THESIS

VIRTUAL MORALITY: THE MORAL STATUS OF VIRTUAL ACTIONS

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ABSTRACT

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In this thesis, I examine virtual actions and the relationship between them and morality. Increasingly, people are using computer generated virtual mediums for relaxation, work, and socialization. Virtual worlds are one form that virtual mediums can take and are becoming more popular than ever before. These worlds are often characterized by an increased sense of freedom, where people can do things that they could not or would not do in the real world. The problem is that as more people interact within virtual worlds, these interactions are often characterized by negative or harmful behavior in one form or another, and while most people recognize this as a problem, it is unclear whether or not virtual actions can even be classified as morally wrong.

I argue that virtual actions are the proper subjects of moral consideration and that, in some cases, they are morally wrong. In order to achieve this, I rely heavily on empirical findings from psychology and from several philosophical theories concerning consciousness and the nature of the self in relation to virtual worlds. By making clear how closely people are connected to the virtual world and showing the real world consequences that are a direct result from virtual actions, I hope to show that virtual actions can and should be morally judged in the same way that actions in the real world are judged.

TABLE OF CONTENTS

ABSTF	RACT	. ii
INTRO	DUCTION	1
CHAP	TER 1: OUR CONNECTION TO THE VIRTUAL WORLD	6
1.	Key Terms	6
2.	Nature of virtual worlds	9
3.	Connecting to the virtual world	16
4.	Philosophical connection	20
5.	Psychological and scientific connection	26
6.	Benefits of gaming	33
CHAP	TER 2: WHY INTERACTIONS WITHIN VIRTUAL WORLDS SHOULD BE	
SUBJE	CTS OF MORAL CONSIDERATION	43
1.	The online disinhibition effect	44
2.	The online disinhibition effect and real world behavior	48
3.	The virtual self	56
4.	Real world consequences	61
5.	Possible objections	67
6.	The proper subjects of moral consideration	77
СН	APTER 3: THE APPLICATION OF MORAL THEORIES TO VIRTUAL	
AC	TIONS	81
1.	Virtual interactions between people	81
2.	The problem with morally judging virtual actions in single user environments	87
3.	Virtual actions have no moral status	89

4. Virtue ethics approach to virtual actions	92
5. Consequentialist and deontological approaches to virtual actions	97
6. Conclusion	100
REFERENCES	103

INTRODUCTION

We live today in a society that has been and continues to be shaped by advances in technology. Perhaps most prominent within the various technological advances is the computer. We use computers not only to further advance existing technology, but also throughout our lives in both obvious and more obscure ways. Since the invention of the computer, technology has continued to increase exponentially. Technology builds upon itself by using the newly formed limit as a foundation for the future, taking our knowledge and society along with it. While it is rather easy to see the advances in our knowledge, at times it is easy to forget to what extent society is changed in response to those advances. Because we are living through the change, it is often not until we take a breath and step back to survey the scene that we are able to grasp the profound effect technology has had in driving society forward. Being born into the digital age, I have never known a world that did not bear the marks of computers. Computers permeate our lives; they are on our desks and in our laps, inside the television and microwave, inside our pockets and our bodies. We use them to communicate, to learn, to cook, to clean, to create, and to relax. And while society has grown with technology, it is not without stretch marks. Lagging behind the advance is the question of how we should use the technology. One place where this is becoming painfully clear is how we use this technology to interact with each other.

Communication has evolved from sending letters to interacting with people across the world instantly within virtual worlds. The disparity is staggering. We use computers to talk in real time over the phone, via text messages, emails, forums, video calls, and virtual worlds. All of these have changed the way we communicate and interact with one

another. Instead of having to wait to interact with someone, we are able to do it instantly and over great distances. People are seldom out of touch. Businesses are able to efficiently communicate and make decisions in real time across the globe. People use the internet to learn and discuss, with classes being held online and papers being transmitted, read, and graded digitally. Students who may otherwise have had trouble succeeding in traditional language classes have the opportunity to use virtual mediums to assist them in learning a new language (Roed, 2003).

Computer mediated communication has enabled us to communicate tremendous amounts of information over great distances in near real time, and it has gone even further in the form of computer mediated environments. Through the use of computer mediated environments, people are able to not only communicate, but interact through virtual actions with people anywhere in the world. By creating and controlling a virtual representation of themselves, a person is able to inhabit a virtual world, interacting with other people there, and even develop a feeling of overcoming physical disabilities (Ford, 2001).

If things continue at this rate, interaction through computed mediated environments will only become more prevalent. There will be more nations establishing embassies and businesses opening up shops or holding conferences in virtual worlds like Second Life. Video games are no longer something played by a minority of the population. On top of the 183 million gamers in the United States who play an average of thirteen hours per week, "Globally, the online gamer community – including console, PC, and mobile phone gaming – counts more than 4 million gamers in the Middle East, 10 million in Russia, 105 million in India, 10 million in Vietnam, 10 million in Mexico, 13

million in Central and South America, 15 million in Australia, 17 million in South Korea, 100 million in Europe, and 200 million in China" (McGonigal, 2011, p. 3). As reported by McGonigal:

- 69 percent of all heads of household play computer and video games
- 97 percent of youth play computer and video games
- 40 percent of all gamers are women
- One out of four gamers is over the age of fifty
- The average game player is thirty-five years old and has been playing for twelve years
- Most gamers expect to continue playing games for the rest of their lives (McGonigal, 2011, p. 11)

What many people do not seem to realize is the real world repercussions that result from events in virtual worlds, ranging from marriage to murder. As this aspect of human life continues to increase, it is important to look at both how we behave, and perhaps more importantly, how we should behave within virtual worlds.

As our understanding of the human mind increases, we are finding the divide between the virtual and real beginning to blur. Clark and Chalmers have proposed that the mind can be extended outside of the body, that our cognitive system can include things like notebooks, calculators, and computer files (1998). Researchers are finding that nonverbal social behavior carries over into virtual worlds (Yee N., Bailenson, Urbanek, Chang, & Merget, 2007) making them an inexpensive place to study diverse social interactions, such as cross-cultural and crisis management situations (Nakanishi, 2004). Virtual environments are even being used to study psychological disorders (Kim, et al., 2009) and to treat autism (Altschuler, 2008; Turner, 2008; Mitchell, Parsons, & Leonard, 2007).

The fact that virtual environments elicit the same kind of behavior found in face to face interactions indicates the profound similarities between what was initially considered very distinct. These similarities are what enable us to treat autistic children via virtual interactions, but they are also leading people to reject the line that has traditionally divided reality and virtual reality. Jos de Mul claims that "In telepresence and virtual reality the artificial body has become part of our own body scheme" which could explain why "Pilots exercising in such simulators often experience dissociation between their biological and artificial bodies" leading to imbalance and flight restrictions by some airlines after simulator use (2003, p. 259). Humberto Maturana Romesín claims that "the distinction between virtual and non-virtual realities does not apply to the operation of the nervous system" and that virtual realities have now become non-virtual (2008, p. 109).

Living in the midst of such an extensive use of computers and computer mediated environments, questions concerning the nature of these environments and what they could mean for the moral status of actions performed in and through them, often go unasked. Instead, people tend to appeal to some form of common sense in order to try and explain how we should classify virtual environments and, more importantly, the actions and interactions of people within them. The problem, as is the case with most other forms of common sense, is that people hardly take the time to examine the assumptions that underlie the common sense they take for granted as true. More troubling, there are those who believe that virtual actions, in virtue of occurring within virtual environments, are not subjects of moral consideration. By examining the nature of computer mediated environments and the connection they have with the real world, I hope to establish a clear

base from which to argue that virtual actions are proper subjects of moral consideration and that it is possible for real wrongs to occur within virtual worlds.

CHAPTER 1: OUR CONNECTION TO THE VIRTUAL WORLD

In this chapter I will begin by defining some key terms that will be used throughout the three chapters. I will then examine how we commonly view virtual worlds and the sorts of assumptions we have about the interactions that occur within them. I will then present some philosophical and psychological views of virtual worlds, focusing on the connection they have with the real world. From there I further emphasize the connection with the real world by presenting some of the benefits that may result from playing games in general, and video games in particular.

1. Key terms

When most people think about virtual reality, they imagine head mounted displays that fully immerse the user in a computer generated three-dimensional environment. While this is indeed a good example of virtual reality, it can take different forms. On the more complex side, there are new technologies that are being developed that allow for haptic (tactile feedback) experiences and telepresence, that is, technology that allows a person to feel as if they are in another location, which most commonly takes the form of video conference programs, but can also involve control of robotics, allowing the user to have a direct effect on the environment. While fascinating, virtual reality does not need to be nearly so immersive or technologically advanced, it is simply a term used to describe computer generated environments. Increasingly, however, it has begun to take on a slightly different meaning, wherein it can be seen as something distinct from the real. For this reason I will not be referring to virtual reality as much as virtual worlds and the virtual environments within them.

By virtual world I generally mean a particular, isolated, computer generated environment. Often times this will be a video game, so, a particular game or program would be one particular virtual world. Virtual worlds are very similar to virtual environments, which are also computer generated, and the two terms may be used interchangeable, but I try and keep a very fine distinction between them, wherein a virtual world may contain one or more virtual environments. Much like the word environment can be used to describe a wide range of systems or areas (from a particular body to the world and perhaps beyond) in the real world, it carries similar connotations into the virtual world. In the virtual world, one can talk about a particular virtual environment inside the world, or the virtual world itself as being a virtual environment.

Virtual worlds vary in both how they are constituted and how a person interacts with them. As was mentioned before, there are advanced technologies, such as haptic devices and head mounted displays, that allow for a high degree of immersion, but much more commonly people interact with virtual environments through the use of computers (including gaming consoles), peripheral devices (keyboards, mice, etc.), and some sort of visual display like a monitor or television set. The virtual worlds themselves come in many different forms, but most all involve at least one user and since many are video games, the user could be considered a player or gamer as well. Within most games there are both non-playable characters (NPCs) and playable characters (PCs). Increasingly, virtual worlds make use of the internet to allow multiple users to interact with each other, many of which are considered massive multiplayer online (MMO) and some are also role playing games (RPG or all together MMORPG).

Users typically interact with the virtual world through the use of avatars. Through the use of different devices, like a keyboard and mouse, users are able to control the actions of virtual character. In many virtual worlds there is a great amount of freedom involved in creating an avatar and they can take the form of nearly anything (including realistic representations of the user). Because virtual environments are seen through computer generated visual representations, all actions that occur within them are seen as representations of actions. This, however, does not mean that virtual actions are necessarily not also real actions.

Because so much of what we perceive as computer generated representations on monitors and television screens are strictly passive experiences, wherein there is no user or no active control of the actions by the user, there is a temptation to lump all virtual actions into the same category as things like animated movies. There is, however, a distinction between passive events and those that are actively caused by a person. For example, a program may generate a virtual representation of two people boxing but, while still a computer generated representation, a fight between two users in a virtual environment is different. The difference lies in the active quality of the user, as it is necessary in the second example and not in the first. Even though both may be represented on the monitor in similar ways, the fight between users is the result of real actions that are carried out by real people through the use of the program, the user takes an active role in the creation of the event. For this reason I will use virtual actions to refer to only those representations that are actively caused by choices the user makes and not entirely due to the creator of the program. In this way we can differentiate between events that take place solely as a result of the program and those that require action by a user.

2. Nature of virtual worlds

What is the nature of virtual reality, that is, is it any different from what we commonly call reality and if so, in what way. There do appear to be some very obvious differences between virtual worlds and the 'real' world. While virtual reality does seem to take place within reality (most commonly on a personal computer or through some other visual device, the best of which are headsets which allow full visual immersion into virtual worlds), the events and the various actions that compose them do not seem to take place in any physical location. It is possible to go to places of historical import throughout the world, such as locations of major battles or speeches. We cannot go and take a physical trip to the place where the legions of the dead invaded Azeroth, though we may be able to make a trip within the game world. What is the difference between these two trips? The most common answer is that one is virtual while the other is real, but what does this mean? Of course, it does not seem likely that the virtual world is not in some way a part of reality, but there does still seem to be a significant difference between the two. The question is how these differences affect our classification of virtual worlds and the events that occur within them, and whether or not they should.

Perhaps the most glaring difference is the lack of physical interaction that is possible within virtual environments. In the real world, we are able to touch and smell, physically comfort and hurt. These are, for the most part, lacking from virtual environments. Though it may be possible for one avatar to replicate any number of the various forms of interaction available to us in the real world, there is usually no way for either party to physically feel anything. In the medieval combat simulator Warband, another player does not feel the physical pain of being killed by my morning star any

more than a player in another game would feel a hug. There is fundamentally a divide between the real and virtual worlds that is constituted by physical sensation.

The divide between virtual and real seems to result in all things virtual to be relocated to a lower stratum of social esteem. By this I mean that the actions and events and the time and effort spent in creating them, are considered to be of little to no importance, especially when weighed against real world actions and events. It does not matter how long it took a person to earn or construct a virtual item, it is, after all, only virtual, not real, and therefore not worth anything. A good example of this, and one that I am sure anyone who has played MMO's has experienced at one time or another, is what I call the Dinner Time Raid Scenario. Take for example, Rob. Rob is a college student who is living with his parents. His entire life before college was spent in competitive team sports, which instilled in him a good work ethic, dedication to the team, and a desire to achieve group goals with his teammates. His family and he were accustomed to practicing several hours a week, several days a week, and playing games on the weekend. After entering college he moved away from competitive sports and began to find a similar fulfillment in online games. Rob joined a team (a guild) and began competing with other guilds through dungeon progression. Just like his previous teams, there would be set times where they would get together and play or compete, though there were no practice times, it was all competition. It is worth mentioning that there is a danger (much like there is in just about any action) that some people may spend too much time interacting in virtual worlds. While the frustration some parents may feel towards a child who does little else but spend time in virtual worlds is completely understandable, that does not have to be the norm and is a separate issue from this one. Rob does not spend all

his time gaming. He goes to college, has a part time job, helps around the house, and eats dinner with his family when he is not raiding. It is only his free time that could otherwise be spent in competitive sports that he spends gaming.

Despite his best efforts to explain this to his parents, they would insist on calling him away from his team for dinner. To them he was just playing a game, he should just pause it, and if he was playing on a team of 40 people, while they would just have to wait. This, of course, never happened with his previous teams. No one showed up at practice or games demanding that Rob come home to eat dinner with his family. So what prompted his parents to act so different in regards to his online team. The answer is the way his parents, and much of society, view virtual reality. To them it was only virtual, a game, not real, something that did not have the same status as anything that happened in real world. It did not matter to them that there were 39 other people depending on him to fulfill his commitment to them, they, in virtue of being within the virtual world, also somehow lost their status as real people. This line of thought, as should be obvious, has dangerous implications for ethics when extended considering the interactions that take place within virtual worlds. These may be common beliefs of a large portion of society, but they are not consistent with other, more common beliefs.

There are many other aspects of society that are given equal or near equal weight as face to face interactions that not only lack the same degree of physicality, but are no less virtual than the interactions that take place within virtual environments. Perhaps the most common examples can be found in our forms of communication. Emails and text messages are common forms of communication that are largely treated by society in the same way as verbal communications. They hold real weight and can be used in criminal

proceedings, as evidence of wrong doings, and are judged ethically. Increasingly, they are being used to bully people as forms of cyberbullying, which is at least generally considered to be wrong. Similar forms of communication are used within virtual environments. Often times the most basic and standard form of communication is via ingame text based protocols, including in-game mail services and real time textual communication. In addition, there are games that come with additional forms of communication, including VoIP protocols.

With the use of modern telephones, we are able to communicate in near real time with people across the world. Our voices are digitized and sent as signals through wires and via satellites to the other party where it is interpreted and played back as a voice through a speaker. Of course, this consists entirely of physical processes, but so too do the VoIP protocols that the fictional Rob (and millions of real people) uses every day to communicate. VoIP protocols are very similar to traditional phones, but instead of sending the signals via the phone companies' networks, the sounds are turned into digital data and sent over the internet. There are numerous programs used by people to communicate, often times with upwards of 40 people all at once. Programs like Skype not only let people communicate audibly, but visually as well. This, however, does not limit them to use with computer users. While it is true that many programs are designed to work with other computer uses over the internet, millions of people are using VoIP via companies like Vonage. These people use phones that, in most cases, plug right into the wall jack.

If both consist of physical processes, and we do not generally degrade the status of one person simply because they are talking via the phone as opposed to face to face, how could we justifiably do so to people who are conversing or communicating while acting towards a common goal within a virtual environment? It is inconsistent to respect people's interactions via phone calls, but not VoIP protocols. Still, this may not save Rob from dinner. Often times it is a simple matter to continue a conversation after dinner, though not so with games and other group activities like sports.

When someone is playing a board game, especially a rather non-competitive one, it is usually simple matter to put the game on hold and walk away. The same is also true of many single player video games. Still, the degree to which a game accommodates a break in play is highly dependent on the circumstances. Sometimes people are 'hooked' on a game, they are at a pivotal moment in the story or a confrontation with an opponent is coming to a head, requiring much concentration or the game itself does not allow for a break in play, where if stopped, one would have to continue from the last saved point (potentially hours ago). Some games are timed, such as chess, and putting the game on hold may give one player an unfair advantage. Nevertheless, in games that involve more than one person, how easy it is to walk away seems to depend in large part upon the other players. Anyone should be able to walk away from a single player game with relative ease, there are, of course, people who may have an unhealthy relationship with any particular game, but most people should not have this problem. There is, however, a problem that anyone can have when they play with other people, that is, often times a commitment is involved. This becomes increasingly clear in team sports.

I will take soccer as an example, but any other team sport should suffice. A soccer match requires the coordination and commitment of many people in order to succeed.

First of all a field is required, which often takes prior planning and fees. Second, two

teams are required. Each member of each team has a commitment to show up at the schedule day and time of the match and to stay for the entirety of the match (in most cases, players also have a similar commitment to practice as a team). Third, each team has a commitment to the other team to show up to and have enough players who will stay for the match. Both of these often require the commitments of parents or other family members to take people to the matches. Fourth, referees are required to show up and stay for the entirety of the match. If any of these are missing, then it is possible that the game may not continue. In light of all this, it seems like most people would not show up at a match and demand that their child come home for dinner. As this would break the commitments they have to all the other people involved if the game is unable to continue, most would consider this behavior to be at least abnormal, if not wrong.

In the Dinner Time Raid Scenario, Rob has made similar commitments to his fellow guild mates. In order for the raid to operate successfully, it is necessary to have enough people, of the right classes (different classes of avatars have different abilities), together for a set amount of time. Everyone agrees to meet at a specific time, at a specific place within the virtual world, and stay for a set period of time. In the example the raid was made up of 40 people, each and every one of them has made a prior commitment to the others to make the raid successful by following through on their agreement. It is true that the players are not interacting with each other or the virtual environment at the same physical level as the soccer players, but that does not mean that their interactions are not meaningful.

Similar to how other forms of communication work, when interacting within virtual environments, a physical action (in this case strokes on a keyboard) are translated

into data and used to affect change in a virtual environment to some degree. This change can range from communicating with other people textually or through the actions of an avatar, to world changing events such as killing a particular virtual entity or terraforming the virtual environment. Any successful form of communication or interaction between more than one individual requires the other party to be able to have access to the changes in the environment affected by the first. This, of course, is also true of virtual environments and other players are able to communicate and see the effects other players have on the environment. It is true that one is not able to touch these changes as one would touch a goal post, but one is able to climb the steps of a newly formed pyramid in a virtual environment via an avatar. While the action itself is not the same physical action as climbing a Mayan pyramid in South America, it still consists of physical actions in order to actuate, and perceive. The signals sent to the virtual environment are then turned into visual and auditory data that is displayed on the monitors of whoever happens to turn their gaze upon the scene. The visual and auditory data is the result of physical processes and can be picked up by anyone viewing the monitor or listening via the speakers through physical processes.

Just as we do not degrade the moral and societal status of interactions that occur through other mediums like telephones, we should not degrade interactions that take place within virtual worlds. While the interactions between people that take place through virtual environments are not characterized by the same degree of physicality as typical face to face interactions, they still involve real people. If we believe that people should be afforded a certain amount of respect, e.g., that we should uphold our commitments to them, and we do this even when we use other mediums, such as telephones or emails,

then there does not appear to be any reason why we should not treat virtual worlds in the same way. The commitments we have to the people we interact with within virtual worlds should be considered as important as those we have with people we interact within the real world.

3. Connecting to the virtual world

People are able to interact with virtual environments and other people within them by inhabiting an avatar. Originally derived from Hinduism where it was used to refer to a physical manifestation of a god in our world, it has evolved to refer to the virtual manifestation of a person within a virtual environment. They can be found in many forms in cyberspace. On forums people are able to upload 2-dimensional images that represent them and accompany their posts. Much more interesting, in virtual environments people are able to control the actions of 3-dimensional (for the most part) avatars that are able to interact with the world, both the items, non-playable characters, and other avatars within it. These avatars are often seen as representations of people in virtual environments, but they should be seen more as manifestations because of the nature of the connection between the user and the avatar.

One reason people feel a psychological connection to their avatar is due to the creation process. While not all games allow for any customization of avatars, most allow for some and many allow for a great degree of control over the appearance and abilities of an avatar. Because of this, people are able to shape avatars to appear how they want and be able to do what they want.

One important aspect of what it means for an avatar to be an avatar is that it is actively controlled by a person. There are two examples that can illustrate this point

further. When a person is AFK (away from the keyboard), the avatar is not able to interact with the world and for all practical purposes is considered to be worthless. It is like tool that is not being used or a car that is parked and not being driven. Interestingly, prior to the person leaving, the avatar is not really considered just an avatar, but as that person, or at least a manifestation of the person. People do not say that this or that character did this or that thing, but that the person who is controlling the avatars has done some specific action. When a person is AFK, even though the avatar remains, they are said to not be there. In this way, people can come and go from a virtual world by taking or releasing control of an avatar.

The second example concerns the use of BOT's or programs that control the avatar in a particular way while the user is actually not present or at least not actively controlling the avatar. This is generally considered a rather deplorable action that results in an unfair advantage, but also can be seen as being wrong in some other way. While it may not be clear exactly what is wrong about BOTing, one way to see it is as a form of deception. Generally, all avatars are controlled by users, when they cease to be, they are no long avatars in the same sense. Similar to how a brain dead person's body is often considered to be nothing more than a body, the avatar of an AFK person is seen as an empty vessel. What is perhaps so disturbing about BOTing is that it blurs the line between avatar and NPC's (non-playable characters). At first glance, we see the avatar not only being controlled by another person, but as manifestation of a person, as the person themselves. Then a person begins to notice that the BOT is not acting quite right. They are doing repetitive motions when nothing is there, or perhaps there is just something more subtle. Upon further investigation, the player sees that the BOT is

unresponsive to changes in the environment or ignores attempts at communication.

Realizing that there is not a person where their initially was believed to be one can be a disturbing experience. Admittedly not as much in virtual environments as it would in the real world, but it does begin to erase the distinction between human and non-human presence in virtual environments which can be disturbing when we look further into the nature of the connection between people and their avatars.

An interesting behavioral phenomena that helps to illuminate our underlying beliefs about the nature of virtual environments, is the language people use to refer to themselves and others within them. People use the first person pronoun to refer to themselves both in and out of virtual environments. Of course people refer to themselves in the first person outside of virtual environments, but what is interesting is that they refer to themselves in the exact same way while within any particular virtual world, when referring to actions they committed while there, and in regards to real-world actions, often times in the same sentence. This can be seen through the following example. Rob, from the previous example, is trying to convey to his family the sense of accomplishment and enjoyment he receives from playing a medieval combat simulator, Mount and Blade: Warband. He describes how the skill based nature of the game gives him great control over his avatar, which then results in a great sense of accomplishment when we is able to use his skill to defeat opponents who have the same degree of control over their avatars. However, in doing so, Rob does not say that his avatar parried three attacks, feigned right and then brought his morning star down with an overhead swing, instead he says that the he himself did these things. For example he could say, "there were seven of them left and only 3 of us, I hung back as my two teammates pushed forward, when I saw they were

ignoring me, I came crashing in from the side. I was in the zone! Parrying every attack and killing six of the remaining team. I was covered in blood and overcome with bloodlust, almost killing one of my own teammates in my attempts to finish off the last of the enemy team. Then I had to log off and I walked down stairs to get ready for school, still pumped from the battle". Of course this is just an example, but it does highlight several real aspects of experiences within virtual environments. Notice first that Rob refers to the actions he performs through the avatar not as actions the avatar commits, but as actions he himself commits, using the first person pronoun. He also flows from using it to refer to actions he committed in virtual environments to actions he commits in the real world, illustrating a lack of distinction between the two. Furthermore, the actions that occur within the virtual environment result in psychological states in the user in the real world, a point that will be expanded upon later.

In order to communicate in and about actions in the virtual world, people use the first person pronoun to refer to themselves, demonstrating an intimate connection to their avatars as being at least extensions of themselves. They also refer to other people in a similar way, not as this or that avatar, but as this or that person. When Rob tells his family about his exploits in virtual worlds, he does not say that he and some avatars went on a quest and killed a dragon or won some battle against other avatars, he says that we did these things, that he and some friends did these things, that he and other people did these things. People use the second person pronouns and proper nouns to refer to each other. While they may not refer to each other by their legal names, as anonymity can be very high online and in virtual worlds, they do refer to each other by the names they chose for themselves. It may be that we do not have the linguistic apparatus to distinguish

between how we refer to people online and people offline, but it seems more likely that such a distinction is nonexistent. Without thinking about it, we realize that we are communicating and interacting with other people in avatar suits. The way we use language while in a virtual world and to refer to events occurred there indicates that at the core of our beliefs we regard these interactions to be real events between two real people.

It is beginning to look like the virtual world is not some fantasy realm sharply delineated from reality. The more we study virtual worlds and the interactions of people within them, the more it seems like they are analogous in many ways to what people generally consider the real world. Recently, there has been an increasing amount of work being done in numerous fields that offer insights into nature of our relationship to virtual worlds, further erasing the barrier that is traditionally perceived to separate them from the real world.

4. Philosophical connection

One theory of cognition that is gaining acceptance and widespread use is the extended mind view or active externalism put forward by Clark and Chalmers. In their article, "The extended mind", Clark and Chalmers argue for the extension of cognition outside the bounds of the body, leading to an extension of the mind and eventually the extension of the self (1998). Basically, we make use of external objects in our cognitive processes. When we use a pen and paper to do a long math problem, tap our feet to keep rhythm, or consult information stored in notebooks or computers, we are creating a cognitive system that utilizes these various externalities in order to ease the cognitive load placed on the mind. By placing some of the process on the external environment, we

are able to perform more complex tasks more efficiently (think of doing a long math problem with pen and paper versus without).

In order for the mind to follow the cognitive process outside of the body, it is necessary to show that at least some mental states are in some way externalized. Clark and Chalmers (1998) compare the actions of two people, Inga and Otto, who want to go to the Museum of Modern Art. For Inga it is a rather simple matter. After hearing about the exhibit, she stops and thinks about where the museum is, having retrieved the information from her memory, she walks to 53rd street and enters the museum. Otto, being afflicted by Alzheimer's disease, the task is not quite so simple. Because of his disease, Otto carries around a notebook in which he stores information for later use. After hearing about the exhibit and deciding to go see it, he checks his notebook for the museum's location and enters the museum.

It seems in both cases that the person believed the museum to be on 53rd street and had this belief before consulting either their memory, in Inga's case, or their notebook, as in Otto's case. For Otto, his notebook filled the same role as Inga's memory does for her. It could be claimed that Otto does not really have a belief about the museum's location, only a belief that he has this information stored in his notebook. But if this was the case, then it would seem to also be true of Inga, who, after retrieving the information she needs from her memory is no longer conscious of it. Since both Otto's notebook and Inga's memory perform the same function, to claim that they are significantly different because one is internal and one is external is to not only beg the question, but to miss the point (1998, pp. 12-16).

All of this seems to indicate that the self consists of more than what is contained in a flesh and blood vessel. For Otto, his notebook is an integral part of his identity and as such, his self is partially composed of external sources. "Otto himself is best regarded as an extended system, a coupling of biological organism and external resources" (Clark & Chalmers, 1998, p. 18). If this is the case, it opens up the possibility that people can be connected in a meaningful way to externalities, even to the point of having them constitute parts of their selves. It seems that it is possible for a person's identity to encompass their computer, the information accessed through it, and even perhaps the avatars through which they access virtual worlds. Once they become part of the cognitive system, they can potentially be considered integral to the self. If there is good reason to believe that people readily do identify with their avatars or are at the very least effected by them, then it does not seem a stretch to consider them potential extensions of the self.

Another philosophical position that could lend insight into the nature of the virtual world and our place within it is presented by Jos de Mul in his article "Digitally Mediated (Dis)embodiment: Plessner's concept of excentric positionality explained for cyborgs" (2003). While still not widely known outside of Europe, Plessner was a contemporary of Martin Heidegger who is gaining renewed attention. Contrary to Heidegger who focused on finitude of man in time, Plessner begins by focusing on the finitude of man in space, or man's positionality. The positionality of all living creatures is defined by the organism's relationship to their constituting boundary. Plants have no one on either side of the boundary, neither subject nor object. Animals are characterized by being centered in the subject, by being in its body, having a relationship to the boundary that is characterized by interacting with the other side from the subject centered in the body.

People not only have this center, but have a relationship to the center. They experience the world and experience their experience of the world. They are both a body, in their body, and outside their body creating an excentric or de-centered positionality (Mul, 2003, pp. 251-252). Jos de Mul describes the human experience as the following:

"Because of double aspectivity, which is characteristic of life, each of these three worlds appears to human beings both from an inner and an outer perspective. Our body (as part of the outer world) is both body (*Körper*) – that is to say, a thing among things that takes up a specific place in an objective space-time continuum – and a lived body (*Leib*) that functions as the centre of our perception and actions. In its turn the inner world is both soul (*Seele*), the active source of our psychic life, and lived experience (*Erlebnis*), the theatre in which the psychic processes take place. With regard to the world of culture we are both an I (*Ich*) that creates this world, and a We (*Wir*) insofar as we are supported and formed by this world" (2003, p. 252).

This is no doubt a brief sketch of what is otherwise a large body of work. Still, I hope it is sufficient to make sense of what Jos de Mul does with it; from this framework he extends the concept of positionality in order to make sense of the technological developments in telepresence and virtual reality. Similar to active externalism previously discussed, claims that "although technical and cultural artefacts such as knives, cars, books and computers are not part of the biological body, as soon as they become part of human life, they also become part of the human body scheme and cognitive structure" and as such, we "human beings have always been cyborgs, that is, beings composed of both organic and technological components" (2003, p. 254). Jos de Mul turns to a rather striking example of the kind of out of body experience or doubling of the center that can be experienced through telepresence and virtual reality technologies.

"The strangest moment was when Dr. Tachi told me to look to my right. There was a guy in a dark blue suit and light blue painted shoes reclining in a dentist's

chair. He was looking to his right, so I could see the bald spot on the back of his head. He looked like me, and abstractedly I understood that he *was* me, but I know who me is, and me is *here*. He, on the other hand, was *there*" (Rheingold, 1991, p. 264)

While this could be used to support a Cartesian understanding of teletechnology, Jos de Mul finds the Cartesian reading to be much more problematic than a Plessnarian reading. It seems that a true out of body experience is not possible with this technology, as the body (or at least the brain) would still necessarily have to be present in order to have an experience. Instead, the experience would better be described not as a relocation of the center of experience, but as multiplication of it. In using telepresence and virtual reality technologies, we do not simply migrate our consciousness into an artificial body, but incorporate the artificial body into our own body schema, extending or multiplying our center of experience (Mul, 2003, p. 259).

Support for this interpretation can be seen in another description of Rheingold's experience. He initially claims that his consciousness switched locations, but later in the same paragraph remarks "how odd it seems to be in two places in the same time" (1991, p. 256). Jose de Mul himself points to the use of flight simulators by pilots.

"Pilots exercising in such simulators often experience dissociation between their biological and artificial bodies because the visual experience of movement and acceleration in the virtual body finds itself in conflict with the organ of equilibrium in the biological body. It takes the body a couple of hours to link both senses together again and during this period a pilot often has serious difficulties in maintain his balance. For this reason many airlines do not allow their pilots to fly within a specified period after they have been in a simulator" (2003, p. 259).

In telepresence there is a doubling of the physical body. Rheingold experiences the world both from his body and from the robot body. In virtual reality, however, it is not that the

physical body is doubled, rather "that the biological body is supplemented with the representation of a body – or at least a finite, subjective perspective that constitutes an additional centre of experience" (Mul, 2003, p. 260). Through the use of these technologies, people are able to multiply their center of experience, incorporating new bodies within what is considered the self.

It would seem to be much easier for a Cartesian to accept the extension of the mind into virtual environments and machines via telepresence technologies. Jos de Mul, before attacking the position, acknowledges that "Where Cartesian tradition fundamentalizes the distinction between body and mind ontologically, telepresence and virtual reality seem to aim at realizing this Cartesian dualism technology" (2003, p. 257). In describing his telepresence experience, Rheingold says that his "consciousness suddenly switched locations" and that "it was an out-of-the-body experience, no doubt about it" (1991, pp. 255,264). Jos de Mul is not the only one to attack the Cartesian possibility of the mind existing beyond or without the body, Monica Meijsing argues, for instance, that even a brain in a vat scenario is impossible without there having initially been a real body (2006). Criticisms aside, there seems to be more of a reason for a Cartesian to at least consider the possibility of the mind extending into things beyond a flesh and blood body. Such out of body experiences, where one experiences their mind transported into a robot body or into an avatar in a virtual world, all seem like possibilities for a theory that holds the mind and body to be distinct substances. If it is possible for the mind to inhabit and animate a corporeal human body, why not a machine or virtual one? Indeed if we are to entertain the possibility that the mind can animate different bodies, exist without the body, we could be brains in vats with virtual bodies,

that the mind could be downloaded onto a machine or the internet, then it seems that we must also consider it possible for the mind to animate a virtual body within a virtual environment. In this way, one could view the relationship between a person and their avatar as a sort of mind body dualism, where the body is not a corporeal body, but a virtual one. There would of course be the standard criticisms of this view, but they would equally apply to the Cartesian theories in general, and, as we have seen, there are good reasons beyond Cartesian ones to view avatars as an extension of the self. Beyond philosophical reasons for doing so, there are also good psychological and neurological reasons for considering happens in virtual worlds and our relationship with them to be much more integral to what constitutes a self than many would at first believe.

5. Psychological and scientific connection

A very interesting and relevant set of studies conducted by Nick Yee, Jeremy N. Bailenson, and Nicolas Ducheneaut indicates there is a deep connection between people and the avatars they inhabit in virtual environments, providing good reason to believe that there is something like extended cognition at work in these situations. Two studies, published in an article entitled "The Proteus Effect: Implications of Transformed Digital Self-Representation on Online and Offline Behavior" culminate in introducing the Proteus Effect, whereby the appearance of an avatar used by a person effects the way they behavior, in direct relation to preconceived beliefs about such an appearance. For example, a person using a taller avatar would be more confident or those using an attractive avatar would be more friendly (Yee, Bailenson, & Ducheneaut, 2009).

According to the two studies mentioned in the article, both the behavior of the user and the behavior of others towards them in the virtual environment, and the users behavior

outside of the virtual environment, are all shaped by the appearance of the user's avatar (Yee, Bailenson, & Ducheneaut, 2009).

There has been much work in how a person's behavior may be influenced by the appearance of whoever they are interacting with (face to face or via computer mediated environments), by playing a role in various role playing settings, through behavioral conformation, and explained by self-perception theory. Behavioral conformation is used to explain how a person's behavior changes in order to fulfill the expectations of the person they are interacting with (Snyder, Elizabeth, & Berscheid, 1977). In an attempt to explain why this process occurs, an appeal to the Self-perception theory is made, according to which a person's own attitudes and beliefs are inferred by observing themselves from a third person point of view (Yee, Bailenson, & Ducheneaut, 2009). It would make sense that if we derived, at least some, of our personal beliefs and attitudes in this way that when we then see ourselves as someone who is attractive and therefore nice, or tall and therefore more confident and aggressive, we will be more likely to act in a way that corresponds to this perception. I do not believe, however, that this offers an adequate explanation for all or even some of our actions. There is a further step that is necessary for this to succeed, namely, that we actually view our avatars as third person representations of ourselves. It is for this reason that I wish to discuss this process, as it helps to show the degree to which we are connected with our avatars, as extensions of ourselves.

It had previously been shown how the appearance of a user's avatar could shape their behavior both in the virtual environment and out of it (Yee & Jeremy, 2007); what was needed now was a study that showed a greater degree of generalizability to actual online communities.

The first study looked at the success of people within the Massively Multiplayer
Online Role-Playing Game (MMORPG) Word of Warcraft (WoW) based on the height
and attractiveness of their avatars. An automated scripted performed as census on three
WoW servers over seven days collecting data on each unique characters race, location,
and level. In WoW there are eight races, all can be male or female, and there are limited
amounts of changes that can be made when the avatar is created. All heights are the same
within a race. Because of the great similarity within a race and the vast differences
between races, it was possible to approximate the attractiveness of an avatar based on
race alone. Twenty-two undergraduates ranked the attractiveness of sixty-four (four per
race) randomly generated images of avatars on a seven point scale. Once the in-game
data was collected, it was compared with the attractiveness rankings.

Attractiveness and height were found to be a significant predictor of character success (as judged by the level of the avatar). As such, tall attractive characters were more likely to be higher level than all the rest. Interestingly, attractive small characters were found to be the lowest performers, possibly because of the childlike nature of such avatars (Yee, Bailenson, & Ducheneaut, 2009).

The second study was aimed at determining whether or not an avatar's appearance could affect a user's behavior once outside of the virtual environment. In order to test this, the height of the participant's avatars were made to be either taller or shorter by one standard deviation (of Caucasians aged 18-22 in the US, or 10.2cm) in relation to the confederates avatar. The confederate, on the other hand, perceived the avatars too all be

of equal height in relation to their own avatar. After the head-mount display (HMD) was set up, a black curtain dividing the room was lifted allowing the participant and confederate to interact within a virtual replica of the room. After introducing themselves, a money sharing task was performed. The task consisted of splitting a hypothetical pool of \$100. The participant offered the first and third split and the confederate was instructed to accept any split that did not exceed 9/1 in the participants favor. The confederate's proposed splits consisted of a 50/50 and 75/25, respectively. After the money sharing task was completed in the virtual environment, the curtain was drawn, allowing the participant and the confederate to sit themselves in chairs facing each other without giving a clear view of any real difference in height. Once they were ready, the curtain was drawn and the task was repeated face to face.

It was found that height was significant in the first split in both the face to face and virtual settings, but did not carry through to the other splits. Still the findings do support at least a limited lingering effect from the appearance of the user's avatar in the virtual environment. The authors suggest that the aggressive splits of the taller avatars in the virtual reality split may be due to their initial perception of themselves in virtual reality as being tall and the first split in face to face interactions could be due to see themselves as someone who can negotiate aggressively (from their behavior in the virtual environment) (Yee, Bailenson, & Ducheneaut, 2009).

What is important for our purposes is to recognize that there is a close relationship between avatars and the people who inhabit them. Not only do people perform better when using attractive avatars, but the appearance of an avatar a person uses even once seems to influence their behavior in and out of the virtual world.

Another study by Yee, Bailenson, Urbanek, Chang, and Merget aimed to show whether or not nonverbal behavioral patterns were extended into interactions within virtual environments. If they were, it would lend support to the generalizability of the many studies being done in virtual environments. In order to do so, they ran a script which would record the coordinates of people within a 200-meter radius of the researcher assistant within the virtual world Second Life. In addition to location, the script also recorded whether or not the people were talking. The researcher assistants were instructed to run the script wherever they saw at least two people interacting and after initiating the script, note the gender of each person in the area. From the data collected, it was possible to determine the gender of each person (at least to a degree since some genders were indeterminate), interpersonal distance (the distance between avatars), mutual gaze, location, and whether or not they were talking.

The study found that male-male pairs were more likely maintain a greater interpersonal distance, as this distance decreased, they were less likely to maintain eye contact. At the same time, female-female pairs and mixed gender groups were likely to maintain a smaller interpersonal distance and were more likely to maintain eye gaze. Furthermore, male-male pairs were less likely to be looking at each other indoor (most likely because of the forced proximity of the two parties) and it was found that the more two people were talking, the more likely they were to be maintaining eye gaze. These findings mirror those found in face to face interactions offering support for the claim that virtual worlds work as an adequate model for the real world (2007). While it is important to have support for the generalizability of findings within virtual worlds when we consider the increasing amount of research being done that utilizes them, it is also

important to try and understand why behavior within virtual worlds are analogous to those in the real world and what this could mean for the nature of both worlds and the interactions that take place within them. If virtual worlds are adequate models for the real world, and our behavior (both in and out of the virtual world) can be affected simply by the appearance of the avatars we use, then should we not also be worried about the actual actions we take within virtual worlds? The connection between the two worlds appears to be much close than one would assume from a mere game or form of fantasy, from something unreal there appear to be very real implications.

Virtual worlds are being used to study and treat a myriad of psychological and social issues ranging from mental illness to autism (Kim, et al., 2009; Altschuler, 2008; Turner, 2008; Mitchell, Parsons, & Leonard, 2007). It has been shown that there is good reason to believe research done in virtual worlds can be generalized to the real world, and the work being done that utilizes virtual worlds in order to help the social functioning of children with autism is a striking example of how they can be applied to real world situations.

While it has been shown that the virtual world has a significant impact on the real world, it has not yet been explained why something that is supposed to be by its very nature unreal or only a sort of fantasy or game play can have this effect. It seems that while we may distinguish between virtual realities and reality in general within our language, our nervous system does not make the same sharp distinction.

Recent work on mirror neurons might be able to explain the close relationship between the virtual and real worlds. Mirror neurons are a relatively new discovery and are found in both humans and other animals. Basically, they are neurons that fire both

when an animal performs an action and when it watches that same action being performed, hence the name, mirror neurons. Often times they respond to goal directed behavior, whereby a goal directed behavior can lead to the same brain activity in the observer as if they had actually achieved the goal (Goertzel, Aam, Smith, & Palmer, 2008, p. 12). What exact role mirror neurons play in cognition is still not entirely understood, they are almost certainly involved in learning and empathizing with people (Goertzel, Aam, Smith, & Palmer, 2008, p. 12; Gallese, 2003). Interestingly, there is mirror neuronal activity when observing an animal from another species (in this case monkey or dog) perform tasks that are within the human observer's repertoire (Buccino, et al., 2004). There is also support for the hypothesis that mirror neurons were integral to the evolutionary development of language (Arbib, 2008; Binkofski & Buccino, 2006; Corballis, 2004; Corballis, 2010; Rizzolatti & Arbib, 1998).

It should come as no surprise that a system seemingly so integral to social life should be found to be impaired in people with disorders that affect normal social life, like autism (Oberman, Ramachandran, & Pineda, 2008; Oberman, et al., 2005; Enticott, et al., 2012), and perhaps mental disorders like schizophrenia (Arbib & Mundhenk, 2005). What is important for our purposes is how virtual worlds are being used to treat these disorders and what this could mean regarding the cognitive function of the brain in relation to virtual worlds. The fact that actions in the virtual world would have such an effect would make perfect sense if the same mirror neurons were activated when viewing virtual and real objects. This is, in fact, most likely what occurs.

What makes studies and therapies that involve virtual worlds effective is the nature of the connection they have with what we call the real world. If it were the case

that virtual worlds were far removed from what we consider the real world, if they were part of some make believe realm, then they would not be as useful as they are. The connection is so great that it has lead people like Humberto Romesín to claim that, cognitively speaking, there is little to no difference between virtual and real events as far as the nervous system is concerned; in fact, this is why virtual realities are possible in the first place (2008). There does not appear any good reason to continue to relocate virtual worlds and experiences into the realm of make believe somehow detached from the real world

6. Benefits of gaming

While there is no doubt there are real concerns about potentially spending too much time playing games¹, particularly video games, there are also an array of potential benefits that game play in virtual worlds can offer us². In her book *Reality is Broken*, Jane McGonigal uses research conducted largely in the area of positive psychology in order to support her claim that, far from being a necessarily detrimental aspect of society, games are not only an integral part of human culture, but they can help "fix" reality. People turn away from reality because it is lacking in some aspect and she introduces fourteen "fixes" for reality, or ways that games help us experience things that are lacking and can be incorporated to improve society as a whole.

- 1. Unnecessary Obstacles
- 2. Emotional Activation
- 3. More Satisfying Work

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¹ Withdrawal from family and friends, community in general, addiction, etc.

² In general they offer avenues of escape, which are not always bad, and offer the possibility of socialization. In particular virtual mediums are giving people the opportunity to regain a sense of lost mobility and social functioning (Ford, 2001), providing a setting for learning that is more suited for some people than a traditional classroom settings (Roed, 2003), and are even being used to try and help children with autistic spectrum disorder (Altschuler, 2008; Mitchell, Parsons, & Leonard, 2007; Turner, 2008).

- 4. Better Hope of Success
- 5. Stronger Social Connectivity
- 6. Epic Scale
- 7. Wholehearted Participation
- 8. Meaningful Rewards When We Need Them Most
- 9. More Fun With Strangers
- 10. Happiness Hacks
- 11. A Sustainable Engagement Economy
- 12. More Epic Wins
- 13. Ten Thousand Hours Collaborating
- 14. Massively Multiplayer Foresight

The first fix, Unnecessary Obstacles, is explained like this, "compared with games, reality is too easy. Games challenge us with voluntary obstacles and help us put our personal strengths to better use" (McGonigal, 2011, p. 22). For much of society, work is boring. People punch in and punch out in order to be able to do other things and often they feel unchallenged. Games provide an opportunity for people to voluntarily take on a challenge and work to overcome it. Working hard in games generates positive stress, which leads to positive emotions including fiero, or pride. According to McGonigal, "scientists have recently documented that fiero is one of the most powerful neurochemical highs we can experience. It involves three different structures of the reward circuitry of the brain, including the mesocorticolimbic center, which is most typically associated with reward and addiction. Fiero is a rush unlike any other rush, and the more challenging the obstacle we overcome, the more intense the fiero" (McGonigal, 2011, p. 33). Games give us more opportunities to generate positive emotions than is typical in everyday life.

It should come as no surprise that something with such potential for generating positive emotions would lead to the second fix, Emotional Activation, or as McGonigal puts it, "compared with games, reality is depressing. Games focus our energy, with

relentless optimism, on something we're good at and enjoy" (McGonigal, 2011, p. 38). In other words, games offer us a rather easy way to experience flow. Flow is a state of consciousness first studied by Mihály Csíkszentmihályi as a specific kind of happiness. There are several ways to describe the experience, such as the "the satisfying, exhilarating feeling of creative accomplishment and heightened functioning" (McGonigal, 2011, p. 35) or "psychological state that accompanies highly engaging activities.... Most likely to occur when there is an optimal balance between skill and challenge.... In other words, flow represents the coming together of a person and an environment (Peterson, 2006, pp. 66-67). In sports it is commonly called being in the zone, and while these definitions serve to approximate the sensation, it is probably impossible to adequately describe it with words. If you have ever experienced it, then you will know what they are referring to, if not, then these words will fall indescribably short. The point is that flow is a very powerful, and beneficial, state of consciousness that can be acquired rather easily through games. More than just achieving flow, games allow us to gain intrinsic rewards from all four of the major categories: satisfying work, the experience of hope of being successful, social connection, and meaning or being part of something larger than ourselves (McGonigal, 2011, p. 49). Games offer comparatively easy access to positive emotions that are necessary for humans to feel satisfied.

Games give people the opportunity to experience more satisfying work than they are likely to experience in the contemporary work force. Compared to flipping burgers or stocking shelves; games are able to give people the satisfying work they need to be happy. People may choose to subject themselves to the work found in video games (and make no mistake, leveling up characters can be a lot of work), but they are likely to do so

because the work they do in the real world is not satisfying. According to McGonigal, "satisfying work always *starts* with two things: **a clear goal** and **actionable next steps** toward achieving that goal. Having a clear goal motivates us to act: we know what we're supposed to do. And actionable next steps ensure that we can make progress toward the goal immediately" (McGonigal, 2011, p. 55). Games most often present people with clear, achievable, goals and directions on how to reach them, something that is often lacking in work done by much of society.

Contrary to common sense, people like to fail, at least in video games. Good games present a challenge, challenges that are difficult, prone to cause failure, and yet offer the hope of success. Failure in reality is not always so pleasant, "compared with games, reality is hopeless. Games eliminate our fear of failure and improve our chances for success" (McGonigal, 2011, p. 68). The fun in games is improving, learning how to play the game better in order to overcome previously failed obstacles. They almost necessarily have to offer a hope for such success, as it is implicit in most games that it is possible to beat any particular part and, ultimately, the game itself. According to McGonigal, this quality of games actually helps foster optimism in people that can be carried over into their everyday life and optimism is has a good positive correlation with quality of life (2011, p. 69). If this is the case, then there is a good reason to play games on a somewhat regular basis.

In a time where many people go home to houses closed off to the world by blinds and shutters, a society where communities are becoming fractured, games can actually help build and maintain social connections. Playing with the same people over an extended period of time helps build social bonds and playing with family and friends

online can help maintain bonds over great distances. McGonigal's fifth fix explains how games are able to do this: "compared with games, reality is disconnected. Games build stronger social bonds and lead to more active social networks. The more time we spend interacting within our social networks, the more likely we are to generate a subset of positive emotions known as "prosocial emotions"" (2011, p. 82). Prosocial emotions are "feel-good" emotions directed at other people, including love, compassion, admiration, devotion, and most notably, what she calls happy embarrassment and vicarious pride (Naches). Happy embarrassment is associated with teasing, which can help build social relationships, and is perhaps most prominent in "party games" like *Rock Band* or Wii games that require people to physically move around in embarrassing ways. Vicarious Pride, or Naches, was reported by over 53.4 percent of a recent survey of gamers as an emotion they experience from games and that enhance their enjoyment of games (McGonigal, 2011, p. 88). It is the pride one feels at the accomplishment of another, in this case someone they help work through a game.

The sixth fix for reality concerns the rather mundane world most people see compared to the epic scales of many virtual worlds. "Compared to with games, reality is trivial. Games make us a part of something bigger and give epic meaning to our actions". They give us an opportunity to feel awe by creating epic contexts for action, epic environments, and epic projects (McGonigal, 2011, p. 98). Games offer us the opportunity to explore the ocean depths, space, other dimensions, and save the world by fighting off all manner of invasions and potential catastrophes, often by working together with a group of people.

Aside from the emotional benefits that people can experience from game play, games can be used to improve the real world in more tangible ways. One of the reasons they can do this is because they encourage wholehearted participation. By focusing this participation on specific real world issues, it is possible to affect real change in those areas. McGonigal uses three examples of alternative reality games to help illustrate this point. The first is Chore Wars, a game that helps people get organized and clean their homes by turning it into a game. Another is SuperBetter, a game she developed to help her recover from an injury. My personal favorite, and perhaps the most needed, is the game called Quest to Learn. Quest to Learn is not what most people think of when they think of a game, it is a charter school that has turned the learning experience into something much more game like. By offering children quests, secret missions, boss level assignments, group activity, and the ability to level up, the children are more likely to be drawn into the curriculum and participate wholeheartedly.

Another way that games can improve on reality is by increasing rewards. As it is now, reality is largely unrewarding. People are expected to do their jobs and are not always rewarded for doing it well or putting forward a lot of effort. Games, on the other hand, offer near constant rewards and positive feedback, which is one reason why they are so popular. By taking this model and applying it to everyday situations, we can reduce flight anxiety, help get and stay in shape, and encourage socializing with friends, all of which seem like pretty good things (McGonigal, 2011).

Games can also help strangers come together, building a greater sense of community. "Compared with games, reality is lonely and isolating. Games help us band together and create powerful communities from scratch" (McGonigal, 2011, p. 172). By

developing and playing games that encourage social play out in public, this can be achieved. Such games are being used to encourage a connection among strangers within a city, increase interest in museums and history, and help build connections between the elderly and younger generations.

The final example of how games can help affect positive change in society through the use of alternative reality games is what McGonigal calls "happiness hacking". Happiness Hacking is the general term for much of what has already been discussed, it is the application of findings in positive psychology to people's lives through the use of games. In her discussion, McGonigal focuses on three activities that research in positive psychology indicates should significantly improve happiness. People should practice random acts of kindness twice a week, think about death for five minutes every day, and dance more (2011, p. 183). She then describes three games that can each help to achieve one of these goals. It should come as no surprise that games are able to do encourage people to perform certain behaviors since they do foster whole hearted participation, as was previously mentioned.

By playing games people are able to experience positive emotions that reward participants with intrinsic rewards that can lead to a "sustainable engagement economy" (McGonigal, 2011, p. 244). Some games are utilizing this powerful incentive in order to enlist the help of a large number of people. For example in 2009 when there were allegations of misuse of public funds by British parliament members, the *Guardian* newspaper turned the mind numbing task of sorting through claims and receipts into a game, encouraging thousands of players to help them sort through 458,832 documents. In the first three days over 20,000 players helped analyze over 170,000 documents

(McGonigal, 2011, p. 221). Other examples include Free Rice where players answer multiple choice questions in a given category and earn virtual grains of rice. At the end of the game, their total virtual rice is converted to real rice and donated to the United Nations World Food Programme by the sponsors of adds on the site that are present while you play. At the time the book was written, McGonigal reports over 69,024,128,710 grains of rice or over 10 million meals, were donated (2011, p. 235). Others have turned protein folding simulations and DNA sequencing into games that are enlisting the processing power of thousands of gamers to help solve important medical problems.

Games offer people the opportunity to experience epic wins, they "help us define awe-inspiring goals and tackle seemingly impossible social missions together" (McGonigal, 2011, p. 252). There are games that encourage people to log the GPS locations of defibrillators via an APP on their cell phone, letting them see when a life was saved because responders knew that that defibrillator was there. Other games encourage people to help one another by completing player made "quests", like, delivering a latte to a dancer who is stuck in a dance rehearsal and could really use one, or helping community gardens. There is even a game that helps people compete with one another to help reduce their energy consumption by providing accurate feedback on use statistics, concrete goals to achieve, and puts all of this online where your family and friends can bet for or against you. All of these games help foster the feeling of an epic win, whether it is knowing you helped save a life by finding a defibrillator, made someone's day by bringing them a latte, or reduced your overall energy consumption.

According to McGonigal, by the twenty-one years of age, the average American will have spent more than ten thousand hours playing video games, and this is important,

because "ten thousand hours of practice before the age of twenty-one, according to at least one theory, is the number one predictor of extraordinary success later in life" (McGonigal, 2011, p. 267). Because much of modern video games requires or at least encourages collaboration, current gamers "are on the front lines of testing and improving the ways we organize ourselves, amplify each other's individual abilities, and contribute to the common good" (McGonigal, 2011, p. 276). With over ten thousand hours of practice, gamers are becoming experts and collaborating.

Using this ability to collaborate in order to work on solutions for major problems, both current and potential future problems, is her last fix. "Reality is stuck in the present. Games help us imagine and invent the future together" (McGonigal, 2011, p. 302). By turning potential world crises scenarios into a game, ordinary people were able to become a sort of giant think tank, producing potential problems and solutions to these problems that might occur in a particular crises scenario. Evoke was a game for students aimed at creating social innovations. The program culminated in real solutions to social problems, including a program run by high school students in Cape Town designed to give people the skills and knowledge to grow their own food, a program that converts glass boats in the Gulf of Aqaba to solar power, and Spark Library, libraries set up in sub-Saharan Africa where people can check out books after contributing "local or personal knowledge, in order to help build up a database of indigenous or traditional knowledge about the environment, cultural practices, and natural resources" (McGonigal, 2011, p. 339).

These are just a few of the benefits that games and some virtual worlds have to offer. Not only can they benefit people on an individual level, but they can and are being

used to contribute to the overall good of society. In light of this, unethical behavior within games or virtual worlds or the subversive use of them becomes all the more troubling. By interfering with an individual's ability to play games, one could be frustrating the attainment of personal benefits to the player and society.

CHAPTER 2: WHY INTERACTIONS WITHIN VIRTUAL WORLDS SHOULD BE SUBJECTS OF MORAL CONSIDERATION

In this chapter I will continue to focus on the close connection between the real world and the virtual world and how this relates to ethics. At the end of this chapter, I expect to have clearly presented several reasons supporting my claim that interactions between people in virtual environments should be subjects of moral consideration. In the previous chapter we saw how subconscious nonverbal behavior patterns exhibited in virtual environments were analogous to those seen in the real world. In this chapter I will continue along these lines by examining behavior in the virtual environments and seeing how it is what would be expected from people in similar real world situations. In particular show how the behavior is really the same that you would find in other sorts of situations that are characterized by a high degree of anonymity. This indicates that, at least subconsciously, we treat each other the same in virtual environments as we would in the real world, at some level they are the same to us.

I then look at the relationship between the self, ethics, and virtual worlds. There are good reasons to believe that the self extends into virtual worlds, and since the self is central to determining the moral status of actions, it would seem that if interactions between people in virtual environments also affect the self, then they should also be subjects of moral consideration. There are more concrete, consequentialist, reasons for judging interactions between people that occur within virtual environments, as they often lead to readily apparent real world consequences.

I will end the chapter by responding to some objections to morally considering interactions between people within virtual environments. These objections seem to center

around the claim that these interactions take place in a game like environment and that that somehow makes them exempt from moral consideration. There are several ways to interpret how this could work, but none of them are able to withstand a close inspection. I hope that by showing the various ways the real world virtual worlds are connected, and by showing the inadequacies of possible objections, it will be clear that interactions between people through a virtual environment should be subjects of moral consideration.

1. The online disinhibition effect

There is no nice divide between the real world and virtual worlds, at least in terms of the way people behave within them. We have seen that nonverbal behavioral patterns are analogous between the two environments, suggesting that, on a subconscious level, people treat them the same. Still, there are some interesting behavioral changes that can be seen when people start to interact online, including what Suler calls the online disinhibition effect (2004). While it is interesting to study the way a new situation can affect a person's behavior, the study of situational effects on behavior is nothing new. There is a relatively short, but expansive, history in psychology of studying the effects different situations can have on behavior, and perhaps what is more interesting than simply how being online can affect behavior, is how similar these effects are to similar situations that occur in the real world.

A person's behavior can change simply by being online. Depending on their personality and the situation, people display a range of behaviors that are uncharacteristic of their daily behavior. In what has come to be called the online disinhibition effect, people loosen up and do things they normally would never do in face to face interactions (Suler, 2004). Sometimes this behavior is more or less harmless, taking the form of

greater disclosure of personal information (Joinson, 2001) or an increase in compassion (Suler, 2004), earning the label benign disinhibition from Suler. What is more troublesome is when the behavior takes the form of what Suler calls toxic disinhibition. Toxic disinhibition is characterized by negative behavior in general, ranging from rudeness to software piracy (Hinduja, 2008).

According to Suler, there are six factors that contribute to produce the online disinhibition effect: dissociative anonymity, invisibility, asynchronicity, solipsistic introjections, dissociative imagination, and minimization of authority (2004, p. 321). Because the internet offers a much higher degree of potential anonymity, and even the ability to take on a new persona, a person is more easily able to separate their online actions from their everyday actions, leading to what Suler calls dissociative anonymity. In essence, a person effectively creates an online self that is dissociated from their normal self, allowing them to do things they normally would not. While this may sound a lot like what goes on in role-playing games and seems to occur easily during online game play or interactions within virtual worlds, it is not limited to these environments, and can occur simply by being online.

While online people are able to take on a high degree of anonymity, even becoming invisible (to a certain extent). Aside from simply surfing the web, an example of this can be seen in what is called "lurking" on forums. When a person lurks on a forum, they simply watch the conversations that take place without engaging in them personally. Some forums offer the possibility to not display when a person is logged onto the forums and others are public or offer public sections that allow for anyone to view the forums without having to sign in. More basic than this sense of invisibility is the fact that

people are physically invisible in their interactions, potentially causing a change in behavior even when interacting with people they know (Suler, 2004, p. 322).

Asynchronicity refers to the time frame of the conversation, i.e., often times online conversations occur with considerable time in between responses, for example through email or online forums. While this is certainly not true of all forms of online communication, it is true of a great portion of it, just think of how many people you know who do not communicate via emails, if you can. According to Suler, when people interact face to face, there is a feedback loop that exists between the interlocutors that continually shapes the conversation. When there is a significantly delay in the feedback loop, it can lead people to exhibit disinhibited behavior that is often in violation of social norms (2004, p. 323)

Solipsistic introjection has to do with the way people internalize conversations that they read. According to Suler, it is possible that as people read text based communications, they mentally add a voice to words. This can make some people feel more like they are talking with themselves than other people, which can in turn lead to more disinhibited behavior (2004, p. 323).

Dissociative imagination is perhaps best described by what is referred to as "the magic circle" in play theory. As Suler puts it, "consciously or unconsciously, people may feel that the imaginary characters they "created" exist in a different space, that one's online persona along with the online others live in an make-believe dimension, separate and apart from the demands and responsibilities of the real world. They split or dissociate online fiction from offline fact" and "Once they turn off the computer and return to their daily routine, they believe they can leave behind that game and their game identity. They

relinquish their responsibl[ility] for what happens in a make-believe play world that has nothing to do with reality" (2004, p. 323). From my personal experience, this is perhaps the most dominant perspective of gamers within MMORPG virtual worlds. Typically, when questioned about the potential ethical status of actions within virtual worlds, people either agree that they have an ethical status, or they consider them to be somehow unreal, fantasy, or banished to the realm of make-believe that is somehow separate from the real world and thereby void of any real world ethics. Unfortunately, the later is by far the more common of the two perspectives. It should not be hard to see how controlling a character in a make-believe world that is not under the same ethical demands of the real world could lead to gross disinhibition.

According to Suler, the minimization of status and authority can take two forms. In the first, people generally do not have outward symbols of authority online like they do offline. Since people respond heavily to these symbols (Milgram, 1963) the lack of them tend to act as a disinhibitor on behavior. The second form is from the nature of the internet itself. Seen as a place where everyone is equal and able to express their ideas as such, as lacking any centralized control with the ability to expand and encompass everyone in every country, denizens of the internet are not likely to be predisposed to cowing towards authority figures.

These factors, in combination with specific contextual factors, contribute to bringing about the online disinhibition effect. What is interesting for the purposes of this paper is the similarity between the online disinhibition effect and the disinhibition experienced offline through the use of masks and other means of creating a sense of anonymity. These similarities offer a reason to believe there is not such a big divide

between the virtual and real worlds. In addition, we are now in a better position to understand disinhibited behavior online and possible reasons why people believe the virtual world to be immune from moral consideration.

2. The online disinhibition effect and real world behavior

The ways that perceived authority can affect behavior has been studied in numerous experiments, perhaps most famously by Milgram. In the initial study, Milgram had an authority figure instruct participants to deliver electric shocks of increasingly high voltage to a confederate poising as another participant every time they got a wrong answer on a multiple choice question. Against common belief, the majority of participants delivered the maximum amount of voltage (450) and no one stopped before 300 volts, where the confederate kicks the wall and then stops responding to questions (Milgram, 1963). People appear on average to be much more willing to obey the commands of an authority figure, even when commanded to commit acts widely considered to be wrong, than most would at first believe. It is not surprising that when the trappings of authority are diminished, people are more likely to act in ways contrary to the rules or directions set forth by authority figures, as is the case when people interact online.

Similar to what Suler called dissociative imagination, the dehumanization of victims is widely known to contribute to disinhibited behavior. In describing the online disinhibition effect, Suler is more concerned with how people dissociate their behavior while online from reality, as if the actions are part of "make believe dimension". By doing so, they also relegate the people they interact with into the same realm, thereby absolving them of any immoral acts, since they all take place between make believe

characters in a make believe dimension. This is a good example of how dehumanization of victims can make it easier for people to mistreat them. In virtual environments, where people interact via avatars that are often unrealistic human like representations or even something completely fanciful, it can be even easier to dehumanize the person behind the avatar. This kind of behavior is not only found online, but is common in the real world as well.

Zimbardo and Bandura have both developed theoretical models that help to understand disinhibited behavior in the real world, but there are clear correlations to online behavior within them. Deindividuation is the major factor in explaining disinhibited behavior in Zimbardo's theoretical model. Deindividuation can occur in varying degrees and can be seen as degrees of anonymity. When people feel more deindividuated or anonymous, it is easier for them or they are at least more likely to do things they normally would not do, often things we commonly considered morally wrong. For example in one of Zimbardo's studies, he found that young women in a condition of comparably greater anonymity were more likely to administer shocks to other women. Leading him to conclude that "anything that makes a person feel anonymous, as if no one knows who he or she is, creates the potential for that person to act in evil ways—if the situation gives permission or violence" (2004, p. 29).

One disturbing example of how increased anonymity can affect behavior is described by Zimbardo as follows:

"Bringing the laboratory to the party, so to speak, Fraser (1974) arranged for elementary school children to go to a special, experimental Halloween party given by their teacher. There were many games to play and for each game won, tokens were earned that could be exchanged for gifts at the end of the party. Half the games were nonaggressive in nature, and half were matched in content but involved aggression: Physical confrontations between two children were necessary to reach the goal and win the contest. The experimental design was a within-subject (A-B-A) format: in the first phase

the games were played without costumes; then the costumes arrived and were worn as the games continued; finally, the costumes were removed and the games went on for the third phase (each phase lasted about an hour). The data are striking testimony to the power of anonymity. Aggression increased significantly as soon as the costumes were worn, more than doubling from the initial base level average. When the costumes were removed, aggression dropped back well below the initial base rate. Equally interesting was the second result: that aggression had negative instrumental consequences on winning tokens—that is, it costs money to be aggressive—but that cost did not matter when the children were anonymous in their costumes. The least number of tokens won occurred during the costumed anonymity phase, when aggression was highest" (Zimbardo, 2004, p. 30)

That children may behavior more aggressively when they are wearing a costume should come as no surprise to most people. What is perhaps more disturbing is what it the behavior says about people in general, and the implications it has for more dangerous behavior. Inspired by Zimbardo's work, Robert I. Watson, Jr. looked at the levels of aggression in warfare of ancient cultures in relation to the presence of deindividuation (such as war paint or special uniforms). He concluded that while wearing war paint or otherwise changing a warrior's appearance could possible server another purpose, "there also appears to be a link between the change and the aggression or ferocity of the individuals who take part in the change" (1973, p. 343). With research like this, it should come as no surprise that people have been using different methods to modify their appearance before going to battle for thousands of years and that we continue to do so today, though perhaps our uniforms are less ostentatious then before.

All of this is nothing new; we have known that there is a positive correlation between degrees of anonymity and amoral behavior in most people for thousands of years. In the *Republic* Plato discusses a story about the ring of Gyges. In the story, a shepherd happens to find a ring that grants him the power of invisibility. Once he discovers this power, he utilizes it to seduce the queen, kill the king, and take possession

of the throne. The story in the *Republic* is meant to show that people would throw morality out the window if it led to personal gain, as long as they could get away with it. Plato's task was to refute this and show how being good was good in itself. Regardless of whether or not he is successful, this story illustrates that it was known that a high degree of anonymity or the potential to commit acts without anyone knowing (and therefore without external repercussions) could lead most people to behave immorally. I am sure there are some people who would still act morally in a similar situation, but it seems like most people would succumb to temptation, become disinhibited, and do whatever they wanted.

According to Zimbardo there are two major theoretical models used to explain negative disinhibited behavior. The first is his own, which focuses mainly on the deindividuation, or states of increased anonymity, of the agent. The second model is Bandura's model of moral disengagement described by Zimbardo as consisting of four sets of cognitive mechanisms that alter the way a person perceives the situation:

Bandura's model outlines how it is possible to morally disengage from destructive conduct by using a set of cognitive mechanisms that alter (1) one's perception of the reprehensible conduct (e.g., by engaging in moral justifications, making palliative comparisons, using euphemistic labeling for one's conduct); (2) one's sense of the detrimental effects of that conduct (e.g., by minimizing, ignoring, or misconstruing the consequences); (3) one's sense of responsibility for the link between reprehensible conduct and the detrimental effects (e.g., by displacing or diffusing responsibility); and (4) one's view of the victim (e.g., by dehumanizing him or her, attributing the blame for the outcome to the victim) (Zimbardo, 2004, p. 31). Bandura describes three ways a

person's perception of the act can be modified in order to allow them to perform the action without considering it to be wrong, i.e., through moral justification, advantageous comparison, and euphemistic language (Bandura, 2004). Most people, perhaps psychopaths aside, do not want to perform actions they know are wrong. As such, people will generally try and justify their actions to themselves in order to avoid self condemnation. According to Bandura, "the conversion of socialized people into dedicated fighters is achieved not by altering their personality structures, aggressive drives, or moral standards. Rather, it is accomplished by cognitively redefining the morality of killing, so that it can be done free from self-censuring restraints" (2004, p. 124). While he relates this primarily to warfare and terrorism, the same kind of behavior can be seen in many virtual worlds. Often there are opposing factions built into the game (like the Horde and Alliance in World of Warcraft). Because these factions are explicitly at war with each other, it becomes easier to grief³ or otherwise kill players from an opposing faction. Where one might not be comfortable with corpse camping another person until they log out of the game in frustration, it is perhaps easier to corpse camp a dirty horde noob until they rage \log^4 . This ties in with the other two ways people change the way they perceive an immoral action.

By changing the way people talk about certain actions, it is possible to change the way people perceive those actions. For example, the extensive use of euphemisms in the armed forces turns what is really a horrific act, say, killing civilians through the use of bombs into the collateral damage from the deployment of vertically deployed anti-

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³ Griefing is the attempt to intentionally cause grief or suffering in another player through various actions such as corpse camping (repeatedly killing a player as they try and resurrect or re-enter the playing field from death) or killing significantly weaker people.

⁴ Noobs are players who are new to the game, often having underpowered characters and player skill / knowledge. Rage logging is causing another player to log out of the game in frustration.

personal devices in a clean, surgical strike (Bandura, 2004). Admittedly, while griefing and corpse camping noobs until they rage log, might not be at the same euphemistic level as those used by the armed forces, they do sound better than saying that one is repeatedly killing a new or weak player that has no chance of beating you with the aim of causing enough suffering and frustration that they simply log off, unable to do anything else.

By comparing one's actions to the supposedly much more heinous actions of one's victims, the action can become justified. This, of course, is a two way street. "In social conflicts, injurious behavior usually escalates, with each side lauding its own behavior but condemning that of its adversaries as heinous. By comparison, in World of Warcraft people from one faction might set out to grief noobs in a given area as retaliation for past offenses, or as a defensive measure. Fighting back against the horde (which everyone knows is full of griefers) is a righteous act, worthy of praise, but when the horde grief noobs in the same area, they are committing a terrible act.

Bandura acknowledges the potential for harmful consequences to be disregarded or distorted, thus enabling a person to commit heinous acts. "When people pursue activities that harm others, they avoid facing the harm they cause or minimize it. If minimization does not work, the evidence of harm can be discredited. As long as the harmful results of one's conduct are ignored, minimized, distorted, or disbelieved, there is little reason for self-censure"; furthermore, "it is easier to harm others when their suffering is not visible and when destructive actions are physically or temporally remote from their injurious effects" (Bandura, 2004, p. 133). There are many parallels that can be drawn from this disengagement method and aspects of the online disinhibition effect described by Suler. When interacting with people online or through virtual environments,

the effects of one's actions are not physically immediate and often they are not temporally immediate either. Analogous to what Suler calls dissociative imagination, people are able to distort the consequence of their actions be believe that they take place in some magical realm of make believe devoid of morality and responsibility.

By blaming the victim or the circumstances for their suffering, the perpetrator is able to justify their actions to themselves. One disturbing example can be seen through the following anecdote. A person I knew once told me how he had spent a fine Saturday corpse camping another player in World of Warcraft. The victim had killed one of his lower level alts (alternative characters). In response, the perpetrator logged onto his main character (generally the most powerful character a player possesses), found the victim, easily killed him, and waited by his corpse for him to respawn. In World of Warcraft, when a player dies they have the option of returning from a graveyard to their corpse and respawning with a small amount of health, or they can resurrect at the graveyard for a temporary penalty. This gives people a defense against being corpse camped. But since the perpetrator killed the victim near the graveyard, this was not a viable option. If the victim wished to play the game, he would have to wait for the perpetrator to give up and stop killing him, or continually die. The perpetrator spent about six hours camping the victim. The victim would log off and come back on only to be killed again. This seemed rather excessive, and when I questioned the perpetrator he said that the victim deserved it, and that he was a dirty alliance player anyways, so what did it matter.

According to Bandura, "moral control operates most strongly when people acknowledge that they are contributors to harmful outcomes", therefore, when the sense of agency is reduced, people are more likely to commit reprehensible acts (2004, p. 130).

One example of this is when an authority figure is the one who issues the order. A subordinate is able to shift responsibility off of themselves and onto the authority figure.

Another way that responsibility can be diminished is by diffusing it among a group of individuals

Diffusion of responsibility can occur in different ways. One way is through a division of labor, where each person performs some small task that is not in and of itself wrong, but when combined together contributes to something wrong. Another way responsibility can be diffused is through group decision making processes. If a group comes to a decision, no individual is responsible for the decision. Or as Bandura puts it "where everyone is responsible, no one really feels responsible" (2004, p. 133).

Perhaps the disengagement practice that is most easily seen exhibited online is the dehumanization of other people. Because the way we treat people is partially due to how we classify them (e.g., as human, neighbor, etc.), "self-censure for cruel conduct can be disengaged or blunted by stripping people of human qualities. Once dehumanized, they are no long viewed as persons with feelings, hopes, and concerns, but as subhuman forms" (Bandura, 2004, p. 136). This, of course, is very easy to accomplish when interacting online, where a person might be represented by nothing more than a name or an avatar. It becomes even easier in virtual worlds where players are deliberately represented by non-human avatars. It might be much easier to kill an ork while it fights other monsters in a virtual world than to kill another player while they try and level up their character.

What we find when people are introduced into environments that offer a higher degree of anonymity than typical interactions or somehow absolve them of punishment,

is that they behave in a disinhibited manor, specifically, it is easier for them to commit crimes or other actions commonly considered by society and the agent to be wrong. What is interesting is that the online disinhibition effect is analogous to any other sort of disinhibiting effects that are found in real world interactions. It does not appear that what matters is that the behavior takes place online or through a virtual medium, but rather that it is characterized by a higher degree of anonymity and other factors that lead to the same sort of behavior, regardless of the particular environment. In other words, the behavior we see is what we would expect to see of people who are acting in an environment that in some way makes it seem less likely that there will be any sort of punishment for their actions; the fact that the action takes place in a virtual environment in and of itself is inconsequential.

3. The virtual self

If the self is extended into virtual worlds, then when we interact with other people there, we are interacting with the essence of that person, similar to how people generally consider face to face interactions. When we talk about face to face interactions, we talk about interactions between two people, not about two bodies. If we were to equate a person solely with their body, we would run into numerous problems of identity, similar to the Ship of Theseus problem. The body undergoes changes at the cellular level continually, and while the change may be gradual, our bodies are changed over time.

Despite this, we do not say that a person has become another person. Nor do we say this when a person loses a portion of their body or adds something to their body. Instead, we generally considered a person to be comprised of something more than a body, that is, an ego, or a self.

For something so fundamental to the human experience as the self, it may be surprising that there is so little agreement on what exactly the self is. Possible candidates for the nature of the self range from the strictly material to the strictly immaterial, and everything in between, and even to nothing, such as the no self doctrine of Buddhist teachings. The self can be described as bodily continuity, psychological continuity, psychological continuity coupled with bodily continuity, conscious continuity, the center to which all experience is directed, the soul, but regardless of how the self is characterized, there is reason to believe that it can extend or be affected by actions that take place within virtual worlds, and as such, those actions should be objects of moral consideration.

No matter what we take the self to be, we consider it to be the most important aspect of any moral action. Actions require agents who perform them and it is upon the relationship between an action, an agent, and sometimes the object that we find morality. Where there is no agent, we do not generally ascribe morality. Do we say that some obscure stream that affects no one has behaved morally? Or that a cloud has done right or wrong? A tree? A rock? The answer is of course, no; an action may have occurred, but it was not caused intentionally by anyone. Three major ethical theories, deontology, consequentialism, and virtue ethics all display this focus on the self.

For deontologists there are simply right and wrong actions that are to be followed regardless of the outcomes. Deontological theory is generally characterized by rights a person possesses and duties that they should uphold. For example, if people have the right to clean water, and we have a duty to uphold this right, then polluting a water source in another country, while only harming the small number of natives who live around

stream, is still wrong despite the fact that a large number of people can benefit from such an action. Kant is perhaps the most well known contributor to deontology and perhaps his most well known contribution is his mandate that people should be treated always as ends in themselves and never as mere means. All of this, of course, is centered around people, their rights and duties. When applying this theory to real world situations, what is important is the actions of the agent, it does not seem to matter much where the action occurs.

Consequentialism, by contrast, is concerned not so much with concrete right and wrong actions, but by maximizing good outcomes. According to this theory, the moral status of an action is judged by the consequences, so, even if an action violates a person's rights, as long as it results in a greater gain in the overall good compared to not committing the action, then it is not only permissible, but required. There are of course different variations of this theory, including different ways to define what the good is, but some of the best known versions are those that maximize pleasure and minimizing pain. In this case, these sensations are something that is experience, by a person, by a self, without which the theory would make no sense. It does not seem to matter how one cashes out the self, as long as the self is affected by an action in some way.

The most familiar form of virtue ethics, Aristotelian virtue ethics, is concerned with the development of good character. By continually choosing virtuous actions and habituating them, one is able to achieve a state of human flourishing. All of which would be impossible without some sort of self, an agent. Interestingly, this theory is generally much more agent centered than the others, focusing on an agent's choices and actions being those best suited to bring about virtue and human flourishing in a give situation as

opposed to being guided by strict rules or the potential consequences. In fact, it might be the case that the agent is all that is required in any particular situation, that is, the agent does not need to act on another, but act correctly.

As all of these theories take the self to be necessary to even begin to work, which makes sense for theories that are concerned with the actions of agents, if a person's self was considered to extend into virtual worlds, or otherwise be affected by them, then they would fall under the moral consideration of these theories. It would take substantially more time and space than I have here to go through every conception of the self and how it can relate to virtual worlds, therefore, I will limit my discussion to what was mentioned in the previous chapter, namely, the way that a Plessnarian, dualistic, and extended mind conceptions of the self are extended into or otherwise affected by the virtual world.

Through the extended mind theory proposed by Andy Clark and David Chalmers, it is becoming more widely accepted that a person's consciousness (and, if we take consciousness to be the self, or at least some integral aspect of it) is extended beyond the body, incorporating external resources into the cognitive process (Clark & Chalmers, 1998). Much as Otto's notebook can be regarded as a part of himself, it is possible that a person's cognitive structure can be meaningfully composed of their computer, information on it, and more interestingly, resources within virtual worlds that are accessed through avatars. In extending the composition of the self to external sources, it may be "that in some cases interfering with someone's environment will have the same moral significance as interfering with their person" (Clark & Chalmers, 1998, p. 18).

The Plessnarian explanation of humans and other living beings is characterized by centers of experience. Humans are characterized by a three way relationship to the body

as a center of experience. In other words, humans have a body in which they are centered, through which they experience the world, while also having a relationship to this center as something that experiences having a center of experience and, therefore, being both centered in a body through experience and centered outside the body through the experience of this experience, thus ex-centric (Mul, 2003, p. 252). What happens in situations like telepresence described in the proceeding chapter, or even when a person enters a virtual world, is not so much that the self, or the center of experience is moved, but, rather, it is multiplied. Humans are no longer restricted to having their center of experience centered in one body, but they are able to also experience being centered in an additional body as well. Since this center is how we characterize a person and towards which we have duties, give rights, or judge particular actions (in other words, morality), by creating another center, we have created another locus of moral judgment. It would seem odd to consider myself to a subject of moral consideration and at the same time not, simply because I have a new center of experience.

For a dualist, the person is, in essence, an immaterial soul, which interacts with others through the medium of a material body. While of course the body is not morally ignored, it is perhaps only considered due to the effects it has on the soul. Because of the special way the body interacts with the soul, a person is able to experience sensations through the body. So, when we cause another person to experience pain, we generally consider the action to be bad. Now, it would seem that it would be rather easy for a dualist to accept that the telepresence experiences that people have described as "out-of-the-body experience" or that their "consciousness suddenly switched locations" (Rheingold, 1991, pp. 264,225), as being entirely possible. Unless there is some reason to

believe that the human body is somehow special, then there is no reason to think that it is not at least possible for a person's soul to exist in another location. While we may not want to say that a person's soul actually leaves the body and enters a virtual world, it may be easier to picture the avatar as a kind of suit that one inhabits in order to enter a virtual world. Regardless, much as a person's soul can be affected through the material medium of the body, it seems just as likely that a person can be affected through a virtual medium as well. There are, in fact, very really effects that occur from experiences that take place within virtual environments.

4. Real world consequences

Aside from reasons for considering virtual actions to be subjects of moral consideration that involve the self, a concept that can be rather vague, there are reasons that are clearly tied to physical or psychophysical consequences of virtual actions. For many people there is an explicit bond between themselves and the avatar they use to interact with virtual environments, but it seems there is also an implicit bond that most people may not be aware of.

People generally use the first person pronoun in describing actions they perform through an avatar, suggesting that, at least subconsciously, they consider it to be themselves that are acting within virtual worlds, not an avatar that they control yet do not act through. Yee et al have shown through several studies that people not only act differently towards an avatar depending on how they appear, but that people can experience a change in their behavior both online and offline depending on the appearance of the avatar they use (Yee & Jeremy, 2007; Yee, Bailenson, & Ducheneaut, 2009; Yee N., Bailenson, Urbanek, Chang, & Merget, 2007). This general finding is

supported by research suggesting a link between violent video games and aggression in the real world (Porter & Starcevic, 2007; Anderson & Dill, 2000; Vessey & Lee, 2000; Williams & Skoric, 2005). This should come as no surprise to anyone who has grown up in a family with young boys. I remember the first thing my brother's and I did after watching the latest Ninja Turtle movie was try to fight each other using karate, which, of course, rarely ended well.

All of this indicates that there is a much closer connection between people and the events and environments of the virtual worlds they interact with then some people would lead themselves to believe. Sadly, because of effects like those outlined by Suler in describing the Online Disinhibition Effect, people are able to do horrible things to each other, while at the same time convincing themselves that they have done nothing wrong (Suler, 2004). Examples of such actions include typical cases of cyberbullying and griefing within virtual worlds, which is also considered a form of cyberbullying (Chesney, Coyne, Logan, & Madden, 2009).

I will use the term griefing generally to describe online behavior within virtual environments that have a high probability of causing psychological distress in another human being. Griefing is characterized by an intentional action that is aimed at causing grief or suffering in another human being through a virtual medium. It has been defined as the "intentional harassment of other players... which utilizes aspects of the game structure or physics in unintended ways to cause distress for other players" (Warner & Raiter, 2005, p. 47) or as "intentional, persistent, unacceptable behavior which disrupts a resident's ability to enjoy Second Life and First Life" (Chesney, Coyne, Logan, &

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⁵ Second Life refers to a particular virtual world and is the term inhabitants of Second Life have come to use to refer to real world or face to face interactions.

Madden, 2009, p. 542). It is important to realize what the name of this behavior suggests, much like rage logging (a goal of some griefers, where a person logs out of the virtual world in a state of rage), griefing is behavior that intends to cause grief or suffering in another human being. Because of this, people like Chesney et al consider griefing to be "framed within the general bullying domain and can be considered as an extension to the phenomenon of cyberbullying" (Chesney, Coyne, Logan, & Madden, 2009, p. 542). If we are to except some cases of griefing as instances of cyberbullying, which is implicitly always subject to moral consideration, then at least some actions that occur within virtual worlds would be subjects of moral consideration.

Bullying is generally defined as "abusive relationships where there are repeated, intentional hurtful actions directed against a victim (or victims) who is in a less powerful situation and thus not able to defend themselves" (Smith, 2009, p. 180). Cyberbullying is when people carry out similar behavior, but instead of doing the bullying face to face, it takes place through a technological medium. For example, bullying carried out over the phone, through text messages, web pages, video recordings, posting of videos on the internet, etc. are all cases of cyberbullying. And now similar actions are being carried out within virtual worlds. Although they may not always involve repeated abuse, instances of griefing are intentional hurtful actions generally directed at people in a less powerful situation, one example of this is the notorious Winterspring Massacre that occurred in the popular MMORPG WoW⁶.

There may be other names for it, but I think that the Winterspring Massacre is the most appropriate. WoW is divided up into different servers that house particular instances

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⁶ MMORPG stands for massively multiplayer online role playing game and World of Warcraft (WoW) is perhaps the best known game of this type, which peaked at 12 million subscribers in 2010 (http://wow.joystiq.com/2012/02/09/world-of-warcraft-subscriber-numbers/)

of the virtual environment. So while the environment is the same on each server, the events that occur there are primarily decided by the people who inhabit each server. After a person died of a stroke, an in-game funeral was organized on the community forums for the server she played on. It was held in neutral territory (where, on player versus player (PvP) servers, it is possible to fight and kill members of the opposing faction), near a lake surrounded by snow, because she liked to fish and she liked the snow. On the forums where the event was organized, it was explicitly requested that people not interfere with what was surely an emotional time for friends of the deceased. A recording of the event was planned with the intentions of showing it to the family.

What started out as a kind gesture to family and friends of the deceased turned into an infamous event that caused clearly upset people to post profanity filled responses directed at the people responsible for the massacre. A group of Alliance players (the opposing faction of most of the funeral goers) descended on the people there to pay their respects, killing all of them. If that was not enough, they recorded the entire process and posted the video on the internet, complete with video editing and added music. This was clearly intended to cause suffering to people who were already hurt and it was done through the use of powerful avatars that were coordinated, leaving the funeral goers little hope of fighting back or surviving.

If for no other reason besides the real world consequences they have on people, actions in virtual environments should be subject to moral consideration. We do not excuse bullying behavior from moral consideration because it takes place over the phone or through a website, nor should we if it takes place through another medium like a virtual environment.

Within certain virtual worlds, griefing or similar behavior can lead to the loss of virtual property, including the time and effort that is involved in creating it. While there are ways to prevent such actions, often new players are unaware of different methods of protection, resulting in loss of virtual property (Chesney, Coyne, Logan, & Madden, 2009, p. 539). The loss of virtual items or characters can be seen as a loss of the time and effort involved in obtaining them, which can cause negative emotional consequences for people. Imagine spending hours to make or obtain a particular item, only to have someone destroy it. It does not seem to make much difference whether this occurs in virtual worlds or the real world, what is important is the time and effort that is put into it. This might be easiest to see when we look at written work. Often there is a lot of time and effort that is put into creating a manuscript, and while this can take on a physical form when printed, before that it only exists as a piece of information. If someone were to steal or destroy another person's writing, we would consider the action subject to moral consideration and, barring any strange circumstances, find it to be wrong. Similarly, virtual items exist and are used primarily as forms of information, but, just like the manuscript that only exists virtually, that does not mean destroying or stealing it is exempt from moral consideration, indeed it seems to suggest that doing so should not only be considered morally, but that it is should be considered wrong. This becomes even clearer when the items in virtual worlds are tied to real money.

There are several games that allow for the exchange of the particular virtual currency used in the virtual world's economy for real world currencies. Games like Entropia, Second Life, and Diablo 3 all offer ways to exchange items or virtual currency for real money currencies. Taking advantage of this has allowed entrepreneurs to make

thousands of US dollars, even becoming millionaires (Saenz, Entrepreneur Anshe Chung Makes A Fortune Selling Virtual Land, Banking and Fashion; Saenz, Man Sells Virtual Real Estate in Online Game for \$635,000! WTF?; Solomon; Virtual real estate selling for millions).

Virtual worlds are not just for fun anymore. People are making real money buying and selling virtual items at a substantial rate, according to VR-News, "research estimates that in the US alone the virtual goods market overall will reach \$US2.1 billion this year" (Virtual real estate selling for millions). This means that actions taken in virtual environments can have an immediate and direct effect on a person's ability to make money. One participant of Chesney et al's study described griefing as follows: "it means to me not being able to finish products on time because someone likes to bomb my shop. And that costs real money in the long run" (2009, p. 539).

Sometimes there are even physical repercussions from events that take place within virtual worlds. Unfortunately, there are cases of suicide and murder that occur as a consequence of events that take place within virtual worlds (Kuhn, 2009; CA-gamer; Online game rivalry ends with real life murder). Despite some of the negative aspects of virtual worlds, there are many potential benefits associated with them. There are a growing number of people who fall in love in virtual worlds, and carry that feeling over into the real world, sometimes resulting in marriage (Virtual world, real emotions: Relationships in Second Life; Terdiman). In addition, there are numerous personal and social benefits that virtual worlds and games can offer us.

As was discussed in the previous chapter, games offer people the ability to improve their overall wellbeing and society as well. In her book *Reality is Broken*, Jane

McGonigal proposes fourteen fixes, or ways that games can help improve upon reality. Many of these have to do with nature of games and how they offer easy access positive emotions that are generally lacking contemporary life. In a world where many people work mundane, boring jobs, games present an environment that challenges and stimulates people while offer experiences on epic scales. In addition to the personal benefits offered by games, there are also opportunities for social interaction, potentially leading to the betterment of society through more engaging and collaborative social work and easily distributed cognitive work load.

Behavior within some virtual worlds can have a direct effect on a person's income and personal wellbeing and should be judged accordingly. People who grief other players or commit similar actions, may be doing more harm than it first appears. It is possible that they are not only harming an individual on the emotional or cognitive level, but they may also be depriving an individual of a source of income, contributing to suicidal tendencies, making it more likely that they themselves will commit similar actions outside of the virtual realm, depriving people of beneficial positive emotions, or even preventing the betterment of society. Actions that cause such potentially important consequences should at least be considered morally, regardless of what the moral status of any particular action ends up being.

5. Possible objections

As we have previously discussed, there are many reasons why we should consider actions that take place within virtual worlds to be subjects of moral consideration, based on both the nature of the actions themselves and the consequences they bring about. But are there any reasons why we would want to limit them from moral consideration? I

would hope that after the proceeding discussion this question would seem odd, even if one insists on calling these nothing more than virtual actions in virtual worlds. This should seem especially true when one considers the way in which we normally treat interactions that take place through different types of mediums, that is, we do not withhold moral judgment from actions that take place through writing (electronic or otherwise), over the phone, or on websites, indeed we consider some of these to be forms of cyberbullying. Why, then, would we think that similar actions that take place in virtual worlds should be excused from moral consideration, when really these actions are still interactions between humans albeit through a (increasing less) novel medium?

The main objections seem to all start out with one basic claim, namely, that these are really just games, and, as such, should not really be considered objects of moral consideration. Now this can be broken down into two similar but distinct claims. First, that the rules that govern games are often distinct from the rules that govern normal interactions, and, since these virtual worlds are really just games, they two have a distinct set of rules that govern them. Second, that these virtual worlds, solely in virtue of being virtual, are not real and thus not subject to moral consideration; in other words, they are make believe realms and everything that happens in them is also make believe. While these may be common beliefs concerning general griefing behavior, and even motivational factors contributing to the behavior (Suler, 2004) (Chesney, Coyne, Logan, & Madden, 2009) (Coyne, Chesney, Logan, & Madden, 2009), upon closer examination neither of these claims are adequate objections for morally considering virtual actions.

The first claim that I will examine is that virtual worlds are games, and like other games, they are subject to a different set of rules than those that govern normal

interactions. It is generally recognized that games allow for certain kinds of behavior that would normally be restricted in everyday life. For example, in a soccer match it is acceptable to slide tackle another player, and in a kick boxing match it is not only accepted but expected that you punch, kick, knee, and even elbow your opponent, none of which is generally accepted outside of the ring. One example of this can be seen in the unfortunate incident involving the baseball players Ray Chapman and Carl Mays. During a game, Ray Chapman was struck in the head by a pitch from Carl Mays, resulting in his death. After learning of his death, Carl Mays turned himself into the New York district attorney. Despite throwing a pitch which caused the death of another person, in front thousands of witnesses, the rules of the game effectively exonerated him of any wrong doing (Lastowka, 2010).

This sort of thing is nothing new. War, for example, involves killing other people, which is generally considered wrong, but since it takes place within a particular context, it is accepted and expected. As long as you abide by certain standards, and your side wins, you will most likely not be held morally accountable for your actions; indeed, you may stand to be praised. The question is whether or not actions that take place in virtual worlds should be considered to be in a similar situation, that is, is the virtual world a game, and if so, do the rules of that game allow for generally immoral behavior such as griefing.

The first question is whether or not all virtual worlds are games. Probably the clearest way to answer this is to determine how the virtual world is marketed and described by the developers. Aside from this we must rely on the individuals who inhabit and interact within the world and their perceptions of the environment. Fortunately, it is

usually easy to see what the virtual world is designed to be, and once noticed, it becomes clear that not all virtual worlds are considered games. One example of a virtual world that is not described as a game is one that I have already mentioned, Second Life. Second Life is a virtual world where people can come together and interact within a virtual environment and is even defined as such in the Terms of Service agreement⁷, not as a game. There are games that can be played within Second Life, but the virtual world itself is not primarily considered to be a game. It is more like second world, where people are able to live out a second life, complete with businesses and real-world country embassies, property they can own or rent, fashion design, entertainment, marriages, dance clubs, and the list goes on. Even the denizens of Second Life consider it more than just a game (Chesney, Coyne, Logan, & Madden, 2009; Coyne, Chesney, Logan, & Madden, 2009), indeed people make real world money in this virtual world. In order to try and prevent griefing and behavior like it, the community developed a set of standards called the "Big Six", which the Terms of Service agreement for Second Life requires users to follow.

⁷ http://secondlife.com/corporate/tos.php#tos4

⁸ 1. Intolerance: Combating intolerance is a cornerstone of Second Life's Community Standards. Actions that marginalize, belittle, or defame individuals or groups inhibit the satisfying exchange of ideas and diminish the Second Life community as a whole. The use of derogatory or demeaning language or images in reference to another Resident's race, ethnicity, gender, religion, or sexual orientation is never allowed in Second Life.

^{2.} Harassment: Given the myriad capabilities of Second Life, harassment can take many forms. Communicating or behaving in a manner which is offensively coarse, intimidating or threatening, constitutes unwelcome sexual advances or requests for sexual favors, or is otherwise likely to cause annoyance or alarm is Harassment.

^{3.} Assault: Most areas in Second Life are identified as Safe. Assault in Second Life means: shooting, pushing, or shoving another Resident in a Safe Area (see Global Standards below); creating or using scripted objects which singularly or persistently target another resident in a manner which prevents their enjoyment of Second Life.

^{4.} Disclosure: Residents are entitled to a reasonable level of privacy with regard to their Second Life experience. Sharing personal information about your fellow Residents without their consent -- including gender, religion, age, marital status, race, sexual preference, alternate account names, and real-world location beyond what is provided by them in their Resident profile -- is not allowed. Remotely monitoring conversations in Second Life, posting conversation logs, or sharing conversation logs without the participants' consent are all prohibited.

One could, of course, believe that virtual worlds like Second Life are really games, but this seems to be akin to running around a super market dropping round house kicks on people claiming the market is really a kick boxing ring⁹.

While it may be that some virtual worlds are considered to be more than games, there are many more that are explicitly developed and advertised as games. When judging actions in these virtual worlds it becomes even more important to look at the rules that are set up to govern actions that take within them. We have seen that Second Life requires adherence to a set of community standards in order to have access to the virtual world, but what about virtual worlds designed as games, what sort of rules do they have? In order to answer this question I looked at the most brutal virtual world I know of, Darkfall¹⁰.

Darkfall is a virtual world that allows players a large amount of freedom in deciding what they want to do. The environment is inhabited by various different monsters, many of which can kill a player easily. The game is made even more dangerous by the fact that you can kill and be killed by anyone at any time; furthermore, when a player dies they are returned to their bindstone (a preselected stationary stone that may be hours away from where you died) while, at the same time, everything you had on your

^{5.} Adult Regions, Groups, and Listings: Second Life is an adult community, but "Adult" content, activity and communication are not permitted on the Second Life "mainland." Such material is permitted on private regions or on the Adult Continent, Zindra. In either case, any Adult content, activity, or communication, that falls under our Adult Maturity Definition must be on regions designated as "Adult," and will be filtered from non-verified accounts. Other regions may be designated as either "Moderate" or "General." For more information on how to designate land, events, groups, and classified listings, please carefully read the "Maturity Definitions."

^{6.} Disturbing the Peace: Every Resident has a right to live their Second Life. Disrupting scheduled events, repeated transmission of undesired advertising content, and the use of repetitive sounds, following or self-spawning items, or other objects that intentionally slow server performance or inhibit another Resident's ability to enjoy Second Life are examples of Disturbing the Peace (http://secondlife.com/coporate/cs.php). Sadly, according to Chesney et al this seems to be what actually happens in some cases. People are perceived to carry over the goals and general atmosphere of games, where the goal is to kill other players, into Second Life, thereby disrupting very different goals and interactions within this virtual environment. www.darkfallonline.com

person or in your bag remains on a grave stone that appears where you died. Anyone can access this stone and take whatever they wish from it. In such a brutal world, players often band together for protection (and mayhem) and are able to own hamlets and cities. These holdings are not permanent, however, as they can be sieged and taken away by other groups of players. In such a brutal environment, one would assume that griefing would not only be rampant, but allowed, however, this is not the case. Darkfall's EULA version 1.0.48, prohibits what is commonly considered griefing under the player conduct subsection within the in game and in world conduct section:

- i. While playing Darkfall online, you must respect the rights of others and their rights to play and enjoy the game.
- ii. You may not defraud, harass, threaten, or cause distress and/or unwanted attention to other players within the Game, the World or on the official Darkfall online web sites.

There may be other games that do not prohibit griefing, but if a game like Darkfall does, it seems reasonable to assume that most others do as well. If not all virtual worlds are games, and those that are games explicitly prohibit griefing, then such behavior is not removed from moral consideration because it takes place within the confines of a game; in fact, the behavior should be considered a breach of conduct, because it breaks the explicit rules of the game.

If the rules of the game do not exempt griefing and other negative behavior from moral consideration (in fact it seems like in most cases it contributes to judging the behavior to be morally wrong since it is explicitly prohibited), perhaps the fact that the actions take place within a virtual world is itself enough to excuse the behavior from moral consideration. An objection along these lines would claim that actions in virtual

worlds are not real and if something is not real, it cannot be a subject of moral consideration. So, all virtual actions, in virtue of taking place within a virtual environment are not real, but part of a make believe realm wherein morality does not exist. I am skeptical about whether or not such realms can actually exist with the exception, perhaps, of various forms of fiction.

Interactions within virtual worlds, however, or not the same as fiction. We can say that fiction is a make believe world, wherein characters interact with each other and stories play out. And it is true that events are shaped by the interaction of people within virtual worlds. But people are not the same as characters. Fiction is generally a much more passive experience; we read books or watch plays and movies. We do not build them as we interact with other people. There are, or course, various forms of acting and role-playing that are not scripted.

An important difference between role-playing and interacting with people in virtual environments is that it is not always the case that both parties are willing to role-play the same situation, or that they are even role-playing at all. For example, say I enter a medieval simulation virtual world where people are peacefully interacting in a market square and I want to role-play a psychopathic murder and go on a killing spree. It is highly unlikely that others will want to role-play this scenario, or that they will allow me to stay in the virtual world. If I did go out and kill some of the players, even though they did not want to be killed, could I justify my action by saying that I was role-playing, even if they were not? It does not seem likely. That would be similar to me, returning to the super market and saying it was alright for me to attack shoppers with round house kicks because I was playing at kick boxing, even if they were not.

Virtual worlds are different from fiction, and, even in some virtual worlds that are explicitly more game like, they can still be more than mere games. Within these virtual worlds people are able to interact with each other in ways that go beyond moving pieces on a game board. These games are persistent worlds that do not end when a certain objective is achieved or a time limit has been reached. There is no pause, reset, or off button. There may be games like this contained within the virtual worlds, but the virtual worlds themselves are very different. Within them people are able to communicate with each other both bodily, through manipulating their avatars, and verbally, both through writing and often times through voice over internet protocols. It is often difficult to tell if a person is playing the game, using it as a means to interact with other people, or both. This becomes increasing true of virtual worlds that are not considered games, such as Second Life. While people within these virtual worlds are able to play games, they are able to do so much more, including running a business that generates real world money.

These worlds are quite different from what we generally consider to be games. When playing games, there are rules that govern what one cannot do and what one must do. So, for example, in chess a pawn can only move forward one space (except on the initial move), rooks can move any direction on the vertical and horizontal axis for as many spaces as they want (permitting they are not occupied), so on and so forth. Virtual worlds, on the other hand, while limiting what a person is capable of, either through rules or design, they do not force a player to do anything. A player in a virtual world might be restricted in terms of speed or jump height by the physics of the virtual world, but they can jump or not as they see fit. This freedom is very different from traditional games. In chess, in order to play, I must try and defend my king while simultaneously trying to take

the king of my opponent. If I do not do this then I am not playing the game. In a game like World of Warcraft, while it may not make much sense to some people, I can spend all my time walking around a virtual city, or hanging out in an inn. There is lots to do, but I do not need to do anything to "play the game", since, really, there is no game, only a virtual world wherein I can play games.

If virtual worlds are significantly different from fiction, and even other more basic games, then how can we justify considering all actions that take place within them to be part of some make believe realm where morality need not exist? What would need to be true for virtual actions to be immune to moral consideration is that the medium in which they take place is somehow significant enough to warrant removing them from ethical judgment. What characterizes this medium is a lack of direct physical contact and an increased ability to remove oneself from the situation.

While it is true that there is no physical contact between people within virtual environments, this is not enough to warrant moving it to some make believe realm. As we have seen there are real consequences that can occur as a result of events that take place in virtual worlds. In addition to this, we do not make this exception for other mediums that are characterized by a lack of physical proximity. If we did, then there would be no such thing as cyberbullying, and everything would be acceptable, as long as it did not take place through a physical interaction. A large part of our financial transactions take place through virtual mediums, surely we do not want to say that anything that goes on there is alright because it is not actual physical money?

Of course, one could always walk away from the computer, put down the controller, or log out of the virtual world. While true, this does not make an action

acceptable. First, it restricts a person from accessing something they enjoy, can reap real world benefits from, and, in most cases, something they pay to access. In many cases they have spent time and effort obtaining virtual items and improving their avatars, asking them to walk away from that in order to avoid the behavior of another person does not seem right. Second, being able to walk away from a behavior does not make it right nor does it excuse it from moral consideration. Again, if it did, we would not care about cyberbullying, or any form of bullying that does not involve physically restraining a person.

Another possible objection is that people are only negatively affected by virtual actions because they have an unnatural attachment to their virtual items or avatar. Again, this does not change anything about the behavior itself. First of all, people can spend a considerable amount of time and effort obtaining items, furthermore, they are able to use them for various purposes; the loss of which can result in negative consequences for the victim. For example, let us say that I want to work on improving my character in WoW, but someone is corpse camping me so I cannot. So, I get up and walk outside to work on my garden, but my mean neighbor Fred has taken my gardening tools and will not let me have them. I decide to log back into WoW, but the person is still there waiting for me and the corpse camping continues. It does not seem like there is a significant difference between these two situations, both involve one person restricting access to or use of another person's property. Ashley John Craft investigated a particular instance of virtual theft that took place inside the virtual world EVE, and found it to be entirely consistent with the legal definition of theft (Craft, 2007).

Furthermore, we generally do not judge an action based on whether or not a person is attached to a particular object or not. While true that a person would probably feel a lot better in situations where their virtual objects were being destroyed or they were prevented from using them as they wanted if they did not value them, the same could be said of anything. People sure would feel a lot better about getting their car stolen if they did not care so much about it and the things they could do with it. A person probably would take an instance of griefing or being corpse camped all day one Saturday if they really did not care so much about the virtual world or the things they could do in it, but then why would they play it in the first place? Surely, we do not want to say that it is alright to murder someone because they are hopelessly lost to nihilism and so they do not value their life, or because we think they have an unhealthy attachment to it; why, then, would we want to say that we can cause suffering in another human being through virtual actions because they should not care so much about the virtual world or the things in it?

6. The proper subjects of moral consideration

Despite all of this, it seems that many people still consider virtual worlds to be entirely part of some make believe realm that is not subject to moral consideration. Even though 41% of subjects in Coyne et al's study found griefing to have at least the same (31%) or more (10%) of an impact on the victim compared to traditional bullying, it was found that one of the major motivations for griefing was that some users saw "Second Life as a safe environment for grief either due to anonymity afforded to the perpetrator or because the impact on a target is not real" (2009, p. 215). How are we to reconcile these differences?

While there was a significant difference between how victims of griefing and people who had never been griefed rated the impact of the behavior (the victims rated in as having a greater impact), ignorance of the experience does not seem to be the only way to explain difference in perceptions. In fact, these findings fit in perfectly with the previously discussed psychological theories of Suler concerning the Online Disinhibition Effect, Zimbardo concerning the effects of anonymity on behavior, and Bandura's model of moral disengagement.

If we look at factors that contribute to disinhibited behavior, one of the most prominent is an increased degree of anonymity. It is one of the factors mentioned by Suler as contributing to the Online Disinhibition Effect (Suler, 2004) and can be seen to work in the same way in real world situations through the work of other psychologist that were previously discussed like Zimbardo and Watson (Zimbardo, 2004; Watson, 1973). The fact that similar behavior is exhibited online as in offline situations where anonymity is increased indicates that virtual worlds are not some new realm where people are separated from the real world, but that they are extensions of the real world. People who interact within them may be influenced by environmental factors, like a heightened degree of anonymity, but this is true of any situation and not unique to virtual worlds. Perhaps virtual worlds are more like a modern day experiment testing how people would behave when given the ring of Gyges. Unfortunately, with Coyne et al finding that 95% of participants had experienced griefing within Second Life, viewing virtual worlds in this way is rather depressing (2009).

It is not only possible for some people to end up seeing virtual worlds as either safe places to grief other people, or find it easier to rationalize or commit actions they know to be wrong, but they can even come to see the world as being somehow separate from all moral concerns. Perhaps the best example of this can be seen in the response of (JE), a participant in Chesney et al's study. (JE) claims that "as much as we would like to play 'make believe' and pretend that real people are under attack.... It is just a virtual world, real rules can and do not apply" (2009, p. 540). Looking at psychological studies that address online disinhibition and moral disengagement can help explain why this is.

Two of the six factors Suler describes as contributing to the Online Disinhibition Effect that seem to fit this response the best are dissociative anonymity and dissociative imagination. Dissociative anonymity is when a person creates a separate persona that commits the online actions. In this way they separate themselves from any immoral behavior. Similarly, a person is also able to dissociate themselves from immoral behavior by perceiving the events that occur online or in virtual worlds as unreal, or make believe. In much the same way, Bandura describes how people morally disengage from actions by changing the way they perceive the action, the effects of the action, and one's responsibility, all of which can be seen at work in virtual worlds.

People may see things this way, but, if we recall, there are real consequences to these actions, and they are still actions directed at other human beings, albeit through a medium. So, while a person's perception of virtual worlds and the actions they choose to commit within seem to them like they are immune to moral consideration due to enabling psychological factors, there is little reason to take this to be the correct way to judge these actions. Just as we would not excuse other behavior that occurs in the real world because of a heightened sense of anonymity, we should not excuse behaviors that occur in virtual worlds for similar reasons. Indeed, noticing the similarities between behaviors in the real

world and virtual worlds that take place in similar contexts actually does more to reinforce the claim that they should be judged by the same standards then to discredit it. Of course, that does not mean that killing in a virtual world is the same as killing in the real world, situational factors certainly have a role to play in how we judge the behavior, but that does not mean we should refrain from judging.

In this chapter I hope to have shown the implausibility of holding a position that does not take the interactions of people within virtual environments to be subjects of moral consideration. In light of the deep connection between the real world and virtual worlds, including the extension of the soul into them and the very real consequences actions there can have on the real world, there does not appear to be any legitimate reason why they should not be considered subjects of moral consideration. Once it is clear that this new medium of interaction by no way escapes the bounds of morality, then it becomes a simple matter to apply the ethical theories already widely used to such interactions; indeed, beyond simply being acceptable candidates for moral judgment, there are many actions that are quite widespread that will most likely be found to be wrong.

CHAPTER 3: THE APPLICATION OF MORAL THEORIES TO VIRTUAL ACTIONS

In the previous two chapters we have examined the nature of virtual worlds, how they can affect the behavior of people in both negative and positive ways, and seen how closely related the virtual world and the real world are. Because of the intimate connection between the two worlds, I have argued that actions that occur within virtual worlds should be subjects of moral consideration, and not dismissed outright simply because they take place within a virtual world. In this chapter I begin by arguing that there are no relevant differences between actions mediate by virtual environments and those mediated by other mediums. Afterwards I apply three main ethical theories, deontology, consequentialism, and virtue ethics to virtual interactions between people and find that they all judge behavior like griefing to be wrong. I then discuss the issues surrounding virtual actions that are directed at NPC's (non-playable character), wherein the user is the only actual person involved, finding that it is more difficult to apply the three ethical theories to these sorts of actions.

1. Virtual interactions between people

One of the most obvious differences between everyday face to face interactions that are the classical subjects of moral consideration and interactions that take place within a virtual environment is the distinct lack of physical proximity and contact. While things may not always stay like this, as confrontations within virtual environments do sometimes spill over into real world, the fact remains that, though enabled by physical objects and actions, virtual actions take place within virtual worlds. But, as we have seen, this does not seem to be as big of an issue as it may at first appear.

There is a deep connection between the virtual world and the people who inhabit them; aside from clear repercussions that affect the real world (such as psychological pain and pleasure, monetary loss, and relationships and disagreements online becoming physical interactions), there are also psychological and philosophical reasons for believing that virtual and real actions are much more alike than they are different. The same psychological theories that are used to explain disinhibited behavior in general can be used to explain similar behavior online and in virtual environments. For example, it has been shown that the way an avatar looks affects not only the behavior of people towards the avatar within the virtual environment, but also the user's behavior both inside and outside the virtual environment. In addition, different philosophical positions are able to make sense of incorporating or extending the essence of a person, their self, into virtual worlds. Other interactions that occur through particular mediums (over the telephone, for example) are not somehow excluded from moral consideration, and there is no reason why virtual actions in general should be excluded.

There is, perhaps, one way in which virtual actions may be excluded from moral consideration, or at least have their status changed. Similar to how certain actions that would normally be morally prohibited, such as physical violence, can be allowed and even expected if they take place within the rules of a game, it is possible that interactions in virtual environments should be treated in the same way. Since many virtual worlds are considered games, there is reason to believe that the actions that take place within them may share a similar status as the actions that take place within games played face to face.

Games all have rules, some are very structured and complex, while others are simple and allow for more freedom. In general, as long as you are not breaking the rules

(cheating), then any action you do is permissible. Some games are so structured, that, so long as you are not cheating, then any action you do is encompassed by the rules of the game. For example in chess, as long as I am not cheating, then any action I perform within the game is going to be covered by the rules of the game.

If all virtual worlds where games like chess, then any action that one performed, would be covered by the rules of the game and, therefore, not subject to the same ethical considerations as other actions. The problem is that virtual worlds are not nearly as structured as games like chess. While there are limitations on what actions you can perform within them (these might include things like only being able to fight players certain areas, or use certain abilities if you have a certain amount of health), you are free to do many different things, often in whatever manner you want. You are able to trade with other players, but you do not have to. You can develop your character, participate in PvP, PvE, or RP (role-play), but you do not have to and the way you do so is only minimally structured.

However, unlike chess, it is clear that any action that takes place within virtual worlds, even those that are games, are not necessarily allowed by the rules. Before entering a virtual world, a person must accept an End User License Agreement (EULA), which contains explicit rules not only on what a person can do with the program, but what they can do within the virtual world, including rules that govern how people can interact with each other. In addition to these rules, there are also Game Masters (GM's) or other entities that are charged with enforcing the rules, neither of which would need to exist if any action that one is capable of performing within the virtual world is considered part of the game.

Not all virtual worlds are games, but there are games that are or are within virtual worlds, therefore, some actions that could be considered to be morally wrong, will be acceptable as long as they are within the rules of the game. There are, however, no games that allow for griefing and other abusive behavior within the stated rules. If there were such a game, then the issue would be much more problematic. Even so, it would not be any more problematic than a game played in the real world that allows for similar behavior.

If the actions that take place in virtual worlds are subjects of moral consideration, as I think it is clear they are, then, apart from any actions that are allowed within the rules of the game, they should be held to the same standards as the actions that take place face to face. As Ashley John Craft puts it "users have the same de facto duties towards each other when they interact within virtual spaces as they do when writing in print, talking over the telephone, or meeting in person" they are, after all, still interacting with another human being (Craft, 2007, p. 216). With this in mind, I will use the example of griefing to show how three major moral theories, deontology, consequentialism, and virtue ethics should judge the action.

Deontological theories are concerned with right actions as opposed to good consequences. There are many different deontological theories but they are all centered on the rights or duties people have in regards to how they are treated and how they treat others. The most well known example is probably the Ten Commandments. These commandments are rules that govern right action which are not supposed to be breached, regardless of the consequences. Aside from religious commandments, there are many version of deontology in philosophy, the works of Immanuel Kant being central to most.

Central to Kantian ethics is the categorical imperative to "act only in accordance with that maxim through which you can at the same time will that it become a universal law" (Kant, 1997, p. 4: 421). This leads to the practical imperative, and perhaps the most well known aspect of Kantian ethics, that we should "act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means" (Kant, 1997, p. 4: 429).

Since there does not seem to be any reason for excluding interactions between people within virtual environments from moral consideration, the application of deontological moral theories should be straightforward. Baring the exclusion of some actions that are covered by the rules of the game that both parties except, if the action takes place within a game, then any other action should be held to the same standards as face to face interactions. Therefore, one should only act in accordance with the categorical imperative. As such, griefing and other sorts of behavior that use other people as mere means for one's enjoyment would be considered morally wrong.

Contrary to deontological moral theories, consequentialist moral theories find the moral status of actions in the consequences that result from them. For example, instead of saying that lying is always wrong, one would look to the consequences that occur due to the lie and decide based on those whether or not it is alright to lie in that situation.

Utilitarianism is the classic consequentialist theory and it states that one should maximize utility, or the good, in any situation. There are different views on what the good is, but one of the best known is that the good consists of pleasure and the bad pain. If we take this hedonistic view of the good, then, according to utilitarian, one should try and maximize pleasure and minimize pain in any given situation. So, it might be alright to lie,

as long as doing so maximizes pleasure for all affected by the action. Since we are looking at actions that do affect real people, even though they take place in a virtual environment, we would look at the consequences of the actions in determining the moral status of the actions.

Generally, it would seem that most of the actions that are traditionally considered wrong if performed face to face would also be considered wrong if they take place in virtual environments. Stealing, lying, cheating, griefing, and other forms of immoral behavior should be considered wrong, regardless of whether the behavior occurs face to face, online, or in a virtual environment. This is because those actions generally result in an unnecessary loss of utility. There is often a clear negative impact on the victims of these actions, as shown by 30% of participants in Coyne et al.'s study rating griefing as having the same impact as traditional bullying, and 10% claiming that it had more of an impact (2009). Aside from the direct impact on the victims, there is evidence that suggests exposure to violent games and media can contribute to aggression and other social problems, which could affect the agent and society in general (Porter & Starcevic, 2007; Anderson & Dill, 2000; Vessey & Lee, 2000; Williams & Skoric, 2005; Funk, 2005).

Unlike deontological and consequentialist approaches to ethics which are focused more on the action or the consequences, virtue ethics is a more agent focused theory, focusing on the development of a person's character in such a way that leads to eudaimonia or human flourishing. The consequences are not as important as using reason to shape behavior towards human flourishing. Furthermore, it is not simply performing the actions that is enough; they must be done for the right reasons from a developed

moral character. A person must have knowledge, know which actions are the right ones and then choose to do them because they know they contribute to developing a character capable of human flourishing. A robust character is not something that is easy to obtain, but comes about through hard work and habituating correct action.

The problem with griefing, cyberbullying, and other actions like them that can occur in virtual environments, is the same as what is wrong with similar face to face interactions, namely, they contribute to the development of a poor character through the habituation of vices. We have seen that there is no reason to distinguish between virtual and non-virtual actions when they concern interactions between real people, so the same standards should apply between similar actions, regardless of whether they occur face to face or in a virtual environment. This is all the more true of an agent centered ethical theory, as the agent is still acting out actions that contribute to habituating non-virtuous actions. Indeed, whether you cheat someone online or in front of their face, you are still cheating the person.

2. The problem with morally judging virtual actions in single user environments

By now it should be clear that the way one treats other people within virtual environments should be subject to moral consideration and, in many cases, harmful behavior like griefing should be considered morally wrong. This is because most of the actions are not part of some distinct fantasy land that is removed from all real world responsibilities and ethical restrictions, but an extension of the real world. There are real effects that result from virtual actions because they are just another medium through which people can interact with each other. But these multiuser virtual environments do

not exhaust the form of virtual environments; indeed, many virtual environments are constituted by many NPC's (non-playable character) and only one person.

There are more virtual environments that contain only one actual person amid a myriad of NPC's than there are multiuser environments. Most of these single user virtual worlds take the form of a game, an increasing number of which are violent. Quite different from the violent video games of the past, which consisted of little more than simple 2-Dimensional figures eating ghosts, smashing people with barrels, or jumping on goombas, the violent games of today are typically much more realistic and much more violent. There is research suggesting that playing violent video games may contribute to increased levels of aggression in the real world (Porter & Starcevic, 2007; Anderson & Dill, 2000; Vessey & Lee, 2000; Williams & Skoric, 2005; Funk, 2005), and these games are both becoming more prevalent, realistic, and violent. In addition to hyper-violent video games, there are also games that allow for other despicably immoral actions. For example in Grand Theft Auto players are able to "visit virtual prostitutes in the game, have intercourse with them, and beat them up afterwards to retrieve the money they paid" (Gooskens, 2010, p. 65). Even more controversial is a Japanese game called *Rapelay* which directs players to first stalk and then rape a single mother and her two "virgin schoolgirl" daughters (there is also a "freeform mode" where players can rape any woman NPC in the game and get male NPC's to join in) (Fennelly). Even if there is no clear harm to anyone (these characters that are being raped are not controlled by any person, they are only computer generated characters designed to look and behave a certain way within the confines of the game), most people would still feel that these actions are wrong. The question is whether or not we are justified in considering these,

and similar, actions to be wrong, or even have a moral status. I will begin by looking at a position that holds that do not virtual actions¹¹ have a moral status and they are not objects of moral consideration. Next I will look at the ability of virtue ethics to judge the moral status of virtual actions, followed by the ability of consequentialist and deontological theories to do the same.

3. Virtual actions have no moral status

One possible position regarding the moral status of virtual actions is that, in virtue of being virtual, they have no moral status and are not the proper subjects of moral consideration. According to Geert Gooskens (2010), virtual actions within single user virtual environments can be considered neither wrong nor right since they are comprised only of images (as if's). The discomfort people feel from games like *Grand Theft Auto* and *Rapelay* are generated when a person feels the player is associated too closely with their virtual-world-I. In order to argue for this position, he proceeds in three steps. First, he defines the necessary condition for considering virtual actions morally. In the second, he argues that, for virtual actions, this condition is not sufficient. His third step tries to explain why we can still feel uncomfortable with virtual actions, even though they are not subjects of moral consideration.

According to Gooskens (2010), the necessary condition for a virtual action to be the subject of moral consideration is analogous to real world actions, namely, freedom. In many games there is a clearly defined end, an objective to achieve, and a player tries to find the best way to achieve this end. Increasingly, games are allowing for more and more freedom within their virtual worlds. Often times players are presented with a clear

¹¹ By "virtual actions" I do not mean all representations of actions that take place in virtual environments, but those brought about by a user.

89

ethical choice that does not may not affect achieving their goal. Players may also be presented with a great amount of freedom to do whatever they want. For example in *Grand Theft Auto*, a player can steal, murder, use and then beat up prostitutes, or do none of these things; they are continually presented with the freedom to do what in the real world would be considered both right and wrong.

Not all games present players with the freedom necessary to consider an action morally, but even actions that take place in those that do are beyond the domain of ethics. This is because even if I rape an NPC or beat up a prostitute to get my money back, I have not actually done anything wrong. According to Gooskens, any actions within a virtual environment are a form of image-consciousness and "image-consciousness is always characterized by neutrality, or the so-called 'as-if'-modification" (2010, p. 66). Furthermore, Gooskens states that "not only the objective correlates of my acts are neutralized, but also my mental acts themselves" (2010, p. 66). Subsequently, virtual actions are similar to looking at photos or feeling "pity-as-if" (not actual pity) when seeing a picture of a suffering person, and, since as-if things are by definition neutral, then they cannot be right or wrong.

When we take this position on virtual worlds and the actions that can occur within them, it makes both consequentialism and deontology wholly impotent. If every virtual action results only in as-if consequences, then there are no actual consequences and so no right or wrong, since as-if things are by definition neutral. According to Gooskens (2010), deontology is characterized by the intentions that ground actions. But, since the "mental acts themselves" are neutralized when dealing images, deontology will also find all virtual actions to be neither right nor wrong. Interestingly, Gooskens claims that when

we are "immersed in a virtual image-world, we do not merely leave the actual world behind us, we also leave our actual ego" he maintains that "although one always identifies to a certain degree with the image-world-I, the actual I and the image-world-I are still separated by an abyss that makes it very hard to say who is accountable for possible virtual 'wrong-doing'" (2010, p. 68). He seems to imply that, while there is no actual wrong-doing, there may be virtual wrong-doing and either the actual I or the image-world-I may be responsible for that.

It may be the case that virtual actions strictly have no moral status because they are virtual and not actual as Gooskens claims, but this does not explain the "discomfort" that we feel concerning certain virtual actions. In order to explain his, Gooskens claims that "we are discomforted by acts of virtual rape and virtual violence when they are performed by people who have lost track of the distinction between their actual I and their (immoral) image-world-I" (2010, p. 69). He likens the actions in virtual worlds to plays, where there are no actual murders or rapes, only murder-as-if's and rape-as-if's. The discomfort arises when we suspect that a person is identifying with their imageworld-I and their as-if-intentions in their actual I. Like an actor who not only portrays a rapist, but is actually turned on by doing so, we suspect that people who play the Japanese rape game *Rapelay* are actually turned on by raping women and "virgin schoolgirls".

The problem with this explanation for the discomfort we feel is that it does not seem to fully explain the situation. Here Gooskens equates an actor identifying to closely with the character they portray and a player doing the same for a character they are playing in a game. While there may be some issues surrounding what sort of role one

chooses to play and what sorts of games one chooses the buy, there is a big difference between acting and games that exhibit the kind of freedom he said was necessary to even consider an action morally. Similar to very linear games, where a player has a clearly defined goal and very little freedom in choosing how to achieve it, an actor has a script and defined role to portray as well. But the games that he was talking about are games that allow for a greater amount of freedom, where players are forced to make ethical decisions that do not immediately affect the achievement of the goal. In games with a high degree of freedom, which Gooskens said was necessary to even judge the action morally, there is a much weaker similarity between the virtual actions possible within them and acting. While it is true that we probably feel uncomfortable about an actor or a player sharing the immoral desires of the character they portray, there seems to be something more sinister about a person actively choosing to rape women or commit other acts of violence within a virtual world, when it was not scripted, necessary, or even helpful in achieving the goal.

4. Virtue ethics approach to virtual actions

In response to Geert Gooskens, Thomas Nys (2010) agrees that consequentialism and deontology are not able to adequately judge the morality of virtual actions, but argues that virtue ethics might be. Nys argues that because immoral virtual actions presuppose moral awareness, that "the thrill of such virtual actions is precisely that they transgress ethical boundaries", we should focus on the actual I instead of the image-world-I, as it is the actual I that is endorse these games (2010, p. 81). Once we focus on the actual person who commits the virtual actions, we can see that it could be considered wrong according to virtue ethics because such actions lead to willing desensitization and detract from

human flourishing by leading to the development of pro-attitudes towards vices.

McCormick (2001) is more charitable to the other normative theories, but agrees that

Virtue Ethics is well suited to judge the moral status of virtual actions.

According to Nys, people play and enjoy playing games that allow for immoral virtual behavior because they are able to get away with things they normally would not. It is being able to do something that one knows is wrong that is the foundation of the enjoyment people feel when raping a virgin schoolgirl or beating up a prostitute in order to steal the money you paid her in a virtual world. Nys claims that "it is no coincidence that we experience such joy and sovereignty in the realm of the virtual, rather than in the real world, for only in fiction do we transgress (the rules and laws of) reality" (2010, p. 82). First, I assume we are not talking about the laws of nature so much as the rules and laws that exist in reality. Second, I also assume he means it is only in fiction that transgressions go unpunished, as people in the real world break rules and laws all the time, it is just that they are often punished for doing so. Virtual worlds provide people with the opportunity to commit such crimes and get away with them. Third, I find it odd to suggest that we experience the joy "in the realm of the virtual, rather than in the real world" (Nys, 2010, p. 82). I do not believe that Nys is suggesting that we somehow experience emotions within virtual worlds rather than within our actual bodies in the real world (though these emotions may be brought about by actions that occur within virtual worlds), as this might seem to undermine his claim that "the true locus of our attention is - and should be -the real person playing the games in question, not his or her virtual alter-ego" (Nys, 2010, p. 83). This is made even clearer in his treatment of freedom as a necessary condition for moral evaluation.

Gooskens (2010) largely sets aside virtual actions in games that do not allow for a certain degree of freedom of action. He uses as an example a tennis game where one faces challengers and the goal is to beat them all, eventually winning the US Open.

Because freedom of action is a necessary condition for considering an action morally, games like this would not be subject to moral consideration. The problem is that this would seem to apply to many violent games and even to some extent *Rapelay*, which is characterized by a clearly defined goal (the stalking, raping, and training of a single mother and her two daughters). Nys (2010) argues that freedom is not a necessary condition because by playing such games, the goals become one's own and one endorses them. By focusing on the goals that the actual person endorses, it becomes possible not only to judge the virtual actions through a virtue ethics framework, but we can judge all games, not just ones that allow for a high degree of freedom.

According to Nys, virtue ethics is characterized by an emphasis on doing actions with the correct feelings and emotions, and that people need to be trained to develop "the appropriate stance toward these emotions" (2010, p. 85). What is wrong then, in playing such games, is that by doing so a person is willing subjecting themselves to desensitization against things they should be developing a negative attitude towards. While this is a contentious empirical matter, there is evidence that supports, not only the claim that such actions lead to de-sensitization, but also that they may contribute to increased levels of aggression in the real world (Porter & Starcevic, 2007; Anderson & Dill, 2000; Vessey & Lee, 2000; Williams & Skoric, 2005; Funk, 2005). Perhaps most disturbing of all is the fact that "the U.S. military explicitly uses games to 'cure' its soldiers of their moral squeamishness" (Nys, 2010, p. 85). If it turns out that immoral virtual actions

really have this effect, then they would detract from proper moral development by inculcating the wrong sorts of attitudes. As Nys puts it, "by playing such games one grows callus in one's soul" (2010, p. 85).

From here it appears relatively straight forward how certain virtual actions may detract from human flourishing. Because of the intimate relationship between human flourishing and virtue, and since virtue is a learned tendency to do the right things for the right reasons, developing a tendency to do what is wrong is going to be detrimental to human flourishing. Not only can one be de-sensitized to actions that should be condemned, but by choosing to do such actions, one may develop a pro-attitude towards such actions. Nys (2010) is careful to note that one may be able to derive pleasure from certain actions (like the virtual rape of virgin schoolgirls?) but as long as one still recognizes this as wrong, then one is not developing a pro-attitude towards the action and so it is alright. Similar to Gooskens, the problem would then become whether or not a person endorses such behavior, whether or not their actual I and their image-world-I share the same pro-attitudes towards an immoral action like rape.

The problem is that this seems to be an over simplification of the action. Again the virtual action is being equated to something much more passive. Gooskens used the example of a play actor, who, bound by a script, acts a certain way in order to play a role. Nys uses the example of violation pornography (an even more passive example), wherein a person finds bad things (in this case the depicted rape) enjoyable and may or may not have pro-attitudes towards the action. In the first case the discomfort may come about when the actor overly identifies with the character, and in the second case the moral

status of the action would depend on whether or not the agent has pro-attitudes towards the action.

There are three problems with Nys's position. First of all, there does seem to be some significant different between watching an action and depicting it yourself. Second, there seems to be a problem with saying that one finds bad things enjoyable, and yet does not have a pro-attitude towards them. Perhaps it is because Nys never really defines what he means by pro-attitudes besides saying one example is "a belief about its goodness" (2010, p. 88). I assume he means something like "developing the appropriate stance toward these emotions", which he mentions earlier as a key characteristic of virtue ethics (Nys, 2010, p. 85). If we consider an action to be wrong, and yet we enjoy it and actively pursue depictions of it or even act it out in a virtual environment, it would seem that we really do have pro-attitude towards it, regardless of what one may say. In this case one's actions would betray just what sort of stance one has in regards to these emotions. It is not enough to say that these actions are only simulated, as Nys himself recognizes that "the general consolation that gamers just like the simulated versions of 'bad things' is misleading: this does not change the object of their pleasure, namely these 'bad things' themselves" (2010, p. 88). It would seem that by taking bad things as the objects of our pleasure and actively strengthening this attitude or emotion by seeking them out and even acting them out in virtual environments, one is cultivating a pro-attitude toward them. Finally, Nys seems to be placing a bit too much weight on the significance of one's attitudes concerning an action in regards to its moral status. While true that for an action to be right according to virtue ethics it should be grounded in a virtuous character with the appropriate stance and be done for the right reasons (with the right attitudes), failing

to do so does not make the action not right, it makes it wrong. It is not acceptable to do the wrong thing as long as we do not hold a pro-attitude towards it.

McCormick (2001) is much less hesitant in his support of virtue ethics. Largely setting aside any empirical concerns, McCormick claims that, because virtue ethics is concerned with reaching eudaimonia through the cultivation of a character that chooses virtuous actions for the right reasons, it is in a position to answer what is wrong with playing violent video games and the immoral actions that occur within them: "by participating in simulations of excessive, indulgent, and wrongful acts, we are cultivating the wrong sort of character" (2001, p. 285). Unlike the consequentialist and deontological responses, it is not necessary to focus on any real harm to other people that may result from virtual actions; instead, the focus is on the character of the person who is committing the acts. Violent and other immoral virtual actions are wrong because "by engaging in such activities, you do harm to yourself in that you erode your virtue, and you distance yourself from your goal of eudaimonia" (McCormick, 2001, p. 285). Accordingly, virtue ethics is capable of providing a straightforward moral evaluation of virtual actions that conforms to the common feeling of wrongness when presented with games like *Rapelay*.

5. Consequentialist and deontological approaches to virtual actions

Unlike Gooskens (2010) and Nys (2010), Brey (1999) and McCormick (2001) are not so dismissive of consequentialism and deontology's ability to evaluate virtual actions. Instead they identify some arguments supporters of each theory could put forward and clarify what would be needed in order for them to succeed. In the end they argue it is possible (though perhaps unlikely) that virtual actions have a moral status according to

these normative theories, that this is based on empirical facts, the veracity of which still needs to be determined.

Both Brey (1999) and McCormick (2001) argue that there is a potential consequentialist case to be made against violent virtual actions; however, it is dependent on empirical findings. McCormick begins by distinguishing between three different kinds of actions: dangerous acts, harmful acts, and risk increasing acts. Harmful acts are those that directly result in some harm on a person, while Dangerous acts are acts that directly increase the chances of someone being harmed. For example swimming with sharks is a dangerous act, and, if you get bitten, it becomes a harmful act as well. The third kind of action is risk increasing acts, or actions that make it more likely a person will commit a dangerous or harmful act.

According to McCormick, playing violent video games are neither dangerous acts nor harmful acts, but they may be risk increasing acts. Whether or not some virtual actions should be considered risk increasing is dependent on empirical evidence, that is, whether a virtual action (like rape or murder) increases the risk of doing something dangerous or harmful in the real world. While there is some evidence to support this (Porter & Starcevic, 2007; Anderson & Dill, 2000; Vessey & Lee, 2000; Williams & Skoric, 2005; Funk, 2005), it is still a controversial position. Even if it was found that some virtual actions were risk increasing acts, it would still have to be determined whether or not the benefits (e.g. the enjoyment) one gets from committing the actions would be outweighed by the potential harm doing so could bring about. That is, it would have to be shown that committing a particular virtual action or not would maximize utility. Furthermore, it is important to recognize that consequentialist theories should take

into account all of the events surrounding the action, not only including how the action may lead the user to treat others, but also themselves, if it is a good idea to play games in the first place, and even whether it is ethical for people to produce such games. There may be a lot of work needed to show that certain virtual actions like rape or murder should be considered wrong according to consequentialism, but it should not be dismissed outright like people have done.

Brey (1999) and McCormick (2001) offer the same argument against immoral virtual actions from a Kantian deontological perspective, which, like the consequentialist argument, is based largely on empirical evidence. The argument is the same one that is put forward against treating animals cruelly, namely, that it is not acceptable because it will lead to similar behavior in our treatment of real people. This would seem to come down to the same empirical evidence that is needed to support the consequentialist argument.

The main issue deontological theories seem to have with virtual actions is that they are not directed towards any particular person. As such, they must fall back on possible effects these actions may have on the user and, eventually, on other people through a change in the users behavior. It may be possible to focus more on the intentional states of the user committing a particular virtual action, like rape, and while this does seem to involve a lack of respect towards women in general, it is still important to realize that the intentional state is not directed at a real person, but a computer generated image. While this example does involve something that exits in the real world (a women), it is possible that it may involve something entirely fictional, like an alien or some made up creature, further complicating the issue. Although possible, it would seem

to be much harder to make a case against such virtual actions from a deontological position without appealing to empirical evidence.

6. Conclusion

In the end, all three normative theories seem to have difficulty judging virtual actions. This difficulty largely rests on the fact that these actions involve only one actual person and may rest on empirical findings that are not always agreed upon in the literature. It is probably not as dire a situation as Gooskens (2010) where they can be dismissed offhand, but, as Brey (1999) and McCormick (2001) make clear, there are some concerns that need to be addressed. Virtue ethics is able to make a stronger case against committing immoral virtual actions, but there is a worry that it too may be dependent on empirical findings regarding the effects of such actions.

By committing virtual actions like rape or murder, one may be willing desensitizing oneself to such actions and developing pro-attitudes towards them. This is detrimental to developing a virtuous moral character which should condemn such actions. One could object on the grounds that these actions are not real, only virtual, and so we are not condoning real rape, but only virtual rape. While true, because of the close connection between people and their avatars and the way the brain processes virtual images, it is likely that the effects on one's character are very real and such actions should be avoided.

As we have previously seen, people are closely connected to their avatars. People use the first person pronoun to refer to what they did while controlling their avatars, which makes sense, since, it is really they who are doing the actions (Cogburn & Silcox, 2009). This close connection, the fact that people seem to feel like it is they who are

doing the actions (and rightly so), supports the claim that these actions will have an effect on the person's character just like all the other actions they themselves commit. In addition to the way people speak of their virtual actions, it was found that their nonverbal behavior in virtual environments mimics their nonverbal behavior in real world environments (Yee N., Bailenson, Urbanek, Chang, & Merget, 2007), suggesting that in practice, we do not seem to make such a drastic distinction between virtual and real words, at least in terms of our behavior. It was found that even something as simple as the physical appearance of an avatar could affect behavior both on and offline (Yee, Bailenson, & Ducheneaut, 2009). If something as simple as the appearance of an avatar is enough to affect behavior, it seems reasonable to assume that the actions one chooses to commit in virtual environments would also have a great effect on behavior and moral development. Cognitively speaking, there is little to no difference between virtual and real events as far as the nervous system is concerned, both are processed in the same way. In fact, this is why virtual realities are possible in the first place (Romesín, 2008). As we have seen there is work being done within virtual worlds that helps the real world functioning of people with psychological and social problems (Kim, et al., 2009; Altschuler, 2008; Turner, 2008; Mitchell, Parsons, & Leonard, 2007). Clearly, virtual actions can have an effect on the person's behavior in the real world, it seems reasonable to assume that one's character can be affected in the same way.

In addition to the psychological findings concerning virtual environments and the actions we commit within them, there are philosophical theories that support a close connection between users and the virtual actions they commit. As we have seen, the extended mind theory (Clark & Chalmers, 1998), the excentric positionality described by

Jose de Mul(2003), and Cartesian dualism all offer reasons to believe that a person's self, is at least closely connected with the virtual world, and it may even extend into it. If this is the case, then it is clear that the moral status of the virtual actions one performs would be unchanged by being virtual according to virtue ethics, since it is the self which performs both virtual and real actions.

It should now be clear that interactions within virtual environments should not be excluded from moral consideration. There is no nice divide that separates the real and virtual worlds, with the consequences of actions performed in either having an effect on the real world. In addition, it is important to realize that these interactions are at root interactions between people, and it does not matter if they occur through any particular medium. Not only are interactions within virtual environments subjects of moral consideration, consequentialist, deontological, and virtue ethical theories are adequately equipped to judge the moral status of such actions.

The issue is more complicated when dealing with virtual actions that only involve one agent, but there are reasons to believe that some virtual actions may be wrong and others should at least be avoided. Consequentialist, deontological, and virtue ethical all have some issues handling these actions, having to rely largely on empirical findings because of the absence of people directly involved besides the actor. Because of this, virtue ethics appears to be in a better position than the other two normative theories in dealing with virtual actions; nevertheless, there are reasons to believe that they can adequately handle virtual actions including support from empirical studies, and, though perhaps more difficult, non-empirical arguments

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