

Evil social institutions

Carl D. Mildenerger¹

Abstract. The purpose of this paper is to introduce the concept of *evil social institutions*: rules that shape human interactions just like other social institutions but which actively *incite* social conflict by explicitly condoning socially destructive behavior. They are presented as an additional (and more radical) reason for the endurance of social conflict and underdevelopment in a given community besides other forms of perverse institutions. These institutions do not even intend to protect property rights, albeit unfair ones, but put them willingly at risk. To empirically prove their existence, rigidity, and economic relevance the paper conducts behavioral and institutional research in the virtual world of the online video game “EVE Online”. Thanks to collaboration with the game’s developer, the empirical part can build on data that encompasses practically everything the 390,000 players did in the month of January 2011. Thus, it can build on rich and objective empirical evidence about economic behavior in a natural state from a highly controllable environment; something difficult to achieve in real world or laboratory conflict settings.

Key words: institutions, virtual world, evil, social conflict, natural state, development

I Introduction

Economic research on how communities overcome social conflict seems to be of rather conciliatory nature. On the one hand, the idea that purely self-interested people if meeting in a natural state might turn to violence to foster their interests is well-received. But on the other hand, the optimism that the incentives presented by the economic advantages of cooperation will eventually lead people to surpass the natural state is strong. This optimism is partly rooted in a very positive concept of institutions. Institutions, so the general idea goes, will help to overcome the natural state by allowing for third-party enforced contracts and secure property rights.

How is this idea optimistic? North famously defines institutions as “the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social or economic”

¹ Carl D. Mildenerger; University of St Andrews; cdm4@st-andrews.ac.uk

(1990, p. 3). Note that this does not by itself imply that the incentives will be such as to overcome conflict. But if one further asks why institutions exist, one very common answer goes along the line of interpreting these humanly devised constraints in a very positive way: Institutions foster exchange and protect property rights (Ménard & Shirley, 2008, p. 4). Institutions help to solve the problems of cooperation and collective action (Nee, 1998, p. 8). Institutions are the first step toward overcoming the Hobbesian problem of social order (Mantzavinos, 2001, p. 83). Institutions are important since they allow for impersonal exchange and thus foster economic performance (North, 1990, 2005; North, Wallis, & Weingast, 2009). In their models of economic transactions of anarchy, Buchanan (1975), Hirshleifer (1995) and Skaperdas (2006) hold that in the absence of formal institutions, individuals will almost necessarily not only start to produce goods but also to steal from others. However, as soon as enforceable social rules enter the scene, the potential of focusing all efforts on productive actions and, subsequently, of profiting from the gains from trade that arise from the division of labor can be exploited.² Just how positive a role is intended for institutions can also be seen in the huge literature on “order without law” (e.g. Elickson, 1991; Olson, 1965; Hardin, 1968; Ostrom, 1990; Ostrom, Gardner, & Walker, 1994; Garfinkel & Skaperdas, 2007; Leeson & Coyne, 2012). The underlying question here seems to be: Given that we know that a society with a well-functioning set of formal institutions produces desirable outcomes, can we have similar positive effects relying only on informal institutions? To summarize: the literature chiefly stresses that institutions erect social order – which is preferable to a natural state since everybody is made better off.³ Institutions are believed to constrain behavior – in a good way.

The purpose of this paper is to describe a different kind of institution: *evil social institutions*. When institutions are believed to appease social conflict, evil social institutions incite conflict. When institutions are often said to exist because they secure property rights, evil social institutions willingly put these at risk. If abided by, such evil social institutions do not increase the social total of wealth but rather lead to destruction (not merely redistribution) of wealth. Consequently, contradicting the prevailing optimism concerning anarchy and its breakdown with the help of institutions, this paper suggests that there might be a neglected reason as to why social conflict endures: the *existence* and *rigidity* of evil social institutions alongside other social rules.

² Hirshleifer highlights that this is one of the recurring themes and assumptions made in the field of the economic theory of conflict: “The way of production and exchange enlarges the social total of wealth. The way of predation and conflict merely redistributes that total” (2001, p. 2).

³ Besides this *motivational* view on the existence of institutions, there is also a very prominent tradition of explaining the existence of institutions from a *cognitive* perspective not treated here (e.g. Mantzavinos, 2001, p. 89; Hayek, 1973, p. 102; Gehlen, 1961, p. 68; DiMaggio & Powell, 1991, p. 15; Hall & Taylor, 1998, p. 25). The main idea is that institutions are capable of structuring and standardizing repeated interactions, thus unburdening the limited cognitive capacities of humans by reducing uncertainty and stabilizing expectations.

To empirically show the existence, rigidity, and economic relevance of evil social institutions this paper will turn towards research in a *virtual world*. Generally speaking, a virtual world is “an electronic environment that visually mimics complex physical spaces, where people can interact with each other and with virtual objects” (Bainbridge, 2007, p. 472). One important class of virtual worlds are massively multiplayer online video games (MMOs) such as the one examined in this paper: “EVE Online” (EVE). MMOs are computer games played online by thousands of 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*. “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. MMOs are inherently social games in which cooperating is essential for success and in which stable communities of players and distinct social institutions evolve. “The social and interactive complexity of virtual worlds can be substantial, making users feel like they are truly ‘present’ somewhere else. This is why virtual worlds are called ‘worlds’” (Lastowka, 2010, p. 9).

Although virtual worlds constitute a very young phenomenon, considerable work concerning their specific institutions has been done (e.g. Lessig, 1999; Ludlow, 2001a; Balkin & Noveck, 2006). In a pioneering paper, Morningstar and Farmer (1991) argued that central planning of activities and institutions as executed by the developers of the world in acts of social engineering are not a suitable strategy for governing virtual worlds. Instead, the institutions governing functioning virtual worlds need to emerge somewhat spontaneously and “on the go”. Notably in response to conflicts between the developers and users rather than between real world governments and their (playing) citizens (Ludlow, 2001b, p. 16). Johnson and Post (2001) as well as Lastowka and Hunter (2004) and Lastowka (2010) underline the particularity of virtual worlds as being situated in a new type of space not easily to be squared with traditional ideas of territory. The ultimate enforcer of institutions, therefore, is not the real world State but typically the developers of the game. “Game designers really are the *governments* of virtual worlds” (Grimmelmann, 2006, p. 152; my emphasis). Finally, Mnookin (2001) shows how the governance of a virtual world might swing back and forth between more aristocratic and more democratic forms. Thus, while it is acknowledged that the institutions of virtual worlds are a worthy object of study in political economy, to my knowledge there is no research using virtual worlds as a tool to illustrate the emergence, existence, rigidity and economic relevance of *evil* social institutions in particular thus far.

This paper will proceed as follows. First, the concept of evil social institutions will be described

more thoroughly from a theoretical perspective (section 2). Section 3 will discuss this paper’s methodology in more detail. It highlights the advantages of doing research in virtual worlds (especially when researching social conflict) as well as what data has been used. It is directly followed by a short discussion of the economic fundamentals of EVE Online (section 4). Section 5 constitutes the backbone of this paper’s empirical part discussing how social conflict evolved and endures in this virtual world – particularly highlighting the role evil social institutions play. It will be argued that a formal institution that allows attacking innocent fellow players in supposedly safe regions of the virtual universe is indeed an evil social institution. Its emergence, rigidity, as well as its economic consequences will be highlighted. The empirical part is followed by some limitations (section 6) and a conclusion.

2 Evil social institutions

An *evil* social institution is a normative social rule shaping human interaction, which emerges either spontaneously or deliberately, and which *explicitly allows people to engage in behavior destroying social wealth*. If one abides by evil social institutions, material lose-lose-situations for those abiding are the consequence. For example, concerning a situation featuring the typical payoff matrix of the game of Chicken (table 1), such an institution would explicitly allow both of the players to choose the lower right corner, i.e. to crash (the *conflict option*).

Tab. 1 Typical payoffs for a game of Chicken

	swerve	straight
swerve	0,0	-1, 1
straight	1, -1	-10, -10

If there were an option in which both players could make a positive payoff, the evil social rule would still allow the players to crash. More than that – following an evil social institution, even in a sequential Chicken game the second-mover is officially allowed to choose ‘straight’ if the first-mover already did so. Good examples might be rules for retribution (Boehm, 1984; Hasluck, 1954; W. Miller, 1997). If retribution is a costly action, then not only the victim of the retributive action loses but also the retaliating person – and this seems to be the standard rather than the exception (Elster, 1989, p. 101).⁴ Put differently: evil social institutions officially sanction obviously socially detrimental behavior.

Socially beneficial institutions (i.e. institutions that raise the social total of wealth by coordinating

⁴ It is true that acts of retribution or, in more general terms, social punishment may have beneficial long term effects like raising cooperation within a group (Fehr & Gächter, 2000). But this does not necessarily have to be the case empirically (Herrmann, Thöni, & Gächter, 2008); and certainly not theoretically speaking.

people's actions appropriately) are typically thought to be enforced either through law or through other mechanisms of social control (Mantzavinos, 2001, p. 83). For example, there might be a rule in place that punishes opting 'straight' in our Chicken game. In contrast, evil social institutions are *passively enforced*. They are "enforced" by general *non-interference*: it is characteristic that there is an either informal or formal consent in place not to punish behavior which clearly is undesirable overall. People who find themselves in a Chicken situation are not directly forced to choose the conflict option by the evil social rule. Therefore, evil social institutions are not normative in the sense that they necessarily encourage socially destructive actions ('You ought to drive straight in the Chicken game') but in that they do not forbid it ('You may drive straight in the Chicken game under all circumstances').⁵

Given all this, the existence and rigidity of such evil social institutions must seem highly doubtful. However, before switching from these purely theoretical reflections to the empirical part it might be helpful to consider some things which are not evil social institutions to get a still clearer impression of what they are.

First, they are not social rules that simply condone *egoistic behavior*. For instance, take a rule that advises you to opt 'straight' when your opponent has already chosen 'swerve' in a sequential Chicken game. However, what characterizes such scenarios is that the allowed action is indeed one that redistributes wealth. In other words, this is a win-lose-situation. However, evil social institutions only advise behavior that has negative material consequences for *both* the victim and the perpetrator.

Second, evil social institutions are not simply lacking institutions. Bates (2001) and Herbst (2000) for example suggest that too little political conflict with outside enemies over territory may hinder societies to build effective bureaucracies – that can also prevent conflict within their territory. But first, evil social institutions themselves drive conflict. This is why it would seem odd to consider them as non-existent institutions due to a lack of conflict. And second, it is not the case that evil social institutions foster conflict only in environments where informal rules dominate and reliable formal institutions are rare. After all, evil institutions themselves might be formal institutions.

Third, evil social rules are not the rules that might underlie "Nietzschean development failures" (Hillman, 2004, p. 263), i.e. rules that may be said to unduly *favor the rich and strong* over the weak and poor. Consequently, evil social institutions are not the extractive institutions that Acemoglu et al. (2001) describe as underlying the exploitation of colonies by colonizers. They do not aim at

⁵ To be sure, it is a different thing to allow for socially destructive behavior to happen than to actively incite it. However, it is widely accepted in the social psychology of evil actions that the omission to take action is also an action (A. G. Miller, 2005, p. 6). In this sense, a rule that is publicly known for allowing social conflict may very well be called an evil rule. For a philosophical argument on potential differences between 'doing' and 'allowing' see for example Kagan (1989), Foot (2002), or Kamm (2007).

concentrating the political power in the hands of a few in order to extract valuable resources from the masses. For it does not have to be the case that evil social institutions favor the rich over the poor. Instead, if one subscribes to the idea that it is often the poor and unproductive people who would gain more from fighting (Buchanan, 1975, pp. 79–82), it might very well be the case that evil rules favor the poor.

Fourth, and in relation to this, evil social institutions are not *rules that are abused* by powerful economic and political to further their interests (Shirley, 2008, p. 612). They do not require somehow “evil actors” to unleash their destructive potential. Actors which simply blindly abide by them are enough.

Finally, evil social rules are not simply *dysfunctional rules* from a temporal or spatial perspective. In dependence on North’s idea of adaptive efficiency one might suspect that evil rules used to promote social welfare in the past but are unable to do so any longer because circumstances have changed (North, 2005, p. 122). Institutions that were adopted at one particular point in time may be far from optimal as the human environment changes over time. For example, rules that promote close cohesion within a family might be highly beneficial in societies largely resting on personal relationships, whereas they might be the source of nepotism or corruption in societies with mainly impersonal relationships. But evil social institutions are not just rigid institutions. They have never been beneficial in the past. Furthermore, evil social rules are not such that they work well in one geographic area – where the underlying beliefs and norms fit them – and produce negative outcomes in other areas. Notably, they are not those poor institutions that colonies inherited from their colonial masters (North, 1990). In every place where evil social institutions prevail they lead to destruction of social welfare.

To summarize: evil social institutions are a more *radical* kind of “weak, missing or perverse institutions” (Shirley, 2008, p. 611) which are at the roots of underdevelopment due to enduring social conflict (The World Bank, 2011). Not because they lead to worse outcomes. All of the types of institutions just mentioned certainly contradict too optimistic a picture of the function of institutions. But still all of these institutions are intended to protect property rights in some way at least: be it those of the egoistic, the strong, the rich, or the powerful. But evil social institutions are more radical in that they negate some fundamental assumptions about what institutions do. They are not even intended to protect property rights but rather put them willingly at risk. They erect (or maintain) an anarchic natural state where everybody has a right to everything with respect to their scope of application. Let us now show that evil social institutions nevertheless exist and persist.

3 Methodology: virtual worlds as a research tool

Empirical research focusing on the social institutions prevailing in areas ridden with social conflict is rather complicated. Communities stuck in the natural state are inherently chaotic. Obtaining “objective” information concerning their status quo is difficult as both conflicting parties try to make propaganda for their cause. Newspaper articles from crisis regions discussing battles and casualties for example may not be taken at face value. Actual field work on the battleground is a potential but dangerous and very limited option. A related problem exists for experiments: Thinking of the ethical considerations arising when planning a laboratory experiment on people intentionally engaging in social conflict and seriously harming each other makes this point very clear. More than that, laboratory games are generally not complex enough to produce a situation resembling a natural state (Abbink, 2012)⁶.

Given these concerns, *virtual* environments turn out to be a promising environment for conducting research on social conflict and evil social institutions. For example, this paper’s virtual world of choice, EVE Online, features a virtual natural state that showcases the whole spectrum of human behavior concerning conflict. Generally speaking, virtual worlds have “great potential as sites for research in the social, behavioral, and economic sciences” (Bainbridge, 2007, p. 472) as they may become the tool of choice to conduct experiments on a truly social level with tens of thousands of subjects (Fiedler & Haruvy, 2009).

Several unique properties of virtual worlds underlie their research potential. First, they are more *controllable* since they are digital environments. Everything a user does can potentially be monitored and the exact sequence of his actions can be determined. They allow us to gather objective and rich empirical evidence on social interactions in a state of nature without having to rely on the tales of victims and perpetrators.

For research in political economy in particular, it is also of high value that virtual worlds are quite *young*. The average age of a current MMO is about four to five years. These time spans – in which a true history, distinct institutions, etc. emerged – are manageable ones. All the debates about which institutions are the right ones to govern the virtual world are recent and still recorded (text-based) in internet forums. Using virtual worlds, one can retrace the making of a culture and its specific institutions from the very beginning. At their accelerated pace, virtual worlds live through all the stages from an anarchic natural state via communities governed by informal insti-

⁶ A notable exception to this rule is the work of Powell and Wilson (2008) who try to set up a Hobbesian jungle in real time. However, the problem comes back in as it is very hard to interpret their findings in a more precise way than Abbink stating that “anarchic environments neither lead to a constant war of all against all nor to a utopia of universal cooperation” (Abbink, 2012, p. 549).

tutions to societies regulated by “constitutions”. The seminal findings of North and Weingast (1989), North (1990, 2005), or Greif (1993, 2006) were produced by looking at historical data. A complementary way is to look at the digital data of virtual worlds.

A wide range of sources will be utilized to develop an all-encompassing picture of EVE; for example forum discussions in the official EVE-forums, the official EVE wiki, game documentation and interviews with game developers. The protocols 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 will also be referred to extensively. *Dev blogs*, i.e. short texts written by the developers in order to announce new developments in EVE Online to the player base (including the discussions they generate in the community), will be a preferred source, too. These blogs represent the most official and direct communication between developers and players. However, the data underlying the empirical part will also encompass the unmediated, computer-created server logs of player interactions. Thanks to collaboration with the game’s developer, the empirical data basis of this paper comprises the entire logged server data of this game in January 2011. The around 66GB of data (corresponding to about 13,000,000 pages of plain text) encompass practically everything the 390,000 active players did.

4 EVE Online

“EVE Online” was published by *CCP Games* (CCP) in May 2003. EVE is a science-fiction themed game about trade and conflict in the remote future. 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. 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. Over the last three years, the average yearly population growth rate was slightly over 17 per cent. These numbers make EVE one of the internationally most successful MMOs at the moment.

The average EVE-player spends around *17 hours per week* playing and has been active for *two years* (Guðmundsson, 2009a, p. 12). 95.7 per cent of the players are male players; 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).

Fig. 1 Age distribution in EVE. Population of EVE at the end of January 2011 from 13 years to 69 years of age (representing 99.8 per cent of the population)

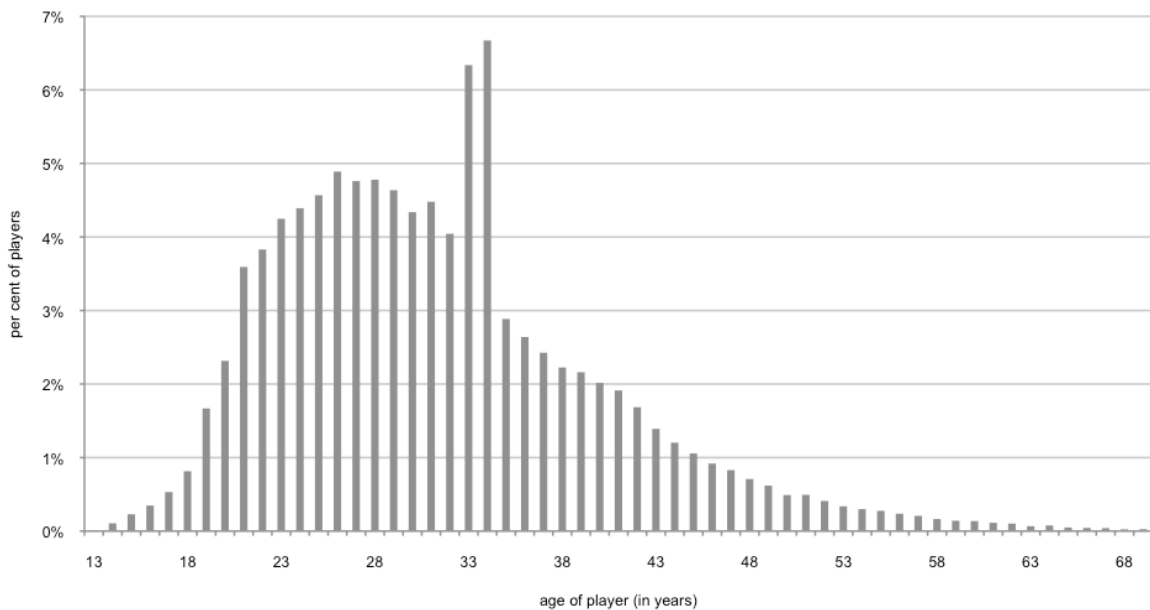


Figure 1 shows that apart from the outliers at ages 33 and 34⁷, EVE has a rather smooth age distribution. The average age of the player is around 31 years. Across different MMOs, Yee (2006) has gathered occupational data over a three-year period. He finds that the biggest share of players (around 50 per cent), irrespective of gender, is full-time employed. The second largest group is full-time students (around 20 per cent).

EVE features a thriving, almost completely player-run economy in which the developers very rarely intervene. Although EVE does not have a domestic territory, it is a clearly delimited economic area and possesses its own currency: ISK (“InterStellarKredit”). The exchange rate between ISK and EUR in January 2011 was about 1 ISK = 0.000000051 EUR, or respectively 1 EUR = 19,444,364 ISK.⁸

Over the years, the money supply has been constantly growing in EVE – as has the population. Periods of mild deflation were always followed by periods of mild inflation and overall EVE turns out to be a very stable economy (Guðmundsson, 2007, 2008, 2009b, 2010, 2011). In December 2010, the money supply M1 for EVE’s economy amounted to 445 trillion ISK (around

⁷ There is no obvious explanation besides players willingly entering a wrong age when registering their account.

⁸ In EVE, there is the possibility of buying in-game currency with real-life money: the PLEX-system. PLEX is short for “30 Day Pilot License Extension”. If a player buys a PLEX for the price of EUR 17.495 (in January 2011) from CCP Games, then he basically buys the right to play EVE for one month. However, a PLEX at the same time can be converted into an in-game item that can be traded via the in-game market. The purpose of the system is to allow experienced players who make enough in-game money to play “for free” by buying PLEX in-game and then using them for buying playing time. Calculating the monthly average for the price of one PLEX in the in-game market in January 2011 (340,179,152 ISK) and dividing it by the cost of one PLEX (17.495 EUR), yields the exchange rate mentioned above. It is, basically, the average number of ISK that you could buy in January 2011 with one Euro.

23m EUR).

Generally speaking, earning money is the single most important task in EVE. One simple process by which players can earn virtual money 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 stylized production process also is a fairly short but reasonably exhaustive description of the supply side of the EVE economy. But producing virtual goods is not the only way to make a living in EVE. Economically speaking, EVE might best be considered as a typical economy of an anarchic state of nature as described by Buchanan (1975) or Hirshleifer (1995). The characteristic economic decision to be made by every person living in anarchy is: Should I produce goods myself or steal them from others to make a living (Buchanan, 1975, p. 72-76). This is precisely what can be witnessed in EVE – without one lifestyle clearly dominating the other. Just because EVE is a computer game this does not mean that everybody is only invested in shooting or robbing other people.

“The industrial and market component of EVE is every bit as harsh and competitive as the PvP⁹ aspect of the game. Players compete fiercely with each other as they battle to lower production costs or outbid each other on the open market. They also compete in the mining sector by adding to and advancing their skills in order to boost returns and reduce waste, often investing significant effort to increase their efficiency by just 1% at a time.” (Guðmundsson, 2008, p. 4)

The vibrant EVE in-game market underlines this importance of EVE’s economic side. The current *daily trade value record* (from December 2010) of trades executed via the market system in EVE amounts to 1.8 trillion ISK (around 90,000 EUR) raised in more than 1.2 million individual trades (Guðmundsson, 2011, p. 6).

5 An evil social institution in EVE

5.1 Emergence

Since the first launch of EVE, CCP has tried to attain two sometimes conflicting goals (Hinrichsen, personal communication). With the underlying design idea of EVE as being a very competitive game in economic and military ways the developers anticipated that social conflict was bound to arise from the very beginning. On the one hand, they were supportive of the idea that lots of “killing” would take place, a *kill* being the in-game term for the intentional destruction of the space ship of a fellow player.¹⁰ On the other hand, they figured that there should be some rela-

⁹ “PvP” means player-versus-player combat, and thus the military aspect of EVE.

¹⁰ When killed, you will find yourself in a small rescue capsule (the “pod”). 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

tively safe areas, notably intended to allow new players to get used to this new environment a little bit before actually being shot at.

This second goal was the rationale behind programming a tripartite universe. The designers decided that in EVE there shall be *high security space* (“hisec”; security status of the solar system between 1.0 and 0.5) in which a computer-controlled virtual police actively enforces property laws, *low security space* (“lowsec”; security status between 0.4 and 0.1) in which there is only passive enforcement, and *null security space* (“nullsec”; security status equals 0.0) in which there is no police at all and no property rights apply. For example, if you attack your opponent *in hisec*, police ships will quickly arrive and retaliate by destroying your ship. The police (“CONCORD”) will arrive so fast that you probably do not even have the time to destroy the other person’s ship. They arrive *every time* somebody attacks an innocent and will *always eventually kill the perpetrator*. Additionally, your personal “security standing” will be lowered as a consequence of every crime you commit.¹¹ If you commit the same crime *in lowsec* however, the police will not destroy your ship and the security standing decrease is the only sanction. *In nullsec*, finally, you can do whatever you like. The police will take no notice of what you do there.

However, when EVE started out on May 6th 2003, the tripartite design actually did very little in preventing social conflict. Perpetrators quickly invaded hisec and killed new players. Only 4 weeks after publication, it became clear that CONCORD was ineffective: They fought with weak weapons and arrived too late to actually destroy the ships of the attackers. In those days, killing others in hisec was often not as suicidal as it was intended to be (CCP LeKjart* et al., 2003)¹². CCP was forced to take action very early in the history of EVE.

“We definitely underestimated the need for security in the first place. A lot of effort went into making hisec safer, as we intended it to be. The main efforts were to secure new players who are not profitable targets for griefers. The intention was to allow profitable piracy but making new player griefing more difficult.” (Hinrichsen, personal communication; lead game designer at that time)

The first measure that was taken to relieve pressure from the victims was to give CONCORD ships better weapons (CCP LeKjart* et al., 2003). The increased power of CONCORD solved the problem for some time.

But CONCORD now being deadly effective with their “an eye for an eye”-retaliation technique,

you were carrying with you in the cargo hold of your ship.

¹¹ The *security standing* is a number between +10 and -10 attributed to your avatar. If your security standing gets too low, you are no longer allowed to enter hisec without getting attacked by the police. Bringing your security standing back up after you committed a crime generally takes a lot of time and effort.

¹² When the developers or players of EVE post their opinion in the official EVE Forums, they use their in-game character name to sign it. These are the fictitious names of real people. Since there is no way of finding out the real name, this paper will use the character names instead for referential purposes. To distinguish real names from fictitious character names, each character name will end with an “*”. The developers are 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.

a new phenomenon appeared: *suicide ganking*. In a suicide gank (SG), a group of perpetrators joins forces, i.e. firepower, to quickly kill their chosen victim (before CONCORD arrives) only to get killed themselves by the police directly afterwards. Nota bene: Every perpetrator that acted aggressively will be killed. 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. By selling this robbed cargo later on in the in-game market, ISK can be earned; so there are some profits for suicide gankers in this tactic. *It is important that the changed institutions did not prevent player killing in principle but only turned it into a kamikaze-tactic*. In fact, even a punishment that is 100 per cent effective was not able to deter perpetrator’s from killing and robbing other players in hisec.

5.2 Existence

Now, whether suicide ganking is a legitimate in-game action is out of the question: “Suicide ganking is an accepted game mechanic”, this always has been the clear standpoint of CCP (CSM & CCP Games, 2010, p. 15). As long as one is willing to incur the costs inevitably tied to this, it is fine to attack other ships in hisec. In other words, there is a formal institution underlying suicide ganking and explicitly sanctioning it. *This formal institution of EVE is an example of an evil social institution*. It is officially allowed to gank other players even in supposedly safe hisec space.

Now, to be called an evil social institution proper, the game mechanic of suicide ganking does not only have to foster social conflict, it actually has to lead to lose-lose-situations in which both the perpetrators and the victims lose materially. This is precisely what happens. There were 616 suicide ganks in January 2011 in EVE (Mildenberger, 2013, p. 175). On average, four perpetrators attacked one victim, leading to about 4,000 SG-related kills. Adding up the perpetrators’ benefits (robbing the victim) and the losses (being killed oneself by the police directly afterwards), the total benefit of the 616 suicide gank events amounts to -11.7bn ISK (\approx -600 EUR). Against the claims of many gankers (e.g. Destiny Corrupted*, 2011), SGs almost never are a profitable endeavor, neither in total nor on average (ibid., pp. 175-180). On average, every ganker in January spent more than 5m ISK *per SG*. One might argue that these 5m ISK are only worth about 0.26 EUR in real world currency. But the actual decision to be made is whether spending 26 cents for initiating social conflict, or to earn about 2 EUR per hour in a peaceful way instead.¹³ For perpetrators, suicide ganks are losing deals in the short term. What is more, it can be shown that SGs do not have strategic or long-term effects that offset these losses in the long run (ibid.): for ex-

¹³ In virtual professions (like mining or trading) an hourly wage of about 20m to 40m ISK (1 to 2 EUR) can be achieved with comparably low effort. Setting up a suicide gank certainly takes at least one hour – therefore the comparisons of hourly wages is appropriate.

ample, those who engage in hisec killing have a slower wealth development than the average player. Furthermore, there is no reputational benefit from SGs in the sense that cultivating a reputation to be evil might pay off later by making the perpetrator feared and thus attacked less often (e.g. Schelling, 1960, 1978; Duntley & Buss, 2005). In fact, the gankers – by lowering their security status consistently – reach the exact opposite of being attacked less often. This is because once the security status of a character drops below -5.0, he is considered an “outlaw” – and may be killed on sight by *anybody* and *anywhere* without *any repercussions* for the attacker.

If even the perpetrators of SGs lose money, it comes as no surprise, that suicide ganks are also tied to severe material losses for the victims. On average, every victim of a suicide gank loses 13 EUR worth of ship and cargo (Mildenberger, 2013, p. 177). Thus, one can safely conclude that the game mechanic of suicide ganking is indeed an evil social rule. It fosters social conflict and leads, if abided by, to material lose-lose-situations for perpetrators and victims alike. Instead of making virtual property secure at least in hisec space, the evil social rule that allows for suicide ganking puts them willingly at risk.

5.3 Rigidity

Since shortly after its launch, the virtual institutional matrix of EVE comprises this evil social institution. But what is even more surprising is that this evil social institutions is fairly rigid. Although its detrimental economic consequences are publicly known it was changed over the years but not abandoned. For example, in 2008, the CSM decided to ask CCP to impede suicide ganking. The protocol of the meeting details:

“CCP realized that even though they do not plan to remove suicide ganking completely, today’s suicide gank mechanics are too biased in the ganker’s favor, and they have set up a task force to look into suicide ganking ...

For the short term, they plan to increase the security hit for crime in high-sec space ... Mid term, the plans are to look into suicide ganking and the insurance payout¹⁴ (CSM & CCP, 2008, p. 9)

The mentioned changes to the security status reduction were introduced shortly afterwards (CCP Fear*, 2008). The main effect of this was that repeated offenders were prevented from ganking over and over again in a short period of time. The latter is due to the fact that if the security status of a character is too low, it is difficult for him to even enter hisec systems. If he tries to do so, the police ships who patrol at the entrances to hisec immediately attack him. Between every SG committed the gankers therefore had to bring their security status back up.

It is important to note that this decision to raise the security status reductions was by no means

¹⁴ Gankers can insure their ships before committing an SG to partly offset their losses. Insurance in EVE is paid out even when the ship was willfully destroyed – which is obviously the case.

made unanimously: “Alex (CSM Bane Glorious) said that most suicide gankers already thought of ... regain[ing] security status as painful” (CSM & CCP, 2008, p. 9). Furthermore, it is important to note that this decision did not have all the desired effects. Many suicide gankers simply found a way to circumvent this new rule by exploiting another institution of the game. The game mechanic that CONCORD does not attack characters flying around only in their rescue capsule (their “pod”) *even if they have a very low security status and try to enter hisec space* was abused:

“[A] certain tactic is currently being employed by criminals, which allows them to operate in high-security space despite their negative security status. The tactic is as follows:

- Fly into ... [hisec] in pod
- Let neutral [character] ... pile up ships in safespot ...
- Board ships and fly to belt/station/gate
- ... gank some targets
- Let neutral [character] ... loot the wrecks
- Repeat.” (CSM Ankhesentapemkah*, 2008)

People obviously are adapting to new institutions in EVE that make committing SGs more complex. It is surprising to see to what lengths players go to initiate conflict in “safe” areas.

Eventually, the promised mid-term counter measures came into effect: The insurance system of EVE was overhauled (CCP Chronotis*, 2010). By lowering the payouts, CCP encoded one of the traditional main complaints of the opponents of suicide ganking, namely that insurance payouts subsidize it. This concession was in fact a compromise. CCP did not abolish insurance payouts altogether for ships being destroyed by CONCORD – which was the initial goal of the opponents.

But even after all these changes to the underlying evil institution, SGs happen a lot and have severe negative consequences for the overall EVE economy. The 4000 SG-related kills in January 2011 translate to 0.5 per cent of EVE’s active population being killed in SGs (Mildenberger, 2013, p. 195). For comparison, in the EU this would be around 2.5m people. Adding up the losses of gankers and victims, one finds that the EVE economy lost 222bn ISK in January (11,000 EUR), or 0.05 per cent of its money supply M1, respectively. Translated into the terms of Europe’s economy, this corresponds to a yearly¹⁵ damage of 2.4bn EUR (European Central Bank, 2011a, 2011b). Given these numbers, one cannot doubt that the evil social rule allowing suicide ganking is economically relevant for EVE. It is not only individual players who lose money by practicing suicide ganking but total social wealth also is destroyed.

What is noteworthy in this respect is that it is not the developers who are the driving force be-

¹⁵ One month in EVE roughly translates to one year in the real world: “No formal studies have been conducted on the measurement of time across ‘fiscal’ periods in EVE, but judging from forum-based discussions, markers such as dividend payout frequency and other variables suggest that one year in real life is equivalent to one month in EVE.” (Guðmundsson, 2007, p. 6). “We have a weekly economic cycle and an economic cycle that fits around the expansions – about every 6 months.” (Guðmundsson, personal communication)

hind keeping the evil social institution in place. CCP Games is an Icelandic corporation, not an elected government. Still, it is important not to confuse the developers of EVE with an almighty dictator able to autonomously decide which rules will hold. After all, compared to real life it is very easy for the players to “vote with their feet”, to quit playing the game and switch to another one, i.e. to emigrate. Therefore, the developers generally listen closely to what the community says and tend to follow their wishes. This might even lead to the threat of simpleminded majoritarianism on the developers’ side (Grimmelmann, 2006, p. 154).

But it is not only the developers who want to establish a safe but harsh environment. An important part of the player base also wants to allow for SGs. Since the first days of EVE, there have been constant discussions between “carebears” (i.e. “business people”) on the one side and “PvPers” (i.e. those interested in competing by military means) on the other side. Whereas the carebears want to avoid combat against other players, just run their business, and try to influence the developers to make aggressive actions more difficult, the PvPers want to engage in combat as often as possible and seek to diminish the possibilities of avoiding attacks. It is a quarrel between the two potential lifestyles in anarchy: between *producers* and *fighters*.

There are many technical terms used in forum discussions surrounding the propagation of one or the other lifestyle that may hinder an easy understanding. To overcome this problem and to give at least a slight overview of the arguments exchanged, table 2 reproduces some of the comments. It is structured in the following way. For every measure taken to make SGs more difficult, there are some pros and some cons listed that were brought up by the players. It is in these forums and in discussions like these that the players decide which institutions they want to see implemented or changed. It is a public parliament in the literal sense.

Tab. 2 Comments on institutional changes affecting suicide ganking over the years

<i>Character</i>	<i>Comment</i>	<i>Reference</i>
Measure 1: What the PvPers say about a more powerful police and the dev intervention		
Stavros*	“do not do this, areas are secure enough as it is. Carebearing the game like this will drive off many legit pirates, in space concord would have a long reaction time of hours or days at least, so this is at least realistic.”	(CCP LeKjart* et al., 2003)
Measure 1: What the carebears say about a more powerful police		
Hippey*	“Stavros is just a pirate and wants his life easier. Drive off legit pirates?? come on.. who cares about 10 legit pirates when they ruin the gameplay for 1000 players.”	(CCP LeKjart* et al., 2003)
Yakzan*	“These are secure systems after all, CONCORD should be given the same tools as the pirates and not be outnumbered or outgunned.”	(CCP LeKjart* et al., 2003)
Tigsen*	“In 1.0 security systems I would like to see the police come in and stomp any would-be pirates in a heartbeat. I think that if you don’t have this happen then you will eventually end up with PK ^a corps ^b taking over the	(CCP LeKjart* et al., 2003)

^a PK = *player killer*, a person that regularly attacks other humanly-controlled characters.

^b A *corporation* (short: corp) is a formal association of players in EVE, and thus the first level of organization.

Lijah Reaper*	newb ^c starting systems and killing the new players right away. That does nothing but harm the game...” “I think a permanent police presence in 1.0 areas near asteroid belts would be an excellent solution, making police protection visible and comforting to the new (or scared) player.”	(CCP LeKjart* et al., 2003)
<hr/> Measure 2: What the PvPers say about increased security reductions <hr/>		
Lysander Kaldenn*	“As long as suicide ganking remains possible... I don’t really care about doing it, but i always thought high sec violence made the game more credible.”	(CCP Taera* et al., 2008, p. 1)
Bellum Eternus*	“It’s sad to see CCP cave again. Oh well, it wasn’t unexpected. On the flip side, this’ll keep the lesser players away from killing in high sec and let the pros get on with culling the braindead carebears and taking their ISK. The funny thing is, this won’t even slow down the high sec killings that much. It may raise the bar a bit on what is considered worth killing, but it won’t stop it. Thank God.”	(CCP Taera* et al., 2008, p. 1)
Scout R*	“This game get nearer and nearer to being carebears online every day”	(CCP Taera* et al., 2008, p. 1)
Dungar Loghoth*	“Keep bending over for the whiners CCP, it’s really what’s made this game unique among the sea of other MMOs.”	(CCP Taera* et al., 2008, p. 1)
Kyguard	“Sad, so sad.”	(CCP Taera* et al., 2008, p. 1)
Plave Okice*	“Have you forgotten what this game was supposed to be about? Where are the old devs who made this game a dark and harsh universe?”	(CCP Taera* et al., 2008, p. 2)
<hr/> Measure 2: What the carebears say about increased security reductions <hr/>		
Ralitse boyter*	“Finally CCP does know how to make a game fun it just takes them a while to actually implement these kinds of things. Current ganking is really taking some of the fun out of playing EVE, even in high sec space moving around in anything smaller than a Battle Cruiser ^d is basically waiting to die.”	(CCP Taera* et al., 2008, p. 2)
Merin Ryskin*	“These changes are long overdue. For all the people crying about it: <i>suicide ganking still works</i> . The only difference is now you’ll have to work a little harder, and you’ll have to actually pick your targets instead of just ganking every ship you see.”	(CCP Taera* et al., 2008, p. 3)
<hr/> Measure 3: What the PvPers say about less insurance payouts <hr/>		
Shepard Book*	“More steps in the wrong direction helping people stay safer in empire. ... Where did the vision go to make people want to go to low sec and 0.0? This does not help the sandbox grow. It just makes the weak want to stay in high sec.”	(CCP Fallout* et al., 2010, p. 6)
<hr/> Measure 3: What the carebears say about less insurance payouts <hr/>		
Furb Killer*	“More steps in the right direction, gives additional incentive for the suicide gankers to move away from their carebearish concord hugging where they are afraid of any risk. This way they will sooner decide they might try the scary low sec and 0.0. Face it, it doesnt make sense you profit from suicide ganking even if you shoot an empty hauler. Yes it should be possible, but it also should hurt your wallet if you randomly gank around.”	(CCP Fallout* et al., 2010, p. 6)
Nye Jaran*	“Really disappointed to see that the devs continue actively supporting terrorism within Eve by leaving intact insurance payouts on ships attacked by Concord (read: suicide ganking).”	(CCP Fallout* et al., 2010, p. 1)
TheLostPenguin*	“Mentioning suicide ganks this wont ‘fix’ the issue, but at least now it’s a bit of an outlay for the ganker(s) rather than the current situation”	(CCP Fallout* et al., 2010, p. 6)

^c A *noob* (also: newbie, newb, n00b, etc.) is a new player. In general, a noob is someone incapable of playing the game properly or of understanding what EVE is about. Calling somebody a noob need not necessarily refer to how long this character has actually been playing EVE. “You’re a noob!” is probably the most common form of badmouthing in EVE.

^d A reasonably powerful class of space ships.

Over time, the rules regulating the effects of suicide ganking got more and more severe. These were all changes demanded by the community. On the other hand, one has to clearly acknowledge that the fundamental evil rule is still in place. Asked whether players of EVE *like* the unique atmosphere of EVE with all of its consequences or if they *only accept* it, almost all developers agree that they do actually like it (Eriksen; Guðmundsson; Hinrichsen; Turbefeild & Óskarsson; all personal communication). Of course, players complain when they get ganked and threaten to quit playing the game but “people may rage on the forums but they don’t quit” (Guðmundsson, personal communication). After all, as the comments in table 2 point out, even many carebears are not per se against SGs but just against too biased a version of it.

The fact that the evil rule is still in place is astonishing since EVE’s institutional matrix obviously is adaptive. And it really would be no technical problem to change the game mechanics so as to make attacking innocents in hisec generally impossible. Since the developers are those who write the software code of this virtual world, and since “code is law” (Lessig, 1999, p. 6) in these environments, they could simply rewrite it. Still, the developers do not change the evil social institution. The argument that EVE might just be “too young” for such a radical institutional change to happen should be weighed against the fact that – for a computer game – being eight years old means being a true oldie.

6 Limitations

The most common criticism of doing research in MMOs is that the actions of players might not have any relevance or relatedness to real life human behavior whatsoever. In short, the standard criticism goes: these are strange people that behave strangely in a strange world. Now, as the EVE demographics outlined above show, EVE players are not particularly strange. The average player is a 31 year old, highly educated, full-time employed male. And generally speaking, virtual worlds are an important and growing cultural phenomenon: by 2009 at least 100 million people around the globe have been interacting in some form of virtual world (Lastowka, 2010, p. 9). If these people are indeed strange, at least there are a lot of them.

But do these people perhaps behave strangely online? The whole complex of questions is a very dynamic and ongoing field of research at the moment – there are no final answers yet. For instance, the question of the connectivity of online and offline behavior is a very young field of research in psychology. However, 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. 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). Furthermore, 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, & Emmelkamp, 2010; Aupers, 2007; Bailenson & Yee, 2005; Downing, 2009; Messinger et al., 2008; Yee & Bailenson, 2007). A virtual alter ego always somehow stays an alter *ego*, which is never truly separate from the players “real” identity (Turkle, 1995; Taylor, 2006; Boellstorff, 2008). Additionally, when talking more specifically about aggressive behavior, many parallels between virtual social conflict and patterns of aggressive behavior known from perpetrators and victims in the real world can be identified (Mildenberger, 2013, p. 220). Finally, motivational data suggests that MMO players are not just trying to escape from real life (Griffiths, Davies, & Chappell, 2004; Meredith, Hussain, & Griffiths, 2009; Yee, 2006). The main motivation is to socialize and play together with others.

Last but not least – and without establishing a thorough philosophical argument here – 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 to economics – a discipline that does not believe in inherent values of things but that people themselves are best to decide how much something is worth to them – 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.

7 Conclusion

Economic theories claiming that emerging social institutions will readily appease the social conflict typifying a state of nature might have to be considered as fairly optimistic. This paper argued that alongside standard, pacifying social institutions *evil social institutions* can emerge. Such rules shape human interactions just like other social institutions but incite social conflict and lead, if abided by, to material lose-lose-situations for perpetrator and victim alike. They explicitly condone people engaging in socially destructive behavior and might constitute an additional reason for underdevelopment besides other forms of perverse institutions. In doing so, they do not even intend to protect property rights – be it in an unfair way – but willingly put them at risk.

In order to provide empirical evidence on the emergence, existence, and rigidity of such evil rules this paper turned to an examination of the institutions guiding the virtual world of “EVE Online”. It could be shown that in spite of the general adaptiveness of this game’s institutional matrix, the evil social institution allowing for destroying other people’s space ships in intendedly safe regions has evolved out of a virtual natural state and remains rigidly in place.

This paper does not claim that one can easily transfer these findings to real world settings. But thinking of failed states or other instances of intense social conflict around the globe they might nevertheless be relevant. After all, it is certainly better to avail of this evidence rather than not, as valid empirical data about such conflicts is extremely thin spread.

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Conflicts of interest

The authors declare that they have no conflict of interest.

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