ANTHROPOLOGICAL PERSPECTIVES ON
KNOWLEDGE IN THE DIGITAL AGE

Being in the World (of Warcraft): Raiding, Realism, and Knowledge Production in a Massively Multiplayer Online Game

Alex Golub
University of Hawaii

Abstract

This paper discusses two main claims made about virtual worlds: first, that people become "immersed" in virtual worlds because of their sensorial realism, and second, because virtual worlds appear to be "places" they can be studied without reference to the lives that their inhabitants live in the actual world. This paper argues against both of these claims by using data from an ethnographic study of knowledge production in World of Warcraft. First, this data demonstrates that highly-committed ("immersed") players of World of Warcraft make their interfaces less sensorially realistic (rather than more so) in order to obtain useable knowledge about the game world. In this case, immersion and sensorial realism may be inversely correlated. Second, their commitment to the game leads them to engage in knowledge-making activities outside of it. Drawing loosely on phenomenology and contemporary theorizations of Oceania, I argue that what makes games truly "real" for players is the extent

to which they create collective projects of action that people care about, not their imitation of sensorial qualia. Additionally, I argue that while purely in-game research is methodologically legitimate, a full account of member's lives must study the articulation of in-game and out-of-game worlds and trace people's engagement with virtual worlds across multiple domains, some virtual and some actual. [Keywords: knowledge production, phenomenology, virtual worlds, World of Warcraft, Second Life, video games, raiding]

Personally I really enjoy pushing the pace, challenging myself: how hard, how efficient I could be, how much I could push damage, how I could survive. That sort of thing was the first reason why I chose to raid, and that continues to be a motivating factor. Eventually it really became about when you achieve common goals, as a group you really build strong camaraderie and strong connections. When you're raiding in Molten Core and you're killing bosses for the first time and doing server firsts or close to server firsts, it was [sic] an incredible high. And the amount of people yelling on vent when we killed Ragnaros was amazing. It was like nothing has even been louder. There will always be those first kills that I remember.

— HolyHealz, raid leader of Power Aeternus

We affirm the specificity of the human act, which cuts across the social milieu while still holding on to its determinations, and which transforms the world on the basis of given conditions. For us, man is characterized above all by his going beyond a situation, and by what he succeeds in making of what he has been made.

—Jean-Paul Sartre, Search for a Method

In retrospect, Julian Dibbell's 1993 Village Voice piece "A Rape in Cyberspace" was the beginning of a high-water mark in the first generation of studies of virtual worlds. The worlds Dibbell wrote about were alphanumeric contraptions in which people's sociality consisted of great walls of texts flowing across their screens. His achievement was to demonstrate that something as abstract as a database of typed descriptions of rooms could become a world which was deeply compelling for those who

inhabited it. While many remember the content of Dibbel's piece, few remember the original subtitle: "How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database Into a Society" (Dibbell 1993). Indeed, sixteen years later, visually realistic, three dimensional, persistent virtual worlds have become so successful and ubiquitous that we have trouble remembering how surprising people found it in the mid-1990s that databases could be turned into worlds at all (for a history of virtual worlds, see Bartle 2004:4-31).

In this article, I seek to turn the table on Dibbell's original piece. Rather than describe people who turn databases into worlds, I will describe a community which has taken a virtual world and turned it back into a database. My topic is the lives of medium-core raiders in *World of Warcraft*, the most popular massively multiplayer online game in the United States. Raiding (large-scale set piece battles between a team of twenty-five players and computer-controlled monsters called "bosses") requires players to overcome contingency-filled encounters through coordinated action. In order to "down" (kill) bosses effectively, raiders decompose the realistic visual and audio fields of the game into simpler models of the underlying game state, creating useful forms of knowledge (Chen 2009).

This example of knowledge creation in the service of goal attainment challenges existing understandings of the realism and placeness of virtual worlds. Many have argued that virtual worlds are compelling to their inhabitants because of the sensorial realism of these worlds. On this account, virtual worlds are immersive because they look and sound (and perhaps one day will taste, feel, and smell) like ours (for a brief review of "realism" as a term of art in art history and its relation to three dimensional virtual spaces, see Poole 2000:112-136). Other theories, implicitly undergirded by this commitment to sensorial realism, argue that virtual worlds are "places" and hence legitimate research locations for academic fieldwork which can be conducted "in its own terms" and without reference to other locations, both virtual and actual.

In contrast to approaches which speak a language of sensorial realism, I draw loosely on phenomenology to develop the concept of "project" in order to better understand raiding. Raiders become committed to the collective project of raiding, I argue, and this structure of care in turn leads to a proliferation of sociotechnical systems which break down the graphical realism of the game and create forms of knowledge. It is this commitment to the group project of raiding, rather than sensorial immersion in

virtual worlds, which is the true cause of the remarkable dedication of the raiders I will describe below.

My argument is particularly relevant as anthropology turns its attention to virtual worlds. In one recent influential book, Boellstorff has argued that we ought to imagine virtual worlds as being like Pacific islands, and thus amenable to study using traditional anthropological methods (Boellstorff 2008), creating a fieldwork imaginary which legitimates both virtual worlds and the anthropologists who study them, by hearkening back to the canonical ethnographies of Firth, Malinowski, and Mead. But such a comparison misrepresents both the ethnographic ambitions of Pacific anthropologists and the dynamic, multiply-connected nature of Pacific Islanders themselves.

In contrast, I will argue that the sociotechnical systems created and deployed by raiders ramify beyond the magic circle of World of Warcraft onto websites, Internet telephony servers, and actual-world gatherings. Bringing contemporary theorizations of Oceania into dialogue with a phenomenological account of projects of action, I argue, will lead us to a more complete understanding of virtual worlds—one that will help us recapture the insights of Dibbell's original work, which showed so clearly and powerfully that a world does not have to look like our own to matter to us, and that our care for it becomes part and parcel of our biography as a whole. In doing so, I argue that an anthropology of virtual worlds should learn from studies of Oceania and imagine its subject to be systems of meanings and commitments which spread across multiple locations, rather than discrete places which have a "culture."

Realism, Immersion, Place, Field

Dibbell's "A Rape In Cyberspace" was set in a MUD, or multiple-user dungeon: one of many text-only virtual worlds which proliferated throughout the late 1980s and early 1990s, and spawned a large and sophisticated literature (for example, Smith and Kollock 1999, Cherney and Weise 1996, Kendall 2002; for literature reviews on virtual worlds see Wellman 2004, Wilson and Peterson 2003, Boellstorff 2008:32-60). No sooner had text-only worlds blossomed before it appeared they would be replaced by immersive "virtual realities," which would produce qualia as realistic as those experienced in the actual world. Envisioned first in science fiction classics such as True Names (Vinge 1981), Neuromancer (Gibson 1984), and

Snowcrash (Stephenson 1992), the idea of sensorially realistic virtual worlds grew in popularity in the early nineties as authors such as Howard Rheingold popularized emergent technologies which seemed to promise the imminent feasibility of their construction (Rheingold 1992).

By the late nineties, however, the development of haptic interfaces and virtual reality goggles sputtered out, and it became increasingly clear that science fiction's vision of a future world littered with virtual realities would not come to pass. At the same time, the rise of the Internet and the blogs, wikis, and social network sites it supported indicated that "cyberspace is necessarily a multiple-participant environment" and "the almost mystical euphoria" that surrounded "DataGloves, head-mounted displays, special-purpose rendering engines" was "both excessive and misplaced" (Morningstar and Farmer 1991). Relationships, not realism, seemed to be central to future technologies. Rheingold himself concurred. In his 2003 review of emerging technologies, he admitted that "the past ten years of VR have not been as exciting as the original idea was or as I had thought they would be" (Rheingold 2003:89). Rather, the "world of the twenty-first century" would be one in which "computers would be built into reality rather than the other way around" (Rheingold 2003:82) via technologies such as ubiquitous and tangible computing and mobile telephony. "Science fiction has disserved us," wrote Philip Agre presciently. "Gibson famously defined cyberspace as a space apart from the corporeal world— a hallucination. But the Internet is not growing apart from the world, but to the contrary is increasingly embedded in it" (Agre 1999). Realistic, separated virtual worlds were off the menu.

Even as Rheingold was disavowing virtual reality, however, attention was refocusing on it. In 2001, Edwards Castronova's seminal paper on the economy of Everquest (Castronova 2001) demonstrated (in typical "American" fashion) that these worlds were important and worthy of study because the objects in them were worth money. The strategy of monetization as a method of moral valorization continued, and in 2006, *Businessweek*'s cover story featured Second Life's first millionaire, who made her fortune buying and selling virtual real estate (Hoff 2006). Second Life quickly became an exemplar of a "world" rather than a "game" where people could express themselves through creating in-world objects and sell them—an ethic of "creative capitalism" (Boellstorff 2007:205-211) that spoke to "American" concerns with self expression, authenticity, and wealth.

The visual and aural realism of these virtual worlds and the high commitment they inspire in many players—some of whom spend more than forty hours a week in-world—have lead some to see them as the inheritors of old dreams of virtual realities. For those influenced by laments about the erosion of US civic life (Putnam 2001) and narrowly biomedical models of human psychology (Young 1998), these virtual realities are dystopic nightmares of addiction and isolation which can never replace genuine face-to-face human consociation. For others, they are emancipatory spaces where players can free themselves from the crushing anomie of modern life. An extreme version of this position can be found in the work of Edward Castronova. Drawing on images of the Star Trek's holodeck, which "allows users to enter into a deeply accurate simulation of any environment" (Castronova 2007:3), Castronova has argued that virtual worlds represent "a new technology…that is shockingly close to the holodeck. Already today, a person with a reasonably well-equipped personal computer and an Internet connection can disappear for hours and hours into vast realms of fantasy. These computer-generated virtual worlds are undoubtedly the holodeck's predecessors." (Castronova 2007:4-5) Here, massively multiplayer on-line games are figured as the successors of the completely immersive virtual worlds imagined in the late eighties and early nineties.

These worlds are not only sensorially realistic, they are on Castronova's account deeply separate from the actual world. "Despite the fact that the virtual worlds and the real world intersect with and impact one another," he writes, "these two domains are in competition with one another" (Castronova 2007:7). This exclusivity is the result of increasing sensorial realism: immersion in one requires disattention to the other, and Castronova envisions a world in which we pay only the biologically minimal amount of time necessary to our bodies since, as he puts it, "it doesn't take much to support a human body at a level sufficient to allow the mind to live synthetically. A room, a bed, a computer, Internet, some food, and a toilet." (Castronova 2007:13). As people choose meaningful virtual worlds over the actual, un-fun one, Castronova predicts that "the exodus of…people from the real world, from our normal daily life of living rooms, cubicles, and shopping malls, will create a change in social climate that makes global warming look like a tempest in a teacup" (Castronova 2007:xiv-xv). Even more dramatically, Philip Rosedale, a key creator of Second Life, has argued that "the real world will become like a museum

very soon. So it'll be fantastically cool to go to New York, but in the same way that it's cool to go see the Mayan ruins. Because the big buildings will still be there, but they'll be covered in dust. Because no one will bother too much with them anymore." (Rosedale in Guest 2007:268-269).

Several authors have been critical of positions such as the ones held by Castronova and Rosedale. Salen and Zimmerman (2004) have argued that engagement with computer games requires an awareness, rather than forgetfulness, of the bracketed nature of game experiences. Thomas Malaby has argued that positions such as these are "exceptionalist." Tracing their genealogy back to the work of Huizinga (1971), he argues that these exceptionalist positions implicitly rely on the idea that they are surrounded by a "magic circle" or sometimes a "membrane" which delineates them from the "real world." In doing so, they "hold games at arm's length from what matters, from where 'real' things happen," in order to "cast them as potential utopias promising new transformative possibilities for society, but ultimately just as removed from everyday experience" (Malaby 2007:4).

The reification of virtual worlds as "places" similar to and exclusive of the actual world can also be detected in Tom Boellstorff's much more careful book Coming of Age in Second Life. Boellstorff, like Malaby, seeks to move beyond positions which trivialize human meaning-making in virtual spaces. He insists that all human existence is "virtual"—that is, culturally mediated—and that we ought to speak of "virtual" and "actual" worlds, rather than "virtual" and "real" ones, since both in-game and out-of-game worlds are "real," and "the sociality of virtual worlds develops on its own terms; it references the actual world but is not simply derivative of it" (Boellstorff 2008:63). These are excellent points (and I have used the virtual/actual dichotomy throughout this article). Nevertheless, in his quest to legitimize virtual worlds both morally and empirically, Boellstorff relies on an exceptionalist position which overemphasizes the autonomy of Second Life from the actual world by arguing too strongly against the claim that "online cultures are ultimately predicated upon actual-world cultures" (Boellstorff 2008:62).

In fact, Second Life is ultimately predicated on actual world cultures, even though, as Boellstorff correctly notes, this predication is a necessary but not sufficient condition for in-game sociality. The actual world is where future Second Lifers are socialized and learn language, and it is the origin of the complex technical protocols regarding voltage, material

standards for cabling, and packet encoding which undergird the virtual worlds' technical systems. The actual world really is the paramount reality for human beings, and our deaths in it have a finality and reality that the deaths of our avatars do not. At base all segments of the lifeworld are "actual" because they are all finite provinces of reality embedded in the deeper and more primary experience of everyday life that serves as paramount reality for most humans (Schutz 1973).

The question then arises of how best to understand the relationship of virtual worlds to the other lifeworld contexts in which members find themselves. Boellstorff's solution is to bracket out the actual world lives of Second Lifers from research, focusing only on their in-game activities. As a result, Boellstorff claims that he "did not try to verify any aspect of residents' actual-world lives" (Boellstorff 2008:81), and although he collected "ten thousand pages of blogs, newsletters, and other websites" (Boellstorff 2008:75), he does not discuss the way Second Lifers communicate in online forums.

While Boellstorff is right to insist that Second Life is a "legitimate site of culture" (Boellstorff 2008:61) and I believe in-game fieldwork to be a legitimate method, I would resist Boellstorff's conflation of a valid methodological decision (to conduct research entirely in-game) with a wider epistemological one (to bracket out of analysis all other lifeworld contexts in which Second Lifers participate). This approach legitimizes virtual worlds as fieldsites, but the cost is a narrow focus on only one aspect of members' lives, rather than a fuller understanding, exemplified in Dibbell's autobiographical work, of the connection of virtual spaces with other domains of experience. While it is true that Boellstorff does rely on information about people's actual-world identities (without seeking to verify their self-reports) in order to examine how these are incorporated and made manifest in-world, these brief discussions ultimately do not provide as complete a picture of members' lives as a study which examined the many contexts in which they lived.

Such an argument is not merely a revanchist revaluation of the actual against the virtual. Rather, I would argue that Boellstorff's decision to exclude from his study the websites, blogs, and other online sites where Second Lifers interact is as problematic as his decision to bracket out their actual world lives. Even when Boellstoff does briefly touch on websites important to Second Lifers (Boellstorff 2008:198-2001), he sees them as "virtual virtual worlds" (Boellstorf 2008:199). The hierarchicalization of

worlds that Boellstorff sought to avoid in the virtual/actual dichotomy is here imposed amongst virtual spaces, which results in a focus on the true "placeness" of Second Life at the expense of other locations where Second Lifers might congregate.

Boellstorff argues that visual realism is key to Second Lifers' conception of Second Life as a "place" (Boellstorff 2008:92), and the rhetorical strategy of his text also relies on sensorial realism to make it easy to imagine Second Life as a legitimate fieldsite. Indeed, Boellstorff casts himself as a modern-day Malinowski by quoting the opening of the famous third section of the first chapter of Argonauts of the Western Pacific:

> Imagine yourself suddenly set down surrounded by all your gear, alone on a tropical beach close to a native village while the launch or dinghy which has brought you sails away out of sight. You have nothing to do, but to start at once on your ethnographic work. Imagine further that you are a beginner, without previous experience, with nothing to guide you and no one to help you. This exactly describes my first initiation into fieldwork in Second Life (Boellstorff 2008:3)

Here, it is the sensorial similarity between Kiriwina and Second Life's orientation island—that they look and feel the same—that helps equate Malinowski and Boellstorff. In fact, however, Kiriwina and Second Life have little in common: you do not begin Second Life with gear, Second Life's orientation island looks nothing like Milne Bay and is (for the most part) not tropical, you are not brought to it by a dinghy which then sails away, and there are frequently volunteers waiting to help you. And, of course, you can't smell, taste, or feel anything in Second Life.

Boellstorff's entry narrative, along with the cover illustration of the book, the title, the chapter headings, and other stylistic choices validate Boellstorffff's ethnographic project by equating it with those of classic Pacific anthropologists such as Malinowski and Mead. In doing so, it draws upon a longstanding tradition in anthropology of imagining Pacific islands to be isolated, bounded receptacles of preserved cultural uniqueness (Sahlins 1985, Terrell Hunt and Gosden 1997, Thomas 1989, Diaz and Kauanui 2001). Such a claim reinscribes assumptions of boundedness which the anthropological critique of locality and colonialism have long sought to destabilize. Gupta and Ferguson have argued that "an unyielding commitment to the virtues of an unreconstructed Malinowskian

'field'" must be "aggressively and imaginatively reinterpreted to meet the needs of the present" (Gupta and Ferguson 1997:39-40) by "giving up…old ideas of territorially fixed communities and stable, localized cultures" in favor of "apprehend[ing] an interconnected world in which people, objects, and ideas are rapidly shifting and refuse to stay in place" (Gupta and Ferguson 1997:4).

In fact, Boellstorff's quotation of Malinowski selectively removes traces of interconnection (in this case Anglo-Australian colonialism) that Malinowski includes in his account. Here is the original paragraph:

> Imagine yourself suddenly set down surrounded by all your gear, alone on a tropical beach close to a native village while the launch or dinghy which has brought you sails away out of sight. *Since you have taken up your abode in the compound of some neighboring white man, trader, or missionary*, you have nothing to do, but to start at once on your ethnographic work. Imagine further that you are a beginner, without previous experience, with nothing to guide you and no one to help you. *For the white man is temporarily absent, or else unable or unwilling to waste any time on you*. This exactly describes my first initiation into fieldwork in New Guinea (Malinowski 1922:4; italics added for emphasis)

In fact, Malinowski's introduction is famously concerned with the intrusion of colonialism into Milne Bay—much of it is devoted to demonstrating that it is Malinowski, rather than beachcombers, missionaries, or government officers, who is the correct authoritative knower of "the native." By removing these traces of colonialism, Boellstroff creates a Kiriwina (and hence Second Life) that is even more of a "pure field site" removed from a "home" than Kiriwina itself (Gupta and Ferguson 1997:13). In the end, Boellstorff's ethnography is about "the culture" of "a place," and Second Life's visual realism makes assuming its placeness as a "fixed location for culture" an easy, rather than an innovative, assumption.

In sum, the realism and placeness of virtual worlds has been an important part of the rebirth of scholarly imaginations of virtual worlds. However, these ideas short-circuit attempts to theorize what makes virtual worlds compelling because they appeal to taken-for-granted notions of sensorial immersion which lead us to imagine virtual worlds as stable territories—"places" in which traditional fieldwork can unproblematically take place. In the next

section, I turn to alternative methods of analyzing commitment and place in virtual worlds by examining the way knowledge-making practices disrupt the sensorial realism of one game in particular: World of Warcraft.

World of Warcraft and Power Aeternus

My discussion of virtual worlds is drawn largely from my own research within the massively multiplayer online game (MMOG) World of Warcraft, the most popular MMOG in the US. The game has over 11 million players around the world—2.5 million of them in the US. Available in seven languages and played in North America, Europe, Australia, New Zealand, South Korea, Mainland China, Taiwan, Singapore, Hong Kong, and Macau (Blizzard Entertainment 2008), it is one of the most dominant games in the global market today, and Blizzard Entertainment, the company which owns and operates the world, is considered an industry leader.

World of Warcraft is set in a "high-fantasy world" in which players pay a monthly fee to create and play characters of different "races" (orcs, dwarves) and "classes" (mage, warrior, priest). Players kill monsters and complete quests in order to gain experience and "gear" (armor and weapons). Over time characters "level up" starting at level 1 and working until they reach "level cap" (currently level 80). Characters can also learn professions such as cooking, fishing, and blacksmithing which enable them to "craft" items. Difficult dungeons ("instances") require coordinated groups of players to kill "bosses" (powerful monsters), and there is a "guild" system which allows people to form voluntary associations to pool resources and lower transaction costs associated with finding others to play with them.

World of Warcraft develops over time through a coevolutionary process by which players explore and test the game's limits, and game designers "tweak" the game through patches to rebalance it. The game began November 23rd, 2004, and nineteen major patches have occurred since then. On two occasions, Blizzard has released expansions to the game which increased the maximum player level (the "level cap") and introduced new "content": in World of Warcraft 2.0, the other-worldly dimension of the Outlands and in World of Warcraft 3.0, the continent-sized island of Northrend was added in the northern edge of the existing world.

This article is part of my ongoing research with the guild Power Aeternus (a pseudonym), typically referred to in-game by its acronym PA. The guild

was chartered in December 2004, just weeks after World of Warcraft was released, by a group of friends who originally played Everquest (another MMOG) together, and it has continued into the present with changes of leadership and membership. My own research, like Boellstorff's, has been mostly in-game. I began playing World of Warcraft for the first time on September 4th, 2006 with the intention to eventually study the game, and I have kept a notebook to track my development as a player from that time. On April 5th, 2008, my character was finally powerful enough to join an end-game raiding guild, and I joined PA. On August 13th of that year, I began research with the guild after receiving approval from guild officers and the Human Subjects Review Board at my university, and research has been ongoing since that time (the "ethnographic present'" of this article thus spans from World of Warcraft version 2.4.3 to 3.0.9).

Research involves keeping a daily diary of my activity, recording small biographies of members, creating a simple spreadsheet to record the age, gender, and physical location of each guildie, and recording short in-game half-hour interviews with guild members. Most importantly, I have raided with PA four hours a night, four nights a week, for over four months. I've logged over 95 days of play time across two level 80 characters, including my "main," a character who heals others in battle (over 2500 bonus healing in patch 3.0.9). I am proud not just of my guild's progress in my time with them, but of my own performance with them. It is this deep familiarity with PA and my own competency as a practitioner, born of intense participation, which I feel is the ultimate source of my ability to speak about and describe my "guildies'" lives in both actual and virtual worlds.

World of Warcraft has a mechanism for creating and maintaining guilds that is architected into the game and which includes features such as a private guild chat channel, a guild bank to pool resources, and an in-game information pane which provides information about guild members. It also has a generic system of ranking attached to a permission system which controls guildies ability to see and participate in a guild chat as well as a special officer chat channel ("O-chat"), deposit and withdraw from the guild bank, and invite, remove, promote, and demote members. PA has taken this basic structure and added to it to create a full-fledged institution which has outlasted the individuals who started it to create an enduring cultural system.

The guild exhibits a dual structure reminiscent of Polynesian kingship in which the junior line is responsible for war and the senior line is immoveable and responsible for creating and maintaining order (Sahlins 2004:63-

69, for instance). The ultimate moral and temporal authority of the guild is the guild leader, a twenty-six year old college student pursuing a BA in archaeology at a large state university in the Southwestern US who has control over the guild bank and the permissions system. The actual operations of raiding, on the other hand, is carried out by "raid leaders"—a music store owner on the east coast and a self-employed database designer on the south side of Chicago—who actively plan and coordinate raids, taking turns leading the actual action of raiding for two days each week. In these raids, the guild leader participates as a normal member. As a result, the guild's source of moral authority is removed from the activity of raiding and can mediate in disputes which arise as a result of in-game conflict.

Below the guild leader there are a half-dozen "officers" who form a steering committee that votes on the admission of new members and the demotion and promotion of existing members. The "officers" also manage the bank and act as the moral compass and bureaucrats of the guild. In contrast, "junior raid leader" is a functional role directly related to raiding. While junior raid leaders do not have a prominent say in the long-term direction of the guild, they do have a role to play coordinating the act of raiding—for instance, raid leaders often delegate to junior raid leaders the task of being "master looters" (responsible for allocating treasure to members) or "marking targets" (using colored symbols to indicate the order in which monsters should be killed). Above all, junior raid leaders are allowed to give orders to other players—a privilege that must be carefully used because players are often sensitive to criticisms of their performance.

Membership into the guild is by application—potential members fill out a form online at the guild website and are vetted by the officers. The guild is extremely selective—one officer, a librarian in actual life who is responsible for managing and archiving the guild website, told me that in her experience roughly 80% of all applicants are rejected. Those few that are accepted are given recruit status and taken out on raids to see how they perform. If they do well, they are promoted to "member" status. Over time, if they attend raids consistently and acquire the best gear possible, they may in time be promoted to top-ranked, full-time raiders, called "Powers" (taken from the guild name) and receive benefits for their status: a portion of the repair bills for their weapons and armor are paid by the guild, and they have preferential access to goods in the guild bank, and spots in raid. Below this are "Aeternals"—people who raid regularly and meet gear requirements less strict than those required for "Power"

status. PA just barely has sufficient leadership and raiders to field a twenty-five man raid group. As a result, it relies on its "bench" of regular members to fill out the ranks of a raid if not enough Powers and Aeternals are available on any given night.

PA also has a guild rank for "non-raiders"—people who never raid and are included in the guild for a variety of reasons: they are old-timers who were once guild officers but no longer log on regularly, they are relatives or friends of raiders, or people on hiatus from the game. The existence of this rank reflects PA's commitment to be inclusive and to incorporate actual-world relationships in-game. Finally, there is the lowest, punitive rank of "Mr. Wiggles fan" which is unable to speak in guild chat. This rank is named after the virtual pet pig that serves as a semi-mascot for the guild, and players who behave inappropriately are demoted to it temporarily as punishment for their behavior.

Today, the PA is made up of roughly 140 people. While there are exceptions—a Native American woman and a man who describes himself as "half-Korean"—most members of PA are white men. PA has a policy of only admitting adults, and the average member of PA is roughly 28 years old, with ages ranging from 18 to 59. As you might expect from an institution as quixotic as a raiding guild, PA is home to an unusual group of people: one is a male ballet dancer who spent his summer away from the game dancing with the Kirov. Another is a conservatory-trained classical musician too well known for me to discuss his identity here. A third is a professional pyrotechnician (i.e. fireworks) with an MA in chemical engineering who supplements his income by judiciously selling selections of his extensive collection of precolumbian glassware. Another member is a stay-at-home mother with a three-year old daughter and an eighty-three pound dog. Another works in a factory in Wisconsin moving ninety pound blocks of cheese for a living. There is a retired marine, people who have deployed to Iraq, and at least one cop. What unites all of these people is the activity of "endgame" raiding.

Raiding as a Project

All members of PA have characters who are "fully leveled." Players this powerful can form groups of 25 people (or, in some circumstances, 40 and 10) to enter "instances"—castles and temples whose content is reset once a week. Within these instances are powerful monsters known as "bosses."

When killed, the bodies of these bosses can be looted for "epic" gear, acquisition of which is the only way to make top-level characters more powerful than they already are (for a more detailed description of a raiding guild, see the excellent Chen 2009).

These instances generally follow a certain "progression": you must kill all of the bosses in one instance before you can kill the bosses in another instance. A guild's success and seriousness is measured by how far it has "progressed" in "end-game content." It is this goal of progression that is shared by guild members. For instance, in WoW 2.0 players must slay Gruul and Magtheridon before moving on to Serpentshrine Cavern, where they must slay five bosses before finally taking down Lady Vashj. After this, players may advance to Tempest Keep, kill the three bosses there, and then take down Kael'thas Sunstrider, the final boss. Once Vashj and Kael are "down," players are "attuned" to The Battle of Mount Hyjal, where there are four bosses to kill before taking down Archimonde. Only then may players proceed to the Black Temple, where there are eight bosses to kill before facing Illidan Stormrage, the final boss inWoW 2.0.

Throughout this paper, I refer to PA as a "medium-core" guild rather than as "power gamers" or "hard-core" players because PA is a successful endgame raiding guild, but has consciously focused on creating a community over pursuing progression at the cost of other things. On the one hand, the bosses that PA kills have not been seen by the vast majority of the people who play World of Warcraft. Currently, according to WoWJutsu, a website which tracks guild progress, PA is in roughly the 90th percentile for all raiding guilds (and many guilds and players do not even qualify to be included in this ranking) and has cleared all content (including all tier six content) except three-drake Sartharian (and that may be done by the time this is published). Nevertheless, even medium-core raiding is a serious time commitment: Raiders who seek "Power" ranking must attend 66% of raids, and the guild raids four days a week for four and a half hours each raid—as a result, the average serious member of PA plays World of Warcraft for 16 hours a week. In contrast, "hard-core" guilds raid five nights a week, have strict attendance requirements for all members, and de-emphasize socialization. PA is thus "medium-core" because of its commitment to raiding, but not "hard-core" in that socialization is still very important to members.

Raid encounters are high-pressure, emotionally intense, ritualistic activities in which players learn to repeatedly perform the same actions

in a more or less identical way in a coordinated manner in order to kill a boss. Malaby describes this sort of process as "collaborative action in urgent conditions," and suggests that it "is highly generative of trust and belonging." (Malaby 2007b:63). Phenomenologically, one experiences flow similar to that experienced by professional musicians or athletes in the course of skilled performance (Csikszentmihalyi 1991). Technically challenging, phenomenologically intense, emotionally compelling, and deeply connected with self-esteem and group membership, raiding involves serious investments of time and effort, and as a result, successful downing of major bosses is a collective accomplishment that creates social solidarity and can even serve as an important moment in the biographies of individual players.

Boss fights average between five to fifteen minutes in length, and must be fought over and over and over again before players "learn the fight." For instance, the guild that I study first "pulled" (activated) Illidan Stormrage, the final boss in World of Warcraft 2.0, on October 26th, 2008 and "wiped" (were killed to a man) 14 times over the next two hours as we slowly learned what was required of the fight (proper positioning and healing througout in the second phase of the fight was key for us in this instance). At the end of the week, the instance reset, and we returned to Black Temple, where Illidan lives, and cleared through the seven other bosses in the instance before returning to Illidan on November 2nd, 2008. Four hours later, after being killed 14 more times, we finally achieved our first Illidan kill on our fifteenth attempt of that night, and could now claim that our guild had "cleared BT" (i.e. successfully killed every boss in Black Temple).

A good example of the complexity of raiding can be seen in the strategy required to successfully complete "Magtheridon's Lair," a 25-man raid which I learned over the spring and summer of 2007. Magtheridon is a large demon imprisoned by 5 channelers (magicians) who hold him in place via beams of energy projected out from 5 glowing cubes. The raid begins by attacking these channelers, who are slain so that Magtheridon can be freed and killed. From the moment that players attack the channelers, they have two minutes before Magtheridon is released. Because the party will wipe if they attempt to fight both Magtheridon, the channelers, and the flaming abyssals (demons) which the channelers summon, all of the channelers must be killed in the two minutes between the start of the encounter and Magtheridon's release.

One minute after Magtheridon is released, he will release a dangerous "blast nova" that will wipe the raid. In order to prevent the blast, players must simultaneously click on the cubes formerly used by the channelers in order to delay the blast for one minute. However, any individual player can only click on a cube once every two minutes. As a result, two teams of five players each must take turns clicking on the cubes while the remaining fifteen players focus on killing Magtheridon. Finally, when Magtheridon is at 30% of his full health, he will become enraged and begin collapsing the walls of the room. Players must then also move around the space of the encounter to avoid pieces of falling rock which will kill them while they continue to perform their tasks of damaging the boss and clicking on cubes.

For raiding guilds, then, battles such as Magtheridon's and the others which feature in end-game "progression" become a "project" in the sense used by phenomenologists (Sartre 1962:99-165, Schutz 1989:21-45): a projection of a future state of affairs, the bringing about of which becomes an orientation for action by a person or group of people. Raiding is thus a structure of care to which raiders are emotionally invested. The project is engendered by a relationship between raiders and the technical system within which they act, a relationship that is dialectical because of the coevolutionary dynamic of World of Warcraft. Raiders create technical systems to be successful in raid, Blizzard updates the game, and raiders then deploy more technology to keep pace with those changes.

The result is that the project engendered by the virtual world (World of Warcraft) proliferates out into a variety of technical systems, including other virtual worlds, which are created as a result of the shared project of raiding: PA has its own website where players can communicate in forums and take polls. Those seeking membership in PA must fill out a written form and submit it to the website, where it is evaluated by officers. The website is also home to the guild's currency system which measures individual's contribution to the guild (an EP/GP system), producing a numerical score that is used to prioritize right to the loot that drops from bosses (for similar systems see Malone 2009, Castronova and Fairfield 2006, Silverman and Simon 2009). There are also numerous third-party websites which provide data on objects in-world such as WoWHead and WoWWiki.

In what follows, I will limit my discussion to one particular kind of technology that ramifies out of raiding—specialized technical measures that are undertaken to develop knowledge about the game in order to

more efficiently defeat bosses. As we shall see, these technical systems further the project commitment to the game (which some might call "immersion")—successful raiding—by decomposing the visually and aurally realistic world of Warcraft into its component parts.

Decomposing the World: Sensorial Realism and Knowledge Production in WoW

The World of Warcraft is a beautiful and complex three dimensional environment, featuring grim lava-filled hell dimensions, verdant jungles, icy tundra, and a variety of other physical environments. The sun rises and sets; it rains and snows. Dust storms kick up. From the clever visual renvois to Gnomeregan and the Ironforge tram built into the architecture of Mimiron's wing of Ulduar, to the smouldering aftermath of the battle of the Wrathgate, the beautiful and unique world that Blizzard has carefully hand-crafted is an important part in creating a realistic and compelling world for its inhabitants. Raiders and more casual players of World of Warcraft experience these environs as rich and immersive.

At the same time, however, the visual field of World of Warcraft is suboptimally configured for raiding. Many spells and attacks cast in World of Warcraft produce visual effects that are both dazzling and confusing, particularly when raid groups of twenty five players are in an enclosed space. Locating guildies to heal or monsters to target can be difficult amidst constant explosions of light and the scrum of warriors and rogues which often form around monsters. Indeed, many players' computers lack the processing power to display these graphics and cannot update the screen quickly enough to display them. As a result, raiders often turn down the graphical detail of the game in order to make it more playable but less immersive.

In sum, raiding encounters require a level of situational awareness and an awareness of game variables that Warcraft's realistic interface simply does not provide. Fortunately, Blizzard has published an API (application program interface) to allow people to write programs which modify the appearance of World of Warcraft's interface. These "add-ons" or "mods" are key to enabling success because they transform a graphically realistic world of spurting blood and shimmering magic runes and into a series of numbers and bars which record how many points of damage where done to a monster or guildie. Heavily modded interfaces take a beautiful three dimensional world and turn it into a more easily-parsed

visual display which describes information in the game database about the state of the game world. In doing so, add-ons "reduce effort, make visible invisible parts of the game, aid players in coordinating with one another, and capture important aspects of a player's history of play" (Nardi and Kallinikos 2007:9). As I show in this section, raiders systematically modify their computers in order to maximize their knowledge of the game state, replacing realistic three-dimensional imagery with user-friendly measurements of underlying variables in the game. I call this process "decomposing the world."

Threatmeters

One example of decomposing the world is the widespread use of threat-meters in World of Warcraft. There are essentially four functional roles that raiders can take in raid: DPS (damage per second), or damaging monsters; tanking, or keeping a boss's attention and absorbing attacks while more vulnerable players DPS it; and healing, where raiders heal other raiders who suffer damage. The simplest form of boss encounter is the "tank and spank" in which a tank character in heavy armor goes "sword to board" (uses a sword and shield) and tanks a boss, allowing it to pummel him while healers "keep the tank up" and DPSers "burn down" or "spank" the boss.

The game mechanic underlying this division of labor is "threat." Every time players perform actions in a monster's presence, they increase the amount of "threat" the monster feels they pose. A monster will "aggro" (or attack) the character in a party with the most threat. Managing threat is key so that the boss stays "stuck" to a tank rather than aggroing on "clothies" (characters such as mages and priests who wear only cloth armor and can be "one-shotted," or instantly killed, by the boss). A major part of the game, then, involves players using a variety of spells and abilities to lower or raise their threats—warriors taunt monsters in order to tank them, while mages become invisible to lose threat when their damaging spells attract too much attention. Often these tactics can be quite complicated. In the Magtheridon fight, for instance, the raid's main tank must "tank" Magtheridon against a wall with his back turned to the raid so his ability to "cleave" people with his axe does not one-shot clothies, while a second "off-tank" must deal with abyssals; healers must not only keep the tank up but also heal raid members who take damage from the channelers' shadow volleys or, even better yet, the casting of the volleys

must be interrupted, and so forth. Throughout the encounter, damage dealers must walk the fine line of maximizing their firepower without exceeding the tank's threat, "pulling aggro," and have the boss "come loose" off the tank.

The underlying game mechanics of World of Warcraft record the threat of each character quite precisely, since the entire game world is, ultimately, a series of mathematical formulas represented in the WoW code base. The three dimensional world that players see, however, provides few visual cues to allow players to gauge their threat and the threat of other people in a raid. Most obviously, when bosses begin mowing down priests and mages, it is clear that the tank has lost aggro. There are subtler cues as well—when warriors "taunt" a boss to increase their threat, a small series of triangles will flash about the monster's head. But how can mages judge precisely their own threat in order to maximize their DPS? And how can a shadow priest tell that a warrior has taunted Magtheridon, if the monster is half way across the room and its head is obscured by the looming image of a flaming abyssal headed towards her?

In order to increase their effectiveness in raid, PA has made it mandatory that all raiders use an add-on called "Omen" which is a sort of threat meter. Users install this plug-in on their computer, and it reads game state information from the WoW client and then provides visual feedback about the amount of threat that a player is generating. If multiple players have Omen installed, the add-ons will record the threat level of each individual member. The result is a window which floats in the World of Warcraft interface and presents a series of bars whose size measures the amount of threat of each player in the raid. In addition, superimposed on the bar is a number indicating the threat per second (TPS) of each player, their total threat on a target, and their percentage of threat relative to other members of the raid. Players in the Magtheridon fight monitor this window closely—so closely, in fact, that they often forget their character's "positioning" and sometimes are killed in cave-ins which would be easy to avoid if players focused on the image of their character in three dimensional space, rather than the abstract series of numbers and bars represented by their add-ons.

This brief example of Omen demonstrates the way that raiding as an activity prompts raiders to create new forms of displaying information—new knowledge—about the game world. This information is useful, but not graphically realistic. Rather, it makes the game world "legibile" in James C. Scott's sense (Scott 1995). A previously invisible but still present

dynamic—in this case, the mathematical formulation of threat—is made visible in order to be made useful. As such, it represents a form of knowledge production in the service of purposive-rational action: learning about the world in order to more efficiently manage one's performance and succeed in downing the boss.

Vent

Just as World of Warcraft features a visually realistic interface, its aural environment is also realistic: when players cast spells or strike monsters, the explosion or thud can be heard in surround sound. Ambient noise from the environment such as the crackling of fires, and the clop-clop of horses' hooves are all included in the game. Some aspects of World of Warcraft's aural environment are not, technically speaking, realistic— unlike the actual world, World of Warcraft has an in-game soundtrack which varies according to locale and activity. At times, it is difficult to tell whether this music is diegetic or not. Is the crystalline, minimalist music that plays in the spaceship-city of the Exodar an homage to avant-garde composer Daniel Lentz's use of half-filled wineglasses to create complexly textured ambient soundscapes? Or is that just what it sounds like inside the Exodar? Regardless, both diegetic and non-diegetic audio make gameplay in World of Warcraft immersive and compelling.

Just as graphical cues obliquely signal game mechanics, so too do audio cues play their part in providing players a rough sense of the underlying game dynamics (Jorgensen 2008). And, just as the graphical realism becomes unparseable during raid encounters, the sonic environment of raids—the explosions, grunts, and screams—can be deafening and confusing. Many members of PA respond to this simply by turning the in-game sound off entirely. Others will turn off some aspects of in-game sound, but not others. Overall, most raiders actively attempt to reduce the built-in aural channels of the game world, so that it does not serve as a distraction in raid.

This does not mean that sound is not used by raiders. There are several add-ons which provide raiders with knowledge of their environment so that they can raid better. Several add-ons, for instance, play sounds to alert players that events are occurring that will require them to change their positioning. For instance, Akil'zon the Eagle Lord will occasionally cast an electrical storm which will "wipe" the raid unless all characters

run and stand directly under him, and some add-ons play a waterfall or rushing sound to let players know that he has begun casting the spell and that they must move—a fact that they may miss in the heat of battle. When battling the dragon Sartharion on a small island surrounded by lava, waves of lava will periodically rise up and wash over the raid, which must move to one of two locations where there a gap they can stand in to avoid being hit. Some mods play a sound indicating that the lava waves are about to come at the players. In both cases, players repurpose the aural environment of World of Warcraft in order to provide them knowledge of their environments that they can use to be successful in raiding.

Even more important to raid success than these add-ons however, is PA's use of a Ventrillo (or "Vent") server. The guild uses a program called Ventrillo to connect to a central server which is paid for by one of the raid leaders. Once logged on to the Vent server, players use headsets with microphones to communicate with each other voice-to-voice. Use of Vent is mandatory for all members of a raid in PA—even those who prefer not to speak or do not own a microphone are required to listen in. Vent is central because it facilitates communication and sharing of knowledge amongst raiders: during boss fights when players are too busy pushing buttons to type in the in-game chat channel, they can communicate viva voice (Kavetsky 2008, Wadley 2007).

Such communication is necessary because of the complexity of boss fights. Typically, the raid leaders issue orders, exhortations, congratulations, and threats in vent. Depending on the fight, however, more specialized forms of communication might occur. Instructor Razuvious, for instance, is a powerful Death Knight who would wipe the floor with any normal tank. In order to defeat him, priests in the raid group must use their "mind control" spell to possess Razuvious's Death Knight Understudies and have them tank him, a task made difficult by the likelihood of the mind control spell breaking. For this fight, PA uses two priests who take turns mind-controlling Death Knight Understudies to maintain control over at least one at all times. Doing so requires constant communication over Vent by our two priests, who count down the seconds prior to and before they cast or drop their mind-control spell. During this fight, the rest of the guild keeps "chatter off of vent" and is totally silent as two women, one in Virginia and one in Utah, take turns intoning lines like "Releasing [the target marked with a] star in 3…2…1…" and "'MC'ing [mind-controlling] triangle. I have triangle for at least the next 10 seconds…5…3…"

Unlike many of the participants in the MUDs described by Julian Dibbell and others, most people in PA hate to type and are not good at it. As a result, Vent is important not only for giving instructions during raid, but also as a place where the guild socializes, jokes, and chats. The PA vent server is thus a second virtual location, often used in conjunction with but separate from the World of Warcraft game client. Like the forums on the guild website, it is another context in which the life of the guild, anchored in in-game raiding, occurs outside of the game.

Conclusion

The initial wave of intellectuals such as Julian Dibbell who theorized computer-mediated communication did so in a world without sensorially realistic virtual worlds. These thinkers realized very quickly the imaginative power of non-representational media and pondered the fate of human subjectivities lodged in spaces made of text. The rise of sensorially realistic virtual worlds, on the other hand, has made it easier for us to imagine virtual spaces as similar to actual ones. I have suggested that we be mindful of the lessons of the earlier literature on text-based virtual world as we try to understand the various computational "realisms" that make virtual worlds compelling to their inhabitants.

In this article, I have attempted to demonstrate that medium-core raiders like the members of Power Aeternus are committed to World of Warcraft because of a structure of care that emerges from the game. The key feature of the actual world which virtual worlds must share with it in order to become compelling is not its visual and sonic "realism," but the fact that it is a forum in which we give our lives meaning by entangling them in projects we undertake with others. Worlds become real when we care about them, not when they look similar to our own. As William James put it long ago, "reality means simply relation to our emotional and active life…whatever excites and stimulates our interest is real" (James 1950:295).

Two points fall out of this. First, theorists of virtual worlds (including their creators) often, I believe, rely implicitly on Western notions of human nature which posit expressive individualism to be central to our constitution as subjects (Taylor 1989). For this reason, they assume that human beings naturally find some kinds of projects more fulfilling than others. For instance, the creationist capitalists that Boellstorff describes

(2008:205-210) see Second Life as a "world" rather than a "game" because human beings feel especially fulfilled by the act of making whatever sort of three dimensional objects they want, while downing Magtheridon is "merely" a victory condition in a "game." On this account, Second Life is more "real" than World of Warcraft because it does not give you anything to care about. Rather, participants can express themselves by choosing which projects to create and pursue—choosing and expressing seen here as fulfilling a supposedly species-deep need for self-actualization (for more on the cultural background of the designers of Second Life, see Malaby 2009). Such a move, as Heidegger might say, passes off an *existentiell* understanding for a truly *existential* one—it mistakes one kind of project for the general dynamic of projectness itself. In doing so, it conflates the general fact that human beings undertake projects, with the particular fact that one such project, creating virtual objects, is the only kind of project which human beings, by nature of their constitution, would choose.

What sort of analytic purchase might we get on virtual worlds if we imagined object creation in Second Life to be an etiolated version of raiding in World of Warcraft rather than the other way around? Could it be that people become most committed and involved in virtual worlds like Second Life the more and more their activities in Second Life come to resemble raiding—that is, when they become attached to a project and a group within the game world? It may be that the group-based, goal-oriented work on culturally defined projects exemplified by raiding is the most "real" form of activity of all.

Second, a methodological point: Compelling projects may have their origin in and be anchored to a particular virtual world, but this does not mean that the sociality, action, and cultural formations created by that project need to be confined to that world. Indeed, the more committed a group is to a project, the more likely that project is to spread to other parts of these people's lifeworlds. For this reason, an account which takes seriously both virtual worlds and the anthropological critique of locality should focus on three things. First, as Dibbell (and Schutz) would insist, we must follow participants in virtual worlds across all segments of their lifeworlds that are central to their biographies, not merely those that are virtual (for examples, see Burrell 2009, Lindtner 2008, and Pearce 2009). Second, we must understand the intertwined systems of action and meaning which become projects for people (Kaptelinin and Nardi 2006). Finally, we must understand the way those projects engender publics, both net-

worked (Boyd 2008:15-42, Varnellis 2008) or otherwise (Warner 2002). People, projects, and publics ramifying across a variety of sociotechnical lifeworlds understood not geographically but culturally—such an undertaking would be a properly rhizomatic anthropology of virtual worlds. Although I have not had space to do more than to gesture to a full analysis of raiding, I hope my references to guild websites, vent servers, and the actual lives of raiders help provide a promissory note of what a larger study could accomplish, and demonstrate that taking virtual cultures seriously need not require fixing them in a particular locality.

Finally, this multi-sited approach does more justice to Pacific anthropology and Pacific Islanders than one which imagines virtual worlds as islands. The Kula is nothing if not a project, and Malinowski was, as Boellstorff recognizes, one of the first anthropologists to conduct multi-sited fieldwork on regional flows of objects and identities which form "a distributed network rather than a bounded place" (Boellstorff 2008:241, for more see Marcus 1998:90, on Malinowski's fieldwork see Young 2004). Pacific Islanders have also described themselves as posessors of an expansive form of sociality. Epeli Hau'ofa famously shifted analysis of the Pacific from "islands in a far sea" to "sea of islands." "The first," he wrote, "emphasized dry surfaces in a vast ocean far from centers of power…tiny, isolated dots in a vast ocean" (Hau'ofa 1993:7) while the second, on the other hand "was a large world in which peoples and cultures mingled unhindered by boundaries of the kind erected by imperial powers. From one island to another they sailed…the sea was open to anyone who could navigate his way through" (Hau'ofa 1993:8-9). The ocean, on Hau'ofa's account, does not bound islands, it connects them. More recently, Pacific Island scholars have argued for a form of Native Pacific Cultural Studies which is "on the edge" not just in terms of its interdisciplinarity but because it is part of the larger process in which Pacific Islanders push the edges of their region through expansive forms of sociality (Diaz and Kauanui 2001). Here it is mobility and diaspora that are key words, whether they take the form of cultural revival in the form of long-distance voyaging (Finney 2004), multi-sited research projects undertaken by indigenous scholars (Teaiwa 2004), or developing indigenous epistemologies which challenge Western notions of diaspora and space themselves (Ka'ili 2005, Lilomaiva-Doktor 2009).

These are the images of the Pacific, rather than the lone anthropologist arriving on the beach, that should inform our approach to virtual

worlds. By expanding my scope to include the technical and cultural systems which ramify out of in-game activities, I hope to have at least suggested an analysis of raider culture as one of proliferating, overlapping domains of experience: although boss fights can only occur in World of Warcraft, this is a world that is curiously laminated. Add-ons intrude on the graphical realism of the game, while voice over IP telephony brings players together by reworking World of Warcraft's aural realism. The more committed raiders become, the more the project of raiding spills out of a bounded sensorially realistic virtual world into websites, chat channels, and workplace discussions. Creating, spreading, and sharing knowledge becomes part of a project which is both "real," "virtual," and "actual." Like Hau'ofa's sea of islands, the spaces of raiding are connected, expansive, and compelling. Understanding virtual worlds, like understanding the Pacific, requires us to attend to these connections.

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