

# Experts and Novices or Expertise? Positioning Players through Gameplay Reviews

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## ABSTRACT

In this paper we attempt to unpack the meanings of “expert” and “novice” in games research. A literature review reveals unreliable definitions and inadequate operationalization of these concepts. Nonetheless, researchers default to recruiting experienced players for games research projects to the exclusion of novices. We take an interactionist approach to argue for reframing the expert/novice dichotomy in terms of expertise, which all players possess. To support this empirically, we explore how players’ interactions with video recordings of their gameplay exhibited their expertise with digital games. We report on the analysis of the gameplay of one research participant who played 20 hours of the massively multiplayer online role-playing game *World of Warcraft* over a six-week period in 2012. By involving the participant in focused discussions on selected recorded segments of his gameplay, called a gameplay review, we leveraged his insight and interpretations of his own activity. The gameplay review method creates reflexive space, positions the player as an expert in his or her own understanding, and draws on player expertise as interpretive data.

## Keywords

digital games, expertise, experts, gameplay review, methods, novices, symbolic interaction, video data, *World of Warcraft*

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## INTRODUCTION

Research involving digital games tends toward one of two methodological directions (see Aarseth 2003 and Jørgensen 2012 for relevant reviews). On the one hand, researchers make analyses of games or their components based on self-play and close readings in order to analyze the game world and game design, often relying on assumptions about the uniformity of meanings that are attached to objects and processes within games, as well as to the games themselves. For example, humanities-type studies often assume that the researcher's reading of a game represents an obvious or natural interpretation (e.g., Rettberg 2008). This assumption carries with it a further assumption—that people experience games in the same way and therefore subjective experiences are relatively unimportant. Within a second direction of games research, researchers make analyses based on player-participants in order to analyze gameplay and interaction. Interpretive social scientists in particular focus on the significance of meaning to develop understandings of what people do, how, and why (e.g., Golub 2010). The player-participant direction of games studies favors “reflexive ethnographic” methods such as observations and interviews to uncover the wide range of possible meanings surrounding gameplay, but often produces “scientific-realist ethnographic” results (Pink 2007) because researchers focus primarily on the subjective experiences of one type of player: the expert player. This player type is idealized and normative, and his or her (but usually his [see Jenson and de Castell 2010]) experiences and interpretations are privileged over players of other skill or knowledge levels, leading to a large body of work premised upon the invalidity of beginner experience. For example, in Jørgensen's (2012) study of user interface (UI) design, she used expert players because they “would be in possession of rich information that would shed light on how the interface *should be interpreted*” (emphasis mine, 381). Because of this privileging of expert experiences, one criticism applies to both approaches: that there is a lack of consideration of the ways in which different players may assign different meanings to various aspects of gameplay.

In this paper we utilize an interpretive perspective called symbolic interactionism (Blumer 1969) and following its premises view gameplay, like other social action, as an interactional accomplishment through which people negotiate and develop knowledge, competencies and identities. Players take into account past experiences and act purposively to create meaning and solve problems. Different players develop different interpretations of gameplay and exhibit understanding in varied forms. Keeping in mind that players of all experience levels can offer valuable insight, we identify issues with the

operationalization of the concepts “expert” and “novice,” and the scholarly favoring of expert players. We demonstrate the usefulness of reframing the expert/novice dichotomy in terms of expertise to take into account understudied player perspectives by offering empirical and interpretive data from “gameplay reviews.”

## **EXPERTS, NOVICES AND EXPERTISE**

An “expert” in common usage is a person with greater-than-average ability, talent or knowledge in a domain. Exemplary accounts of gameplay such as Hock-koon’s (2012) training for six months to perform a one-credit run on the *Alien Vs. Predator* arcade game, the documentary film *The King of Kong* (2007) that chronicles the rivalry of two world champion *Donkey Kong* arcade players, and David Sudnow’s (1983) portentous volume on his mastery of *Breakout* suggest that major characteristics of experts in games are vast individual knowledge and “skillful performance” (Reeves et al. 2009). More mundane examples abound in games research that equate “expert” with “good” or even “average.” For example, Kinnunen et al. (2012) interviewed 16 “average” players of digital gambling games. Their average players “have a clear picture of the game and they are able to discuss about its features from different points of view,” (4) and “are clearly gaming hobbyists based on the time used on gambling” (6). Reeves et al.’s (2009) description of experts in Counterstrike is similar: “they have invested a great deal of time on play, moved beyond simple competence and regularly achieve mid-to-high ratings on in-game statistics tables...” (210). Both studies emphasize the lengthy duration of involvement and knowledge-based competence of players. Quantitatively, Schrader and McCreery (2008) conducted a Likert-type survey (n=1817) to measure typical MMO players’ expertise. “Participants’ average expertise was 4.01 [4 = “Expert”] and most players rated their level of expertise with their current avatar Expert or Master [4 or 5]” (562). It appears that the average game player is also an expert.

Literature shows that the definition of “novice” players is at least as varied as that of “expert.” Sometimes criteria for novices and experts are hardly distinct. Ziaeehezarjeribi (2010) classified novice participants as playing digital games less than two hours per week and experts as playing more than five hours, only a three hour per week difference (53). Reflexive narratives are not uncommon, especially in game ethnographies, where researchers begin as novices and become experts through self-play and/or (participant) observation (Bainbridge 2010). Is a novice someone who has never played a particular game (Hung 2009), someone at level 10 in an MMOG (Steinkuehler 2004) or someone

who on average played 1.36 hours per day of online computer games for the past 1.45 years (totaling over 719 hours) (Rau et al. 2006, 399)? Are there objective lines of achievement, knowledge, skill, and time played demarcating novice from expert, or are those lines imaginary?

The answer we want to suggest is that boundaries between expert and novice are often so subjective as to cripple the utility of the two concepts. Given the unreliable definitions of the concepts, we argue that novices *can* be experts, and that in fact all players are experts in their own experiences who can provide useful interpretations of games and gameplay which researchers would not have access to without taking their expertise seriously. Instead of classifying player-participants as novices or experts, it may be more useful to reframe their capabilities in terms of expertise.

Placing less emphasis on expertise comprised of deep individual knowledge and extraordinary skillful performance, a second perspective tends toward a broader conceptualization of “everyday expertise” that develops through practice occurring in “any setting in which consequential decisions are made and meaningful action taken” (Chen 2012, 4). This definition embodies two important characteristics of expertise: First, expertise is not limited to one domain, and second, expertise is constantly developing. Expertise is also distributed among people and sites like forums and wikis that players can access. The situated meanings that players construct and the expertise they develop through gameplay may draw upon expertise they hold or retrieve from any number of sources and domains. Game players have opportunities to exhibit expertise in instances of play at every decisional crossroads, and in games studies, researchers can facilitate such exhibition through careful methods. If expertise is not limited to individual knowledge and skill, but involves experience and interpretation, subjectivity and reflexivity, is local and distributed, then why do games researchers continue to focus on expert and experienced players as research participants?

Two related sources of the focus on expert play are readily identifiable: player-researcher identities and research questions. Many games researchers are avid players and fans (Mayra 2006) and enjoy observing others perform. They feel a shared identity as game enthusiasts with participants and also tend to share player identities (Chen 2012), which has the practical effect of facilitating communication, shared meaning and the acquisition of an emic perspective (Ducheneaut and Moore 2005). Although some research projects

require the participation and insight of experienced players (e.g., Williams and Kirschner 2012), recruiting experienced players is simply the default (Ribbens and Poels 2009). Aarseth (2003) contended that “informed [games] scholarship must involve play,” and pointed out that “if we have not experienced the game personally, we are liable to commit severe misunderstandings” (3). But as “insiders” studying their own culture, Hodgkinson (2005) cautions that researchers may make certain assumptions about the existence of a “single insider *truth*” and risk taking peoples’ varied experiences and understandings for granted (141). While focus on expert players could reflect the growing prevalence of gaming in everyday life, few researchers purposefully include novice players in the research process (e.g., Commeyras 2009), and it is typically to contrast their experiences with those of experts (Rau et al. 2006) or to show how experts teach novices or novices learn from experts (Hung 2009; Steinkuehler 2004). This too often results in measuring a less experienced participant’s perspective against a preferred expert perspective, whether that derives from the researcher, other players, game designers or the game system. In order to guard against misinterpretation, games researchers can leverage the player-participant’s own interpretive ability to reflect on their experiences.

Jørgensen (2012) presents a similar argument for leveraging participant interpretations to understand game design, but one which is based on the assumption that only expert players have meaningful interpretations to offer in the role of “coresearcher.” In her study, she engaged in self-play and game analysis “in order to understand the basic functionality of the UI and gameplay of the four games” (382), then recruited participants for a focus group and individual interviews, and finally interviewed UI designers. She specifically argues for the use of expert players because they “are in possession of expertise beneficial to understanding games” (375). Yet there is no clear definition of what constituted an expert player in her study. Her participants “were invited based on their experience with games” (382) and “based on their knowledge of one or more of the games used in the study” (385). Jørgensen’s self-play and analysis presumably provided her with expertise beneficial to understanding games as well. Was she also an expert? Perhaps it is implicit that her expert participants possessed more expertise in the games than she did, but without operationalizing the concept, we can only rely on what she reported. After collecting data from participants, she interviewed UI designers to “test the dependability and credibility of the player interpretations” (382). Jørgensen undermines her participants’ expert authority by cross-checking their interpretations against those of

professional UI designers. She also tests her coresearchers' interpretations of the UI against her own (380). While we recognize the importance and rigor of Jørgensen's triangulation, this represents a hierarchy of experts in a situation where the players' insights, which are supposed to be invaluable, are measured against and potentially (in)validated by those of the research and industry professionals.

We are only able to critique Jørgensen because she provides such methodological detail and insight. She notes that "games, through their interactive nature, are experienced in different ways by different players" (379). We want to stress that expert player experience is not the only type worth studying, but that players with varying levels of expertise can lend their interpretive understanding of gameplay and games to research projects. To support this argument, one must take the experiences and interpretations of diverse players seriously. This involves reflexive work on the part of both researchers and participants. In the next section, we describe the gameplay review method and propose its utility in constructing rich interpretive data from players' experiences.

## **GAMEPLAY REVIEWS**

We report on data from one participant's experiences in the massively multiplayer online game (MMOG) *World of Warcraft* (WoW) (Blizzard 2004), part of a larger study on gameplay socialization in which eight participants each played approximately 20 hours of *Portal 2* and 20 hours of *WoW* over about 12 weeks. Participants had varied gaming histories. None of the participants had ever played either game before, though some had prior experience with similar games.

Beginning with an opening interview to explore previous gaming experiences and preconceptions of *WoW*, we regularly observed participants' gameplay and wrote field notes, and made audio-visual recordings of gameplay using Fraps. We employed a talk-aloud protocol at opportune moments, often when players appeared to be stuck on a problem, that "consist[ed] of asking people to think aloud while solving a problem and analyzing the resulting verbal protocols" (van Someren et al. 1994, xi). These methods gave us a more complete view of what players were doing and thinking on a moment-by-moment basis. We also conducted in-depth interviews after one hour, ten hours, and 20 hours of gameplay to monitor participants' developing expertise and to facilitate reflections on their gameplay experiences. The gameplay review was conducted as part of

the final in-depth interview and was customized for each participant based upon prior analysis of data, as we describe below.

The gameplay review method builds upon Bastien and Hostager's (1993) use of "participant informants" to help analyze complex processual data. Using a commercial video recording of an improvisational jazz concert, and recruiting one of the musicians to review the video alongside them, the researchers endeavored to explain "how the musicians had accomplished an exceptionally complex cooperative work task...without knowing each other, having any plans, rehearsals, or sheet music" (Bastien and Hostager 1993, 206). The researchers occasionally paused the video to ask questions as they sought to elicit descriptions of the musician's moment-by-moment thoughts and behaviors. Similarly, we leveraged players' expertise in their own understanding to review and discuss their gameplay footage. We selected three video clips of each participant's play that we found to be significant based on prior analysis of interviews and field notes, and based on observations and informal conversations. We asked participants to narrate the clips and asked questions to elicit interpretations of the videos.

Through talk-aloud sessions, interviews, informal discussions and gameplay reviews, we sought to create a space for "reflective play [that] involves the process of externalizing various aspects of intrinsic play through communication, sharing, and discussion. When reflective play occurs, players step out of the predefined game boundary and reflect upon their intrinsic play activities" (Ang et al. 2010, 364). To make sense of the rich and diverse set of data involved in constructing the gameplay review, it is necessary to identify two levels of data. Level I data are observable instances of social behaviors such as players' use of the UI and movements in the gameworld. These are collected through video recordings and field notes and provide empirical evidence of specific behaviors. Level II data are in turn collected from players' descriptions of their behaviors and events, or more specifically from the dialogue among the researcher, the player, and the video. Level II data bring together the researchers' interpretations of the empirical account with the player's subjective interpretations. We developed a four-step process to describe the generation and analysis of video data.

The purpose of the first step is for the researchers to generate Level I data—i.e., a record of what the player is doing at each moment during data collection. Depending on the researchers' goals, they may want to focus on one or more levels or amount of detail. The

researchers should also decide analytically what aspects of interaction to focus on. The second step involves the researchers' interpretations of the actions just recorded. The video is synchronized with a corresponding audio file, observation notes, and memos, and may also be interpreted alongside other gameplay videos, interviews and so on. The researchers then contextualize the descriptions of the empirical data and, using these new layers of data, interpret the how or why of certain actions in accordance with analytical decisions and research questions. The third step is the generation of Level II data in the gameplay review, which focuses on players' interpretations of their gameplay. The purpose of this step is to leverage the participants' knowledge/recollections to refine, add to, or even displace researchers' interpretations from step two. The fourth step involves the researchers analyzing the gameplay review and has two potential uses. First, it involves integrating the earlier steps to satisfy larger research goals. Here the researchers may decide to write up findings based on the earlier analyses alone, but they may also involve the player in the process to get feedback on the validity of the claims being made (see Pearce 2008). Step four would typically involve the integration of data from multiple players or even multiple studies as the researchers establish significant patterns of behavior and meaning.

### **COREY'S GAMEPLAY REVIEW**

Corey had never played an MMOG before. He self-identified as a "social gamer" because at the time of the study he was spending three to five hours per week in LAN shops playing team-based games, especially the popular *Warcraft III* modification *Defense of the Ancients (DotA)*, with his friends. Corey described his typical gameplay style as "gung-ho, in the sense that I will just charge." This orientation toward gameplay was supported by his attitude toward dying in games: "I don't care about dying...I'll respawn [come back to life] in a few seconds anyway. Dying is normal. It's just dying." Without a fear of virtual death, Corey chose to play as a warrior in *WoW*. Corey interpreted the meaning of the warrior to align with his favored play style: "It's a melee character so it gets up close and personal. It allows me to play the direct game that I'm more familiar with from *DotA*." With the combat-heavy emphasis of his previous gameplay experience in place and his character chosen to align with being gung-ho, Corey entered the *World of Warcraft*.

Using video data from his first five hours, the gameplay review method leverages Corey's early experiences with *WoW* and shows how we relied upon the interpretive force of his



subjective understandings to help us make sense of his gameplay. Since he was a gung-ho warrior, we focus particularly on how he made sense of hostile and friendly non-player characters (NPCs), and show that his sense-making involved expertise both brought from outside *WoW* and developed through interactions within *WoW*.

## Scenario 1: (Re)interpreting Hostile NPCs

### *Producing and analyzing Level I data*

*Corey approaches a Springpaw Lynx and a Springpaw Cub (see Figure 1). He attacks the Springpaw Cub, which subsequently attacks him back. Once Corey attacks the Springpaw Cub, the Springpaw Lynx also begins attacking Corey. His sword hits the Cub four times over five seconds and the Cub dies. Corey activates an ability that attracts a second Springpaw Lynx walking past Corey's right. This Lynx also begins attacking Corey. Corey begins walking backward, and he and the two Lynxes fight while moving for 17 more seconds before the Lynxes kill him.*



**Figure 1. Corey approaching a Springpaw Lynx and its cub**

To contextualize this scenario, Corey began the game next to a friendly NPC with a golden exclamation mark over her head, signifying that she had an available quest. He did not recognize the NPC as such (“Oh, it’s the other player”), nor did he recognize the significance of the exclamation mark (“*DotA* doesn’t have quests”), and did not act

toward the NPC after commenting about it. Leaving behind the NPC, Corey ran the other direction toward his first foe. His main activity for the first five hours of gameplay was fighting enemy NPCs like the lynxes. In line with his gung-ho attitude, he reasoned, “I’m just going to go around killing all these monsters and leveling up.” During his first hour, Corey fought enemies that were roughly the same level as he was. Both Corey and the lynxes were level three and the cub was level one. Because he had stayed near level-appropriate enemies, we assumed that he was aware of his and enemies’ relative level values; however, after analyzing this scenario in conjunction with other Level I data, we realized that at this point in time he was not aware that enemies had levels, let alone where to find such information. In a subsequent interview he recalled that “understanding how level works was difficult. I didn’t know what to look out for in terms of what level the monsters were because I remember at the beginning I was constantly killed.”

Since Corey was unaware of enemy levels, we reasoned that he attacked the Springpaw Cub because he thought the baby animal would be easy. As he approached the NPCs, he said “It [the lynx] has a cub! As you can see, it’s a mother or a father and his or her child. My merciful heart tells me not to, but you know... [Laughs and attacks the cub].” Corey also thought that he would be fighting the cub alone. This was the first time he attacked an enemy in a social relationship with another enemy, and he did not predict that attacking the cub would invoke wrath from the parent. As soon as he attacked the cub, the lynx became hostile. Corey stopped laughing: “Whoa. This is dangerous! What happened?” Then when he activated his ability and the second Lynx attacked, he shouted, “Two! There’s two coming at me! Shit. Aah, run, run, run! [Dies.] Attacking that cub killed me.”

### *Producing and analyzing Level II data*

During the gameplay review session, we watched the video of Corey attacking the cub and being defeated by the lynxes, and discussed his understanding of that situation. Corey said that he later returned to that spot and attempted to fight another cub, but that again the parent responded. “I went after the cub the first time and two mother/fathers came. And stupidly, I went back again, and this time the mother/fathers helped again. I didn’t know that they had such cooperation. But I figured the second one, because I hit the arcane move, which has an AoE [area of effect] impact, so it kind of instigated, provoked, the second one.” Through attacking the cub, Corey learned that some enemies cooperate. He also learned that some abilities will hit nearby enemies, which will then attack him.

Corey drew on his expertise in *DotA* to understand these relationships: “The same thing happens with neutral creeps [enemy NPCs in *DotA*]. If you were running through the forest, but somehow you got too close to them or hit them, they start attacking.”

We asked Corey how he knew the Cub would be an easy opponent. Because Corey did not yet notice enemy levels, he could not necessarily determine an enemy’s strength without fighting it. Thus, any encounter was a gamble. But, Corey had constructed a hierarchy of enemy characteristics that reduced his uncertainty and provided an interesting explanation of how he knew which enemies were difficult or easy:

The wyrm [the first enemy he encountered] is small in size. It’s located at the beginner’s hut. So like okay, free frags [kills]. And then you have the cubs that are easy. But their parents are not easy. I could see that the skeleton [in Scenario 2] would be difficult. It had that eerie feeling. It’s that instinct that you see the monster and you’re like okay. I guess from other games as well, you see the undead and it resembles a human form, which probably increases its attack. And something that resembles a dragon is also strongly associated with power. For the human, furthermore, there are only a few of them in the environment, which shows that those are not free frags that the game is giving away.

Corey pointed out a number of meanings he attributed to enemies in order to intuit their strength. First, he saw physical characteristics such as size. Small enemies were easier. Second, their locations in the world provided clues. Enemies in starting areas were easier. Third, their physical-spatial relationships with other enemies were significant. Scarce enemies were difficult. Fourth, the social relationships between enemies were significant. Killing the cubs was no problem, but that angered the parents, which were formidable. Fifth, Corey realized certain associations from his experiences with prior games and popular culture. Dragons were associated with power and would be difficult. The undead were humans with extra might. Corey enacted any combination of these meanings when faced with enemies, which influenced his combative behavior. On a subsequent occasion, the above meanings were challenged. Corey was killed by a Feral Dragonfly Hatchling that was level six to his four. Corey recounted his death: “And then I attacked the stupid dragonfly hatch-I-don’t-know-what, and I didn’t expect him to kill me that fast because it was supposed to be easier than that. But I died!” Enemies were not the only characters

whose strength Corey was concerned about; he also developed and utilized knowledge of friendly NPCs.

## Scenario 2: (Re)interpreting Friendly NPCs

### *Producing and analyzing Level I data*

*Corey, level four, approaches a level six skeleton. The skeleton becomes hostile and runs toward Corey. Corey walks backward, then turns around and runs toward a standing group of seven NPCs. As he approaches them, they draw their weapons and run past Corey. Corey stops and turns around. The NPCs are all attacking the skeleton that was following Corey. They kill it in one second and then return to their formation. Corey moves toward a second skeleton, which becomes hostile and runs toward him. Corey walks backward and simultaneously attacks the skeleton, before turning around and running toward the NPCs. When the skeleton gets near the NPCs, they begin attacking it. Corey turns around and helps them kill it. When it dies, the text “XP: 39” appears in the middle of the screen (see Figure 2).*



**Figure 2. Corey and friendly NPCs defeating a skeleton.**

This scenario depicts the first time Corey used friendly NPCs to help him defeat difficult enemies. He became bored fighting the same enemies over and over, saying things like “How many hours do I have to spend here? Never-ending wyrms,” “I got so sick of

killing wolves because they were so easy,” and after this scenario went on for ten minutes, “it is not worth the trouble to attack the green skeletons, so I want to try somewhere else.” Instead of being guided through the gameworld by quest objectives, Corey’s search for new enemies to fight led him into dangerous areas with higher level enemies that out-matched him.

When he was level four, he discovered a river that piqued his interest. He swam across it and reached an area called the Dead Scar, populated with level six and above undead enemies. Upon attacking new and powerful NPCs, such as skeleton-like Plaguebone Pillagers, he expressed surprise and said things like “Oh shit! This is strong, man. This guy is strong!” Still unaware of enemy levels, he interpreted the skeletons’ difficulty based on their appearance and according to his hierarchy, as shown in the Level II analysis in the previous scenario. After many deaths, he appeared to change his strategy to defeat the skeletons. Corey had previously learned how to attract enemy attention by moving within close proximity until the enemy ran toward him, and he utilized that skill to lure the skeletons toward a band of friendly NPC rangers who patrolled the roads. One ranger was level 30 and the others were level 12. He discovered that friendly NPCs would attack enemies in a similar proximal fashion as enemies attacked him. When the rangers killed the first skeleton, Corey said, “ah, like gatekeepers,” an utterance we did not find significant at the time, but which he elaborated on in the gameplay review.

### *Producing and analyzing Level II data*

During the gameplay review, Corey discussed how he interpreted the rangers as combat allies. From analyzing Level I data in step two, our initial interpretation was that he approached the first skeleton with the intention of luring it to the rangers. This is an instance where the participant refuted our interpretation and exhibited expertise that enhanced the utility of Level II data emerging through the gameplay review. It was not until after Corey was running for his life from the skeleton that he saw the rangers as significant and decided to try and enlist their aid. He describes:

The eureka moment was when I realized the rangers would help me. I saw this troop of three or four monsters running through the Dead Scar, and I thought, okay, even though I’ve just died a lot, let’s check out what kind of monsters these are. Experience should have taught me better, and yet again I still went too near such that one started attacking me. And I started running back, and then it

suddenly occurred to me, hey, there are the rangers there. Okay, so let's try it out. So I ran back to the rangers and true enough, the rangers couldn't just let it pass through.

First, Corey did not intentionally lure the skeleton; rather, he accidentally "went too near." Second, since he was not intentionally luring the skeleton at first, then he altered his strategy in practice. This required assigning a new meaning to the NPC rangers that he had seen in other locations throughout the game. In the context of being chased by a dangerous enemy, the previously decorative rangers became combat allies. The meaning Corey attributed to the rangers changed through Corey's activation of a set of relationships hard-coded into the game. When the skeleton got "too near" to the rangers, the rangers attacked it alongside Corey. Treating rangers as combat allies was both a usable and functional meaning, and thus the rangers *became* combat allies.

Corey specifically related this strategy and his "eureka moment" to *DotA*. Referring to the rangers, he said, "I think they are something like invulnerable probably. I mean I get it from *DotA*, you know the life source, that area, is invulnerable, and the gatekeepers and all that are invulnerable." By treating the rangers as combat allies and inserting them into his hierarchy as "invulnerable probably," then he could leverage the most powerful units around for his purposes. He repeated this process in the Dead Scar for some time to accumulate experience points, and then moved to another area to kill level nine enemies (more than twice his level) in same fashion.

Another insight Corey provided in this scenario was also expertise carried over from *DotA* and applied in practice that explained an element of his gameplay we had previously found insignificant. When Corey defeated the first skeleton, he received no experience points, but he gained 39 from the second skeleton. We did not interpret that detail in Level I data analysis, and did not recognize that Corey gained experience from the second skeleton because he inflicted damage on it, whereas he inflicted no damage on the first. But Corey knew right away that using "the tactic of getting the last hit" was a *DotA* strategy for accumulating experience points and gold, explaining that the player who made the "last hit" against an enemy received all the gold from that enemy. He observed that he did not receive experience from killing the first skeleton and, in the gameplay review, said, "I did not manage to get the last shot. So after that then I tried very slowly with the green skeleton, and got the last shot and got something off of it."

## DISCUSSION AND CONCLUSION

The examples show that Corey brought expertise from other domains, particularly the game *DotA*, which was relevant for playing and understanding *WoW*. He was able to step into a fantasy frame with which he had familiarity from *DotA* and other media, and construct a hierarchy of enemy characteristics where cubs and dragonflies were not especially powerful, while dragons and the undead were formidable opponents. In another interview, he noted “I already got other tactics like fighting from a distance, knowledge of the characters I’ve seen in *DotA*... [and] familiarization with the hotkeys was smoother because of experience with *DotA*.” He recognized why enemies attacked him when he ran too near and readily understood that friendly NPCs were strong and would help him defeat enemies. In this case, he transferred expertise by realizing his old strategy was not working (attacking the skeletons one-on-one often resulted in death), observing similarities between his current problem and his past (*DotA*) experience, and once he saw the rangers in context, he creatively adapted a solution to his skeleton problem on the spot (Gee 2003, 127). Further, he recognized that friendly NPCs not only would kill enemies for him, but that by applying the *DotA* strategy of “last hits” he could earn extra experience points to meet his goal of leveling up.

In addition to showing how expertise transfers across domains, the examples also show how Corey developed expertise through play. The process through which people develop expertise involves (re)interpreting meanings to fit new knowledge and diverse situations. For example, the relative predictive power of Corey’s hierarchy waned after he was able to identify the enemy level number, which became his dominant method to determine enemy difficulty. Instead of switching methods altogether though, he integrated identification practices. For example, in the final interview, he recalled chancing upon an enemy that he called “Pudge,” a hulking abomination that resembled an eponymous *DotA* character, known for its vicious attack. “I saw Pudge coming and I hid behind a tree so that he wouldn’t see me! Pudge was level 20 or 21 and I was also. Usually you have to be maximum two levels below to stand a chance. If a three-level difference, you won’t be able to kill that character. But I wasn’t about to attack Pudge. I knew he would kill me regardless.” Corey defined a revised set of rules for engaging enemies once he knew their level, but still took into account their characteristics. Because the enemy NPC resembled Pudge, Corey altered his rule for the situation and avoided Pudge even though they were about the same level.

Although Corey's hierarchy of determining factors of enemy strength was technically incorrect from the perspective of the game design, it made sense to him and was functional knowledge that he developed and utilized in practice. We recognize that although players are experts in their own play, interpretations are not "anything goes," but are guided by past experiences, current situations, and future plans, as well as structured by game design elements. Hung (2009) suggested that players with different levels of expertise tend to lack a shared understanding of what is going on in games. They each have their own interpretations of gameplay, some of which are more aligned with the rules, or the game's perspective. As Corey developed expertise in *WoW*, he too began to align his interpretations with those of the game. One perspective on expertise development is that players conform to an "ideal player trajectory" (Ziaeehezarjeribi 2010), but given the unique experiences all players have, we think such an anticipated outcome is to miss the significance of the range of experiences and expertise players both bring and develop over time. To focus on players who have already been socialized into a game, learned its rules and interpret it how it is "meant" to be interpreted, is to miss pivotal moments in the socialization process. Zagal and Bruckman (2008) argued that we may hold misconceptions about expert players on such an ideal trajectory, mistaking their success for insight. Two points are especially germane: "An expert player isn't necessarily more insightful, and might even be less so than a novice player...[and an expert] player's expertise is often very specific, limited to certain types of games, and often full of gaps" (no page).

Because of these pitfalls and the unreliable definitions of experts and novices in the literature, we argue for a reconceptualization of player expertise that promotes the perspective that players bring expertise from other domains and develop expertise through experience. Thus, all players have unique experiences and insight to contribute as participants in games research projects. If researchers restrict themselves to studying players who have achieved mastery or have great experience in a game, without acknowledging the perspectives of other players, then they have failed to appreciate that expertise develops without players necessarily reaching any arbitrary level of competence, and risk limiting the range of expertise and types of insights available as data. This is a significant point that designers may take into account too, particularly regarding questions of how players will use games or game features. How might players interpret a design element? What outcomes might those interpretations have for their



experience? There are valuable answers to be obtained from players with varied levels of expertise.

The gameplay review method facilitates reflexive play and creates space for insight to develop. By mixing the words “interpreting” and “reinterpreting” we have encapsulated a large part of what goes on during gameplay reviews. The process of (re)interpreting Level I and Level II data is iterative through the four analytic steps. Producing and analyzing Level I data is largely a conversation between the researcher and the data, but during Level II data analysis, the researcher leverages the interpretive force of the participant. Corey and other players in the study illuminated thoughts, social behaviors, and events we could not have adequately explained from Level I data alone. So in (re)interpreting, we refer not just to the researchers’ understandings of the data over the four analytic steps, nor only to the participants’, but to the constant (re)construction of meaning in a trialogue.

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