

3 WTF?!

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Key Words: Endgame, Extensible Markup Language (XML), ~~Game Boss~~, Heterogeneous, ~~Location Aware~~, Machinima, Massively Multiplayer Online Role Playing Games (MMORPG), Non-Player Character (NPC), Raiding Guild, Software Development Kit (SDK), ~~Terms Of Service (TOS)~~

Project Summary

This chapter discusses a project called “WTF?!” a parody of the hugely popular Massively Multiplayer Online Role Playing Game *World of Warcraft* (WoW). Think *WoW* meets social theory meets game studies meets, well ... tabloid journalism, since plenty of dirt gets dug up along the way.

Project Developer Background

I tend to be obsessive compulsive. I’m also a bit of a perfectionist. I don’t wash my hands a lot, but a pixel off bothers me. This may be fine when it comes to digital design, but it’s not so great with other stuff. Over the years I’ve become skilled at avoidance and/or sublimation, where one learns to displace a negative behavior with one seen to serve a more “socially productive” purpose. In high school the compulsions were punk rock, skateboarding, chewing tobacco, smoking clove cigarettes, drinking, doing recreational drugs, cutting classes, masturbation, and most relevant to the mission here, playing video games. They were actually quite complementary activities ... well ... except for the masturbation part, since the gaming happened largely in public places like bowling alleys, convenience stores, arcades, and dance clubs. I also did a lot reading and drawing, just not as compulsively. My virtual communities back then were largely imagined, and given form from things like the images found in *Skateboarder* magazine, and the words found in the fantasy/sci-fi literature I consumed. As imagined spaces, they were actually quite flexible and easily modded, they just weren’t particularly conducive to synchronous interaction with others over significant amounts of time and space.

Once I took my education seriously and was admitted into university (after paying the dues for my earlier transgressions with a two-plus year stint in four different community colleges spread throughout Southern California), I was able to displace those earlier compulsions with things like exercise, masturbation, and video games. Actually that’s not quite true. I didn’t play that many video games in university. OK ... so I’d occasionally lose a week here or a month there, but nothing too dramatic or destabilizing. I didn’t really start playing seriously again until soon after I took my first faculty position at University of California, Irvine in 1998. It was at that point that I worked very hard to make play my job.

In 1999 I proposed a Minor in Game Studies, and founded the Game Culture and Technology Laboratory. The lab has served as a vehicle to generate funding to support the hiring of talented students to work on projects. In fact, one of the best of those former students, Alex Szeto, has become a key collaborator. Alex and I first started working together when he volunteered to help with a project called “unexceptional.net” which was in development from 2003 to 2006. A couple of years and several projects later, I got the idea for what would become *WTF?!!*

Introduction to *WTF?!!*

In 2004 one of my art students, Dan Repasky, was in the Game Lab playing a beta release of a new Massively Multiuser Online Role Playing Game (MMORPG) called *World of Warcraft*. Every now and then I'd watch over his shoulder, but it wasn't until 2006 that I began playing *WoW*. For that I blame my colleague Antoinette LaFarge,² who seduced me into playing with her husband, her brothers, and her nephews and nieces. They played together as a way to keep in touch and have fun, from various locations around the country. I became a part of their “virtual family,” so to speak.

By 2007 there were some eight million *WoW* subscribers worldwide, and, by 2008, that number had jumped to some ten million, with more than two million in Europe, 2.5 million in North America, and about 5.5 million in Asia.³ As of this writing, *WoW* has more than 12 million subscribers.⁴ We don't know much beyond sheer numbers. The registration data collected by Blizzard is, of course, proprietary. Thus reliable data about player's “real-world” identity is difficult to find. The Daedalus Project run by Nick Yee, of Xerox PARC, is starting important work that will attempt to link in-game demographics to real-life player demographics.⁵ But projects such as these will always suffer skewed samples, since they require voluntary participation on the part of the player community. Nevertheless, we'll hopefully learn more about the relationship between in-game and out-of-game identity before long.

1. Getting Hardcore

In January 2007, Blizzard released the first major expansion to *WoW* called *The Burning Crusade*. With the initial release of the game in 2004, there were two continents (Eastern Kingdoms and Kalimdor) which together made up the world of “Azeroth,” two warring factions (Alliance and Horde), eight races (Dwarves, Gnomes, Humans, and Night Elves on the Alliance side; Orcs, Tauren, Trolls, and Undead on the Horde side), and a level cap of 60. Each continent is composed of “zones,” which are bounded regions most easily thought of as analogous to countries. With *The Burning Crusade*, significant new content was introduced, including an entirely new world known as “Outland” (which at times also gets referred to as another continent), two additional races (the Draenei on the Alliance side and the Blood Elves on the Horde side), and a level cap of 70. In November 2008, the second major expansion called *Wrath of the Lich King* was released. Again, a new continent called “Northrend” was introduced, and the level cap jumped to 80. The third major expansion, *Cataclysm*, is poised for release. In *Cataclysm*, the old-world areas that were part of the *Classic* release, Eastern Kingdoms and Kalimdor, will be completely rebuilt, and the level cap will increase to 85. Two additional races will become playable—Goblins and Worgen.

From a design standpoint, *WoW* is multiple games in one. At the most basic level, until one reaches the level cap, *WoW* is essentially a quest-based leveling game. Players

create accounts where they choose a Race, Class, and Sex, set some appearance attributes, select a name, and then begin play. Players can have up to ten characters per account. The designers created consistency in the experience no matter which faction, race, class, or sex was chosen. Each race has a starting area within a predetermined zone, where they “spawn” upon entering the world for the first time. Within the starting zone are NPC (Non-Player Character) quest-givers that gradually introduce the player to the basic game mechanics, as well as the various quest types (solo, group, dungeon, raid, Player versus Player [PvP], repeatable, seasonal) and sub-types (collect, kill, talk, escort, etc.). Entry-level quests are designed to encourage players to learn how to control their character, interact with NPCs, and navigate the starting zone. After the first few levels, the player is given a quest to travel to a new zone, and thus the world begins to expand. Certain zones have major cities which function as hubs of community activity, with shops, auction houses, class and profession trainers, travel ports, dungeon instances, and so on.

Once the level cap is reached, the game fundamentally changes. The experience bar, which was used to track level progress, disappears. The zones have largely been explored, and a majority of the associated leveling quests completed. Some players are content to continue exploring the world, hang out in the major cities making money by trading goods and services, or do the occasional dungeon run, where one groups up with four other players to battle unique bosses that drop desired gear or loot. Gear acquisition is a main motivator in the game. Gear grants statistical bonuses to players, which aides performance. Gear quality scales in relation to encounter difficulty, from “uncommon” rewards to “epic” items.

Raids are large-scale groupings of players, composed of specific classes and abilities, who collaborate to explore dungeons containing difficult “game bosses.” In *Classic WoW* the number of players required for a raid was 40. With *The Burning Crusade* that number was reduced to 25, and in certain cases 10. Over the years the developers have increasingly tried to figure out ways to get greater numbers of players to experience the endgame content. This desire has led to a lot of tension within the player community, as many of the competitive players feel that the game has been dumbed-down to pander to the (presumably less-skilled) masses. From the developer standpoint, facilitating more people to see content that takes significant resources to create, and provides some of the most sophisticated game play, is financially sound. It allows casual players to experience all the game has to offer.

To raid, whether with 40, 25, or even 10 players, the most practical organizational framework is that of the Raiding Guild. Raiding Guilds are associations of players that agree to meet in-game at predetermined times in order to figure out how to successfully complete the most difficult dungeon encounters the game has to offer. As one might imagine, these guilds can become extremely competitive. In fact, guilds and their members are rapidly professionalizing, with players receiving sponsorship, payment, and participating in national and international competitions.

It was during *The Burning Crusade* era in 2007 that I became a “hardcore player,” meaning that I would spend a considerable number of hours per week, as part of a competitive high-end raiding guild, exploring endgame content. For many, play at this level is like a second job. In fact, I eventually had to stop raiding for reasons of personal health and professional responsibility. I played obsessively for the better part of a year. My story is not particularly unique. I would often spend upwards of 40 hours playing each week. I would stay awake playing until 3 a.m., and wake up four hours later to start again. It got to a point where work, meetings, food, exercise, and relationships all

revolved around raiding and PvP. It was simultaneously exhilarating and exhausting. I was running myself ragged, lying, and making excuses for failing to do things I'd promised at work and at home. I was getting flabby from not going outside, suffering from repetitive stress, and becoming anxious and unpleasant to be around from lack of sleep. I dreamt *WoW* at night, and thought about what gear I needed to get, and how best to tweak my stats, while in front of the class I pretended to be engaged with what I was teaching.

The depth of my involvement and the game environment that facilitated it was fascinating to me, artistically, philosophically, and sociologically. It eventually led to a series of works that I developed in an effort to justify my obsession. It also led to my developing a game-design course organized as a case study of *WoW*, which Blizzard actually sponsored.

WTF?! Proper

Put simply, *WTF?!* is a *WoW*-inspired Flash-based Role-Playing Game (RPG) where an odd assortment of historical and contemporary figures such as Sigmund Freud, Karl Marx, feminist theologian Mary Daly, Albert Einstein, and others have been trapped in a 2D side-scrolling re-creation of *WoW*. The player's job is to help this array of characters make sense of the game world. *WTF?!* is structured to be episodic. The first release in 2008 was a ten-level example showcasing much of the game's core functionality.⁶ *WTF?!* attempts to do two main things: faithfully recreate a majority of the *core game mechanics* of *WoW*, a rather Herculean task; and introduce *new* game mechanics extending beyond the conventional combat system to incorporate the notion of *ideological* combat or exchange.

When *WoW* installs on a player's machine, it takes approximately 11GB of hard-disk space. This is a lot of space. Instead of downloading game assets as they are needed, all the assets are stored on and retrieved from the computer hard drive (or locally). Just snippets of text data are spammed back and forth to the server farms in order to keep track of what players are doing and to synchronize activity. In making *WTF?!* I wanted to access, appropriate, and reuse some of that locally stored game data. Luckily I wasn't alone in this desire. A couple of really useful tools had been written, largely to support

the emerging machinima (in-game movie-making) community. These tools allowed me to access and extract the actual characters, animations, spell effects, and game graphics used in *WoW*, so I could repurpose them.

The goal in *WTF?!* was to use interesting thinkers as a means to explore a range of issues relating to the work *WoW* does to the player while playing. I wanted to investigate repetition, representation, race,



Figure 3.1 *WTF?!* character login screen.

class, gender, combat mechanics, and labor. But I wanted those investigations to be fun, not overly didactic and blatantly educational. So to start, players chose one of two playable characters, “Phallicity,” a Blood Elf Priest, or “Lumpen,” a Gnome Rogue. The game is different depending upon which character is selected.

Whether selecting Phallicity or Lumpen, the player first meets “Hegemon,” a rather dark and swarthy figure surrounded by little pigs. By offering various quests, as in the original *WoW*, Hegemon introduces the player to the different quest types and game interfaces. The nature of those quests, unlike those in *WoW*, asks the player to reflect on game-design mechanics found in *WoW*. Hegemon tries to sway the player into joining his cause. If a player chooses Phallicity, she is eventually sent to the “Rightern” edge of the forest (it *is* a side-scroller after all), she will be asked to spy on “Mr. Marx” who is hanging out in front of a Tavern with his companion “Herr Freud,” fomenting a revolution against the likes of Hegemon. Lumpen is sent to the Abbey down by the “Leftern”-most edge, where “Mary Daly” is organizing the wives of Marx, Freud, and other important women who have been written out of history, in an effort to foment a revolution of her own.

The player soon learns that Hegemon is not to be trusted, and if playing Lumpen, aligns with Mr. Marx and Herr Freud. If the player chooses Phallicity, she aligns with Mary Daly. Mr. Marx gives Lumpen a series of tasks. The first requires escorting sheep back to him, so that he can release them from the chains that bind them. Others require him to go to the city and help “Gramsci,” who is held captive in a cage, and becomes a key figure in advancing the game. Mary Daly enlists Phallicity to help reduce the “typical male” population by emasculating them, over and over again. Eventually, she too gets sent to the city, where she meets Gramsci as the game continues to unfold. In the interest of those who may actually play *WTF?!*, I will resist the spoiler.

The most time-consuming and rewarding part of *WTF?!* was the way we were able to faithfully reproduce *WoW*’s core game mechanics in the context of a Web-delivered side-scrolling Flash game. I often found myself playing *WTF?!* and becoming frustrated when I couldn’t zoom in or rotate the world in 3D, because I’d mistakenly think I was actually playing *WoW*. But even more rewarding was the way we could do things that we wished *WoW* would do, or that *WoW* would never have dared do, with game content as well as with game mechanics and interaction. For example, we could select NPCs and view their gear, something that is impossible in *WoW*. This actually became an important feature, as it provided a mechanism whereby I could name and describe gear in ways that commented upon the thinkers it had equipped. Mr. Marx’s “Materialist Mantle” shoulders, his “Neck of Negation,” and his “Feuerbach’s Thesis” trinket are all anthropomorphic treatments of graphic elements. So many opportunities for inside jokes presented themselves, and were taken, for so many different communities of players.



Figure 3.2 *WTF?!* NPCs.

Players schooled in Marxist or Freudian theory might appreciate references to their works in the naming of their gear. Players familiar with the lore of *WoW*, and the *WoW* style of game play, might find the nature of the interaction and the way the quests were structured to comment on it amusing. The real hope was that players that *weren't* so familiar with one or the other (or any for that matter), might develop a curiosity for either *WoW* culture and/or contemporary social theory.

Technical Description

I decided to use Flash as the primary development platform. I resisted using Flash for years. The two major works I finished prior to *WTF?!*, *unexceptional.net* and *PROXY*, utilized custom-built, or kluged together, tools and technologies. *PROXY* was developed over a three-year period between 1999 and 2002. It explored alternative strategies for knowledge discovery, file-sharing, and information mis/management in relation to networked identity construction and collective behavior.⁷ Both *PROXY* and *unexceptional.net* were centrally concerned with creating communities of users but, rather ironically, because both were developed and deployed with such complex technology requirements, they significantly limited a general audience from experiencing them.

PROXY was created using a custom-designed Java-based multiagent system interfaced to a MOO and Web portal. The project was shown in the Whitney Biennial in 2002, one of the largest and most respected contemporary art exhibitions in the world. During the space of the show, some several hundred new accounts were created. Of those accounts that were created, I would wager far fewer were able to

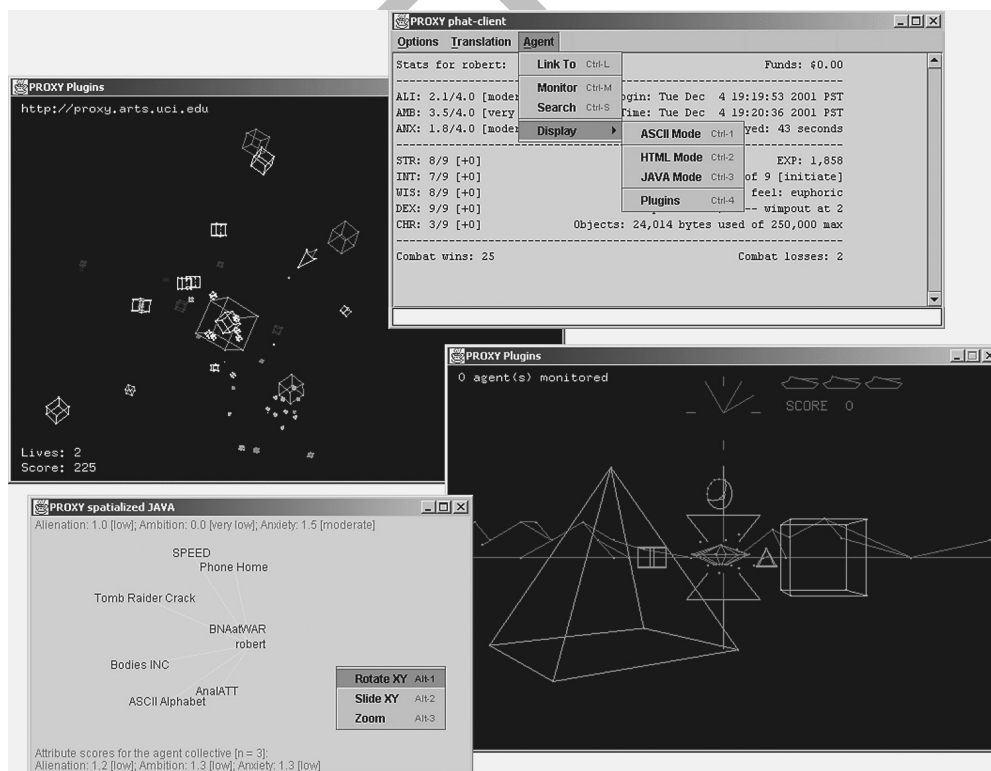


Figure 3.3 *PROXY* interfaces (1999–2002).

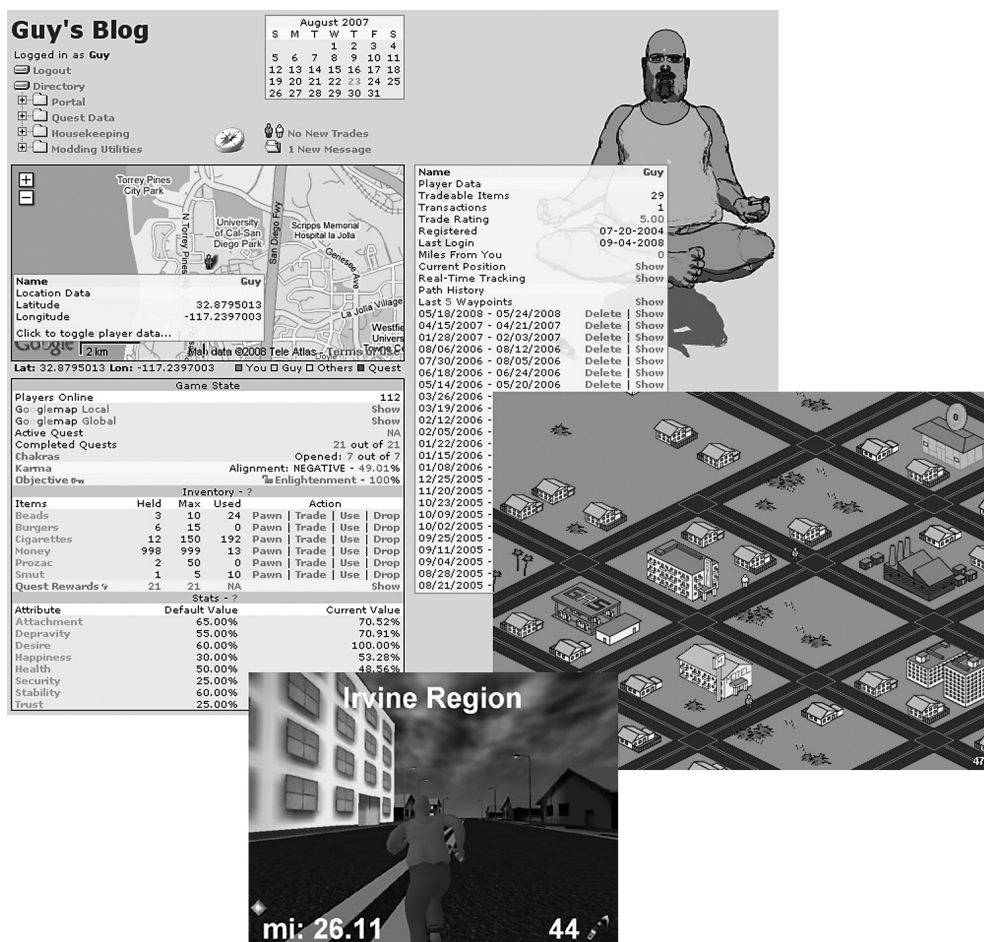


Figure 3.4 *unexceptional.net* interfaces (2003–2006).

successfully install and run the software on their home systems. Of those that did, an even smaller number spent more than a few minutes playing. This was evident to me from tracking various in-game activities such as the amount of data players linked to their agent, the number of MOO spaces that got dynamically created during the ingest process, and so on.

unexceptional.net was even more complicated. Suffice to say it required things like registration through a Web portal, Web questing, dynamic delivery of Blog posts based on player status, real-time Google-mapping of player activity when using GPS-based cell phones as the game client, and three modes of phone play—one where you controlled *in-game* avatars by moving them to partially complete a quest, another where the player's physical body had to move in order to flag a quest as complete, and a third where automated calls were made to players based on their location, which required text-to-speech and speech-to-text translation services so a bot could direct players by speaking commands to accomplish certain goals, or engage in exchanges with other players.

It also required streaming game assets in real-time so that the game world in the phone approximated the physical space the players were in, and streaming assets when playing via a 3D game client, so that the 3D world also corresponded to physical world locations. All of this stuff had to be coordinated so that picking up items when playing

with the phone or in the 3D client were immediately reflected in the Blog, and so on. You can imagine the technical challenges to support all those components. I think it worked flawlessly for *possibly* several months.

I didn't want to repeat those problems. The decision to use a fairly ubiquitous technology like Flash for distributing *WTF?!* had immediate payoffs. As soon as it was posted to Flash-based game sites in late May 2008, *WTF?!* became so popular that our service provider was forced to throttle (reduce bandwidth to) our site. During the first month our distribution site⁸ was ranked by Google as one of the top 250,000 most heavily trafficked sites on the Web, placing it in the 99.8 ~~percent~~ percentile. On average we were getting upwards of 15,000 unique play sessions per day through August.

This popularity was a double-edged sword. It was good to discover that the potential audience was out there, but bad to find out that the volume of traffic would force us to disable the game from running in the Web-browser environment as intended. Instead we had to refer people to a compressed version of the game to download so they could play locally. Much of this traffic resulted from major game and technology websites reviewing and linking to us (such as *WoW Insider*, *Grand Text Auto*, *Newgrounds*, *Kotaku*, *Boing Boing*, among many others). To compensate for this we created a version that other sites and/or individuals could take and distribute from within their own domains. It is impossible to know how many players there were with any certainty, but millions of unique game sessions have been played.

1. Platform Hacking

Even though we used a stable development platform, we still ended up doing things that Flash really wasn't designed to support. As a simple example, with *WTF?!* I wanted to be able to modify or update the project once it was released, similar to the expansions released for *WoW*. To support this, Alex implemented a way to load content in the game stored outside of the Flash executable file during runtime. Things like images used for scrolling backgrounds, objects in various zones, items, rewards, and quest objects could be stored inside sub-directories that the game would load on startup and during zone transitions.

In our initial release, we stored all of the external data required by the game in one central location on a commercial service provider. The not fully anticipated consequence of this approach (since we simply didn't expect to get such a high volume of traffic), which contributed to our service provider throttling us, was that each time a frame of animation was loaded, or an item was spawned, a unique thread was created to handle the request. Thus a single play session would generate thousands of threads, all of which pulled various game assets from our central server. So hundreds of thousands of play sessions equaled ... well ... you do the math. Even when the game was posted to a third-party Flash-distribution site, whenever it was launched, it would make requests to our server. Fun, fun.

2. XML Pointers and Containers

We decided to use Extensible Markup Language (XML) as the main way to link to game assets, and to contain textual data for *WTF?!* XML provides sets of rules for encoding documents in machine-readable form, and is a textual data format widely used for the representation of arbitrary data structures. Alex wrote a Flash/XML interface that allowed a huge amount of the critical game data to be tagged and stored textually. On startup the game would slurp in all the required XML data, then spit it back out when

the player saved or quit the game. All the definitions for the game environments, asset locations, player stats, character attributes and animations, loot and experience, inventory, equipment, projectile and spell effects, and much more were contained in various XML files. Thus, as a developer, I could drop down into the sub-directory that stored the XML and do some basic script-editing, and fundamentally alter the game world for everyone playing it. I could make hot-fixes, create new items, quests, zones, characters, and whatever else I wanted.

3. Modding

Providing the infrastructure and tools to facilitate content creation, for developers as well as players, has been a major goal in much of my work. The flexibility that Alex's Flash/XML interface gave me was really exciting. Along the way, Alex had also built a few Flash-based tools that allowed me to more easily create content for the game. These tools were quite primitive at the time of our initial release. I decided to convince Alex that we should really focus some time on improving them, and then release them to the Flash game-development community. We worked on this sporadically between 2008 and 2010. Eventually it became a full-blown game-development environment, or, for lack of a better term, "SDK" (Software Development Kit), that we ultimately decided to call the *WTF?! SDK*. The *WTF?! SDK* is a suite of integrated tools that provides a visual front-end to a highly flexible XML scripting environment.

In web development, the front-end is the design-side of the project, or what the user sees; the back-end is the code that makes the project functional. By using the *WTF?! SDK* anyone with a little patience and skill can learn to create custom terrains, characters, equipment, spells and effects, inventory, levels and experience metrics, stats, weather and particle effects, scripted events, quests, and many other advanced features related to the genre of action adventure role-playing game design.



Figure 3.5 *WTF?! SDK* player editor.

Conclusions and Outcomes

Creating *WTF?!?* was without doubt some of the most fun I have ever had while developing a project. Alex and I worked on it for the better part of a year. It served as a vehicle for both of us to channel our obsession with *WoW* into something of our own making. Alex, though he hid it well, had in fact fallen far deeper down that rabbit hole than I. We were finally in the position of proactive creation as opposed to reactive consumption. Moreover, for us to be successful we *had* to have intimate knowledge of game design and mechanics, we *had* to research the algorithms behind the surface. In fact, the more intimate we were with the game, the more likely we would succeed! We no longer had to make any excuses for our play! This was wonderfully liberating, and perhaps even a bit therapeutic.

My earlier works more directly addressed the concern of this chapter, the virtual community. They both created a context within which players would have to communicate, share, and engage with each other in order to fully participate in the experience. Also, the result of that engagement was instantly reflected back into the larger game environment. *WTF?!?* was different. Although *WTF?!?* was designed as a single-player experience *in-game*, in many ways I think the community that formed *around it* was far more vibrant and engaged than with either of the earlier works. Enough people played it that a nascent community formed around it for discussion, gaming help, and criticism.

I also think it is interesting to reflect on what requisite elements must be in place in order to believe a community exists. Traditionally, within the field of sociology, community has been defined as a group of interacting people living in a common location, often sharing values that contribute toward social cohesion. Clearly, these days, geography has become less important. So, one could argue, has biology. Ideas of what constitutes sentience, an ability to perceive and react in relation to an environment, are radically expanding. Even something as mundane and simple as the modification to the NPCs in *WTF?!?* can be considered part of a virtual community. They are fairly sophisticated actors, with not entirely predictable scripted behaviors and outcomes.

~~I also think that~~ riding on the coattails of a hugely popular game like *WoW* allowed me to capitalize on the massive community that had already developed. Although the experience while actively playing *WTF?!?* may look *solitary*, the depth of engagement scales in relation to the knowledge one holds, as Benedict Anderson might say “in the imaginary”⁹ as part of the larger *WoW* player community, and thus remains quite *social* as it gets reconstructed during play.

Finally, *WTF?!?* and the *WTF?!? SDK* have served another important purpose. For years I have taught courses on game design. I was forced to explore far more deeply the design decisions, game mechanics, and implementation approaches chosen by the world’s most successful MMORPG than I would have if I weren’t working on *WTF?!?* This, in turn, influenced and increased my knowledge base while teaching game design. Similarly, for years I searched for a usable game-development environment for non-programmers. I tried many different commercial and freely available or open-source platforms. All were difficult to use. With the *WTF?!? SDK* I was able to solve this problem by working with Alex to create our own. As of this writing I’ve conducted one class where students successfully used the *WTF?!? SDK* to make their own creative projects. I’m on the books to do it again. One of the amazing things I observed while teaching the class, and the required playing of *WoW* and *WTF?!?* that went along with it, was how the students and I bonded as we worked and played together, forming our own community—in and out of the classroom, co-present and at a distance; a community we sustained not only during the course, but long after.

Notes

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Links

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