

# Notes

## 2 Introducing Moral Evil and Natural Evil

1. A form of natural *ill* then in Kant's terms, to be precise.
2. 'Mostly' is obviously a very ambiguous term. Although Schulte's view that this new type of natural evil 'by far exceeds the sphere of individual causation and responsibility' (1988, p. 350) might be true for certain instances of natural evil (for example the potentially harmful effects of decision-making relying on our physically built-in fast and frugal heuristics (Gigerenzer, 2008)) it may not be true for others (for example evil social rules). Social rules are something people usually take as given although they sometimes have the possibility to change them – or at least not to be part of situations that are governed contrary to their opinion about what good and fair rules are. After all, social institutions are man-made. How this affects the question of responsibility will be addressed shortly with respect to Doris' work in the following section, 'Evaluating evil'.

## 3 Defining Evil in an Economic Way

1. Although the APR curve seems to be pretty close to an income expansion path, that is the line that connects the optima of different indifference curves, they are not to be treated as analogs. First, because with respect to the actual shape of the APR curve, the income of  $j$  might decline as we move from west to east along it. Second, because the whole point about the argument is that  $j$ 's entire indifference curve map changes in dependence on  $i$ 's choice (Hirshleifer, 2001d, p. 210).
2. A typical public good game has the following structure (Camerer & Fehr, 2002; Ledyard, 1995): in a group of  $n$  players, each player is endowed with an amount of money  $y$ . Then each player has to decide how much of  $y$  to contribute to a public pot  $P$ . The individual contributions  $c_i$  ( $0 < c_i < y$ ) of each player  $i$  are added up and then  $P (= \sum c_i)$  is split equally among the group. The individual payoff  $\pi_i$  thus equals to  $y - c_i + P/n$ .
3. The typical setup of an experimental ultimatum game is the following (Camerer, 2003; Fehr & Schmidt, 2006; Güth et al, 1982): two subjects, a proposer  $p$  and a responder  $r$ , are bargaining. The experimenter endows  $p$  with a certain sum of money  $S$ . Then,  $p$  decides how much of the money he wants to keep to himself, and how much of it he wants to give to  $r$ . In a second step,  $r$  decides if he wants to accept  $p$ 's offer. If he accepts, then the payoff of  $p$  equals to  $S - x$  ( $x \in [0, S]$  being the amount  $p$  gives to  $r$ ) and the payoff of  $r$  equals to  $x$ . If he does not accept the offered amount  $x$ , then nobody gets anything. The responder is thus not any longer a passive recipient. He has the possibility to reject  $p$ 's offer and to punish unfair behavior (by renouncing on his own payoff and, in this way, also destroying  $p$ 's payoff).

4. The original design of a trust game comes from Berg, Dickhaut and McCabe (1995): two people, of which one is the *investor* ( $i$ ) and one is the *trustee* ( $t$ ), face each other. The investor is endowed with a sum of money  $S$  by the experimenter and then has to decide how much of  $S$  he wants to give to the trustee. The amount that the investor gives to the trustee (termed  $y$ ,  $y \in [0, S]$ ) is then tripled by the experimenter. In a second stage, the trustee decides how much of  $3y$  he wants to give back to the investor. The trustee's payoff ( $\pi_t$ ) equals to  $3y - x$  ( $x \in [0, 3y]$  being the amount that the trustee gives back to the investor). The investor's payoff ( $\pi_i$ ) is  $S - y + x$ . In this setup,  $y$  measures trust and the amount returned,  $x$ , measures trustworthiness or reciprocity.
5. It appears that an 'evil' rule, then, is the exact opposite to what Mantzavinos defines as a moral rule. It will be argued below that one should rather consider 'evil' rules to be one specific instance of moral rules – the latter being defined mainly by the characteristics of informality and first-party enforcement.

## 4 Massively Multiplayer Online Role-Play Games as a Field of Research

1. 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 book will use the character 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 character name will end with an '\*'.

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

2. For alternative methodological approaches to game studies, compare Konzack (2002) and Aarseth (2003).
3. It is important to insert the word 'theoretically' in this sentence. The data examined here does not contain everything the players did, and even *CCP Games* do not possess this kind of data. It is in fact the case that not everything that happens on the EVE server is logged. This is mainly due to performance reasons (CSM & CCP Games, 2011, p. 6). The game would be much slower, if the computers had to write down everything the players do.
4. A *corporation* is a formal association of players who regularly play together.
5. An *alliance* is a formal association of corporations.
6. It is important to note, however, that compliance with the rules set by the developers is not perfect in all cases either, even if only in-game proceedings are considered. This has practical reasons. For example, it is forbidden to spam the in-game public chat channels. It would be possible to prevent this – for example by eliminating the public chat channels altogether – but the overall good of having such a chat channel in the game seems to be higher than the costs of having to deal with spammers. Also within the game, the developers are therefore sometimes forced to enact 'only' laws where natural laws would be theoretically possible.

7. More details on the emergence and functioning of this unique organization are presented by Óskarsson (2010).
8. The form of production in EVE that produces the least refined products.

## 5 *EVE Online*

1. For comparison, in the market-leading game ‘World of Warcraft’, all you lose when you get killed is some time, namely the time it takes to walk your ‘ghost’ from the nearest ‘cemetery’ back to where you have been killed. You keep all your possessions and skills.
2. One EVE-account can hold up to three characters. The number of characters per account remains fairly constant at around two over the years (Guðmundsson, 2007, p. 4, 2010f, p. 8).
3. Remark that we speak of the ‘*character*’ if we are referring to the virtual representations of the *players*, that is the real world people.
4. ISK is also the international currency code for the Icelandic Crown – CCP Games being an Icelandic corporation. Wherever ‘ISK’ appears in this book, it always refers to the in-game currency of EVE rather than to the Icelandic Crown.
5. The main problems are that players who do RMT typically use macros (specialized little computer-programs) in order to control their characters. These macros put significant workload on the game server – which worsens the game performance for everybody. Also, RM-traders are not interested in the game itself but use it as a pure money-making tool. This runs counter to the spirit of the game and the gameplay experience for the community. Third, RMT often extends to credit card frauds, account hacking and other illegal behavior. (Guðmundsson, 2009a, p. 34).

For a thorough description of CCP Games’ effort against RMT, see the Quarterly Economic Newsletter of the 3rd quarter 2009, pp. 24–34 (Guðmundsson, 2009a).

6. Guðmundsson’s definition of M1 being ‘currency readily available for transactions’ (2007, p. 7).
7. ‘PvP’ means player-versus-player combat, and thus the military aspect of EVE.
8. That is to say that not all items in EVE are traded via the public market system. Although most of them are, still, there are also the less formal *contract system* and individual *player-to-player transactions*. And this is also to say that there is no ‘global’ market across all 66 regions of EVE: whenever you look at the market window in-game, you will be perfectly informed about the prices in your region but do not know anything about the neighboring regions, which might be just one star gate away. There are, however, many ways of overcoming this lack of information, for example by using a different character in another region to check prices or by turning to out-of-the-game websites that list prices in different regions.
9. Half an hour per day, the EVE server is down and nobody is able to play. This is due to technical reasons; the time is needed by the developers mainly to ‘clean up’ the unnecessary data from the virtual universe.
10. There is also the possibility of bringing your security standing back up after you committed a crime. This generally means a lot of time and effort, however.

11. Including the newly introduced 'wormhole space'.
12. The argument that EVE might just be 'too young' (publication in 2003) for complex institutions like States to emerge and that the predictions of the models need some time to become operative should be weighed against the fact that – for a computer game – being seven years old means being as old as Methuselah.
13. In total, 521,592 humanly controlled characters were killed but this number is a combination of *NPC-kills* and *player kills*. The technical definition of an *NPC-kill* in contrast to a *player kill* is that, whereas the former involves *only NPCs as attackers*, the latter involves *at least one humanly controlled character acting as an aggressor*. This book is only interested in the latter form of kills.
 

The number of 327,911 player kills encompasses *CONCORD-kills*. *CONCORD-kills* are kills by the virtual, computer-controlled police. These kills are included since in order to be killed by *CONCORD*, a player has to transgress well-known laws in hisec. Almost nobody gets killed by *CONCORD* for *accidentally* violating one of the virtual laws (for example not to attack innocent fellow players in hisec). However, many players let themselves be *intentionally* killed by *CONCORD* when they participate in a 'suicide gank'. This practice will be explained below (cf. Chapter 7). Getting killed by *CONCORD* is thus not due to inept play but rather to intentional transgression of the law.
14. The technical definition of a *war-kill* is that at least one of the attackers' corporations or alliances is at war with either the victim's corporation or alliance at the time of the kill.
15. The technical definition of a *factional warfare-kill* is that either the victim or at least one of the attackers is enrolled in a factional militia at the time of the kill, or that the kill happened in one of the officially contested solar systems, that is the typical fighting zones, at the frontiers between the four factions. This is an all-embracing definition for *FW-kills* that tends to consider more kills as *FW-kills* than is probably appropriate. However, taking into account the validity of the findings in this book, it is crucial not to underestimate the importance of *FW*.
16. The technical definition of a *CONCORD-kill* is that the character that fired the final shot that lead to the eventual destruction of the victim's ship was conducted by a police-NPC. This is a comparably narrow definition, since it does not consider kills in which *CONCORD* participated but did not lay the final blow as *CONCORD-kills*. The reasons for this narrow definition are analogous to the reasons for the broad definition of *FW-kills* (see preceding note).
17. The technical definition of an *intra-corporation kill* is that the victim character and the character that fired the final shot that lead to the eventual destruction of the victim's ship are in the same corporation at the time of the kill.
18. As for the technical definition of *erratic kills*: every *player kill* that cannot be attributed to either of the four typical categories of kills mentioned above (war, factional warfare, *CONCORD-kill*, *intra-corporation kill*) qualifies as an erratic kill.
19. The numbers do not add up to 327,911 kills (but to 332,331), since some kills may fall in more than one category and, notably, since many kills in factional warfare are actually effected by *NPCs* (namely the computer-controlled navies of the four empires).

## 6 Piracy

1. Nullsec kills will not be considered, since nullsec is controlled by the big player alliances. Many kills in these regions are kills made to protect the claimed territory, rather than piracy kills, although the involved parties may be not formally at war with each other.
2. The average value of salvage probably lies under 1 percent of the destroyed ship's worth and only few pirates actually salvage their victims' ships – because of the low profit, the considerable time investment, and more effective killing if the attacker's ship has not to be equipped with salvaging equipment, too (Precisionist\* & RetardedNeuron\*, 2011).
3. Doing so, items that were dropped by the victims but did not have any market value in January were ignored. Not having a market value means that these items were not traded publicly that month. These are either very rare items (and thus presumably very valuable ones), or items that only have a symbolic value in EVE (like for example the virtual insignias of NPC officers that are required by some NPC agents in certain missions as a sign of having effectively killed the required number of ships). The items with only symbolic value form the large majority of the neglected items, since the very rare and valuable items (like for example blueprints needed for space ship construction) are very rarely moved.

Ignoring the worth of the items that do not possess any market value obviously underestimates the total value of the items considered; in this case it means underestimating the benefits of piracy. Since there is no easy and appropriate measure for these items, though, *this book will always only consider items that possessed a market value in January* in calculating the economic impact of the virtual killings.

4. All amounts given in EUR in the following are rounded amounts. Their purpose is to give a general idea of the amounts in real-world currency, not precise numbers.
5. This value is reached by dividing the online time since character creation by the total real time passed since character creation. Since the online time is only given in different classes rather than as precise number (see above), class means were used to calculate this value.
6. Measured by the amount of ISK in the wallet of each character at the end of January.
7. This might be an additional reason as to why there are so many acts of piracy conducted although no loot can be robbed eventually. The random process of loot destruction and persistence involves total uncertainty for the attackers. Still, it is very well possible to identify worthwhile targets of attack beforehand: every player in EVE can tell a shuttle from a transport ship and cheap from expensive ships. Furthermore, the ships of the pirates can be equipped with cargo scanners, able to detect what the cargo hold of the victim contains before actually attacking it.
8. As outlined above, one month in the EVE economy roughly translates into one year of real world economies.
9. It is very likely that these are so called *alt-chars*, that is secondary characters of players that are not used as often. Alt-char(acter)s are mainly used for economic reasons, more precisely to procure information about the prices of certain items in different regions. Remember that the EVE market is a regional

market, in which you can only directly see the prices for all items *in a specific region* but have no idea of the prices in the other 65 regions without recurring to additional information sources – like for example alt-chars. The single most important use of alt-chars is to stay in a station in a different region than the main character and make price queries for certain items from time to time. Switching between characters to check prices in the neighboring region (and thus being able to make a profitable interregional trade) is often the fastest and most accurate way of procuring the required information.

10. With respect to their share of total income and expenses.
11. Since the total login minutes are only given in different categories in *characters.csv* (see above), class means have been used to calculate this ratio.
12. Again, alt-chars are mainly used for quick price checks (takes only about 10 seconds per item) and thus have very low online times.
13. *PvP* means ‘player versus player’. In this context, ‘PvPers’ simply are *pirates*, and ‘PvP’ translates to *piracy*.
14. Sometimes perpetrators claim that they shoot pods not because they personally benefit from it but because they know that they can harm the opposite party in a war this way (Elesentra\* et al, 2009); the opposite faction incurs the costs of having to repurchase brain implants. This argumentation does not apply here, however, since all kills considered are those of non-warring parties. Therefore, one should picture victim and pirate as completely indifferent strangers aside from pure material self-interest.
15. Even if the mean ransom per pirate amounted to remarkable 24.2 million ISK (1.20 EUR) in January (median ransom: 6 million ISK), this seems appropriate given the fact that one decision to honor a ransom of one pirate probably does not change much the course of a universe of almost 800,000 characters and with more than 50,000 piracy kills per month. Furthermore, the money-making abilities of a character greatly increase over its lifetime, probably leading to high discount rates.
16. Total number of piracy kills with not more than five attackers: 49,187 (= 87 percent of all pirate kills). This limitation was chosen since encounters with more than five pirates further complicate the ransoming situation. It is difficult to coordinate so many players in such a tight situation, which means that these instances of ransoming are negligible.
17. Here and in the following, all tables presenting player citations stemming from Internet forums reproduce the posts literally, including potential orthographic or grammatical mistakes.
18. A solar system in lowsec
19. ‘Tears’, ‘forum tears’, or ‘carebear tears’ is what is ‘created’ when players complain in the official forums that EVE is too harsh. That is, they write a new forum entry complaining about what has happened to them – which is called ‘whining’. Since they ‘whine’, there has to be somebody who collects the tears created in this process. These usually are the pirates who are always happy to hear somebody complaining about how cruel they are to others.
20. A technical device making it easier to prevent the pod from escaping (only functional in nullsec systems).
21. Noob = newb = newbie = n00b. Gamer slang for new player.

## 7 Suicide Ganks

1. 'Innocent' in this context means: you are not formally at war with the other character and he has not attacked and killed you in exactly the same fashion you attack him now in the last 30 days. Additionally, he is no 'outlaw' with a security status of -5.0 or below and thus free to be attacked by anybody.
2. If in the time span of two minutes before and one minute after the CONCORD kills additional characters get killed in the same system but by NPCs different from CONCORD (for example the faction navies), then these kills will be regarded as a part of the (attempted) suicide gank. This is because: first, it is not only CONCORD (that is the police) but also other NPCs around (the 'army') which prosecute crimes in EVE; second, because it is unlikely that NPC kills that are completely unrelated to the suicide gank take place at the same time in the same system; and third, because for successful suicide ganks it can be shown that the characters that get killed for example by the faction navies also participated in the initial player kill that started the whole process of the suicide gank.
3. Obviously, it is impossible to tell how many victims were attacked in the case the SG failed. If we assume only one victim per failed SG, we reach the total number of 647 attacked victims.
4. Gankers can insure their ships before committing an SG. Insurance in EVE is paid out even when the ship was willfully destroyed – which is obviously the case.
5. Setting up a suicide gank certainly takes at least one hour – therefore the comparisons of hourly wages is appropriate.
6. Worth of gankers' and victims' ships plus cargo destroyed during explosion.
7. To be sure, it is a different thing to allow for evil to happen or to actively incite players to commit evil. There is no game mechanic in place that forces players to attack other players in hisec even though that leads to individual losses. However, it is widely accepted that the omission to take action is also an action. In this sense, a rule that is *publicly known* for fostering evil may very well be called an *evil* rule.
8. PK = player killer, a person that regularly attacks other humanly-controlled characters.
9. POTW = picture of the week, a very good screenshot of an EVE space ship for example.
10. A reasonably powerful class of space ships.
11. Eliminating secondary and tertiary characters, that is characters that were created on an already existing account, the possibility still exists that seemingly new characters are controlled by experienced players who bought a secondary or even tertiary account, though.
12. Total login minutes divided by minutes since character creation.
13. This restriction was added in order to prevent some huge outliers with respect to total gains from blurring the picture. Most likely these characters were subsidized by more experienced characters of the same player.
14. For example *successful* multi-person SGs involved 394 victims and 1218 perpetrators. If we add additional 0.9249 *different* victims per *failed* SG (92.49 percent of the actual victim characters only get killed once), then

their number amounts to 204 (number of failed SGs (211) times 0.9249 = 204). Analogous calculations are used for the one-person SGs.

15. All numbers are combined numbers for multi-person and one-person SGs.

## 8 Wars – Other Forms of Natural Evil in EVE

1. NPC corporations, that is corporations not formally run by a human player are an exception to this rule. They cannot start wars against other corps or alliances, since the CEO (who is computer controlled) would have to agree to it. On the other hand, they cannot be the target of a war declaration by other corps either.
2. For the rest of this section, we will only be looking at war kills that happened in 'Empire space', that is hisec and lowsec combined, since only in this area can wars be said to be a tool to commit evil otherwise impossible or associated with much higher costs.
3. A 'nerf' is gamer slang for a change in the game mechanics that makes some tactic or tool *less powerful*. If for example the rules of chess were changed so as to limit the queen in its movement (for example only allowing it to move similarly to a rook), then the chess players could speak of *the queen nerf*. Nerfs are usually explained by the developers to be necessary for balancing reasons, that is to ensure that no single tactic becomes too dominant or even undefeatable in a game, thus making it boring to play.
4. Privateer Alliance
5. Ultima Online, a different MMORPG

## 9 Altruism in EVE – A Simple Experiment of Online 'Dictator Games'

1. In EVE, the message from the sender of the money to the recipient is, of course, a proof that the sender actually noticed his mistake, very unlike the pedestrian zone scenario. However, the key function of the EVE message is not to signal the *conscious* aspect of the action but the *erroneous* aspect. Whereas in real life nobody would doubt that you drop a 20 EUR bill *unwillingly*, in EVE this could be regarded as a random act of kindness: it happens that experienced players give away money to new players *for no reason* (Guðmundsson, 2010a). Furthermore, the additional message assures that the recipient of the money actually notices that he accidentally gained 50m ISK: experienced and wealthy players may not keep track of their wallet balance at all times.
2. Trial accounts for *EVE Online* are available for free and last for 14 days. Not everything you can do in EVE on a paying account is also possible on trial accounts. For example, you cannot directly transfer money to another player, you cannot trade privately with other players, and you cannot use the contract system.

## 10 Conclusion

1. Keep in mind that the average EVE player has *two* characters – that are sometimes logged in simultaneously, though.

# Glossary of EVE Terms

- Agent* An agent is a special type of NPC character in EVE that provides the players with jobs. In every space station in EVE you can start a text-based conversation with an agent and he will give you a *mission*. A mission can be, for example, to bring item X from station A to station B (a *courier mission*), or to destroy particular NPC characters in system Y (a *combat mission*). After you have fulfilled the task, you can return to him and he will reward you with a sum of money or some items.
- Alliance* An alliance is a formal association of corporations in EVE, and thus the second level of organization (the first level being corporations). Alliances are the most important political actors in nullsec, in which CONCORD does not provide any protection from hostile players. The biggest alliances have thousands of member players.
- CONCORD* CONCORD ('Consolidated Cooperation and Relations Command') is the virtual, computer-controlled police force of EVE. In hisec, many crimes are harshly retaliated against by CONCORD – usually by destroying the ship of the aggressor. Every crime considered *punishable* by CONCORD interference will *always* be sanctioned: CONCORD always arrives, and always destroys the rule's transgressor. CONCORD-penalized crimes are, notably, to attack innocent players in hisec, to attack the property of the four empires (for example star gates), or to help outlaws (for example by repairing their ship). Every crime committed in Empire space will also lower the security status of the character.
- Contract system* The contract system is an alternative way to exchange in-game items in EVE. Unlike the market system, very rare or valuable items are normally traded via contracts, since you have the possibility to sell an item directly to another player without making the trade public.

- Corporation* A corporation (‘corp’ for short) is a formal association of players in EVE, and thus the first level of organization. Every player is always a member of a corporation at any time in EVE – be it a player-run corporation or an NPC corporation led by a computer-controlled character. Members of the same corporation are players that play together on a regular basis, that have a common purpose, and that might know each other in real life, too. Often, corporations are dedicated to one specific task in EVE, for example to mine asteroids (a *mining corp*), to attack other players (a *pirate corp*), or to offer protection for peaceful corps (a *mercenary corp*). Typically, players in the same corp communicate with each other using voice chat, which greatly facilitates real-time coordination of actions.
- CSM* The Council of Stellar Management (CSM) is a democratically-elected group of players that represents the views of the player base to CCP Games. Every EVE character has one vote to support his favorite CSM-candidate every six months. Normally, very experienced players that are usually associated to one of the big alliances in EVE get elected. However, there are also frequently candidates that claim to represent the views of the non-alliance players in their election campaign.
- Dev blog* Dev blogs (developer blogs) are a privileged way for the developers to interact with the community. In around 10 dev blogs per month, the developers publicly announce new developments or changes to the rules of the game. Although not everything said in dev blogs represents the official opinion of CCP Games, the content of dev blogs is taken very seriously by the player base.
- Empire* There are four main empires (also: factions) in EVE: the *Caldari State*, the *Gallente Federation*, the *Amarr Empire*, and the *Minmatar Republic*. Every character formally belongs to one empire but this membership does not have any relevant consequences for gameplay. Together, the four empires control the Empire space (comprising hisec and lowsec) in which no player-run alliance can claim territory. The virtual police force of CONCORD is maintained by all four empires and serves to guarantee law and order in Empire space.

- Game master* Game masters are employees of CCP Games whose job it is to settle conflicts between players in-game. They have the power to close down the accounts of players who violate the End User License Agreement or the Terms of Service of the game, for example by participating in real money trading. Unlike CONCORD, the response of the game masters to alleged crimes is not automated but every player can at any time contact a game master to report illegitimate behavior or to ask for help.
- Hisec* High security space (hisec) is the safest area of EVE. The computer-controlled police force of CONCORD directly retaliates against crimes committed in hisec only. All of the most important trade hubs in EVE lie in hisec space and many business-centered corporations have their headquarters here. Additionally, new players start to play the game in the relative safety of hisec.
- Implant* An implant is an in-game item. Plugged into the brain of a character, it raises this character's attributes, allowing, for example, for faster learning or for being a more efficient fighter by affecting the damage dealt by this character's weapons. Implants are comparably costly items that are tied to a specific character: after plugging them in once, they cannot be removed without being destroyed. Implants are also destroyed upon the death of the character – not when his ship is destroyed but if his pod (that is the rescue capsule the character finds himself in after ship destruction) gets destroyed as well.
- Killboard* Those players interested in PvP-combat typically announce their successes on killboards. The killboards list how many ships a character has destroyed, how much wealth he acquired by doing so, and so on; that is, a summary of how successful a player is in killing and robbing others.
- Loot* Loot is the in-game term for what can be retrieved from the wreck of another player's ship. The loot only designates what is left over after the explosion from the belongings the victim had in his cargo hold and the equipment that was fitted to his ship. In a second step, the wreck itself can also be *salvaged*, which generates some raw materials. Loot and salvage taken together constitute the gains of the kill for the attacker.

- Lowsec* Lowsecurityspace (lowsec) is an area of medium-security in EVE. Whereas CONCORD does not intervene for crimes committed here, the negative effect of a drop in individual security status is still applied for crimes that take place in lowsec. Lowsec is typically considered as the place where the pirates live.
- Mission running* This is one way to earn money in EVE, namely by talking to agents and asking for a job, rewarded with money and in-game items. Since mission running only involves fighting against computer-generated characters, it is the most important form for PvE activities in EVE.
- Navy* Besides CONCORD, the four empires have another group of computer-controlled characters that enforce their laws. Each faction has its own navy with the main function of patrolling the frontiers and securing the most important space stations. One notable task of the navies is to prevent players with a security status that is too low from entering Empire space by patrolling at the star gates. The navies, however, are not as powerful as CONCORD, which means that sometimes even outlaws can slip into hisec.
- NPC* A non-player character (NPC) is a character in EVE whose actions are controlled by the game-software itself in an automated way and not by a human player. Notable NPCs are agents, NPC pirates that regularly have to be killed when running a mission, and CONCORD.
- NPC corporation* An NPC corporation is a corporation led by an NPC. Every new player starts out as the member of such an NPC corporation when she plays EVE for the first time. NPC corporations are typically bigger than player-run corporations but also provide much less trust among the members who are often complete strangers to one another. One reason why many players stay in NPC corporations is that no war can be declared on NPC corporations; there is no more secure way of playing EVE than being the member of an NPC corporation and flying in hisec.
- Noob* A noob (also: newbie, newb, n00b, and so on) 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 may not

necessarily refer to how long this character has actually been playing EVE. 'You're a noob!' is probably the most common badmouthing in EVE.

*Nullsec* Null security space (nullsec) is the most unsafe area in EVE and the one that comes closest to being a virtual representation of the natural state. There are no laws in nullsec except for alliance-internal rules. You can attack whomever you like in nullsec without having to fear any repercussions from CONCORD or any lowering of your security status. The only thing that separates nullsec from a perfect anarchy is that market exchange still works perfectly; it is not very vibrant, though.

*Outlaw* An outlaw is a player with a personal security status of -5.0 or lower. Anybody can attack an outlaw anywhere and anytime in EVE without having to fear a CONCORD intervention or a lowering of his security status.

*Pirate* Pirate is the rather general term for players that mostly earn their money by killing and robbing other players. It may also refer to players with an overall aggressive playing style.

*Pod* The pod is the rescue capsule a character finds herself in after the destruction of the ship she flew. When flying in a pod, you have no possibility of defending yourself (other than flying away as quickly as possible), let alone attacking other players. If in addition to the ship the player's pod is also destroyed, she will find herself reborn in a *clone* that was bought beforehand and waits to be activated in a pre-defined space station. If somebody gets 'pod-killed', this potentially has very severe consequences. Not only are valuable brain implants destroyed by having to use a clone to go on playing, but some skill points can also be lost.

*PvE* Player versus environment (PvE) refers to actions in which a humanly-controlled character plays against computer-controlled characters, notably when killing NPC pirates when running a mission. The player competes with the artificial intelligence of the software.

*PvP* Player versus player (PvP) refers to actions in which two or more humanly-controlled characters compete directly, for example by attacking each other with their space ships. In comparison to PvE, you match your abilities to play the game with other real human beings.

- Real money trading* Real money trading refers to exchanging in-game currency (ISK) for real world currency (for example USD). Real money trading is illegal yet happens to a significant extent. Some players choose to play EVE in order to make money and not for the sake of competing with other players.
- Security rating* Each solar system in EVE has an assigned security rating between 0.0 and 1.0. The solar systems with ratings between 1.0 and 0.5 form the area known as hisec. The solar systems with a rating between 0.4 and 0.1 form lowsec. And the systems with a security rating of 0.0 constitute nullsec space in EVE. The security rating of the solar system is not to be confused with the security status of an individual character.
- Security status* Each character has an individual security status between -10.0 and 10.0 that is raised whenever he does missions for NPC agents or kills NPC pirates, and gets lowered when he violates the laws of the virtual universe (for example by attacking an innocent player in hisec). The security status reduction for committed crimes varies for example with respect to the type of the crime, the security status of the victim, and the area where it was committed. If the security status of a player becomes too low, he may no longer be able to enter solar systems with a high security rating, thus limiting his travel opportunities. Players with a security status of -5.0 or lower are considered *outlaws*.
- Skill* A skill refers to what a character is able to do in EVE. For nearly every activity there is in EVE, there is also a skill that makes practicing this activity more efficient, for example by lowering the time it takes to mine an asteroid or by raising the amount of damage caused by your weapons. Skills are in-game items that can be bought on the market but that have to be trained in order to come into effect. Skill training takes place in real time. Once you have trained a skill, your character will possess that skill forever (unless pod-killed without having

an up-to-date clone). The number of skill points a character has (every skill gives your character skill points when trained) is a very good approximation for the character age and power. The skill system overall fosters the division of labor: somebody very good at fighting is not usually very good at mining, unless he has already had the time to extensively train skills in both areas. To my knowledge, there is no character in EVE that has trained all the skills that exist to the maximum level.

*War* War is an affair of corporations and alliances in EVE, rather than of states. Every corporation and every alliance in EVE can declare war on any other corporation or alliance at any time (with the notable exception of NPC corporations, which never declare war but cannot have war declared on them either). The main effect of being at war with another corporation or alliance is that the respective members are now formally allowed to attack the members of the opposing party everywhere and every time in EVE. Even if two warring characters meet in hisec, CONCORD will not interfere with their battle. In order to declare war, the CEO of a corporation (or the executor corporation of an alliance) has to propose a vote to the members. The majority of the shareholders of the corporation (or the alliance, respectively) must vote in favor of going to war. The CEO can then start the war by paying a war fee to CONCORD. Additional war costs will be charged as the war continues. If a corporation is 'wardec' ('to wardec' is EVE-slang for declaring war on a corporation), all members will be informed immediately and the war will only come into effect 24 hours after this notice.

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