Communication, Coordination, and Camaraderie in World of Warcraft Mark Chen

Massively Multiplayer Online Role-Playing Games (MMORPGs) are a popular pastime for millions of people around the world. Furthermore, the practices around these games represent only a small portion of all of gaming culture. As games become more and more a part of popular culture, their attractiveness as a tool for education becomes overwhelming. Even as games studies grows and people struggle to understand ramifications games have on everyday life, not enough is being done to look closely at player practice. In an effort to do this work, I looked at a group of people who banded together in the MMORPG World of Warcraft. These players learned how to defeat the end-game dungeon Molten Core through collaborative improvements on communication and coordination over a period of months in an iterative fashion. I believe most groups who delve into Molten Core learn to complete it in a similar way. This particular group, however, was focused both on sustaining and building player relationships and learning together rather than the accepted norm of obtaining magical items or completing the dungeon as fast as possible. The trust among group members was forged through their desire to "hang out and have fun" and was evidenced by the camaraderie and joviality of their communications. The group's ability to reflect and be consistent about its desires allowed it to recover from a particularly poor performing night—one evidenced by the fact that the chat among members was relatively sparse and not cheerful—which threatened to disband the group. I argue that the group's ability to be consistent with the type of community the group wanted allowed it to successfully build trust among its members and rebuild trust when it was temporarily lost.

I aim to describe the communication and coordination practices of a group of players in the Massively Multiplayer Online Role-Playing Game (MMORPG) World of Warcraft (WoW) by contrasting two nights of game playing while also contrasting 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, many failures before we finally succeeded in defeating all of the monsters in MC. Success depended on our group members' ability to coordinate our efforts and maximize group efficiency by having each member take on a specialized role as determined by game mechanics and specific monster battles. To do this coordination, my group employed a variety of communication channels including specialized text chart 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 which are specified 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 non-standard group compositions and non-standard character specifications. I argue that the success of this group was due to 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.

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¹ "High-end" here means that the game content was intended for players whose characters have reached the maximum level in the game. It is also known as "end-game" content.

(Computer) Game theory

I have a long history with computer games, and I approach this research from a gamer's perspective using ethnographic methods (Steinkuehler, 2004, Hayano, 1982 for games ethnography, and Porter, 2001, Wolcott, 1997 for ethnography in general). 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.

Previous research about player behavior includes those focused on games from a perspective emphasizing incentives and decision making (Smith, 2005, Zagal, Rick, & Hsi, 2006)—confusingly known as game theory—where an examination of game rules leads to ideas about how people will behave and therefore how designing 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 (CRPG) 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 (Felkins, 2001, PD), 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 playthrough, too.

Making a selfless choice and making a selfish choice actually lead to the same decision. Game theory simulates considering future interactions with each other by modeling *iterated* versions of the Prisoner's Dilemma (Felkins, 2001, PD). 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. My choices were motivated by how I saw myself playing a particular character rather than "rational" thought as presented in traditional game theory literature.

The Prisoner's Dilemma is part of a larger set of situations that economists and game theorists call "social dilemmas" (Hardin, 1968, Axelrod, 1985, Felkins, 2001, SD), only most social dilemmas have many people making choices of whether to cooperate or "defect." Basically, a situation is considered a social dilemma 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 social dilemmas is that the whole community benefits when a certain number of people cooperate. What this means is that someone could defect—make the self-serving choice

by "free-riding"—so long as enough 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 social dilemmas 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 World of Warcraft, 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. Role-playing games' biggest power for education is the way in which players can think or take on a certain perspective by being someone with that perspective. This perspective-shifting (Galarneau, 2005 GLS) allows for understanding through situational experience.

In *WoW*, many norms and rules have emerged from the player community. T. L. Taylor (2006) documents this very well with her experiences in another MMORPG, *EverQuest* (*EQ*), recognizing that game culture which emerges in and around a game is

co-constructed between all of the various authors, including both developers of the game and its players. Players start with the base game but need to develop a myriad of social norms, etiquette, and practices which ultimately help to 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 at as socially constructed social dilemmas. Again, I want to stress that these situations are ignored from a look at only the game mechanics.

Additionally, even in situations which could clearly map onto social dilemma models, the choices I saw being made by both me and other players were not so "cut and dry" and "rational."

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 made this same comment (2005, p. 7), and I would take that argument further by saying real social situations—like the ones I experienced in *World of Warcraft*—are messy and complex and problematize the very notion of constructs as convenient ways of modeling player behavior.

Like other researchers looking at online life (Taylor, 2006, Wilson & Peterson, 2002), I strongly believe that some "virtual" worlds, like *WoW*, are every bit as "real" as our day-to-day off-screen world, in terms of people behaving in a rich, complex social space. I also believe that this distinction between off-screen and on-screen life is becoming more and more meaningless. Taylor (2006) makes this case very clearly—that worlds and cultures are socially constructed and the boundaries between them blurred and dynamic where our roles in one world cannot be separated from our roles in the other. I take this to mean that, at least to some degree, we can never not be who we are.

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 which more quantitative research might be making or be suggesting are dispelled. All ethnography is about exceptions, about teasing out differences. Taylor paints a rich world of player behavior and practice. She is joined by other scholars doing ethnographic research in MMORPGs—relating it, for example, to literacy and learning discourse (Steinkuehler, 2004) and social learning theory and emergent social networks (Galarneau, 2005 DiGRA). One thing to note is that Taylor describes clearly 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 player about what it means to "play" and "have fun."

World of Warcraft the role-playing game

In *World of Warcraft* players create a character to control in a virtual fantasy world full of dangerous monsters, exotic locations, and people who need help (Blizzard Entertainment, 2004, guide). Each player chooses a type of character class to play (e.g., a brawny warrior, a backstabbing rogue, a devout healer) and the race of their character (e.g., orc, human, night-elf) which in turn determines which of the two opposing factions his or her character is aligned with (Alliance or Horde). As a player journeys through the land with his or her character, completing quests and defeating monsters, the character accrues "experience points" or "XP." After a certain amount of XP, the character

advances an "experience level" and becomes more powerful. Additionally, the corpses of monsters which are defeated can be looted for valuable items (known as "loot") which may help characters outfit themselves and be better prepared for future encounters. Characters start out at level one and can (currently) advance to level 60, when the stakes become much higher in terms of danger and rewards. Eventually, most players discover that, in order to continue to advance efficiently, they will need to team up with other players who are working on completing the same quests and defeating the same monsters.



Figure 1: World of Warcraft character creation screen

To team up, the character joins a "party," a group of up to five characters.

Generally, the party goes to the same places and works on the same quests together. As a character approaches or reaches level 60, he or she can go into the most difficult

dungeons. These require special groups called "raids" or "raid groups" which can have more than 5 characters. Molten Core (MC), the dungeon my group has been going to allows 40 of us to go at the same time. 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 since a warrior has high stamina and is 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. This is especially true in a raid attempting to clear a highend dungeon. It is important to be able to clear out a dungeon in an efficient manner because the dungeon encounters are reset every week. In other words, a group has a week to clear out as much of the dungeon as possible before having to start all over. Once completed, groups are still encouraged to repeatedly visit these high-end dungeons every week because the monsters they defeat drop very good loot which makes it easier to succeed in future encounters, but they do not drop the same ones each time. In a raid with 40 people, repeatedly killing the same monsters ensures each member is given the loot that they want.

Often a character is invited or allowed to join a raid group only if he or she meets the raid's requirements in terms of his or her character class in relation to the existing composition of the raid. This works under the assumption that the player is skilled and familiar with the game mechanics to play effectively. It is not the only factor, however. Generally, preference is given to friends or at least non-strangers who (usually) meet the class requirement. In this way, the roles players assume are as much determined by their

character classes and personal skills as by their social situations in relation to the other players and their ability to argue for certain ways of playing.

Ethnography of World of Warcraft

I follow the tradition of games ethnography (Steinkuehler, 2004, Hayano, 1982). Also, I play to play, and, like others who write about their lives (c.f., Jenkins, 2006), I am simply attempting to explain what goes on in a particular domain of which I am closely affiliated. If I was not doing research into games, I would still be playing, and I identify myself as more a gamer than an academic as I have been playing computer games (obsessively) for most of my life. At times, in fact, I feel like I should be writing about academia to an audience of gamers.

I have been playing *World of Warcraft* for over 22 months, spending an average of approximately 20 hours a week in-game. *WoW* has two basic server types—player-vs.-environment (PvE), which emphasizes completing in-game tasks, and player-vs.-player (PvP), where players always face the danger of encountering hostile players of the opposite faction. Additionally, certain PvE servers are known as role-play (RP) servers and certain PvP servers are known as RPPvP servers. I play on a RP server. Players in these servers have agreed to stay in-character (IC) while talking to others, making no out-of-game references (such as references to United States politics). Though actual player talk largely ignores the RP rules, I do find that the way people talk on my server, when not pressed for time, is often not as abbreviated as it is in the stereotypical "leet speak" shorthand (e.g., "cu l8er") and more like how one would see dialog written in a novel. I also play characters that belong to the Horde, the underdog faction on my server, and I have found that a lot of Horde players enjoy complaining about how the Alliance is

everywhere and have an unfair advantage, both in PvP scenarios and in being able to gather enough players for a 40-person dungeon.

For 8 months I was part of a high-end raid group. This raid consisted of 40 characters joining together each week to delve into an end-game dungeon called Molten Core and defeat the monsters therein. MC has several big "boss" monsters with names like Garr and Majordomo Executus and many more generic monsters like Lava Annihilators and Core Hounds. Each type of monster and boss has different abilities and does different things when a raid fights them. For example, Molten Giants, a monster found in MC, have a Stomp ability which damages everyone around them. Every week, we were able to get a little further in our attempt to finish the dungeon, and after several months, we defeated the last boss, Ragnaros. Over the months, the membership of this raid group fluctuated. We had a core of about 20 players who showed up every week since the formation of the group, another pool of 30 or 40 who were regulars for 2 or 3 months, and another 20 or so who showed up either just once or sporadically. I did not know any of these players in "real" life. For most of them, I also did not know their ages, their nationality, their location, or any other real-life demographic. Some of this information, however, I did know from being able to hear them when they talked on voice chat or from inferring from their other chat (e.g., "I need to get up early for a class tomorrow").

I actively collected data in the form of text and voice chat for a one month period which I hope will illustrate some of what I have to say, but a lot of my insights come from the overall 22 month experience in the game and 8 month experience with the group. When I started collecting data, I asked for permission and asked the raid members

to tell me if they were under 18 so I could exclude their chat from my analysis. Only one told me he was under 18, which supports my suspicion that most players of *WoW* on RP servers who get into *high-end* raid groups are adults.² This is partially due to the time commitment required of high-end raiding and leveling a character up to 60. There are certainly many minors playing the game, in general, but I did not normally have much interaction with them once I was involved with the end-game content.

World of Warcraft has several default in-game text chat channels. These channels include:

- say—which only displays talk from other players if they are near enough
- party–for up to 5 players who have teamed up to complete quests or tasks
- raid-for up to 40 players, comprised of 8 parties of 5 players each

There are also optional channels which most players in the raid group, including me, unsubscribed from because it was too daunting a task to keep track of many, many channels and because often the talk found on these channels is about specific things which did not pertain to the immediate purpose of the raid group. They are:

- trade-lets players talk about trading items or selling items with each other
- looking-for-group—so players can find others who are working on the same ingame tasks
- localdefense and worlddefense—so players can alert others about enemy players
 from the opposing faction in their home territory and then coordinate their efforts
 in defending against the aggressors
- general–for miscellaneous talk

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² With the obvious qualifier that I have no way of knowing whether every minor told me of his or her age.

Any player can also define custom chat channels which can be shared with other players

to subscribe to for various purposes. The Molten Core raid group I played with used six

custom channels, broken down by character class/role in the group. These were:

• healsting–for the healer classes to talk about who to heal

madtankin–for the warriors to talk about who would play certain roles

rottentranq-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. I subscribed to all of these channels so I could see the simultaneous

coordination going on during our raid excursions. This act was abnormal but I was

welcome in those channels, anyway. For example, when I joined the warlock channel, I

was greeted with a wave:

18:09:39.093 : Joined Channel: [4. soulburn]

18:09:50.640 : Lauren whispers: *waves hello*

I joined the warlock channel "soulburn" at 6:09 PM. Once I joined, Lauren welcomed

me into the channel.

The text chat from all of my subscribed-to channels was recorded to external text

files for later analysis using a third-party modification ("addon") to the game. The raid

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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. These recordings were done for a period of one month in the spring of 2006. I describe two of these sessions and contrast them with each other. I do this because it is useful to see a normal session in order to understand the actual player practices going on. I also think that role clarification, identification, and learning can come from failure, and, while this happens on any normal night to some degree, the second case was chosen as an exemplar of when we were doing so poorly as to cause internal strife among group members. The way in which the raid group was able to "keep it together" in the face of overwhelming failure is noteworthy because trust and social relations overshadowed loot rules and game-mechanics mandated ways of playing.

A typical night in Molten Core

Gathering and chatting

At about 5:15 PM server time (PST) on a Friday night in April 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—either as the characters who we bring into Molten Core or as "alts" (other characters we had created to "waste" even more time in the game!), working on other quests or pyping or whatever—or just logging into the game after getting home from work/school. Once we got 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, and our official start time was 6:00, but we usually ended up starting at

around 6:15 because some people tended to show up late. That night we started fighting

monsters at around 6:10. In other words, I was in this raid group for almost an hour

before the group actually started fighting monsters in MC.³ 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 which 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 upon time every week, twice a week. Some of us resented the fact that we sat

around for upwards 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.

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, 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!

³ Anyone who claims that a "casual" player (who only has a couple of hours or less to spare on a game at any given time) can participate in World of Warcraft's current end-game content in is sadly mistaken.

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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 PM, 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 that both rogue loot had dropped and that we have had good success as a sub-group in the raid in terms of performing our roles well by dealing out good damage ("dps," for damage per second) 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.⁴ By talking to other players in other raid groups and reading strategies online, we knew that most people suggest 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

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⁴ 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 which protect 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.

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 are talked about.

Pulling and coordinated fighting

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. "Pulling" is used to describe grabbing the initial attention of monsters which are found standing around at pre-set locations in the world. Once their attention was caught, they charged towards whoever did the pulling. The first encounter in MC is with two Molten Giants who guard a bridge into the rest of the dungeon. One could argue that 40 of us versus two giants was not really fair, and watching us fight them after we had been fighting them every session for 6 months would support that argument, but, like most encounters in World of Warcraft, we 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," short for aggravation) 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 which are specifically for angering enemies and keeping aggro (Taunt and Intimidating Shout, for example)—abilities which other character classes lack. We usually had about five warriors in our raid group. Since most encounters in Molten Core involve just one or two monsters, we learned to designate two of our warriors to be Main Tanks (MTs), so that all of the warriors were not competing for aggro. The healers could

then concentrate even more on these two warriors instead of all of the warriors equally. Since 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 which 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 2: Molten Giants

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 8 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 mana.

Only the healing channel was for multiple classes (the healing classes—priests, druids, and shaman), while each other class had their own specialized channel. This assignment of roles was common among all channels. Here is an example from the warlock channel:

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 an ability that they had to create a Soulstone (SS) and apply it on other characters should be active at all times. A Soulstone allows whoever it is applied on to resurrect him or herself. 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/channels. These leadership roles were consistent from week to week and were established before I started looking at specialized chat based on rank in the main guild which organized the raid. Sometimes, however, encounter-specific roles needed to be assigned (much like the MT roles which could change from week to week). Sometimes a player was assigned a role because he or she had participated in an encounter no one else in the raid had done before. Other times these roles were taken up by players who had learned how to manage their cognitive load either through some innate ability or, more likely, through the use of addons. Cognitive load theory (Sweller, 1988, Cooper, 1998) 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 *World of Warcraft*'s built-in interface with user-created addons which replace or augment certain design elements to help them keep track of all of the information going on in the world. A player having an addon which notified him or her of specific events during an in-game encounter (e.g., the addon called CEnemyCastBar) was sometimes the deciding factor when roles were being assigned or taken up.

All of these different roles people assumed—class, leadership, and fightspecific—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. In WoW, at the very least, those factors include game mechanics, players' understanding of the mechanics, players' ability and skill, and relationships of trust. Class 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 and require that players design their characters to most efficiently take advantage of their classes' roles. This raid group I was with, however, valued diversity and accepted variation in how people defined their characters' abilities. In general, a priest was still a priest, and instead of mandating that a priest's abilities were maximized for healing, this raid accepted any sort of priest. Leadership roles were determined by pre-existing relationships before the raid was formed. It is possible that some of these relationships mirror some of the out-of-game relationships between various players who knew each

other, though I only guess at this through indirect information I have absorbed from being around these people for a long time. Fight-specific roles were highly contextually assigned based on social practice in how we approached certain fights and which kinds of information, commands, and actions needed to be made.

Getting back to communication practices, a lot of chat that happened in some of these specialized channels was "off-topic," featuring friendly banter. The earlier example of the rogues talking in party chat could have easily happened in the specialized rogue channel. It just happened that all the rogues were also in the same party, so we used party chat to talk to each other instead of using our specialized channel. This banter did seem to vary by channel and was probably due to the fact that there is variation among people—some were talkative while others were not. It could have been, however, that some classes came to use the channels for certain things and got used to seeing their channel in that light.

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 of the information coming from these various sources could be 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 which were directed at me. Also, sometimes the chat in one channel referenced chat in another channel. In this way, chat could be interwoven and layered. Furthermore, on top of the text chat, there was voice chat which 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 get back to the story, 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 over 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 is 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 Main Tanks 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. I am

guessing Mary, who is a mage, gave some water to Larry. Certain classes, like mages and priests, can cast spells, like Fireball and Renew. Each spell they cast uses up a certain amount of Mana or magic spell points. Characters have a certain amount of Mana (depending on their class, level, and equipment), so after casting enough spells, they can run out and are no longer able to cast any spells. If they have not cast a spell for a while, they start to regain Mana slowly. If they are not fighting something, they are allowed to consume water, dew, milk, or other liquids to regain their Mana at a quicker rate. These drinks can be purchased in towns or cities from certain vendors. Mages, however, can conjure water and share it with other characters, thus saving them from having to buy water.

Next we see that Pat has had a Soulstone applied to her by Lester, so we had a safe rezzer in case something went horribly wrong. Then Marcie hugged Lev. In addition to Soulstones, Warlocks like Lev can create Healthstones and pass them out to other characters. Consuming a Healthstone will heal some damage, giving players a way to regain Health in an emergency during a fight if, for example, the healers have run out of Mana or if they are occupied healing the MTs. It could be that Lev had just given Marcie one of these Healthstones. It could also just be a friendly hug between two people who had not seen each other for a few days.

Roger then asked if "ct" could be rebroadcast. Many of this raid group's players used an addon called CT_RaidAssist which, among other things, allowed raid leaders to designate Main Tanks. 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 addon worked by using its own specialized, hidden chat channel. 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 which CT Raid recognized. Players who joined the raid group late or who somehow temporarily lost connection to the game from their computers often had to be resynchronized by having the raid leaders rebroadcast. CT_RaidAssist is the most popular addon for raiding groups and using it is often required by "hardcore" raids. Even groups who do not identify themselves as hardcore, such as the group I was with, still either require each player to have the addon installed or highly suggest players install it. This is a good example of how the game experience and practice within the game is defined not just by the developers of the game. The practice around raiding and the cognitive load required for raiding allowed a common tool to be developed and propagated such that it is hard to imagine playing the end-game without the CT Raid addon.

About 4 seconds after Roger asked for the CT Raid channel to be rebroadcast, and about 15 seconds after pulling and separating the 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 can place ("drop") totems on the ground which give some sort of benefit to party members standing near them, but each shaman can only drop two unique totems, so they often have to weigh the pros and cons of which totems to drop. By having 5 shaman in one party, they were able to drop a very effective combination of totems since they were no longer limited to only two.

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 for us with little danger of failure or of having lots of people die. In fact, our Molten Core 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 has 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 good 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.

To make 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 damage (known as "dps," derived from "damage per second") and not taking aggro away from the tanks. The problem was that if I did too much damage (my dps was too high AKA I was dpsing too much), the 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. And this happened to me often, early on. 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.⁵ Even healers 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

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⁵ Grabbing aggro from the MTs and dying in such routine pulls is now met with laughter and people who do it are only jokingly chastised. Some even feel a bit of pride when it happens because it means they are out-dpsing others in the raid.

did this—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 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. While it can 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 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 which concentrate on end-game 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 more talk around shared understanding of encounters and the game world. Learning happens in a mature raid, but it is of a more individual nature where a newcomer learns the predefined role the raid group has established for him or her.

Welcoming failure in Golemagg and other boss fights

Since this night was several months into our raid instead of when we first started, we did not wipe on trash mobs. We also 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' lieutenant, Majordomo Executus (Domo), would appear. Then after we defeated Domo's guards, he would teleport away to Ragnaros' 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 Majordomo. Boss monsters are 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 have 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 PM, about an hour after our first pull and about one 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. Being a member of a raid like ours required patience and free time. 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 has an ability which does periodic damage over a

certain amount of time ("damage over time" or "dot") and he can 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 has 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) him 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 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. Each class, like the rogues, had its own balancing act to perform since each class had its own set of abilities, all with different pros and cons. Golemagg has a plentiful amount of Health, and, this night, killing him took us almost 8 minutes (by contrast, the two normal Giants earlier took us a little over one minute). In long "endurance" fights such as this, it is common for healers and other casters to run out of Mana. If enough of our healers run out, the warriors are no longer getting healed. They would die, causing the rest of the raid to die soon thereafter since all the other classes cannot 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 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 until your gear is broken, repair and do it again. Once you finally get it down you can farm them for loots.⁶ It can take a while to master these encounters but we're doing good work!

Each time a character dies, his or her equipment suffers a durability loss. When enough deaths happen, the equipment breaks and can no longer be used. Repairing equipment requires a trip to a blacksmith or other vendor in town who can 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 said:

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

⁶ "Farming" is the term used for when certain monsters are killed over and over again for the loot they drop.

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 *EverQuest*, some players take on responsibilities very seriously and that "fun" and "pleasure" are not so easily defined. Each player decides when to "play" and when to quit based on personal goals and ways of seeing "fun." For most players, this fun comes 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 is standard action according to in-game mechanics which reward player participation through valuable loot when a group of players defeat high-end monsters. Each monster that a group kills only drops a handful of items, though, so only some of the group's members will receive this in-game reward. Situating high-end rewards in this way causes player groups to come up with rules on how to fairly distribute the loot. This practice is so prevalent that almost all groups clearly define loot rules before they set foot in a high-end dungeon, and many players have come to see end-game practice as only participating in these high-end encounters and winning loot. The most common way of dividing loot is through what is known as the DKP (dragon kill

points) system where participating in certain monster kills nets a particular player a certain number of points (Wikipedia, 2006). When loot is distributed, a player then bids his or her points in an auction format against other players in an effort to win a particular item which would benefit his or her character. Winning an auction subtracts however many points were bid thereby limiting how many points the player can bid on a future item, thus giving someone else in the group a chance to win it. This can be likened to a social dilemma in that many players' bidding practices are motivated from selfish, individual benefits. Yet, a particular player could win an item which would actually benefit the whole group more if someone else won the item. This is because not everyone has the same equipment, and someone else's character might be more effective in combat more so than the winning player's character. From a more general perspective, no matter what kind of loot rules a group uses (see Wikipedia, 2006 for many examples of other loot systems), the social dilemma of "who gets the loot?" exists. The addition of using a DKP system on top of the basic game structure reinforces the dilemma by more explicitly making the situation competitive.

This socially constructed social dilemma is not so easy to explain through social dilemma modeling, however. Other factors come into play such as a player's relationship with others in the group, the attachment and commitment a player has with his or her character, how long the player plans on continuing to play the character, the fiction and role or identity he or she sees the character taking on, and personal values about what is an important goal and what constitutes "fun." This last point is important because if the group as a whole values other things besides loot, the whole looting system itself has 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 the receiver of a particular item would be. 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 discussion which was open to all of the raid's members, 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.

Putting it all together for Majordomo and Ragnaros

After dividing loot, our raid succeeded in killing some trash mobs and then Majordomo Executus. Domo is an interesting fight which requires a lot of coordination. He has an entourage of four warrior-like guards and four priest-like guards. For this fight, unlike the Golemagg one, we wanted to kill the guards first. Once this was done, Domo would teleport away to Ragnaros' chamber which was a necessary event for us to fight Ragnaros. Typically, we had five warriors in our raid group (this night we had six), so we could not tank all of the guards and Domo at the same time. Luckily, the priest-like guards, unlike most other monsters in Molten Core, are susceptible to certain abilities of various classes known as "crowd control" ("cc") abilities. These abilities effectively remove monsters from combat for a short duration. For example, rogues can stun certain monsters so they do not fight back for a while. Mages, with a polymorph spell, are able to turn certain mobs into sheep which then wander around, out of the fight until the spell

wears off or they take damage, and this is the strategy we use.



Figure 3: Majordomo Executus and his guards

This night was a "good" night. We killed Majordomo Executus easily. We then moved, however, onto three failed attempts at 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 PM. Our gaming session was almost five hours, and, other than Ragnaros, was relatively successful. Golemagg and Majordomo Executus were effectively on farm status, and we got to Ragnaros without any wipes or even any danger of wiping. (Two weeks later we defeated Ragnaros for the first time.)

An atypical night in Molten Core

Combination of unfortunate circumstances

By contrast to our good night that Friday, the following week, we had an atypical night in Molten Core. It was atypical in that a series of events unfolded which caused us many wipes and gave us generally poor morale which culminated in a "melt-down," where enough raid members fervently opposed each other on an issue as to cause strife and people quitting for the night. I believe it started with having enough people in the raid feeling stressed about other things happening in their lives. We also decided that

night to try using two different warriors as our Main Tanks for the first time. It was clear that the warriors who were not used to tanking were not sure where to position their monsters and that 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. This uncertainty manifested itself in our chat.

At various times in certain specialized channels, raid members were bickering with each other about where they were standing during some fights or doubting the role other classes were playing during fights. In other words, there was a distinct lack of trust this night. We ended up wiping three times on trash mobs. After our third wipe, no one said anything in text chat for eight 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 *eight whole minutes*. The longest idle time from our typical good night was two 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. We decided to continue which in hindsight was a mistake, because a few minutes later we had an argument break out over loot rules. This argument proved a shock to many of our raid members. 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.

For many of the raid members, the melt-down came as a shock since 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 myself. 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 reason I stayed with this group of players was not because I had a good chance to receive rogue loot nor was it because I needed access to a group to do research. I honestly believed I had found the most caring, laid-back, and reflective raid group going to Molten Core. I think many raid members shared similar notions, since, generally speaking, the events that happened that night were seen as a fluke. One raid member said, "I personal[ly] find what happened tonight to be just plane [sic] old rotten luck. We had a bad run tonight and people where [sic] 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 emphasizes 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... and it showed itself in our performance and it showed itself in our stress levels.

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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 goals of building relationships became eclipsed by individual motivations for progressing and winning loot. In this instance, effectiveness of the group was compromised when the motivations for cooperating with each other came from selfish sources. In other words, while one argument about how to address social dilemmas 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 way we could have alternatively addressed this issue was through explicitly reiterating the group members' goals and how it 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.

Additionally, players were not at their most attentive during this night, and it is possible a look at how labor could have been divided differently would have helped. Finally, even though camaraderie is just a symptom of an effective raid rather than the cause of effectiveness, one way to "fix" a poor performing raid due to wavering trust in itself is for members 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. I make the claim, like Iacono & Weisband when they wrote about developing "swift trust" in virtual teams (1997), 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 in terms of immediate gratification. The time to reflect, however, is needed for any meaningful learning to occur, and time to *talk* through this reflection is 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"—socially constructed goals—over the more traditional purpose of receiving loot to improve or progress—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 itself did not think or act, of course. The raid was made up of 40 different players on any given night, 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, other raiding groups in World of Warcraft which I hear about permanently break up after a melt-down. 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 social dilemmas. Actual player behavior, however, is complex. The concept of social dilemmas cannot model all of 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, it becomes clear that the issue of trust is more complicated than merely thinking 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 they were "in it" for the group and "having fun" rather than for individual, self-serving loot collection. This could be a new way of looking at the problem of trust in social dilemmas (Felkins, 1999). My raid group ensured this trust first by only recruiting players who 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 were *collaboratively* decided 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 in which 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.

To aid in this, dividing the labor up into specialized roles allows each individual to contribute to the shared experience. This could only happen, however, in environments which 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 actually leads 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.

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