

Joi Ito presentation at 23C3, Dec 30, 2006

Back in the early days of MMORPGs, you met people online who you would play with and they were your friends, but it was cyberspace and real life. Sometimes you had crossovers, but generally you didn't run into people walking down the street who also played. The difference is with almost 9 million players (although 6 million are in China) you can now go to a dinner in Silicon Valley or in Berlin and you'll often find somebody else who plays World of Warcraft. Families play. If you look at the statistics, a huge number of people play who are real-life friends, which is a different than it used to be. So I think that World of Warcraft is similar to what we've have been working on for a long time, but it's a big jump and it's growing very, very fast. And I think it's going to grow faster.

First of all one of the things that people often ask is whether World of Warcraft is so much better than Second Life. You shouldn't compare them. It's like apples and oranges. People who are my age may remember MUDs (Multi-User Dungeons). They spun off MOOs (MUD object oriented) and MUSHes (Multi-User Shared Hack) where it was more about creating things and creating objects. The kinds of people who participated in MOOs and MUSHes were very different from the kinds of people who participated in MUDs. MUDs were more about constraints and limitations and game-play. You could die in MUDs. When I played the original MUD at Essex University, I was one level from becoming immortal and then I was killed. And in the original MUD, when you were dead, you were dead. There's was cemetery where you could just walk back to your corpse. You were dead and had to start over again.

If you compare Second Life and MMORPGs, it is a completely different thing. It is like the difference between being a racing-car driver and being in some kind of experimental mechanical lab. While they are both virtual worlds and they are both sort of classified in the same genre, I don't think we should compare them really. I use both of them quite a bit, but differently. In Second Life on my island, we have a very good video screening area. I can screen raid videos. We can sit around and watch them and talk about them on maintenance day when the servers are down. We can sit around and talk about strategy while we watch. I lot of my friends are building an replica of Iron Forge where we can sort of hang around there when the servers are down too.

But to get back to Warcraft... I think this is old news for a lot of people, but Richard Bartle was one of the guys who worked on the first MUD and he had this thing called the Bartle types. He classified people into four basic categories. In Warcraft, one big thing that led to the success of Warcraft is that they got those four types of game play down very well. The first part is achievement - like game level, game gear, getting better, looking cooler, and a kind of self-achievement growth part of the game. This is your character and it's all your stats, and they keep getting better. The other important part is exploration. For example the lore. Often it is like talking to the historian and getting into the quest. Some people really get into that and know the whole world of the game. Some people don't care, but for some people, that's the main thing. On role-playing servers the lore is very, very important and people are obsessed with that. Another important part is the socialization part. Here is the chat window. Some people just sit in Iron Forge, face the wall and just chat all day. Your guild is also your social base. Some people think World of Warcraft is just a fancy IRC (Internet Relay Chat) client. Then there's the last part, which is the killing. You can sit around and kill other players, you can sit around and kill monsters. You do deal damage, but the main point is competition, struggle, fighting with each other and strategy. It's a completely different part of the game. If you ask people what their favorite things are and in which order, it defines the way they play the game. If you look at successful guilds, they tend to be focused on a certain balance of these four kinds of game play. Some of them balance all of the parts, and some of them balance some of the parts specifically. This is also an important thing to understand, because when you think about the World of Warcraft you get people who fish all day long. Some of them play in the auction house all day. You can play the game in a completely different and unique way. You can write your add-ons to figure out the economy. All these different game plays are legitimate and interesting but it's the interaction between these four that actually make it even more interesting. I think Blizzard got a lot of this stuff right.

You start World of Warcraft rather lonely, by yourself. You've got this little toolbar. And you're looking around trying to figure out what to do. You quickly realize, when you're get a little higher level that you can work together with other people to take down bigger, bad guys. Then, when you get to level 40, you get a mount, so you can ride and move around a lot faster. And this is a very important part of your experience, and then, hey, you're level 60, hey you've won Warcraft. [This talk was before the expansion. Now the maximum level is level 70.]

This is the entrance to Molten Core. And molten core is the first 40-man dungeon that you get to play. You have to be level 60, you have to do some quests to be allowed to get in here. But basically this is, forty people, eight classes, five of each class. You've got healers that heal, you've got tanks that hold these monsters' attention. The healers heal the tanks, and you've got the mages and other classes who do a lot of damage and take bad guys down. Then you've got a variety of other classes that do other roles. But the key to this is getting this group together. And also when this group isn't perfectly balanced, figuring out the right strategy is also a challenge. Imagine trying to organize 40 people every weekend to go to a movie and have eight different roles about what each of those people are going to do. And make them do that over and over again all day for about eight hours. It's a boring yet difficult task. In order to get that Artemis set that I had, you have to do this every weekend, for about six months.

This is kind of like a ball. First you work to level 60. Grinding by yourself at the beginning, then with five people, then with ten people, and finally you get to go to the ball with 40 people.

When you finally get here and you realize this is the first time you've ever seen 40 of your fellow guild mates in one place at one time. And there's an enormous amount of coordination that's required. You have raid leaders, you have class leaders – I have about eight different channels going in my chat, with eight different colors for all the different things that I have to coordinate. Some researchers are saying you learn things like project management. This is a great metaphor for some kinds of real-time project management. You get a group together, you learn what each person can do, figure out if there are resources you can put together, and move forward. Clearly there are lots of direct and indirect things you can learn from this. You can learn how people work under stress. You can learn how good people are at communicating. My raid leader is a nightshift nurse in Virginia. Our main tank, is a foreman in Australia, one of our rogues is a bartender with ADD. There is an immense amount of diversity in our guild and you can see how their backgrounds help in the game. However, there is a lot of common ground considering the diversity.

One of the things I've noticed though. I haven't found a single MBA so far who is good at leadership in this situation. Most of the people who are good at leading here are people who are good at listening. It's actually very similar to leadership in open source.. John Seely

Brown brings up a very interesting point - that there's another level of learning that you get. It's a kind of imagination and emotional thing, and he uses the word "ensemble". I don't know what the German word for this, but it's when you have a band or an orchestra together and suddenly you are in "the zone" and everything just feels right - you've just got it just right. When you don't have it right, a 40-man raid, can disappear in less than ten minutes. Everybody just blows up. When you're in the zone it just feels right and everything works together.

And it really does feel like some kind of magic when you work and work, and suddenly 40 people are working together in concert. Without having to know the whole of it, they do their part and somehow it works out. I get kids in my guild who are 14 years old. They act like 14-year olds. But when they get into a raid, they realize that if they do something stupid they get kicked out or people get mad at them. If they do something right, suddenly they have 39 adults telling them how great they are. There is a sense of being part of a group and achievement as a group. It is something that you can learn. In my guild, I have priests, soldiers, a policeman, students, businesspeople - I have just about every kind of cross-section of society you can imagine, and it's actually overwhelmingly working class. If you look at Second Life it's rather kind of intellectual. [OK, sort of. ;-)]

For example, the other day, I was chatting with some kid who's just decided that he's going to Iraq because it's better than what he has an option staying home in America because then he can pay for college and come back and become a computer scientist. Sometimes our priest, AKMA, will jump in and clarify theological things for me. The depth and the diversity represented in many of our chats is broader than any other medium I've ever participated in.

It's very different from a chat channel or online form. For instance, our warrior, or "tank" has to have fire-resist gear for Molten Core. It's really, really hard to get enough fire-resist gear to tank Molten Core. It requires lots of people to help you. Many of the pieces of gear that you need requires hundreds of hours of other people's time. By the time you get to the point of tanking Molten Core, you have lots of people in the guild who have invested hundreds of hours in your gear. Some of them are 15-year olds, some of them are soldiers, and you owe them and you've done things where they owe you.

AKMA, our real life priest and I were talking about the organization the other day. It's more like a congregation than anything else. You can leave when you want, you don't pay taxes.

You PAY to play the game. You show up because you want to be part of the group. You can leave whenever you want, there's no one forcing you to do anything, but you have this set of norms, you have a shared activity.

Games are an advanced user interface and have lots of parallels with user interfaces for our operating systems. With 3D worlds I think we're getting closer and closer to being able to perform every function that you do on your computer. You could actually kind of simulate an computer operating system interface. The interesting thing is that most of us at this meeting stare at computers all day long, but most people in the world don't. These game interfaces are becoming a de facto interface for a lot of people. They learn how to use it. They learn the metaphors. As a lot of the people who are playing these games get into positions where they are making decisions about UI, I think it's going to have a huge impact. One good thing is that Blizzard used Lua to allow scripting of the UI. You can customize just about everything except for the really critical things. You're not allowed to communicate real time out of the game. They're doing a lot of things that prevent you from cheating in the game -which makes sense, Anyway, good thing is that you can do just about anything though. For instance, there is a background option which helps you manage and track auctions and prices on the auction house. Once you've added all your add-ins, this is kind of what it looks like. It is like flying with instruments. The 3D behind the interface, it doesn't really matter, especially as a mage. On the left, you see 40 different players, you can see that some of them are dead. You can see some of them have different levels of different things like mana and health. The middle thing shows some of them are cursed with things that I can remove so I should de-curse them. The little arrow is a hunter's mark showing what everybody should be attacking. The top right window is my chat with maybe eight different kinds of chat – raid chat, leader chat, class chat, officer chat, guild chat, all that's going on in there. The other window is system messages like combat messages. I'm tracking all major stats like damage dealt by each person over time or who dealt me the most damage. There are alerts coming from another addon that knows the behavior of the boss. It tells you when certain things are about to happen. These are the stats for the boss, these are the little spells, these are the warriors, because they're important, to see what they're pulling.

The threat meter - when monsters are attacking somebody they attack the most threatening person. Warriors have lots of talents to increase their threat even though they're not doing

much damage. Mages have things to decrease their threat even though they're doing a lot of damage. You have all kinds of tricks. What you do is you watch yourself on the threat meter so that you don't go over the warrior, otherwise you're going to be dead. It is very sophisticated. What it does is it takes all these combat messages from the game. It parses them, figures out how much threat each one is generating based on all the different kinds of magic that's around, discounting and amplifying and all of that. Then it generates the threat for each of its players. Every time they make a patch and change the rules or change the parameters they have to go back and re-do everything. Every time the message that the boss says when he's casting something changes, they have to change the addon. It's crazy. They're parsing text because there's no API (application program interface) for this. But we have an excellent threat meter that works. There's a huge add-on community that's making all this stuff, despite the rather different process. This is fairly sophisticated interface completely customized for myself. I don't think anyone has the same interface. At this point it's no longer about 3D.

I'm going to get back again to Richard Bartle, who's my hero. But he came from the day when we had cyberspace, and Bartle was talking about cyberspace and the real world. In Japan I don't think we really believe in cyberspace any more. Cyberspace is part of our real world. And I don't separate my cyberspace identity nearly as much as I think the old guys do. I mean, I know that we have our online personas and pseudonyms and stuff like that. But one of the things that for Richard Bartle was part of this cyberspace thinking was when you're in a game you're in a virtual world, you're in a fantasy, and you don't want to shatter that fantasy. You don't want somebody to take you out of cyberspace when you don't want to get out of cyberspace. People started talking about whether voice over IP should we be allowed for talking to each other when we're playing the games - for coordination. He said no. This is back in 2003. He said it would be "an immersion-busting reality-intrusive, anti-role-playing debasement of what virtual worlds are". And a lot of the game guys were against it. Warcraft doesn't have it built in, so we use things like TeamSpeak and Ventrilo. They are external applications to do the coordination by voice. But there is no more fantasy. It's seamless, the real world and the game.

So what's important to note is that --- you can do this on Skype - you can sit around, connect 10 people together and have it open. But for some reason - and we have tried it as a

test – people want to start the conversation and then end it. They're not used to the idea of always having a voice connection. It's weird. The thing that you learn on TeamSpeak is firstly that you push to talk. When two people collide there's a pause. You have a protocol where you both back off. At the beginning it's sort of clunky, but after a while it sort of works. You just learn how to use this thing so that 40 people can be talking at the same time on the same channel. You have very little problem communicating the essential things, and you learn how to talk in small pieces and get things through. I sometimes sit around all day long - say eight hours with TeamSpeak on. You never sit around in that kind of mode on the telephone. While we have technologies like Skype or voice-over IP that theoretically allow you to do this, because we don't have the user experience of actually having to use something like that, we haven't generated that kind of behavior in our workplace. I think one of the interesting things about MMORPGs and voice is that its creating a culture of having Teamspeak on. I have TeamSpeak on my speakers at my house, so even when I'm not in the game I can hear people talking. They can call me and I can go in. It's this ambient sound so I know how the guild is doing - if somebody's going crazy or somebody has a problem at home. When one of your guys picked up a girl and her lesbian girlfriend came and beat him up, the first place he goes is to teamspeak to explain it to everyone. It's a very important kind of water cooler.

When you have 400 people together, one of the things that always happens is drama. Everyone who has run organizations knows that running 400 people in an organization is very difficult. And unlike chat, we have loot.

A typical example would be, you're in some dungeon, and there's something you really need. And somebody who doesn't really need it gets it. That becomes a really big point of tension. Drama always exists in parties and also in guilds. For that we have a lot of outside tools. We have forums where a lot of things happen. We have bylaws on a wiki. The bylaws are the rules that we use to govern our guilds - what are you allowed to do, what aren't you allowed to do, our core values. We share this between horde and alliance. And we are about to organize Bylawcon so we can all get together and revise the bylaws.

There's an interesting study by sociologists and anthropologists doing a detailed analysis of guilds. Some guilds are very relaxed and they don't have very many rules. They tend to be less happy than guilds that have fairly strict bylaws and manage things in a very organized

way. You would think it's kind of the opposite, that the relaxed guys would stay relaxed. But it turns out that predictable leadership and rules are very important.

One of the interesting things is that when I set up these bylaws, I looked at a lot of open source projects. I looked at Wikipedia, I looked at Mozilla I looked at some of the others. I'm not an expert in open source, although I play one on TV. I was asking a lot of people about open source and managing open source. I think there's a lot that you can learn. It's absolutely not the same. It is very open, in that lots of people can come in, and you're rewarding mostly by giving people credit. I think there's a lot we can learn from the management in World of Warcraft. The biggest difference, I think, is that the diversity of the kind of people who participate in World of Warcraft makes it a challenge. For instance, really basic things, like you should respect each other. Some people when they first come are like "WHY? WHY? Why should we respect each other?" And then you sit down and explain why it actually is a good thing. Some people come in who are racist. We've had some very racist people in our guild. But if you sit down and explain, "well you know, would you say that, if you knew the other person was that race", and they said "no". And then, like, "how do you know in the game that we don't have you know, Chinese or whatever?" People realize, "Oh he's a real priest". They suddenly realize that the diversity in this guild is actually a plus. They suddenly feel the euphoria of being able to talk to a group, and having a reverend sit there and laugh at their jokes, and realize that tolerance in their speech is worth the trade off of being able to communicate with a whole diverse range of people. Embracing diversity is something a lot of kids don't know anything about, especially in America. And they come to our guild and realize that Chinese kids can be smart too. There's a fifteen year old kid who apologized for asking me whether I was Japanese. I said don't worry about it. He said, "will you still be my friend if I ask you if you're Japanese?" I think, depending on the culture you come from, it's very different. What is interesting is that as you codify and you write it down, you realize that things that you take for granted aren't taken for granted by everybody else. But a lot of this is about trust and reputation.

The other interesting outcome is this convergence of machinima. I think most of you probably know what it is, but it's using game engines and game contents to make video. And as you know, video is huge already. But having video cameras and taking video is also a lot of work and involves a little bit of talent. Building game machinima also involves talent, but

at least you can use the game engines to create content. So there's this huge body of work which is people making video content from World of Warcraft. We have an awesome guild promo video.

So the biggest problem is we don't have the rights to use most of this stuff. Some of the video is from other guilds. Luckily it wasn't me who made it and I am only showing this for educational, non-commercial purposes. One of the biggest hurdles right now is that it's illegal to do most of this some of this stuff. One of the few cases that's actually pushed machinima past a certain threshold was that MTV saw a video game and some music put together that they loved. They contacted the record label and the video game company, and as you know, if MTV is excited that's fine. So they broadcast it on MTV and it kind of established machinima as a legitimate form.

Second Life is much better. Second Life allows you to own the content, they encourage Machinima and have video capture built in. Blizzard, they're friendly, but when I asked them if I could use a screen shot in magazine to talk about how great they are, they said OK, talk to our legal department. And the legal department said, "what kind of magazine is it?" I said it's owned by a company called Hitachi, and they said, "Is that a corporation? What do they do?" They said, "you have to sign a contract to use this screen shot." So I didn't use the screen shot. But they don't understand – I think they understand the value of fan art, but they don't understand this notion of sharing and copying yet.

One of the biggest problems that I find with World of Warcraft is they have a sharded system. They have hundreds of servers, and when you start the game and don't know anybody, you start on some random server. Although they have paid transfers now, basically, even though we both play, there's probably a one per cent chance that we can actually meet inside the game. So even though people call it the new golf, it's not. You can talk about what you do, but it's very difficult to play with your friends. I think that's a fundamental problem in the design that's not going to get fixed by just an evolutionary step.

The good thing about Second Life is that they've made it so each part is connected, each island, each beach, each Sim is on a separate server. The problem is that each Sim can only support a small number of people, so if you put more people on, the thing crashes. When you walk between Sims you fall in the cracks and things like that. But I think they're trying I think the idea of making it a single world is going to be an important part of the NEXT game.

I think that user-generated content, player generated content – the add-on stuff is important, but if you remember all the way back to when we were playing MUDs, one of the best parts of becoming a wizard was that you could create your own dungeons, you could create your own monsters, people could play in your instances. And so while World of Warcraft has done a very good job in creating content, they haven't allowed players to create their own content. Which I think is where there could be a lot of work done, and I think it's coming up.

I think there's a lot of pretty interesting things going on in the guilds, but I would love better guild management tools. For instance, right now, when we're about to run a raid, what I would love to be able to do is to say, "how many of my priests are available right now, the ones that are available, send them an SMS to see if they're available, in this order." And if I'm a priest and I'm sitting around doing my garden and I get an SMS saying we're about to run Molten Core and were short of priests, I'll come running. I think that this is an important thing. Second Life has done it pretty well. They've got an API and a way to interact with the web and things like that. The problem with Warcraft is that since we don't have real-time communication, it's very difficult to build applications that allow guilds to interact with things like that in the game. I don't see them opening that up in the future. Another big issue around Warcraft is actually that there are theories around gold farmers who basically play the game professionally. They take their items and they sell them and get gold, and then they sell their gold for real money on the Internet. Blizzard says it's out of bounds. If you think about the issue of cracking down on this, they say if you are caught buying gold? Well how do you get "caught" buying gold, because you can't pay in the game. For instance, you buy me dinner and I give you gold. What if I owe you 25 bucks and I give you gold instead, is that buying gold? At what point does it constitute buying gold. If Tim has a character, if I go to a gold farmer and buy gold and have him send gold to Tim, he hasn't bought gold. There isn't a way technically for Blizzard to know if you've bought gold really. Some Chinese game companies have actually started doing this item exchange as part of their business model. Second Life has this Linden Dollar exchange. I was talking to one of the Blizzard guys, and one of the reasons they don't like real-life money linked with gold is that it makes the game less egalitarian, and they want it to be fair. The irony is that some Chinese I talked to about MMORPGs say "Well obviously rich people should have more power in the game" It was kind of ironic to me that it was the Americans that wanted an egalitarian system. Having said that, I don't see a Warcraft killer on the horizon. I think it's like a nightclub, so

you got to a nightclub, everybody gets excited about it until the next night club opens. I think we're waiting for the next nightclub. It's hard to take the risk of opening a new nightclub when you've got a big popular one going on and it takes several years to make a game of this size.

Hopefully, some of the open source stuff like Croquet and other things may start developing to the point where they may be some kind of open-source model or something where we can take from learning about World of Warcraft. At the end of the day, I think everything is still heading to more user control, more open source, more open API, more open standards, more open intellectual property. But what this whole thing is is an indication of a behavior change. That's why it's important. It's important that we have millions and millions of people who are learning how to interact this, and can we think up projects that tap that.