Evil in virtual worlds

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1 Introduction

The concept of evil has a long tradition in moral philosophy and a rather peculiar history when judged by philosophical standards as many accounts of evil do not turn to abstract definitions but use paradigmatically evil actions or persons to exemplify the concept's core. For example, Arendt refers to the terrors of World War II (1965/2005, 1963/2006), Neiman elaborates on the terrorist attacks of 9/11 (2004), Kekes turns to historical figures like Robespierre or Charles Manson (2005), Eagleton identifies villains in literature like for example Shakespeare's Jago (2010). In general, this world's battlefields have always been a prime source for exemplarily outrageous acts that can be employed for determining the essence of evil.

However, in the light of the Information Revolution new worlds emerge. The purpose of this paper is to argue that there is *something similar to moral evil to be witnessed in virtual worlds*, more precisely on the battlefields of the online video game "EVE Online" (EVE). It shall be argued that no matter what measure we apply – if we judge evil by its consequences or the intentions of the perpetrator (a classical debate in moral philosophy), if we stress the internal or external causes of evil actions (a classical debate in moral psychology) – the actions we witness in EVE seem to qualify for being truly evil actions.

This paper's virtual world of choice, *CCP Games'* "EVE Online", is a science-fiction themed massively multiplayer online game (MMO) about trade and conflict in remote future. Games of this genre can be defined as video games played online by thousands of concurrent users at the same time. While classic videogames were typically designed for one player or two competing players, MMOs are designed for several thousand concurrent users. They feature persistent virtual worlds existing independently of the individual player – typically themed as fantasy- or science-fiction-worlds – in which the players role-play their *avatars*[1]. MMOs are inherently social games in which cooperating is essential for success and in which stable communities of players and distinct social institutions evolve. In a virtual universe like EVE in which "killing" each other for material profit is widespread, this paper's focus is a virtual kamikaze-tactic called *suicide ganking* (SG) in which both the victim's and the perpetrators' avatars get killed. SGs are, even for this world's measures, a particularly destructive outburst of violence.

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[1] "Avatar" or "character" is the name for the virtual alter ego of the player. It is the virtual person whose actions the player controls over the human-computer interface, i.e. with mouse-clicks and keyboard-commands.

Thanks to collaboration with the game's developer, this paper can draw on the behavioral data of one entire month of an intact community's social interaction by analyzing the unmediated server data encompassing practically everything the 390,000 players of this game did in January 2011.

Section 2 will start out by presenting the phenomenon of suicide ganking, notably highlighting the negative effects of suicide ganking for perpetrators and victims alike as well as describing potential motivations. This detailed description is fundamental for engaging in the discussion whether suicide ganking can in fact be considered an evil action (section 3). Section 4 presents some limitations inherent to research in virtual worlds. Section 5 argues that the evil of suicide ganking is indeed an evil that happends *in* virtual worlds. Section 6 concludes.

2 On suicide ganking

"EVE Online" was published by CCP Games in May 2003. In January 2011, EVE had more than 390,000 active players and an average of around 30,000 concurrent users logged in at any time of the day. These numbers make EVE one of the internationally most successful MMOs at the moment. The player's main activity is to steer a spaceship through a galaxy far away and to compete with other players – in both economic and military ways. Generally speaking, earning money is the single most important task. One simple, non-destructive process of how players can earn "ISK" (short for "Inter Stellar Kredit"; the in-game currency) is to mine asteroids in space in order to acquire ores, to refine these ores later in nearby stations (i.e. making "minerals" out of them), to manufacture simple or advanced products with these minerals as input, and finally to sell the produced goods on the market. This process also is a fairly short but reasonably exhaustive description of the supply side of the completely player-run EVE economy. Individual players trying to advance their characters and wanting to buy better equipment are an important demand force in EVE's economy. However, the single most important factor of the demand side of EVE's economy is ship destruction due to fighting. From a political economist's point of view, EVE is a classical example of anarchy. It is characterized by two basic ways of making a living: either by producing oneself or by depredating the wealth of others (Buchanan, 1975/2000, pp. 72–78). Depredation in EVE happens by means of "killing" each other, a *kill* being the in-game term for the intentional destruction of the space ship of a fellow player.[2] After the destruction of the ship, the perpetrator can collect whatever the victim carried with him in his cargo hold.

In EVE, strategic killing is ubiquitous and not illegal. Thus, an action deemed potentially evil has to meet very high standards of insidiousness. In a *suicide gank*, a group of perpetrators joins forces in order to destroy the spaceship of an uninvolved, innocent victim who finds himself in the wrong place at the wrong time. Suicide ganks happen by definition only in a certain area of space called *high security space*. In high security space (hisec), a computer-controlled police force directly retaliates all crimes committed. New players start to play the game here. It is an area intentionally designed for these new and comparably weak players to get used to the harsh rules of the game in relative safety. The group effort on the perpetrators' side is needed precisely because the police force punishes unmotivated acts of aggression

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[2] When killed, you will find yourself in a small rescue capsule. You are then unable to attack your aggressor and pretty helpless but at least you are able to fly to the nearest station and buy a new ship. You incur the costs of replacing your equipment and ship (often the most valuable possession you have) and the loss of all cargo you were carrying with you in the cargo hold of your ship.

immediately and *infallibly* by destroying the ships of the attackers as well. Without bringing several people, the perpetrators would not even possess enough firepower to destroy the victim's ship before they are destroyed themselves. Every perpetrator that acted aggressively will be killed.[3]

It is surprising to see to which lengths players go to set up these ambushes. A whole group of players has to wait for victims, "camping" at a suitable location with lots of traffic; this may well take more than one hour. And in reaction to *CCP Games* changing the rules of the game in 2008 to block the access to hisec for repeated offenders (CSM & CCP, 2008), they had to find a way to circumvent the rules in order to keep up their frequency of killing. Players started to create secondary, "neutral" characters who are never formally involved in any killing and thus are not attacked by the police forces in hisec. The only purpose of these so-called *alt-characters* is to lodge a small number of the space ships needed for the attack at a hidden place. Once the ships are in place, the perpetrators switch back to playing with their main character. They make use of a small loophole in the game's rules, which enables them to enter hisec if flying not in regular space ship but in a rescue capsule.[4] They fly to the hidden location and swap ships – from the rescue capsule to the battle ship – and then fly to the chosen location for the next suicide gank to wait for the victim (CSM Ankhesentapemkah*, 2008)[5]. As many players in the official Internet forums of the game agree, to come up with this workaround is a stroke of genius (Thoren Gregson* et al., 2008). However, it takes weeks until a newly created character is able to perform this task due to an underlying game mechanic, which prevents new and weak characters from flying expensive and powerful ships right away.

2.1 Suicide ganking as hostile aggression

Following the classification of Staub who distinguishes between *hostile aggression* (desire to harm), *instrumental aggression* (aggression as means to and end), and *defensive aggression* (self-protection from violence) (2005, p. 67), SGs belong in the first group. None of material self-interest in the short run, or in the long run (by building up a reputation of being "evil" which may yield strategic advantages (Duntley & Buss, 2005; Schelling, 1978)), or self-defense in a situation of existential threat can explain the evidence at hand.

Short-term considerations. Of the 616 attempted suicide ganks that happened in EVE in January 2011 about one third failed (meaning the perpetrators were not able to destroy the victim's ship before being killed themselves by the police). The 2,322 perpetrators that par-

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[3] Often the attacking group will bring along one character that stays passive during the encounter only to be able to collect whatever is left over after the battle – notably the victim's cargo. Since this specific character stays passive during combat, he is not destroyed by the police.

[4] This loophole cannot be filled, however, since it is important for more general mechanics of the game.

[5] This is the fictitious name of a real person. The source is a protocol of one of the meetings of the "Council of Stellar Management" (CSM) (a group of players democratically elected by the whole player base to represent their views to CCP Games) and CCP Games. The "CSM" in front of the name indicates that this person is an elected member of the CSM. Since there is no way of finding out the real name, this paper will use the online names instead for referential purposes. Although an unsatisfactory solution overall, this facilitates the finding and verification of quotations. To distinguish real names from fictitious character names, each online name will end with an "*".

The same system will hold for developers from CCP Games, too. They are generally posting in forums using their developer names that always have a "CCP" put in front of them (e.g. "CCP Explorer*" or "CCP Xhagen*"). This enables us to distinguish between player quotes and developer quotes in forums.

ticipated in these SGs lost 11.7bn ISK (about 600 EUR[6]) in total or 5m ISK (0.26 EUR) per ganker and attempt on average. These numbers already take into account the gains the perpetrators made from selling the captured cargo of the victim. As for the victims, in total more than 105bn ISK (5,400 EUR) were lost in January or 247m ISK (13 EUR) per victim. Due to suicide ganking the EVE economy as a whole lost 155bn ISK (8,000 EUR) in January – only to redistribute cargo worth 12.9bn ISK (680 EUR), so to speak (Mildenberger, 2013, p. 152).

Given the way SGs function, nobody can seriously doubt that the perpetrators are consciously inflicting harm. However, one might ask the question whether the gankers realize that they themselves also lose money in such encounters. After all, suicide ganks are a very risky endeavor with respect to profits for the attackers. It is not always clear what cargo the victim has got in his hold and they can never be sure which part of the cargo is destroyed in the explosion. Additionally, especially in small groups it is difficult to judge whether the attackers will be able to destroy the ship quickly enough before the police punishes them. On the other hand, the coordination effort is significant: They have to agree whether a specific, potential victim flying by is actually worth attacking and coordinate the strike to kill quickly. After the combat, they somehow have to share the potential gains among the group members.

But the data suggests that there are no noteworthy exceptions to the rule that suicide ganks do not pay off: The vast majority of failed attempts is slightly unprofitable. Only 29 per cent of attempted SGs are profitable. One should expect players to learn very quickly about this fact, since there are no highly profitable outliers, inducing them to think that SGs might not pay off on average but at least do for them personally, that blind them. Summarizing this data on making money by doing suicide ganks is straight-forward: There is no good way of making money by committing SGs. On average the players will always lose money, even if they optimize their way of approaching this tactic: In the long run, losses are guaranteed. Players can be expected to learn about this quickly.

Long-term considerations. Showing that suicide ganks are not beneficial with respect to the short-run material gains of the perpetrators, one might still assume – adopting a strategic perspective – that the evil *reputation* gankers build up does fulfill the function of raising material income in the long-run. Some authors reason that cultivating a bad reputation ("Do not mess with me!") is a good way of avoiding being attacked or exploited by others and evolutionarily speaking reasonable (Duntley & Buss, 2005; Hirshleifer, 2001; Schelling, 1960, 1978). In EVE, however, a bad reputation seriously hurts the gankers potential to earn money by other means than fighting. Unfortunately for them, these other means (trade, producing, or "business" in general) are typically more profitable than ganking (Mildenberger, 2013, p. 112). Second, gankers incur severe limitations to their freedom of travel, particularly preventing them from going where the money is made in EVE (the big trade hubs in hisec). And third, the gankers do not seem to want to avoid being attacked by others; they rather actively look for trouble. This is the very reason why they started out doing SGs in the first place. Gankers in EVE "enjoy to be mean, … [they] like getting angry mails from the people whose most precious ship they destroyed. … The conflict itself is entertaining to them." (Turbefield & Óskarsson, 2011; researcher and community manager in EVE Online). One side effect of acting as a ganker is that the individual *security status*[7] of the character slowly drops. A security

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[6] 1 EUR ≈ 19.5m ISK; for the calculation of the exchange rate ISK - EUR see Mildenberger (2013, p. 110).
[7] Each character has an individual security status between -10.0 and 10.0 that gets lowered when he violates the laws of the virtual universe (e.g. by attacking an innocent player in hisec). The security status reduction for committed crimes varies e.g. with respect to the type of the crime, the security status of the victim, and the area where it was committed.

status of -5.0 and lower, however, will make the ganker an "outlaw". Outlaws can be attacked by anybody in the universe at any time and anywhere, even in hisec, without the attacker having to fear governmental sanctions. Thus, gankers achieve the exact opposite of having a bad reputation that scares attackers.

Additionally, SGs are particularly unsuitable to even build up a bad reputation in the first place. Whereas the individual security status of the ganker inevitably drops (i.e. he experiences the negative effects of a bad reputation in EVE), he does not automatically experience the "positive" effects of being feared by others. Suicide ganks are a group effort and groups blur responsibility; this has a double effect in this case. Not only are perpetrators more inclined to commit evil (Bandura, Underwood, & Fromson, 1975), but the victims also have less knowledge on who actually attacked them. Hence, if the victim does not know whom to fear or to avoid, then the very idea of building up a bad reputation by SGs is vain.

SGs as self-defense? It should be clear by now that committing an SG is hardly an act of self-defense in a situation of existential threat. Yet, talking of self-defense in a figurative sense, one might believe that in SGs poor people are teaming up to rob the rich (in "Robin Hood" style). This is not the case. Gankers are on average a little bit more experienced and also possess a slightly higher wealth than the victims (Mildenberger, 2013, pp. 154–156). Generally speaking, gankers and victims are more experienced and richer than the population average for EVE. This makes sense since victims have to be relatively rich to serve as worthwhile target and gankers have to be reasonably experienced in order to plan and execute an SG.

2.2 The motivations for suicide ganks

As it stands, suicide ganking seems to be motivated by very low intentions. "Greater goods" achieved by these ambushes are hard to imagine. What is worse, short-run or long-run material self-interest (considered to be a praiseworthy motive at least by some economists) both are unable to explain SGs. Suicide ganking is not a phenomenon of instrumental aggression. What is even worse, not even the all too human emotions of envy and anger seem to underlie these virtual killings. Envy is excluded since perpetrators are more experienced and richer than victims. Anger is excluded since "there is nothing personal in suicide ganking usually. They [the victims; C.D.M.] have done nothing to make you [the ganker; C.D.M.] angry at them" (Eriksen, personal communication; former CSM member and current CCP employee). Remember that the victim of an SG just finds herself at the wrong place at the wrong time, as the gankers are not roaming the virtual universe but are stationary at a busy location. Gankers might care about the unknown victim's payoff but in a very limited way – provided they are negative. Although the evildoers go to great length to prepare the trap for the unsuspecting victim, the final suicide gank is a sudden, extremely destructive outburst of violence. "Suicide ganking is not a planned thing" (Eriksen, 2011) – it is something that a group of players decides to do when they are bored.

3 Is suicide ganking evil?

Suicide ganking seems to be at least a legitimate candidate for an evil action. The purpose of this section is to show that *irrespective of the measure applied to discern evil*, this impression can be sustained. Two important debates surrounding the concept of evil are considered: (1)

whether it is intentions or consequences that make evil actions evil and (2) whether the internal or external causes of evil predominate.

3.1 Intentions vs. consequences

In moral philosophy, one of the most important proponents of an intention-based evaluation of potentially evil actions is Kant. He describes three levels of corruption of humans' natural and original disposition to the good (1793/2009, pp. 31–33). First, if one only respects the moral law when setting maxims, but is too weak and always succumbs to self-love in the situations in which one should act according to them, *frailty* is the reason of evil. The second level of corruption is *impureness*: People may do something evil because the maxim that guides their behavior is not purely motivated by the moral law but rather is a mixture between respect of the law and self-love. The third level is *viciousness*: to completely disregard the moral law in maxim-formation and to purely apply self-love or any other depraved motive as guiding principle. Examples here are actions out of pure evil will.

Although Kant himself does not put it past man to ever act in an evil way for the pure sake of evil – for him humans are reasonable beings rather than devils – Arendt's idea of the banality of evil is maybe the most powerful reply showing the systematic problems with relying solely on intentions for judging evil. In the light of the horrors of World War II she talks of "evil which could no longer be understood and explained by the evil motives of self-interest, greed, covetousness, resentment, lust for power, and cowardice" (Arendt, 1951/1973, p. 459). For her, what happened in Auschwitz is too big to be easily accountable to single persons. Instead, Arendt claims that the biggest evil is such that has been committed by *nobody*, by human beings that refute to be persons, and that consequently can neither be *punished* nor *forgiven* (Arendt, 1965/2005, p. 101). Such evil is committed by ordinary men – not by diabolical sadists. These ordinary men can be said to be *nobody*, because they are not "persons" according to the definition of Arendt. The perpetrators refuse to be persons, because they refuse to think for themselves and are not able to remember what they did (1965/2005, pp. 92–102). "The biggest culprits are those that do not remember, because they have never given a thought to what they did, and without memory nothing can hold them back" (Arendt, 1965/2005, p. 77). Consequently, there might be evil outcomes without evil intentions.

It is not the goal of this paper to provide new insights into this ongoing discussion whether intentions or consequences matter most to discern evil.[8] The point is that either way SGs have to be evaluated very negatively. Considering solely consequences: suicide ganks feature excessive negative effects in comparison to other forms violence in EVE, e.g. virtual piracy chosen by some players as a way to make an online-living. When piracy already is a very inefficient mechanism to redistribute wealth (possessing a loss-redistribution ratio of 4:1, meaning that 4 ISK worth of capital are destroyed every time a pirate makes 1 ISK out of an attack), the corresponding ratio of SGs is 12:1 (Mildenberger, 2013, p. 153). Asking whether SGs are an evil action it is not the absolute amount of destruction caused that matters: 616 attempted SGs, 4,000 SG-related kills meaning 1.2 per cent of all kills in EVE, a total economic loss amounting to 0.05 per cent of EVE's money supply M1[9], or the 0.26 EUR that each ganker spends on average for attacking an innocent. These are impressive but not outrageous numbers. Rather, it is the fact that some people are willing to invest considerable

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[8] For a more recent position concerning the arguments of these classic accounts see Card (2002).

[9] Translated into the terms of Europe's economy, this corresponds to a yearly damage of 2.4bn EUR (European Central Bank, 2011; Mildenberger, 2013, p. 164).

amounts of effort and time and to pay a certain amount of money so that other, innocent players lose 50 times this amount. Considering intentions: neither Kantian frailty, nor impureness, nor Arendt's all too human motives of self-interest, greed, covetousness, resentment, lust for power, and cowardice underlie suicide ganking. Suicide ganking seems to be an instance of what Kant deemed impossible (Kant, 1793/2009, pp. 38–39): A rejection of the moral law in an act of rebellion using the depraved motive of boredom as guiding principle.

3.2 Internal and external causes of evil

In moral psychology, there is a debate that mirrors to some extent the philosophical discussion whether evil intentions or evil consequences better capture the essence of evil. It is the debate whether internal or external causes of evil are predominant. Many moral psychologists believe that internal dispositional factors play a determinant role for evil behavior (e.g. Berkowitz, 1999; Funder & Ozer, 1983; Newman, 2002; Sabini, Siepmann, & Stein, 2001). These authors typically do not totally negate the influence of situational and environmental factors but see the actors' lacking moral traits and virtues as the dominant causes: Those who do evil *are* evil. On the other hand, situationist authors like Zimbardo criticize this "rush to the dispositional" (2005, p. 23). He claims that the bias towards personal factors is due to individualistic societies, in which people are individually praised for their achievements as well as blamed for their misdeeds. The fact that the legal, medical, educational, and religious systems in Western societies all are founded on principles of individualism should not blur the scientific view, however (Zimbardo, 2005, p. 25). Situationists do not trace back evil and aggression to the psyches of disturbed people but highlight the effects of situational and ecological variables like time press or obedience, as well as stressing the potentially negative consequences of the interplay of circumstances and the heuristics built-in in human brains (Doris, 2002; Gigerenzer, Todd, & The ABC Research Group, 1999; Gigerenzer, 2008; Milgram, 1974; Sosa, 2009; Zimbardo, 2005). Miller states that there is "considerable empirical evidence, that personal or dispositional factors are frequently very weak predictors of behavior, even though they are *erroneously* perceived to be the key determinant of individuals' behavior. Moreover, the lay observer frequently underestimates the impact of situational forces on behavior" (2005, p. 2). Ross coined the term "fundamental attribution error" (1977, p. 185) for this phenomenon.[10]

Once again, the interesting thing about suicide ganks is that no matter which theoretical stance is taken, one can identify many parallels between this online behavior and patterns that we know from real life observations. The virtue theorist will be intrigued by the fact that a minority of players is responsible for a comparably important share of the overall destruction happening in EVE. Only about 0.4 per cent of EVE's active population acted as a ganker in January 2011 (Mildenberger, 2013, p. 166). This is well below the 1 per cent of the real world population that qualifies as psychopaths according to Hare's Psychopathy Checklist—Revised (Bodholdt, Richards, & Gacono, 2000; Hare, 1991). Two other well-established findings about psychopaths can be re-identified in EVE. First, although they are few, Baumeister and Vohs (2005) emphasize that the evil committed by sadists goes beyond what other causes of evil produce with respect to cruelty. This clearly applies to the comparative destructiveness of regular piracy and suicide ganking mentioned above. Second, Baumeister and Vohs (2005, p. 97) and Tangney and Stuewig (2005, p. 339) propose that not only sadistic traits are pervasive and robust to change (evil persons stay evil), but also that ordinary people with an aversion to

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[10] A good overview of the discussion between virtue theory and situationism can be found in Sosa (2009) and Doris (2002).

inflicting harm can develop sadistic traits by repeatedly carrying out evil actions (good persons can become evil).

> "The first time one hurts or kills someone, one has a strong negative reaction, but as one continues to perform such acts, … [they] gradually yield more and more pleasure. Certainly the scattered observations on sadism seem to fit such a pattern. Enjoyment of sadistic acts is mainly reported or admitted by people who have been at it for a relatively long time" (Baumeister & Vohs, 2005, p. 97).

In this respect, the story told by a developer of EVE describing his first kill becomes revealing:

> "I remember when I killed another guy for the first time. I sat there with my hands shaking asking myself: 'What have I done? What have I done?' My hair standing, I was cold, it was horrible. I was thinking I am really a bad person. And then I did it again. It was fun... . It is a huge thrill to kill somebody. That is a part of the game. People like that." (Hreiðarsson, 2011)

Finally, with respect to the demographics of the players, a *z*-test reveals that the average age of the gankers (29.1 years) is significantly lower than that of the active population (30.9 years) (population SD = 8.53, z = -7.36, p < 0.01 two-tailed). Additionally, the share of female gankers (2.4 per cent) is significantly lower than the active population average (4.1 per cent) (z = -2.99, p < 0.01 two-tailed) (Mildenberger, 2013, p. 156). Just as in real life, young males seem to fall more easily for aggression.

Despite all these parallels of sadism and suicide ganks according to *virtue theory*, on the other hand almost every important *situational* factor known for raising the extent of evil happening in a given setting is present in SGs, too: Changed vocabulary and semantics trivializing evil (Zimbardo, 2005), formal and informal rules encouraging evil (Milgram, 1974; Zimbardo, 2005), role-play (Zimbardo, 1992), gradual degradation (Baumeister & Vohs, 2005; Milgram, 1974; Zimbardo, 2005), and deindividuation in all of its forms (Bandura et al., 1975; Bandura, 1990; Diener, Fraser, Beaman, & Kelem, 1976; Zimbardo, 1976).

In EVE, perpetrators become "tough guys" and killing many people an "innovation" (CCP kieron* et al., 2006). The formal game rule that attacking other players in hisec is generally possible remains in place although there are no technical restrictions to changing this game mechanic immediately. This is because a big part of the community deems the ability to kill other people an important and necessary feature of EVE (Mildenberger, 2013, pp. 157–164). Furthermore, many players consciously adopt the role of a ruthless space outlaw (CCP kieron* et al., 2007, p. 10). Finally, suicide ganks diffuse responsibility among the perpetrators because of the group effort, the victims of suicide ganks are "deindividuated" by referring to them collectively as "carebears" (CCP Fallout* et al., 2010; CCP Hellmar* et al., 2003; CCP LeKjart* et al., 2003; CCP Taera* et al., 2008), and environmental anonymity is raised by bringing destruction even to the safest and intendedly fully-controlled places of this virtual universe.

To summarize: Both in the light of *intention*-based and *consequence*-based definitions of evil, suicide ganking remains a valid candidate for an evil action. Furthermore, all of the suggested *internal* causes for evil as well as almost every potential *external* cause of evil can be shown

to be of importance for suicide ganking. By all standards, suicide ganking seems to be something similar to real world moral evil.

4 Limitations

The most important criticism concerning the findings about suicide ganks in EVE is that one should not be too rash in linking real world evils to virtual ones. After all, MMOs could be a case of dealing with "somewhat strange people" who furthermore "behave strangely online". Both caveats are legitimate. The usual problem of the external validity of findings stemming from an artificial environment (be it laboratories, thought experiments, virtual worlds) is bound to emerge in an accentuated form for MMOs; but we are definitely better off to avail this kind of evidence rather than not. This is even more so taken into consideration that suitable real life evidence with respect to evil behavior is extremely rare and the impossibility to obtain "objective", non ideology-laden information about evil deeds committed, as perpetrators and victims tell completely different stories of what happened (Baumeister & Vohs, 2005).[11] Additionally, laboratory tests are difficult if not impossible to conduct due to ethical reasons and pen and paper questionnaires typically only yield biased answers.

After all, the demographics of EVE show that the sample is diverse: It not only consists of male teenagers who are socially isolated but of highly devoted and educated people. 95.7 per cent of the players are male players; this is a very high proportion even for the MMO-genre. The players come from nearly every country in the world, with the top three being the United States (36 per cent), the UK (11 per cent), and Germany (9 per cent). EVE has a rather smooth age distribution from thirteen- to sixty-nine-year-olds, the average age being around 31 years. Across different MMOs, Yee (2006) has gathered occupational data over a three-year period. He finds that the biggest share of players, irrespective of gender, is full-time employed.

Motivational data for MMO players suggests that escapism, i.e. the extent to which the virtual world is used in order to avoid, forget, or escape the real world indeed exists among MMO players, however, the most important motivation factor is the desire to interact with others and the willingness for meaningful relationships that transcend to real life (Griffiths, Davies, & Chappell, 2004; Meredith, Hussain, & Griffiths, 2009; Yee, 2006). Furthermore, it is widely acknowledged that relationships formed online can be as meaningful and deep as offline ones (Lehdonvirta, 2010; McKenna & Bargh, 2000; Walther, 1996; Yee, 2009). The average EVE-player spends around *17 hours per week* playing and has been active for *two years* (Guðmundsson, 2009, p. 12). Everybody who spends such a significant amount of time doing something takes the outcomes of his actions seriously; EVE is more than "just a game" for the players.

The question whether people may "behave strangely" online is more difficult to address. The whole complex of questions is a very dynamic and ongoing field of research. For instance, the question of the connectivity of online and offline behavior is a very young field of research in psychology. Still, according to recent evidence, there is little inducement to think that the behavior observed in MMOs has no relationship whatsoever with behavior one could expect in the real world. There is no evidence that gamers really construct a second identity (i.e. that they completely change their behavior) for what they do online (Aas, Meyerbröker, & Em-

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[11] This is another aspect of evil that can be re-identified online (Mildenberger, 2013, p. 143).

melkamp, 2010; Aupers, 2007; Bailenson & Yee, 2005; Downing, 2009; Messinger et al., 2008; Yee & Bailenson, 2007). Even behavioral regularities known from the real world transfer to online environments. Yee et al. (2007) find, for example, that if two male avatars are interacting online, they choose a higher interpersonal distance and make less eye contact than female-female dyads. As the interpersonal distance grows, also male-male dyads choose to make more eye contact. These behavioral regularities are well-known from real-world observational studies. Bailenson and Yee (2005) find that also the *chameleon effect* – that people who imitate nonverbal gestures of their counterpart appear more likeable – transfers to avatars.

Enlightening in this respect is the virtual reprise of Milgram's obedience experiments by Slater et al. (2006). Instead of the original human learner, Slater et al. used an avatar as receiver of the electric shocks. The subjects of the study who, just like in the real experiment, were told to act as a teacher and to punish every failed attempt could observe the reactions of this computer programmed person on a screen. Slater et al. describe the situation faced by the subjects as follows:

> "The Learner had a quite realistic face, with eye movements and facial expressions; she visibly breathed, spoke, and appeared to respond with pain to the 'electric shocks'. Not only that but she seemed to be aware of the presence of the participant by gazing at him or her, and also of the experimenter - even answering him back at one point ('I don't want to continue – don't listen to him!'). Finally, of course, the electric shocks and resulting expressions of discomfort were clearly caused by the actions of the participants." (Slater et al., 2006)

The aim of the study was to test whether immersive virtual environments were valid environments for conducting such powerful social-psychological studies as the Milgram obedience experiments. Discussing a wide range of quantifiable (e.g. the skin conductance level) and non-quantifiable criteria (the participants behavior as observed by the experimenters), Slater et al. find:

> "The main conclusion of our study is that humans tend to respond realistically at subjective, physiological, and behavioural levels in interaction with virtual characters notwithstanding their cognitive certainty that they are not real. The specific conclusion of this study is that within the context of the particular experimental conditions described participants became stressed as a result of giving 'electric shocks' to the virtual Learner. It could even be said that many showed care for the well-being of the virtual Learner – demonstrated, for example, by their delay in administering the shocks after her failure to answer towards the end of the experiment. …
> People tend to respond to virtual environments as if the objects and events depicted are real, in spite of low fidelity representations and certain knowledge that the events taking place are within a virtual reality." (Slater et al., 2006)

The findings of Slater et al. seem to strengthen the view that people are not generally behaving *more* evilly online: If they feel as discomforted when "harming" a computer-generated avatar as when thinking to harm a human being, this discomfort might prevent some evil from happening. Although knowing that they were not inflicting pain on a real person the abidance by the experimenters' instructions caused discomfort to the participant.

Last but not least one should not forget that the reasons for distinguishing two different worlds (one online and one offline) are very weak: In the case of MMOs real persons make real decisions and commit real actions (mouse clicks and keyboard commands) which possess real consequences. People spend big shares of their daily time on playing MMOs and they pay money for it. Claiming that what these people do does not matter would be looking at these people with illegitimate disdain. Or to follow Lastowka and Hunter: Of course, virtual worlds are "artificial, fictitious, imaginary, intangible, and invented" (Lastowka & Hunter, 2004, p. 7) – but where is the difference to laws, myths, many cultural achievements, or the willingness for "paying an extra dollar or two for a certain logo printed on a T-shirt" (Lastowka & Hunter, 2004, p. 10)? The world may be virtual – but the people and their actions are real.

5 Evil *in* virtual worlds

However, the idea that suicide ganks might be said to come down to real people committing real actions would leave us puzzled in another respect. Because to what extent can we then say that the evil really happens *in* the virtual world? Is not suicide ganking, if one stresses the realness of the agents, just another example of real world evil? I do not think this is the case. Even if the idea that evil can happen *in* the completely immaterial virtual world of EVE sounds suspicious at first, the alternative idea that we simply leave evil behind in the real world once we go online is even less convincing. If something like suicide ganks really came into existence in the real world in the distant future we would probably regard them as another paradigm case of evil. And I do not think that just because they are now happening "only" in virtual worlds we should change this evaluation. In my opinion, there are three reasons why we might legitimately speak of the evil of suicide ganks happening *in* the virtual world of EVE.

First, the subjective experience of the players matters. It is not the same thing to look at the (material) numbers of what is lost in SGs – i.e. €0.5 for the average perpetrator and €12 for the victim – and at the experience of the players. Losing €12 in the real world would hardly count as the consequence of an action adequately deemed evil. But in-game the character is *killed*. It is the fact of being killed that arouses the victims not the fact that they lost some real-world equivalent in money. That extreme events like being killed, or being raped, in a virtual environment can severely distress the player behind the avatar is known at least since Julian Dibbell's "A Rape in Cyberspace". The easiest explanation behind this might be that the player does not perceive the avatar as a tool but as a part of his identity: "The player *is* the character. You're not role-playing *as* a being, you *are* that being; you're not *assuming* an identity, you *are* that identity; you're not *projecting* a self, you *are* that self" (Bartle, 2004, p. 155).

Second, we can only understand why suicide ganks are evil with respect to the *virtual* moral code that governs interactions in EVE. Some forms of violence that happen in EVE are backed up by the virtual legal code as established by the developers and nobody seems to be bothered. Piracy in "low-security space", i.e. in a region where no state-enforced property rights are expected to exist, is such an example. This might be compared to the well-known phenomenon that fouls in many sports are not considered evil or even bad actions. Even throwing a lethal fastball in baseball is not necessarily considered murder as the legal case of "Chapman vs. Mays" shows. In games, different sets of moral rules hold – and we can only define evil with reference to these specific rules. And whereas piracy does not arouse much

interest in the Internet forums related to EVE, suicide ganking certainly does lead to heated debate. Many players say that suicide *ganking should not* be allowed and that developers *ought* to do more to prevent it. In other words, there clearly is a moral discourse around the phenomenon of suicide ganking, but a moral discourse that only makes sense with reference to the overall moral and legal code of EVE.

Finally, what makes the idea that evil can happen *in* virtual worlds suspicious might only be the nature of virtual space. Surely, cyberspace is a space without physical boundaries. But should this prevent us from stating that there can be evil that happens *in* cyberspace? I do not think it should, as the "space"-analogy is generally well-chosen. And yet, to those who do not like it, a different way of interpreting the phrase 'evil *in* virtual worlds' might be suggested: a temporal interpretation. If we say that evil is happening *in* virtual worlds this might come down to something similar to claiming that evil things happen '*in* war'. Nobody would doubt that the latter is true and a valid way of speaking. So one might also adopt this temporal interpretation of 'in' in order to make sense of the idea of evil happening *in* virtual worlds.

6 Conclusion

This paper argued that the virtual kamikaze-tactic of suicide ganking as observed in the massively multiplayer online game "EVE Online" is a form of evil. It could be shown that suicide ganks are an instance of hostile aggression (in contrast to instrumental or defensive aggression) and thus are a valid candidate for an evil action. Furthermore, irrespective of the measure for evil that is applied (intention-based vs. consequence-based, internal vs. external causes) suicide ganks meet the criteria set out. Obviously, killing other people in a virtual environment is not identical to killing human beings in real life, thus, suicide ganks are not identical to real world evil. However, they constitute a phenomenon very similar to evil actions known from real life.

In concluding that there is indeed something similar to moral evil in virtual worlds, the paper implicitly defends an idea of evil that controverts a common overmystification of evil claiming that genuine evil is inherently inexplicable as well as accounts that deny the usefulness of the concept due to its allegedly atavistic and simplistic nature. Rather a *double disproportionateness between means and ends* is considered paradigmatically evil: the blatant discrepancy between costs and benefits of suicide ganking as well as the one between rational, "purposeful action taken in the name of a condition which is not itself purposeful" (Eagleton, 2010, p. 104). The extensive preparation and meticulous planning necessary for suicide ganking paired with the fact that SGs are a "lose-lose" situation illustrate this second disproportionateness.

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