. We define "threat" to be a numeric value that each mob has towards each player on its hate list. Note, as we shall soon see, even for a normal mob, the target who has aggro is not necessarily the player on its threat list with the most threat.

We define arbitrarily that 1 point of unmodified damage gives 1 point of threat.

Gaining aggro on a mob

Suppose a mob is attacking player 1. In order for the mob to switch to player 2, he must do more than just exceed the threat of player 1. If he is in melee range of the mob, he will draw aggro when he exceeds 110% of player 1's threat. If he is outside melee range of the mob, he will draw aggro when he exceeds 130% of player 1's threat.

E.g. mob is attacking player x. x does 100 damage to mob, then stops. Player y starts hitting the mob. The mob will start attacking y when y does over 110 damage.

Proof: this is easy to demonstrate. Get two players both doing autoattack on a mob (not warriors or rogues; we'll see later they complicate things). Have player 1 do a certain amount of damage, then stop. Have player 2 keep attacking till he gets aggro. You have an upper and lower bound on the threat required to get aggro - 1 attack before he got aggro was not enough, but the attack that he got aggro was at least enough. With low damage attacks (i.e. fists only), you will get a very good value of 10%. Testing for the non-melee range value is the same. Just replace it with a low damage ability such as a low level wand.

If player 2 has exceeded 110% threat but not 130% threat, they will draw aggro immediately if they do a threat-generating ability within melee range of the mob, but proximity alone will not cause the mob to shift to them.

This is only a description of the normal mob targeting. Obviously there are mobs who will attack secondary targets with special abilities, ignoring their current threat / aggro.

Threat modifiers from Warrior Stances

In Battle Stance and Berserker Stance, all threat from a warrior is multiplied by 80%. In defensive stance, the multiplier is 130%. With Defiance, it is 145%.

Proof: a simple modification of the above proof. Get a warrior to do, say, 1000 damage in defensive stance, without defiance. Get a non-warrior to take aggro with white damage. You will find it does not happen before 1430 damage. The warrior's 1000 damage caused 1300 threat in defensive stance, and the 10% barrier means you need more than 1430 to gain aggro.

Threat does not decay

Threat never, ever decays. Here is test data. Warrior does 83 damage on mob in battle stance, gains aggro. From above, we know it will take more than $83 * 0.8 * 1.1 = 73.04$ threat to gain aggro. Warrior waits for 5 minutes getting beat on. Then mage starts attacking slowly. Mage does 73 damage, but does not gain aggro! Mage does another 2 damage, and does gain aggro. From the warrior's initial hit to losing aggro, the time taken was 496 seconds.

As an upper bound, assume maximal threat decay. i.e. the mage only needed 73.040000001 threat to gain aggro. Then the warrior's threat had decayed to 66.36363636, from 66.4. This means he went down to 99.945% threat in 496 seconds.

At this maximal rate of hate decay, the time taken for the warrior's threat to decay to 90% of the original value would be 26.5 hours. In fact, if a warrior logged in as soon as the

server came online after the weekly reset and hit a mob, his threat would not decay to 50% before the server reset next week. I think this is enough to rule out threat decay.

Threat values for some warrior abilities

the following list is not exhaustive, but includes all the major tanking abilities.

Note: the following values are given in raw terms. In reality the warrior must have either a 1.3 or 0.8 or 1.45 modifier on these, depending on his stance and talents.

Note: * All abilities do not include threat generated by their damage. This will be discussed more later.

Sunder: 261 (260.95 - 261.15)

Heroic Strike*: 145 (143.9 - 148.8)

Revenge*: 315 (313.9 - 318.3)

Revenge Stun: 25 (23.4 - 29.1)

Shield Bash*: 180 (175.4 - 180.3)

Shield Slam*: ?? 250 (estimated from Cop's data. More on that later)

Shield Block: 0 (0 - 0. Can be higher - more on this later)

Thunder Clap*: 130 (126.9 - 134.8)

Demo Shout: 43 (42.8 - 43.8)

Note that debuffs associated with abilities are not connected to the threat they generate. Demoralizing shout generates the same amount of threat whether the debuff is on or not. Sunder armor generates the same threat after 5 debuffs are on as when there are 0.

Healing, “you gain x ___”, etc

Each point of healing, when completely unmodified by talents, gives 0.5 threat.

Replace the proof for (2) by the second person only healing.

Note: overhealing doesn't count, only the actual amount healed. This is easy to demonstrate.

Abilities that put “you gain x mana” in the combat log give 0.5 threat per point gained; life is the same. Examples would be drinking potions, but not natural regen, or the shaman's mana spring totem.

Abilities that put “you gain x rage” in the combat log give 5 threat per point gained. However, this is not modified by warrior stance. Such abilities include bloodrage, improved blocking talent, unbridled wrath, and 5/8 Might.

Like healing, these only give threat if you are below the maximum.

Explaining Cop's 4.0 damage to heal ratio

Cop stated that in his tests, each point of damage by the warrior took approximately 4 points of healing by the priest, for the priest to get aggro. Here's how:

Warrior in defensive stance, with defiance: 1.45 multiplier Gaining aggro from warrior: 1.1 multiplier priest with discipline: 80% threat Healing: each point gives 0.5 threat

Together, $1.45 * 1.1 / 0.8 / 0.5 = 3.9875$. Pretty darn close to 4.

Threat from pulling?

There is no threat associated with pulling. The smallest amounts of threat we could generate drew aggro from a body pull, no matter how long we waited after the pull. However, there are advantages to having the tank pull, as explained in the next section.

Taunt

Casting taunt causes three effects. A) The warrior is given as much threat as the person who currently has the mob's aggro. Obviously if the warrior has aggro, this will do nothing. Also, this effect will not lower the warrior's threat. For example, if player 1 has 100 threat and aggro, a warrior could have 105 but not aggro; after taunt he would still be on 105 threat. B) The mob recalculates its actual aggro target. If the warrior was on the mob's hate list before the original aggro target, the mob's actual aggro target will switch to the warrior. Otherwise, the mob will remember its original target. C) The normal taunt debuff. The mob is forced to attack the warrior, even if the warrior is not its actual aggro target.

The threat that the warrior gains from (A) is permanent, regardless of the outcome of (B). Note that it will not necessarily give the warrior the equal highest threat on the mob. If player 1 has 100 threat and aggro, Player 2 has 109 threat but not aggro, and the warrior has

0 threat, then the warrior is given 100 threat, not 109, so he could easily lose aggro to Player 2 after taunting.

Implications

Note this section is just my opinion.

- a) Let the tank pull! Then he will be first on all the mobs' hatelists, and his taunts will always return aggro to him.
- b) Given that targets at range will only draw aggro when they have more than 130% of the mob's target's current threat, it's important for a tank to keep the mobs well away from the casters. If a healer does draw aggro and you taunt it off him, make sure you also move it away.
- c) Heroic Strike should not be used as a primary threat ability. Suppose you are tanking a level 62 mob. Let's give him 8,000 ac raw, and even assume he has 5 sunders stacked, for 5750 final ac, so he will take 48.89% of damage. A 15% crit rate is balanced by the 10% penalty to damage in defensive stance, and a 10% chance of a glancing blow chance for 50% damage. Then you can expect the 138 damage from Heroic Strike to contribute 67.5 damage on average, for a total of 212 unmodified threat. This is still only 82% of the threat a sunder would give. Even with a 1.3 speed weapon, you will still do 94% the threat of sunder per time interval.

Best practice is to spam sunder, and use HS in between to soak up excess rage.

- d) Revenge ftw. You can expect to do about 345 unmodified threat with Revenge, including damage, against the mob in the example above, which is exceptional for the low rage cost, even throwing in 10 for a shield block. However, there is a rage cost of shield block, in that you will block more attacks, so take less damage, so gain less rage from damage. Two blocks for 180 damage and you can say goodbye to another 4 rage.
- e) Demo Shout ftl. Demoralising shout does one sixth the threat of a sunder. Even spammed in defensive stance with defiance, you're doing no more threat than 42dps on each mob. Besides picking up whelps in Onyxia and tanking panthers in the Panther boss encounter in ZG, i can't see a compelling reason to use this.
- f) Shield Slam ftl. Given the 6 second cooldown, there is no improvement in threat per second by using shield slam. With shield slam: 3 sunders and 1 shield slam every 6 seconds. About 212 threat per second, unmodified. With the 30 rage from the shield slam you can cast 1 sunder and about 1.2 heroic strikes, assuming you have the talents (which you would with any shield slam build), and are losing 3 rage per Heroic Strike from lost white damage rage (i.e. assuming 90 modified damage per hit). The 4 sunders and 1.2 heroic strikes every 6 seconds gives about 215 threat per second.

The only improvement is if you are spamming both sunder and HS, and want even more threat. Suppose we have a 2.0 speed weapon, HS spam and sunder spam. That's about 280 unmodified tps. Changing one sunder for a shield slam

gives us 318 unmodified. However, the same effect would be achieved by changing to a 1.4 speed weapon and casting HS more often. And these values aren't taking into account autoattack damage, which makes the margins comparatively smaller.

- g) There's no amazing super secret randomised blizzard aggro algorithm. The concepts are simple and the values can be fitted with nice numbers. Even formulas for threat-reducing knockbacks can conceivably be worked out, if threat values are carefully monitored.

Well, i hope some of you are still awake, and are feeling somewhat enlightened. And if you skipped to the bottom, i can't exactly blame you after my essay above.

APPENDIX C: FUNCTIONAL PATTERN ANALYSIS – SYNOPSES

Ragnaros Fight Attempts, April 28, 2006

[It's pretty clear to me that these synopses are sort of in-between personal field notes and write-ups for a broader audience; it's more flowery descriptive than quick notes on activity, but it's still written in a way that assumes the reader is familiar with the activity. In other words, it's well-suited for its purpose, that of helping me see notable moments and identify emergent patterns across attempts.]

Attempt 1

Preplanning

At 7:57 pm, the raiders start talking about the last boss fight in Molten Core, after having just defeated Ragnaros's underling, Majordomo (Domo) Executus, while they gather at the entrance to Ragnaros's chamber. They had dispatched all of the monsters and bosses before Domo earlier in the week, so had plenty of time reserved this night to work on Ragnaros himself.

It takes the raiders about 20 minutes to talk about and prepare for this evening's first attempt at Ragnaros. During this time, the raid group talks about the strategies and tactics to use while fighting. The raid leader, Maxwell, is summarizing how the fight works using the voice chat. He details where different players with different roles will be standing during the different phases of the encounter, the actions that will need to be taken during those phases,

etc. Special emphasis is put into framing the work for tonight as practice for phase 2 of the encounter where the Sons of Flame emerge and need to be handled and killed efficiently:

“These are serious attempts, so no slacking, but the prime focus is getting the Sons thing worked out.”

During this summary, a couple of clarifying questions or issues comes up. First, one of the warriors asks what happens when both Warren and Wendy get knocked back. He asks this in the warrior-specific text chat channel. The raid leader replies in the general raid text channel that if it happens then Willy will tank, but it shouldn't happen because Wendy should not be in melee range until Warren gets knocked back. Second, the raid leader tells priests to toss out dots if they can spare the Mana. A man jumps on the voice chat and asks, “dots on Rags?” to which the leader confirms, “Yeah. All dps helps. I mean if it's a mana issue, don't, but, if you've got it, go for it.”

Meanwhile, various members of the group buff each other, drink potions, and generally configure / prepare themselves for the fight. Of particular interest is the range checks the shaman in the rogue group, Scott, is performing with his totems. He needs to know where he should be placing his totems so that the rogues can get their benefits in the upcoming fight. To do this, the rogues have to move to where they will be during the various phases in the fight and Scott has to drop totems at various ranges for each of these locations to remember for later which places to use during the actual encounter.

Also during this time, the rogues talk amongst themselves about their gear and how lacking they are in fire resist items, which are extremely important for this encounter, as his main AoE damage is fire based. Only two of the five rogues have adequate fire resist ratings.

All of these actions and talk are happening in multiple layers of modal experience. Talk is done via voice chat and text chat. The text chat is further divided into various channels for specialized sub-groups in the raiding party. Different physical gestures and interactions are happening on-screen, which indicate to us expert players that various people are doing what they're supposed to be doing. The game produces gestural and audio feedback when characters activate certain abilities. The game also sometimes automatically generates a text chat in the form of an emote for certain abilities such as when warlocks create healthstones.

In the background, the sound of rushing lava and howling winds fill the space. The space, in this case, is a massive, dark chamber made of red rock, illuminated solely by the fiery pools of lava on the chamber floor. A spiral of rock presents us with safe navigation zones to stand and run around on without getting burned. In the center of the spiral stands Majordomo Executus who had fled here after his defeat earlier. He's waiting for one of us to trigger the fight event by talking to him. When that happens, he'll summon his lord, Ragnaros, who will then emerge from the massive pool of lava that the spiral surrounds.

Fight

We start the fight at 8:23 pm, by having the primary main tank, Warren, talk to Domo, triggering the event. Our raid leader signaled the MT to start, and then after Ragnaros emerges and talks to Domo for a bit of flavor text, the fight begins and the raid leader calls for ranged and casters to attack. The melee then all run and jump over a river of lava to the correct spot on the arm of the spiral near the center behind Ragnaros.

Wei, a warrior, starts attacking before the first Knockback, which is dangerous, and the raid leader notices and explicitly says, “Wei, wait until the first knockback.” Wallace, another warrior, stands slightly off to the side by himself, which maybe doesn’t matter but it is unclear why he isn’t bunched up with the rest of us melee DPS. It is possible that his sense of personal space within the game is nuanced since he tends to role-play and stay in character, even during raids. The warriors are using swords-n-boards (three of them, at least, have the same gold, round, scorpion design shield). Interestingly, though Wendy should not be affected by Knockback since she should be out of melee range, on the first Knockback event, she says, “This is Wendy. I got knockback... Coming back.”

A lot of information floods my senses once the fight starts. Both visual and audio indicators come at me. Furthermore, these are both diegetic (such as the animation of all of us swinging our weapons or the grunt of my character as he attacks) and non-diegetic (such as various panels and buttons on my screen representing the game’s UI or the various alert sounds coming from our installed add-ons).

Some of this info: The Bong sound from our CT Raid add-on that happens in sync with the words “AE Knockback” appearing in the center of my screen. The raid leader’s “Melee attack!” command issued in several text channels, also facilitated by CT Raid. SCT (another add-on) sending a constant stream of text up as I gain energy, take damage, activate abilities, etc. My custom timer bars popping up (from yet another add-on) letting me know how long dots and other effects last. KLHTML, the threat meter add-on, keeping track of all our threat levels. Custom UI enhancements (yep; add-on) showing me the Health and Mana of the whole raid, showing me my Health and energy gain and CP build-up, Ragnaros’s Health and all of our buffs / debuffs. Specific windows showing MTs (CT Raid) and their targets. The screen flashes with lava bursts and waves every once in a while. The snick snick whoosh of Sinister Strike and a miss. The sound effects of other abilities including those of the raiders around me. When I mistimed something, my character, Thoguht, saying “not enough energy.” The dingier sound of incoming Knockback and the melee DPS backing up as a group to our corner of the spiral peninsula. After the next Bong, rushing back in with the group.

A semi-regular sequence of indicators and my reactions to them emerges from the chaos bracketed by the Bongs of Knockback. The first time we fought Ragnaros, this pattern was noisy, but this night it is getting refined and less noisy. A month from this night, the pattern starts to stabilize, and I start to feel a rhythm to the fight. SS, SnD, SS, SS, SS, Feint, SS, SnD, ad infinitum. Sometimes an Eviscerate thrown in there if SnD hasn’t expired. This goes on until the ding. Move back. Bong. Move forward. SS, SnD, SS, SS, SS, Feint... Rinse

and repeat. In forums, other players have used another way of visualizing the actions rogues take, referencing the keyboard buttons needed for the actions: 2422262242262223 repeated.

But in this particular iteration of the fight, we don't yet know the pattern, haven't yet found our groove or gotten into the flow.

When the melee back up, a couple of us stand too far back and stand in the lava. Wei, at one point, gets knocked back and dies in the lava. Then others get knocked back. In other words, it seems pretty clear from these Knockbacks and from Wendy's Knockback at the beginning of the fight that we aren't all completely sure of Ragnaros's hit region. Furthermore, the verbosity of Wendy's utterance and also Wei saying, "back it up," multiple times, shows that we were still relatively new to the fight, since later they use more abbreviated utterances to indicate the same info or issue the same commands. In some future cases, verbal cues aren't even needed anymore.

Before phase 2 begins, the raid leader / CT Raid yells for us to get to our collapse point. The melee DPS run clockwise around Ragnaros to get to this point. Then Ragnaros summons his Sons of Flame and submerges. Right beforehand submerging, however, Ragnaros launches a fireball and many of us get knocked out of our collapse point. Bad luck. Rand and I are able to grab a Son pretty quickly after getting back into position. We then proceed to evasion tank it, trading aggro between us. Most of the rest of the Sons go nuts, though, mostly because a couple of Fears happened. This makes it impossible for the melee to grab aggro.

After 3 minutes, Ragnaros reemerges, and, soon after, we all are dead. About half of the Sons are still alive. The fight ends at 8:29 pm. The catastrophic mistake on this first try is the Fears.

Debrief

The biggest thing the raiders talk about is that we shouldn't Fear the Sons of Flame. A lot of emphasis is put into maintaining good control over where the Sons are and who they are attacking.

The rogues talk amongst themselves about getting aggro during the fight. Apparently, Rory died very early on because he was attacked directly by Ragnaros. Rand and Roger talk about the fight being about sustained DPS rather than burst DPS.

Attempt 2

Preplanning

The debriefing time from the previous attempt and the preplanning time for the next attempt is blurred with a lot of crossover talk spanning the whole 10 minutes between actual fighting moments.

Based off of what the rogues are talking about with Rory dying from aggro problems, the shaman wonders if he should be placing a threat reduction totem down for us instead of one of his other totems. Roger and I debate over aggro vs. DPS with Roger not getting what I

mean by energy management. I mean that one could forego Feint in favor of another Sinister Strike if threat isn't an issue. Roger is worried about bursting; doesn't want anyone using Eviscerate, Cold Blood, or Backstab. Roger comes off a little condescending to me. For example, he dismisses Rory's wondering about the shaman's threat reduction totem with: "meh, manage your aggro Rory" (and earlier, in attempt 1: "rogues only need 180-200 fr for this fight max, if you have more than that, roll a warrior.")

Fight

At 8:40 pm, the raid leader tells the MT to start the fight. "Warren? Go ahead." This actually signals to the rest of us that the fight has started, also. Thoguht and Roger are still debating about aggro and DPS at this point. Right after the fight begins, the raid leader tells the ranged and casters to go nuts [with DPS]. Warren informs all of us that his add-on named Carnival did not sync the fight correctly so he won't have a good idea of when Ragnaros will submerge.

Meanwhile, the melee have jumped across the lava into place and are waiting for the go ahead. The first Knockback occurs. Some melee start attacking right at the Bong sound. I was still typing to Roger when the Bong happened so didn't rush in at the same time. Warren and Wendy coordinating their rotation, using full sentences like, "K, Wendy, I'm coming in," where in later iterations Warren starts shortening it to just, "I'm in," and Wendy replying with "K. All yours." rather than just, "Got it," like in later rounds.

Since Carnival is not showing when Ragnaros will submerge, Maxwell asks for Mandy to announce times. It's unclear how Mandy is keeping track of the time. Some possibilities include the use of a different add-on, the use of a working Carnival, or using an in-room, non-game stopwatch. This practice is not spontaneous, though. Over the last several weeks, Mandy had established herself (or himself if you figure that the person behind the character is a man) as an accurate time-keeper in previous nights of raiding, so it is an easy first-choice fallback for Maxwell to take. Interestingly, Maxwell uses the voice chat to ask Mandy to call out times while Mandy replies using the text chat.

At one point when Warren gets Knockback, someone else and him talk at the same time in Vent, so he reiterates to make sure he was heard, "knockback knockback knockback."

On the collapse call, I follow another rogue and we run counter-clockwise, where normally we run clockwise around Ragnaros. This turns out to be a mistake since it takes us longer than normal and we get Knockback, sent flying through the air. I drank a healing potion as I landed, thankfully, on the outer ring and then ran to the collapse point from there. I reached the collapse point just as Maxwell announces, "K, Sons," as the Sons charge. I run to one, it gets frozen. Stepping back, looking around for any loose ones, I try to decide which new one to attack. Maxwell yells for the casters to get out of the collapse point.

Eventually, I get aggro from two Sons; when the first happened, I popped Evasion, but when second one came in and I saw that my Health was getting dangerously low, I hit Vanish to clear my threat level and escape certain death. Unfortunately, this just means that the two Sons rush off to whoever is next on their threat table, which may be a caster. I spend

some time running back and forth between the caster pit and the melee pit, hitting Sons when I can. The running around seems pretty ineffectual. More of my time should be spent actually hitting things.

Ragnaros reemerges while we still have about 4 Sons up. We're all still attacking Sons while the MTs engage Ragnaros. Warren dies. Wendy steps up. The Sons run amok since they were on Warren. I grab one and die. As our raid is decimated, the final 2 Sons wreak havoc while Ragnaros fireballs people. Maxwell starts to debrief the fight while 2 or 3 of us are still fighting. Finally, the raid wipes with 1 Son still up. Ragnaros is at 58%. The time is 8:46 pm.

Debrief

During this debrief, two main topics emerge. First, a discussion about warlocks Banishing the Sons. Maxwell says that he didn't notice any Banishes but others claim that it happened. It's likely not all of the warlocks Banished, though, so that is something that could be improved in later iterations. Second, it seems like we were able to control the Sons relatively well, even without optimal Banish crowd control, but we did not focus fire well or otherwise our DPS was not high enough. Not enough dots.

The rogues continue their talk about aggro management and try to figure out how it works. Rand says, "I got aggro on that one. Not sure how, was using the same technique as last time." I chime in with, "so, I have threatmeter on... noticed I wasn't very high up and did a cold blood evi's just fine" and use this as evidence for the debate I was having with Roger

before this attempt. My position is that we could do more DPS if we did not have to worry about threat generation, and, in fact, I was nowhere near the top of the threat list. Roger maintains that we cannot use our high DPS abilities since they will make us generate too much threat and draw aggro. This debate gets dragged on a bit, but I think we are starting to collectively realize that threat isn't the problem. This idea gets solidified more in the 4th attempt when Roger also gets aggro from out of nowhere.

Immediately after I state that Cold Blood-Eviscerate is okay to do, Roger states, "Rory, i saw you evis on that last fight. dont do that," indicating that he glaringly dismissed my argument. Rory replies, "Actually I didnt. all my finishers look the same." The tension among the rogues is building.

Attempt 3

Preplanning

Wei reiterates for the raid that we had good control of Sons on the 2nd attempt, and good DPS on the 1st attempt. We need to combine control with DPS.

Fight

This fight goes about the same as the previous two and lasts from 8:57 pm to 9:05 pm. Of particular note is that Roger dies from aggro: "lol. he must dump most agg at knockback. i think i got to him quicker then the tanks." He assumes that Ragnaros resets his threat table when Knockback occurs, thus it would be easy for a rogue or non-tank to then

generate threat faster than a tank and therefore draw aggro. This is not, in fact, the case.

Instead, it is simply that Roger got to Ragnaros before anyone else had.

My fist weapon (Eskander's Paw or something) breaks, causing me to prematurely start running to collapse point, since I thought that Ragnaros had submerged early and that was the reason why none of my abilities worked. After just a few steps, though, I realize my main weapon had broke, so I run back and switch to a lower DPS weapon for remainder of night (Cho'Rush's Blade and The Thunderwood Poker).

It seems like we did better with the Sons.

Debrief

A lot of talk about gear and consumables ensues, basically because the raid realizes we aren't outputting enough DPS. I say that my weapon broke mid-fight, which probably didn't help with our lack of DPS, and other raiders confirm that their weapons are starting to break as well. We're running out of potions and other consumables that help make us more powerful. In other words, any chance at downing Ragnaros tonight will have to come from tightening up our coordination as we are losing our potential power pretty rapidly.

Various people, as with the other times after a raid wipe, use the general raid text chat to let healers know where their bodies are located and ping the overhead map.

Attempt 4

Preplanning

Maxwell mentions to the casters that most of the rogues and other melee raiders have gotten their fire resist gear requirements from the raid's crafting resources, so they should start requesting gear. Apparently, there're plenty of available raw materials for the crafters to use, so we should be taking advantage of that as much as possible. This is somewhat surprising news since during the preplanning phase of attempt 1, the rogues had determined that we weren't all geared enough with fire resist. I make a note to myself to request more gear. Casters and hunters need fire resist gear, so, again, maybe the difference between failure this night and success the following month is partially due to having gear that lets us survive longer during the fight.

When we're ready, the raid leader sums up the fight: "Alright, let's focus. Same as last time, we just need to refine our Sons approach a little bit more, but that's basically it. Blow shield wall, keep them all in one area, and focus fire on my command."

Fight

The fight starts at 9:19 pm. I use sprint to jump across the lava and don't get hurt as I did in all the previous iterations. Roger dies on the first Knockback and says on raid channel, "i hit him once. that made no sense." Maxwell replies via voice, "Roger, they may have been out of position for just a second which is enough for anyone else to get aggro who is in melee range." This would seem to finally gel what we've learned about rogues and aggro/threat for

the night, but Roger ignores the raid leader and, after checking his combat logs, says, “wtf. i didnt even hit him, it was a miss. lol.” Wendy replies that Ragnaros just turned to hit Roger because he was there, not because Roger had hit Ragnaros, but her message is vague: “No, Roger, he just turned.” Roger doesn’t take this up, still seemingly ignoring Maxwell and Wendy by typing his system message: “Your sinister strike misses Ragnaros.” This exchange happens amidst the chaos of the fight. It also prompts a brief digression about the pointlessness of trying to heal rogues if they do get aggro. The digression might have prevented us from realizing the full extent of what it means that Ragnaros hits whoever is in melee range. It’s not until the next time we fight him that we know to wait a sec until a tank grabs Ragnaros’s attention before engaging after a Knockback. Full text from this interaction:

[Raid] Roger: i hit him once.

[Voice] Maxwell: Knockback coming in about uh... 5 seconds.

Ragnaros yells: BY FIRE BE PURGED!

[Raid] Maxwell: *** 5 SECONDS UNTIL AE Knockback ***

[Raid] Roger: that made no sense.

Ragnaros yells: TASTE THE FLAMES OF SULFURON!

[Raid] Maxwell: *** AE Knockback ***

[Voice] Warren: Knockback.

[Voice] Wendy: Alright Warren, he’s all yours. Okay then... he’s mine.

[Voice] Warren: Okay, I’m in.

[Voice] Wendy: Alright.

[Voice] Maxwell: Roger, they may have been out of position for just a second which is enough for anyone else to get aggro who is in melee range.

Ragnaros yells: BY FIRE BE PURGED!

[Raid] Maxwell: *** 5 SECONDS UNTIL AE Knockback ***

[Voice] Willy: That's all it takes.

[Raid] Roger: wtf. i didnt even hit him, it was a miss. lol.

Ragnaros yells: BY FIRE BE PURGED!

[Voice] Wendy: Yeah, actually... he got knocked back, I was trying to stay back so I wouldn't get knocked back.

Ragnaros yells: TASTE THE FLAMES OF SULFURON!

[Raid] Maxwell: *** AE Knockback ***

[Voice] Wei: Oh my god, the whole group just flew. The whole melee group just flew.

[Voice] Willy: Yeah... we were back as well.

[Voice] Maxwell: It happens.

[Voice] Man: I'm down.

[Voice] Wendy: No, Rog, he just turned.

[Voice] Maxwell: You gotta-- Hey, you. We can talk about that afterwards. You've gotta spot heal ranged dps.

Ragnaros yells: BY FIRE BE PURGED!

[Raid] Roger: “Your sinister strike misses Ragnaros”

[Voice] Willy: If a rogue gets aggro from Rags, there’s just nothing you can do.

[Raid] Maxwell: *** 5 SECONDS UNTIL AE Knockback ***

[Voice] Willy: It happens too fast.

Ragnaros yells: TASTE THE FLAMES OF SULFURON!

[Raid] Maxwell: *** AE Knockback ***

[Voice] Wendy: Rog, the short reason is that it was my fault.

[Raid] Roger: Indeed Will.

Ragnaros yells: BY FIRE BE PURGED!

[Voice] Maxwell: That’s actually why, um... there’s actually not much healing set up for the rogues because they can’t live through any direct attacks. The only thing they need to be healed for is the fire AE.

[Raid] Maxwell: *** 60 seconds until Ragnaros submerge & sons of flame.

[Raid] Mandy: 50 seconds

[Voice] Willy: That’s right.

One thing I notice is that we all collapse this time instead of ranged and then melee. Wendy complains about Frost Nova, a mage ability that makes enemies immobile for a few seconds. Maxwell says it was justified. Wendy says she couldn’t grab the Son and take it out

of the caster pit because it was frozen. Maxwell says that that's moot, which shuts Wendy up, but it is unclear to me how her point was moot.

It seems that we're finally getting the hang of managing the Sons of Flame, but our healers are running out of Mana. (We just need to stay alive better during Sons. If casters had FR gear they wouldn't get hurt as much and therefore healers wouldn't have as much of a Mana problem. Alternatively, if DPS was higher, that would alleviate some of the endurance fight requirements, too.)

Fight ends at 9:27 pm with Ragnaros at 28%.

Debriefing

We had a minute left before the next Sons of Flame phase when the raid wiped. If we had enough DPS survive the second Ragnaros phase, we would've downed him. This elates everyone's spirits, and renewed energy is put into talking about working during the coming week to farm materials for potions and other consumables to help boost our DPS.

Attempt 5

Preplanning

The warriors talk about a little used ability, Slam, discussing its utility here. The problem is that it is such a useless ability normally, such that warriors do not immediately think about using it. It sounds like they'll be spamming it on the Sons from now on though.

Interesting that the rogues barely talk during this and the next attempt. Possibly Roger is stewing over getting aggro in the last attempt.

Fight

“Warren, gonna hit incoming...” Maxwell’s voice, followed by a long silence in the voice chat, but there’s a lot happening on screen. CT Raid Incoming announcement, Attack announcements, the melee DPS runs and jumps into positions autonomously, having done this before many times. Our skeletal remains litter the ground from previous attempts. Bong of AE Knockback and “Melee attack!” command. We charge and start building up CPs. One of us drinks a potion that enlarges him, presumably making him hit harder. SCT and all my other add-ons sending a constant stream of text and visual information to me. The only voice happening is Warren saying “knockback” predictably after the CT Raid Bong, followed by “Ok” when he gets back into position and Wendy saying “Go ahead” letting him know that she’s backed off (after having stepped up when he got Knockback). Once, after a Knockback, I go into melee range with the rest of the melee group before a tank was able to regain aggro. I was quick enough to hit Vanish to lose Ragnaros’s aggro rather than stepping back. (Dangerous!) Snick snick snick, grunt, until 5 CPs. I hit Eviscerate instead of Slice n Dice because I see the Knockback timer about to expire and I’m about to step back after hearing the ding. Going back in and getting SnD up, build to 5 CPs, Eviscerate, miss, wait for energy... Eviscerate again. Hit. Step back. Bong.

When notified of collapse to prepare for phase 2, we all run to the collapse point while strafing Ragnaros. Maxwell lets raid know he's out-of-mana because Ragnaros hit him in the middle of Evocation. Then he lands in the lava and dies, making the fight that much harder since he's the one calling targets for us. We press on. Sons charge in, and I run to grab one away from the casters. All the melee do the same. The rogues assist tanks with their targets. I see the Immune text scroll up and the dark translucency effect on my current target who got Banished. I switch to a new target. It gets Banished, too. I switch again. It's frustrating to waste time hitting targets that get Banished. Somehow, I pick a Son off a tank and had to use a Health potion. A warrior picks it off me. Various people shout in the voice chat that there's one in the caster pit. I run in there to grab it. Others shouting, "Run to us," meaning for the caster who has aggro to run out of the pit to the warriors. After this happens a couple of times, Warren dies, and Wendy runs to prepare for Ragnaros. We down the last Son and start running back to positions as people say, "Run to positions," etc. I get knocked into the lava as I am getting back to position. I jump up and down, moving towards the safety of the shore, but I die right before getting out. Couldn't use a Health potion since blew one during Sons. About half the raid is dead. Meanwhile, Maxwell is still giving us commands, but I wonder whether they are helpful since his view is occluded. Wendy dies, but Warren is back up after someone battle rezzed him. Ragnaros yells, "BY FIRE BE PURGED!" each time he launches a fireball at someone, usually marking their death. The tanks drop like flies. Wei runs in and immediately dies. The hilarity of the situation is noted and a woman calls it, "a valiant effort." Raid wipes at 9:52 pm with Ragnaros at 35%.

Debriefing

The biggest concern at this point is our broken gear. Each time one dies in *World of Warcraft*, the equipped gear becomes worn down. With enough deaths, gear eventually breaks and one has to get them repaired at a blacksmith located in towns or commerce hubs. It's possible, however, for some characters who have studied Engineering to create a repair bot for the raid, saving all of us a lengthy trip to the nearest town. So, some of the raid starts talking about what it would take to create a repair bot. None of us have the necessary materials, but it's possible to send someone to a major city to use the Auction House to search for the materials and then to teleport them back to the rest of the raid group. We weigh this option against the fact that Ragnaros is only up and attackable for two hours, which means we don't have much time for many more attempts this night. Eventually, the raid leader decides that going through the trouble to get a repair bot ready is not worth it since we realistically only have one attempt left tonight, anyway.

Attempt 6*Preplanning*

This will be our last attempt of the evening. The way attempt 5 went put a damper on our earlier elation. It seems that people are starting to get worn out from playing so long and the effects of running out of consumables and having gear break is definitely starting to show. Most of the talk now is about how broken everything is and how lacking in resources everyone is.

Pall and I occupy ourselves by talking about In-N-Out and Burgerville. :p

Fight

22:06 - 22:11

Debrief

[Raid] Maxwell: This was a very good evening

[Raid] Heather: we done good

[Raid] Maxwell: we made tremendous progress

[Raid] Wei: This was more'n excellent.

[Raid] Maxwell: YOU HAVE ASSIGNMENTS

[Raid] Wei: I shall do my homework.

[Raid] Lori: I hate homework.

[Raid] Hattie: I'll beat someone up to do my homework for me.

[Raid] Maxwell: 1st: Bring consumables, I want you all to have fire pots, and healers, mana pots

[Raid] Maxwell: ALL OF YOU

[Raid] Drusella: My Kodo ate my homework

[Raid] Wei: ive been watching movies for weeks

[Raid] Wendy: shhh let Max talk please

[Raid] Wendy: please

[Raid] Maxwell: 2nd: I want dps to learning everything they can about maximizing their dps

[Raid] Maxwell: *learn

[Raid] Wei: We had some breakthroughs in the Warrior Channel about that, Maxwell. *grin*

[Raid] Matt: Mages need wizard oil and arcane power potions

[4. splittranq] Hall: Mongoose pots. Get 'em, love 'em. Best dps boost you can get from a single consumable.

[Raid] Maxwell: 3rd: casters and ranged need to start asking to get gear crafted

[4. splittranq] Hattie: yep

[Raid] Maxwell: Matt is right

[Raid] Heather: I can fire res cloaks...

[4. splittranq] Helga: aye i usually come here with 10 mongoose and 15 FR pots

[Raid] Mandy: I can arrange for both Wizard Oil and Arcane Power Pots.

[Raid] Maxwell: with those, I was able to hit 1200 damage non crit bolts

We end the night dividing up loot from the bosses we downed before attempting Ragnaros and then dispersing.