

# Why Bill Was Killed

## – understanding social interaction in virtual worlds

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### ABSTRACT

This paper deals with how we should approach the sociology of virtual worlds on the Internet. I argue for the importance of establishing an inside view based on direct experiences of the phenomenon, to avoid the risks of drawing erroneous conclusions about virtual worlds based on the physical world, and not realizing that virtual worlds are full of real people engaged in real interaction. I present an incident from a world based on the Palace technology to exemplify the following points: The social interaction is fundamentally different from interaction in the physical world. The interaction is real. The social structures are hierarchical. People are not anonymous.

**Keywords:** Net-life, Virtual worlds, Social interaction, Virtuality, Social structures, Identity.

### 1 INTRODUCTION

Most people have not spent any significant amount of time within a social virtual world (VW). This is probably true also for the community of researchers who are conducting research within this area. The actual participation in everyday life in a VW is often regarded as unnecessary for the work that they do. My experience from discussions about the characteristics of VWs with people who have not themselves engaged in these activities is that they tend to hold what I call an outside view of the phenomenon. This view typically includes one or more of the following positions:

- Social interaction in VWs is directly comparable to face-to-face interaction but with much lower performance.
- Interaction in VWs is not really for real.
- There are no social hierarchies in VWs.
- People are anonymous in VWs.

I have found that the inside view, i.e. a understanding of the VWs based on first hand experience, is very different from the outside view and I would like to offer the inside view as an appropriate context for understanding social interaction in VWs. In this paper I will first account for a particular incident from a VW. I will then use this case to discuss the four points listed above and conclude with a look at those points from the inside view.

Throughout the paper I have made frequent use of Erving Goffman's [3] theoretical framework for understanding the presentation of self in everyday life since I have found that it, despite being developed in the fifties, very nicely fits and helps explain my observations and findings.



**Figure 1: My avatar holding a video camera**

I have conducted a participative study within a VW space called the Palace. I have mostly made observations in public spaces and saved logs of the communication and captured images from the sessions, but on some occasions I have also used video to directly record what has happened on the screen. To alert the participants that I have been recording the interaction on video I have used a special graphical representation of myself, known as avatar, holding a video camera. (See figure 1.) In line with my own reasoning I have changed the names of the people involved in the episode that I will account for shortly. One might argue that their identities already are

protected by the pseudonyms that they have chosen for themselves. But as we will see, this reasoning would be quite characteristic for the outside view that I am criticizing.

The Palace is a system for making and using two-dimensional graphical worlds. In them, people are represented as small images superimposed on often cartoon-like backdrops. The citizens in these worlds belong to different classes. At the bottom of the hierarchy are the guests. They are restricted to using avatars that look like smileys and they get a new generic name every time they enter a Palace world. (See figure 2.) For a small fee you could become a member and get to decide your own name, and appearance. (Now membership registration is free.)



**Figure 2: Guest and Members in the Palace**

Further up on the social ladder we find the wizards. They enjoy special privileges such as being able to add, edit and delete parts of a world. They also have the power to use force against members and guest. They can take away a citizen's ability to move (pin), speak (mute) or even throw out troublemakers from the world (kill). The supreme authority of a Palace world is a god. The god is the person who runs the world server. The powers of a god are similar to those of a wizard, but with some additions. The most significant of those is the power to shut a world down, and turn it on again.

Since I control the computer that runs my own little Palace world, The Virtual MIT House (V MIT), I am also the god of that world. To help me rule this world I had a couple of wizards who are American teenagers. The third member of my staff was Bill the bartender. Bill was a bot that I had written the script for. His abilities were restricted to answering more or less intelligently to any questions that were put to him,

so if I for instance asked him: "Who do you love, Bill?" He would answer: "I love money, mjson." (See figure 3.) Bill also knew how to serve virtual beer.



**Figure 3: Bill the Bartender, R.I.P.**

In my observations I have tried to be extra attentive to conflicts and unusual events since it is at these times that the inner workings of a society becomes most apparent. It is not until an unwritten rule is disobeyed that it reveals itself. I have also chosen an episode of conflict as a basis for my discussion in this paper hoping that it will help me mediate the inside view.

## 2 KILLING BILL

One day when I entered V MIT I found, to my astonishment, that it had been vandalized. Someone had gotten hold of the wizard password and used it to delete parts of the house and writing some rather unflattering remarks on the walls. The bar was one of the rooms that had been deleted and since the script and graphics that constituted Bill was tied to this room he was also gone. Thus the vandalism turned into a case of involuntary bot-slaughter.

I have to confess that it was not so much a need to revenge my scripted friend Bill, as a curiosity to what had happened and why it had happened that led me to initiate a little investigation into the incident. I started with a look at the server log. As one might expect the two perpetrators had not used their ordinary names but the log still gave away their Palace identities. Just as I suspected this was done by returning visitors so all I had to do was to match the IP-numbers from the break-in with the rest of the server log to find their real Palace identities. Judging from the names they were normally using, they were probably a boy and a girl. I will from here on refer to them as Bart and Lisa. I vaguely remembered Bart from a treasure hunt that my wizards had arranged in V MIT. This had been one of those occasions when I had used video to record the interaction, so I even had him on video. As for Lisa there were two frequent visitors that used that Internet service provider (ISP) and one of them was my wizard!

Save for the motive it looked like it would be an open and shut case, but there were a couple of details that did not add up. Lisa seemed to be a girl and my

wizard was a boy, and I could tell by what the log had registered that Lisa seemed to be unaccustomed to the wizard commands she had been using during the break-in. But all of this could of course be just a clever trick from my wizard, so I e-mailed him to tell him what had happened and that he was my prime suspect. I figured that if he was not Lisa he should at least have some information as to who she was. I also told him that I was going to put their whole domain on the ban list to deny all users of that ISP entrance to V MIT. He answered that he was sorry about what had happened but that he knew absolutely nothing about it. Just when I felt that my investigation had reached a dead end, I got the help I needed to crack the case from a very surprising source. It was the father of both my wizard and Lisa who one day e-mailed me.

He had been reading my e-mail messages to my wizard since it actually was his e-mail address my wizard was using. And when he realized that I was going to cut off the access to V MIT for the whole family he decided it was time to “get involved” as he put it. He explained that Lisa in physical life was my wizard’s eleven-year-old little sister. He made a deal with me to cyber-ground Lisa for one month and asked me in return to refrain from banning the whole family. I gladly accepted his offer. The father also gave me some information as to the reason for this incident, but Lisa had more or less just tagged along for the excitement. The brain of the operation and the key to this mystery was Bart.

Getting hold of Bart was not easy though. Whenever I saw him he discreetly left the world we were in. Once again I needed help, but this time I knew where to get it. I simply spread the word to some mutual friends that I was in the process of negotiating a multiple world banning of him with some other gods, and that his time soon was up unless he turned himself in. It did not take long before he came to see me.

Bart’s explanation to his actions was that one of my wizards had promised him to become wizard in V MIT. When he found out that this had been an empty promise he wanted revenge. His plan had initially been to only destroy things that my wizard had made. But things had gotten a bit out of hand and some additional property had been damaged. He seemed absolutely terrified by the risk of getting banned in all the big Palace worlds. He said that he preferred to be grounded in physical life to getting cyber-grounded. After all, this was where he had most of his friends and where he spent most of his free time. My feelings towards Bart had up to this meeting been annoyance rather than anger, but when I met him I realized for the first time that I was not completely without blame in

this affair myself. I had taken on my wizards in a rather random fashion and I had probably not bothered to be very clear about the fact that I did not have any intentions of bringing on any more. To me this wizard business had never been a big thing but to some of the people out there it had been deadly serious. I decided to go easy on Bart and only ban him from V MIT for one month. We were both very satisfied with the conclusion of the whole affair and shook hands before leaving the meeting.

### 3 NEW WAYS TO INTERACT

Let us now take a few moments to think about what we can learn from this little narrative. I would like to begin from the end by reflecting on Bart’s comment that he would rather be shut out from the physical world than the Palace world. Many studies have shown that conversation over the net is very limited compared to face-to-face (FtF) communication. See e.g. Parks [4] and Chenault [1] for references to some of these studies. Much of our ability to use non-verbal cues, intonation etc is lost, and our haptic senses are rendered virtually useless. It might seem clear from this research that this medium is so limited that it is confined to offer a second rate copy of the interaction going on in the physical world. In fact some people have made that conclusion and deemed the medium to be inherently vague and shallow, one well known example being Stoll [8]. But at the same time the Barts and the Lisas are busy populating the VWs.

Judging by the popularity of worlds like the Palace, Active Worlds, blaxxun, OnLive! Traveler and Ultima Online, and the devotion of some of the people I have met in them, there must be substantial benefits of spending time there as well as good ways of reducing all the problems and limitations in terms of interaction that the medium imposes to a reasonable level. So to me there seems to be a gap between on one hand what we might expect from the outcomes of the CMC research and the conclusions drawn along that line, and on the other hand what I can see actually happening around me in my explorations of the VWs. To me this contradiction is caused by the opposing viewpoints. The outside view tries to apply the formula of FtF interaction to VWs. This is misleading in a number of ways. It is e.g. harder to tell if a person is ironic or sincere without non-verbal cues from body language and facial expressions, but the opportunity to present one self to others as a graphical image of one’s own choice is clearly very compelling to many people. How well one can hide an unwanted feature is never

considered in quality estimations of FtF interaction and is therefore lacking from the outside view.

But can the possibility to hide the physical body behind a digital image really be something good? Is it not deception? Yes, it certainly has an element of deceit, but so has wearing clothes and makeup for instance. Goffman [3] has shown that we constantly put considerable effort in presenting ourselves to others in a way that we hope is as favorable as possible. In doing so we will typically take on a number of different roles. One for holding presentations, one for chatting in the coffee room etc.

VWs gives us the opportunity to play yet another role, a role, which has certain properties that no FtF interaction role can have. I know from my own experiences that playing this role can relieve tension from otherwise pressing situations, and I also know from my interviews that it can help people with different disabilities to interact with other people without standing out, and feeling pitied. And not least important, it can actually be very fun to do it. Having said this, it must also be said that this particular feature of VW interaction also can cause problems. Many of these stem from difficulties in keeping the distinction between the presented self of another person, and what dwells behind that presentation. This is an effect that according to Reeves & Nass [5] is applicable to a wide range of new media.

In addition to disregarding new possibilities of the interaction, the outside view also underestimates the ability to adapt to the medium and work around the problems that it imposes. From the inside it becomes apparent that it is necessary not only to change how we do things, but also what things we do. We could try to play soccer in the Palace, but we know it would not work very well. This does not mean that soccer in VWs in general is a bad idea, only that it does not fit in with the characteristics of the Palace. On the other hand I have seen many examples of activities that are triggered by the inherent affordances of the system.

My favorite example of this is when one day a person changed her avatar name into a short sentence, so that it was shown beneath the avatar where the name usually is (see fig. 2 again). I do not remember exactly what it was, but it was something silly like: "I'm with stupid ~->". She then positioned her avatar next to her friend's avatar. The friend of course responded by typing something like: "Me too!" It was not long before the whole room was a long chain of avatars jointly creating elaborate sentences using the label intended for their names. This example appeals to me because it not only shows that VWs have unique properties that can and will be woven into the interaction, it also shows that

the use of the system significantly differs from what the designer originally intended.

#### 4 ARE VIRTUAL WORLDS REAL?

The most prominent ingredient of the outside view is probably the conviction that it does not really matter what goes on in a VW because, after all, it is not for real. "It's just a game." In a VW *sticks and stones can't break my bones*, but this does not mean that I not would take notice of an angry mob trying to stone me or beat me up with their sticks. My mind and my emotions are present and virtual actions can work as the cause to effects on my mental state that are as real as anything you can experience in the physical world. There are many descriptions of how real the emotional effect of things happening in VWs are. One that has been given much attention is Dibbell's [2] case concerning a virtual rape.

I can understand that it must be hard to understand how strong the emotional involvement can be in a VW setting. Picturing a person sitting in front of a computer screen seems to signal distance and detachment, and in VR terminology the situation would be characterized by a very low degree of immersion. Not many of the senses are engaged, the level of stimuli input is low, and outside stimuli have not been shut out. But from the inside, another type of immersion emerges. Consider the following extract from a paper by Richardson LeValley [6].

*I danced for my cyberspace husband, whom I had recently virtually eloped with, in-world. The dancing was a delightful and deeply moving experience. I danced with a silver teapot, with a chest, with my Asian female head and with my cyberhubby's frog head (with outstretched tongue and fly) on the back of my left hand. I placed a fern on the floor of a temple room and I danced up out of it and back into it. I danced in the silence. I danced for a long time. I was fully engaged in the floating of the dance and in the act of dancing in beauty for him.*

*The next morning, when I awoke in my primary referential context, I remembered the dancing, not only the image of the dancing but also the sensuality of the dancing. I had sensori-motor memory of the dance. I recalled the slight movement of the air on my face as I floated up and down, up and down. I remembered the funny feeling in my tummy from this movement. I remembered the feeling of my arms outstretched with objects on my hand. I remembered the silence and the way time was suspended. I remembered both the solitariness of my self expression, in this dance, as well as my deep emotional connection to my*

*cyberhusband. And I remembered all of this in my physical waking world body.*

One might think that she has tried out some new incredible VR system with astonishing performance but actually her recollections describe an event from Worlds Away, a system fairly similar to the Palace. I would like to distinguish between on one hand the traditional concept of perceptive immersion and on the other hand the emotional immersion that Richardson LeValley describes. The emotional immersion is closely connected to engagement which arguably is best understood through experience and therefore hard to see from the outside view.

So far I have argued that the interaction in the VWs is real interaction with real emotions and real consequences, but this does not make the worlds real. I would, however, like to argue that also the inanimate objects of a VW are as real as objects in the physical world although different. Let us take one of those beers that Bill used to serve before his untimely demise, as an example. Obviously the most prominent characteristics of drinking a physical beer is absent in the VW. We will not get any less thirsty, and we will not get drunk no matter how many virtual beers we choose to guzzle down. So what is the point? Well, we all know that buying someone a beer means something more. It might serve as an invitation to a conversation, or a sign of gratitude or even friendship. It does not matter so much that we do not have to sacrifice money to buy a beer. It is still precious to have someone making the symbolic action of ordering a beer and handing it over to you in a virtual bar. The meaning of the act is conveyed regardless of how much the beer cost.

But even though the beer does not cost anything, the laws of inflation still works. If you get beers for everybody who enters Bill's bar it will lose its symbolic value. And if you take the time to design a custom made drink and offer this to someone the gesture will be more potent than offering a generic drink. Therefore it is socially advantageous in this context to be good at designing computer graphics.

The system with props that can be shared and custom made fills a function in the continuously ongoing formation and reformation of social structures. This activity will of course be found also in VWs that do not have props that the citizens can give to each other. It is a behavior that will be present wherever people meet but the functions embedded in a VW technology still influences what people will do in the world. In Worlds Away, for instance, they have a monetary system, and props can be given or bought, but not made. This makes the framework for the

interaction in Worlds Away different from that in the Palace, and shapes the social interaction in the worlds in different directions.

So a beer in the Palace has different characteristics than a physical beer, but the symbolic significance is left intact. The symbolic significance is very important also in the use of physical objects. We frequently use them as equipment to try to convey a desired image of ourselves to people around us. Goffman [3] refers to objects used in this manner as sign-equipment. In this passage different beverages send different messages.

*Thus, in the crofting community studied by the writer, hosts often marked the visit of a friend by offering him a shot of hard liquor, a glass of wine, some home-made brew or a cup of tea. The higher the rank or temporary ceremonial status of the visitor, the more likely he was to receive an offering near the liquor end of the continuum. Now one problem associated with this range of sign-equipment was that some crofters could not afford to keep a bottle of hard liquor, so that wine tended to be the most indulgent gesture they could employ. (p. 29)*

Note how the limited supply is a deciding factor in the effect of the sign-equipment, just as in the Palace.

## 5 STATUS AND SOCIAL STRUCTURES

Another misconception about VWs as well as net-life in general, is that everyone is equal on the net. My experience, the inside view, contradicts this belief. According to Goffman [3] we form social relationships by adopting a coherent behavior over time, and we take on social roles by enacting the rights and duties attached to a given social status. When we strive for higher social status we also accept a stratification of the social structure and develop an admiration for those who have reached higher levels. The foundation for the social system is a consensus regarding values, and an assumption that the higher levels of the status level converges with that set of values.

So the concept of social status can be used also in VWs and it is as important in understanding a virtual society as it ever was in any physical society. What is new is that the criteria have shifted. The value set is different. In physical life things like money, work and how you look is important for how people will treat you. But those things are downplayed by the characteristics of the VWs. So the value set is replaced by a new one. Instead of money you need props, instead of a high status job, you need computer skills, and instead of looking good physically you need to look good on the screen. This means that someone like Bart suddenly has the chance of becoming someone.

I do not know very much about the real person behind the net identity “Bart” so this profile might very well not fit his situation at all, but my guess is that it fits many guys out there pretty well. Let us say he has trouble making the football team or getting a date for the school dance. Instead he tries the Palace and almost instantly realizes the opportunities this new world opens to him. If Bart’s experiences were anything like this, it is no longer so hard to imagine how he felt when he first was promised to become a wizard only to later be let down on that promise.

Another example of the shift in the social hierarchy is what I experienced when I started my own world. At the time I was fairly new at the department and had been an undergraduate student not so long ago, but when I occasionally arranged some recreational activities in my Palace I became the center of attention. I could decide the rules and those who did not obey got a dose of the wrath of God (me). Compared to an ordinary department seminar things were turned upside-down. Young doctoral students who ordinarily keep a low profile on those occasions felt right at home in this environment and tended to dominate the meetings, while the senior researchers who often do much of the talking in the seminars were not even present.

The same phenomenon was apparent when I tried using the Palace in the undergraduate education. The distance between my students and me shortened considerably in this scenario. I had made an office where they could come and get their assignments and report their results and a coffee room where they could hang out and chat. Especially the coffee room worked as a status leveler. They even told dirty jokes with me present, which has never happened to me, before or since, when I have spent the coffee break together with my students in a physical coffee room. In short, the arena effects the discourse.

Traditional status structures are broken down and redefined, for better and for worse. This can in turn lead to a conflict between those who have something to gain from trying to keep the traditional structures intact and those who want a fresh start. It is important to remember that there are no absolute borders keeping the virtual world separate from the physical world. A person who is a lawyer in the physical world but a newcomer to the VW might want to try to bring the conversation into the area of occupation in the physical world in hope of transferring some status points, while a person who has attained higher in the VWs hierarchy but in the physical world is still in school, might try to change the subject of the discussion.

## 6 ON ANONYMITY AND IDENTITY

But what if I would have wanted to really punish Bart by banning him from as much of the Palace universe as possible? Using the IP-address to identify the person would be problematic for a number of reasons. That would leave me with his chosen nickname as a signifier of his identity and since he can change that name to whatever he wishes at any time, we might conclude that it would be next to impossible to keep him out even if I would have wanted to. But there is a catch. To escape his sentence, he would have to give up his name, and by doing that he would also give up his identity.

This brings us back to the need to fit into the social context. Like everyone else in the Palace, Bart had built up a personal community of people around him. He had invested time and effort in the relations to these people and these investments resided within the connections to these people, in the form of social capital. For an extended discussion on personal communities and social capital in virtual communities see Ågren [9].

Without his identity, he would also be without the key to all the resources he had created for himself within this community. In fact, Goffman [3] notes that you simply cannot belong to a society without stability of self-presentation and Schiano & White [7] have found that there exists a social pressure to maintain a stable primary identity also in VWs. So as it turns out, I would not even have had to put his name on any ban list. I could just let it be known that he had done something that disagreed with the value set of the society, and he would see his social investment get flushed away. The lesson we should learn from this is that we are not, as the outside view leads people to think, by any means anonymous on the net. We are held responsible for our actions. All societies, virtual or physical, demand that we contribute something in order to benefit from being part of it, and to keep tabs on the contributions, there has to be identifiers, and without an identifier, an identity, there will be no payback.

## 7 CONCLUSIONS

Bart was a very committed user of the Palace worlds and had the inside view of what VW interaction is about, so why did he behave as he did? He should have understood that he was taking a big risk and had much to lose. The answer to this question is twofold. First, I do not think that he thought he was running a risk of getting caught. Having the inside view does not imply having deeper knowledge about how Internet

technology in general, and Palace server technology in particular actually works. Second, when I described the formation of a society as a convergence towards some commonly accepted ideals, I did not mention that there are always differences of opinion, and these can lead to substructures with other ideals within the society. I think that Bart belonged to a social structure where he could actually score some status points by behaving subversively.

So now we know why Bill was killed, and however insignificant my dear bartender bot's existence might have been, at least it gave us the opportunity to catch a glimpse of the inner workings of social interaction in virtual worlds. I have argued that it is easy to make erroneous assumptions about life in VWs when keeping a distance to the phenomenon. The reason for this is probably that the VWs are metaphorically problematic. It seems to be hard to intuitively understand what a VW is and how it works and easy to make unfair comparisons to the physical world.

I started the paper with mentioning some typical outside view positions. Now, I would like to offer my own alternatives based on the inside view. I would like to stress that I have used a case from a graphical VW and would like to advise anyone trying to apply my findings to net-life in general to at least proceed with caution.

- Social interaction in VWs is fundamentally different from interaction in the physical world.

Much of the interactions that occur in VWs have no counterpart in the physical world since they have been invented as a way to compensate for weaknesses in the medium, or utilizes strengths or otherwise unique characteristics of the medium.

- Interaction in VWs is real.

Watching someone engaged in interaction in a VW does in fact look like someone playing a computer game, and we all seem to share some intuitive idea about FtF interaction with other people as something important and fundamental for us humans, even if it is just chatting in the coffee room. But, imagine a game which consists of the same form of interaction as what goes on in the coffee room, and it is played with the same continuity. What is it then that makes the coffee room setting real and the game not real? I think the word real is a very unsuitable for distinguishing this difference.

- The social structures of VWs are hierarchical.

It is hard to bring symbols of social status from the physical world into VWs, so one might think that the social structures would be flat, but apparently we do not want it to be that way. We somehow always find ways to build social structures and ways to denote social status.

- People are not anonymous in VWs.

All forms of social structure demands that the participants have some form of identities to work. The names of the avatars are not the names of the people behind them, but as Schiano & White [7] puts it "pseudonymity is not anonymity".

I would like to end the paper by making the general observation that people continue to behave like people whether the arena is a VW or the physical world. But the technology that mediates our interaction has a great impact on what forms the interaction will take. This in turn seems to mean that theories about human behavior can be used in this new context, but the physical world cannot be used as the norm for comparison.

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