# Ethical Issues in The Expanse Series by James S. A. Corey

Filip Nováček

Bachelor's Thesis 2019



Tomas Bata University in Zlín Faculty of Humanities Univerzita Tomáše Bati ve Zlíně Fakulta humanitních studií Ústav moderních jazγků a literatur akademický rok: 2018/2019

# ZADÁNÍ BAKALÁŘSKÉ PRÁCE

(PROJEKTU, UMĚLECKÉHO DÍLA, UMĚLECKÉHO VÝKONU)

Jméno a příjmení:	Filip Nováček
Osobní číslo:	H16804
Studijní program:	B7310 Filologie
Studijní obor:	Anglický jazyk pro manažerskou praxi
Forma studia:	prezenční

Téma práce: Etic

Etické otázky v sérii Expanze Jamese S. A. Coreyho

Zásady pro vypracování:

Shromáždění materiálu k tématu Studium primární a sekundární literaturγ Stanovení cílů práce Rozbor knižní řadγ v souladu s cíli práce Formulace závěru Rozsah bakalářské práce: Rozsah příloh: Forma zpracování bakalářské práce: **tištěná/elektronická** 

Seznam odborné literatury:

Beard, Matthew, Jai Galliott, and Sandra Lynch. "Soldier Enhancement: Ethical Risks and Opportunities." Australian Army Journal 13, no. 1 (Autumn 2016): 5–20.

Brough, Michael W., John W. Lango, and Harry Van Der Linden. Rethinking the Just War Tradition. Albany: State University of New York Press, 2007.

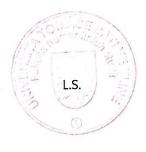
Fiala, Andrew G. Public War, Private Conscience: The Ethics of Political Violence. London: Continuum, 2010.

Mackie, John L. Ethics: Inventing Right and Wrong. 1977. Reprint, London: Penguin, 1990.

Singer, Peter. Practical Ethics. 3rd ed. Cambridge: Cambridge University Press, 2017.

Vedoucí bakalářské práce:	<b>Mgr. Roman Trušník, Ph.D.</b> Ústav moderních jazyků a literatur	
Datum zadání bakalářské práce:	9. listopadu 2018	
Termín odevzdání bakalářské práce:	3. května 2019	

Ve Zlíně dne 22. ledna 2019



Mgr. Libor Marék, Ph.D. ředitel ústavu

doc. Ing. Anežka Lengálová, Ph.D. *děkanka* 

# PROHLÁŠENÍ AUTORA BAKALÁŘSKÉ PRÁCE

Beru na vědomí, že

- odevzdáním bakalářské práce souhlasím se zveřejněním své práce podle zákona č. 111/1998 Sb. o vysokých školách a o změně a doplnění dalších zákonů (zákon o vysokých školách), ve znění pozdějších právních předpisů, bez ohledu na výsledek obhajoby <sup>1</sup>;
- beru na vědomí, že bakalářská práce bude uložena v elektronické podobě v univerzitním informačním systému dostupná k nahlédnutí;
- na moji bakalářskou práci se plně vztahuje zákon č. 121/2000 Sb. o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon) ve znění pozdějších právních předpisů, zejm. § 35 odst. 3<sup>2)</sup>;
- podle § 60<sup>3)</sup> odst. 1 autorského zákona má UTB ve Zlíně právo na uzavření licenční smlouvy o užití školního díla v rozsahu § 12 odst. 4 autorského zákona;
- podle § 60<sup>3)</sup> odst. 2 a 3 mohu užít své dílo bakalářskou práci nebo poskytnout licenci k jejímu využití jen s předchozím písemným souhlasem Univerzity Tomáše Bati ve Zlíně, která je oprávněna v takovém případě ode mne požadovat přiměřený příspěvek na úhradu nákladů, které byly Univerzitou Tomáše Bati ve Zlíně na vytvoření díla vynaloženy (až do jejich skutečné výše);
- pokud bylo k vypracování bakalářské práce využito softwaru poskytnutého Univerzitou Tomáše Bati ve Zlíně nebo jinými subjekty pouze ke studijním a výzkumným účelům (tj. k nekomerčnímu využití), nelze výsledky bakalářské práce využít ke komerčním účelům.

Prohlašuji, že

- elektronická a tištěná verze bakalářské práce jsou totožné;
- na bakalářské práci jsem pracoval samostatně a použitou literaturu jsem citoval. V případě publikace výsledků budu uveden jako spoluautor.

Ve Zlíně 2.2. 2019

.....

1) zákon č. 111/1998 Sb. o vysokých školách a o změně a doplnění dalších zákonů (zákon o vysokých školách), ve znění pozdějších právních předpisů, § 47b Zveřejňování závěrečných prací:

<sup>(1)</sup> Vysoká škola nevýdělečně zveřejňuje disertační, diplomové, bakalářské a rigorózní práce, u kterých proběhla obhajoba, včetně posudků oponentů a výsledku obhajoby prostřednictvím databáze kvalifikačních prací, kterou spravuje. Způsob zveřejnění stanoví vnitřní předpis vysoké školy.

(2) Disertační, diplomové, bakalářské a rigorózní práce odevzdané uchazečem k obhajobě musí být též nejméně pět pracovních dnů před konáním obhajoby zveřejněny k nahlížení veřejnosti v místě určeném vnitřním předpisem vysoké školy nebo není-li tak určeno, v místě pracoviště vysoké školy, kde se má konat obhajoba práce. Každý si může ze zveřejněné práce pořizovat na své náklady výpisy, opisy nebo rozmnoženiny.

(3) Platí, že odevzdáním práce autor souhlasí se zveřejněním své práce podle tohoto zákona, bez ohledu na výsledek obhajoby.

2) zákon č. 121/2000 Sb. o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon) ve znění pozdějších právních předpisů, § 35 odst. 3:

(3) Do práva autorského také nezasahuje škola nebo školské či vzdělávací zařízení, užije-li nikoli za účelem přímého nebo nepřímého hospodářského nebo obchodního prospěchu k výuce nebo k vlastní potřebě dílo vytvořené žákem nebo studentem ke splnění školních nebo studijních povinností vyplývajících z jeho právního vztahu ke škole nebo školskému či vzdělávacího zařízení (školní dílo).

3) zákon č. 121/2000 Sb. o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon) ve znění pozdějších právních předpisů, § 60 Školní dílo:

(1) Škola nebo školské či vzdělávací zařízení mají za obvyklých podmínek právo na uzavření licenční smlouvy o užití školního díla (§ 35 odst.
3). Odpírá-li autor takového díla udělit svolení bez vážného důvodu, mohou se tyto osoby domáhat nahrazení chybějícího projevu jeho vůle u soudu. Ustanovení § 35 odst. 3 zůstává nedotčeno.

(2) Není-li sjednáno jinak, může autor školního díla své dílo užít či poskytnout jinému licenci, není-li to v rozporu s oprávněnými zájmy školy nebo školského či vzdělávacího zařízení.

(3) Škola nebo školské či vzdělávací zařízení jsou oprávněny požadovat, aby jim autor školního díla z výdělku jím dosaženého v souvislosti s užitím díla či poskytnutím licence podle odstavce 2 přiměřeně přispěl na úhradu nákladů, které na vytvoření díla vynaložily, a to podle okolností až do jejich skutečné výše; přitom se přihlédne k výši výdělku dosaženého školou nebo školským či vzdělávacím zařízením z užití školního díla podle odstavce 1.

# ABSTRAKT

Tato bakalářská práce se zabývá vyhledáváním a zkoumáním určitých etických otázek, které se vyskytují v knižní sci-fi sérii *Expanze* od Jamese S. A. Coreyho. Je strukturována do tří hlavních kapitol, přičemž každá z nich se věnuje jedné z oblastí etiky. V těchto kapitolách je nejdříve vysvětlena teorie vztahující se ke specifické oblasti etiky, a následně jsou v podkapitolách prezentovány a analyzovány jednotlivé problémy z knižní série. Cílem práce je dokázat existenci těchto etických otázek v knihách, a zjistit, zda jsou situace, které tyto otázky vyvolávají, etické či nikoliv.

Klíčová slova:

Expanze, James S. A. Corey, etika, vojenská etika, bioetika

# ABSTRACT

This bachelor's thesis deals with finding and researching certain ethical issues that are present in the science fiction book series *The Expanse* by James S. A. Corey. It is structured into three major chapters, each dedicated to one area of ethics. In these chapters, the theory pertaining to the specific area of ethics is explained, and then, individual issues from the book series are presented and analyzed in subchapters. The aim of the thesis is to prove the existence of these ethical issues among the books, and to figure out if the situations raising said issues are ethical or not.

Keywords:

The Expanse, James S. A. Corey, ethics, military ethics, bioethics

# ACKNOWLEDGEMENTS

I would hereby like to thank my thesis supervisor, Mgr. Roman Trušník, Ph.D., without whose help and assistance it would be difficult to write this thesis, as all of his advice has been incredibly helpful throughout the process. Moreover, I would like to thank my family, whose support was almost equally indispensable to me.

I hereby declare that the print version of my Bachelor's thesis and the electronic version of my thesis deposited in the IS/STAG system are identical.

# CONTENTS

INTRODUCTION			8
1	ETHIC	ETHICS IN GENERAL	
	1.1 Pra	CTICAL ETHICS IN THE CONTEXT OF THE SERIES	
	1.1.1	Disdain between Belters and Inners	
2	MILIT	ARY ETHICS	17
	2.1 MII	ITARY ETHICS IN THE CONTEXT OF THE SERIES	20
	2.1.1	Destruction of Canterbury	21
		Destruction of MCRN Donnager	
3	3 BIOETHICS		
	3.1 BIO	ETHICS IN THE CONTEXT OF THE SERIES	27
	3.1.1	Eros experiment	27
	3.1.2	Protomolecule-human hybrids	
	3.1.3	Enhancement implants	
С	ONCLUS	ION	
B	IBLIOGR	АРНУ	

### **INTRODUCTION**

The purpose of this thesis is to explore the various ethical issues that are present in the science fiction novel series *The Expanse* written by James S. A. Corey. It is divided into multiple parts that each deal with a certain area of ethics that are most prevalent in the series, such as military and political ethics and bioethics, firstly from a theoretical point of view to define ethics, and thenceforth from a practical point of view in the context of the books, examining the largest issues and debating whether they can be seen as right, wrong, or neither, and from what point of view.

James S. A. Corey is a pen name of two authors, Daniel Abraham and Ty Franck. Under this pen name, they have released 7 science fiction novels – *Leviathan Wakes* (2011), *Caliban's War* (2012), *Abaddon's Gate* (2013), *Cibola Burn* (2014), *Nemesis Games* (2015), *Babylon's Ashes* (2016) and *Persepolis Rising*  $(2017)^1$  – with an 8th novel having been released in March 2019, titled *Tiamat's Wrath*.<sup>2</sup> (As this installment has been unavailable at the time of writing this thesis, it was not read, and thus will be completely omitted from this thesis.) The books are published by Orbit Books. Apart from the main novel series, the authors have also published a few short stories and novellas that complement the main books, such as *Gods of Risk, The Churn, Strange Dogs*, or *The Butcher of Anderson Station*.<sup>3</sup>

*The Expanse* series is set about a few hundreds of years in the future, where humanity had colonized the Solar System, but have not yet achieved interstellar travel. The Solar System is maintained by an alliance between Earth, which is now completely governed by the United Nations, and Mars, governed by the Martian Congressional Republic. Another faction, the Outer Planets Alliance, which defends the interests of the people living in the asteroid belt between Mars and Jupiter, also plays an important role in the series. Due to the political differences of the three major factions and the meddling of an Earth-based corporation, the Solar System finds itself on the brink of war, and due to this, the series is riddled with events and situations which, depending on the point of view, could be viewed as right or wrong, thus being potentially morally ambiguous.

Moreover, as technologies advanced in the series, their usage can be inspected in terms of bioethics as well. On top of that, an infectious agent of extraterrestrial origin is also

<sup>3</sup> "Short Fiction Archives," James S. A. Corey, accessed March 18, 2019,

<sup>&</sup>lt;sup>1</sup> "Books by James S. A. Corey," James S. A. Corey, accessed January 7, 2019, https://www.jamessacorey.com/writing-type/books/.

<sup>&</sup>lt;sup>2</sup> "TIAMAT'S WRATH Coming in Spring 2019!" Orbit Books, last modified August 27, 2018, https://www.orbitbooks.net/2018/08/27/tiamats-wrath-coming-in-spring-2019/

https://www.jamessacorey.com/writing-type/short-fiction/

discovered, and raises multiple questions about related research and its subsequent potential use in new technologies.

# **1 ETHICS IN GENERAL**

Ethics are defined in dictionaries as either "Moral principles that govern a person's behaviour or the conducting of an activity" or "The branch of knowledge that deals with moral principles."<sup>4</sup> In the modern world, humanity faces the topic of ethics on a daily basis in relation to various issues.

The field of ethics that is most relevant in today's world is practical ethics. Practical ethics, simply put, deal with practical issues, such as the ethics of racial equality, abortion, euthanasia, and even questions concerning climate change and environmental protection.<sup>5</sup>

The two major theories that attempt to establish a definition of what is right and what is wrong is consequentialist and deontologist theory. The difference between these two major theories is as follows:

- Consequentialism asks the question whether the consequence of an action brings the best results, or greater happiness than any alternative action, and if so, the act is judged to be morally right.
- Deontology asks the question whether an action is in compliance with a certain set of rules, while the consequences of said action are not taken into account. It is then morally right if it follows the rules.<sup>6</sup>

There are a couple of misconceptions about ethics that some might hold, and one of the most common ones is that ethics is good in theory but not in practice, and that it is merely a simple set of rules. Ethics are more complex than that, and Singer argues that sometimes, in certain situations, simple rules can conflict, and that "following a rule can lead to disaster." Singer then adds to this by stating a practical and relatable example from the time of World War II: "It may normally be wrong to lie, but if you were living in Nazi Germany and the Gestapo came to your door looking for Jews, it would surely be right to deny the existence of the Jewish family hiding in your attic."<sup>7</sup> Ethics are therefore not exactly a set of rules and views on whether something is ethical or not tend to be ambiguous.

According to Singer, a failure of the ethics of rules does not necessarily mean a failure of ethics as a whole, and rather just a failure of that one specific view. He also mentions consequentialism as the view which considers any act that produces a positive consequence

<sup>&</sup>lt;sup>4</sup> "Definition of ethics in English," Oxford Dictionaries, accessed April 5, 2019, https://en.oxforddictionaries.com/definition/ethics

<sup>&</sup>lt;sup>5</sup> Peter Singer, *Practical Ethics*, Edition 3 (Cambridge: Cambridge University Press, 2017), 1.

 <sup>&</sup>lt;sup>6</sup> John L. Mackie, *Ethics: Inventing Right and Wrong*, 1977, Reprint (London: Penguin, 1990), 154.
<sup>7</sup> Singer, *Practical Ethics*, 2.

as morally right.<sup>8</sup> Stemming from that view, the utilitarian theory of consequentialism says that an action is right as long as it produces more happiness for all of the subjects affected than any other action, and said action is considered wrong if it does the opposite.<sup>9</sup> Returning to the Nazi Germany example, if the consequence of someone lying to Gestapo about the presence of Jews in their attic is a good one, then the act of lying is justified. To explain this, one can imagine two possible outcomes for this situation:

- Person lies to the Gestapo, potentially saving the Jewish family.
- Person tells the truth to the Gestapo, causing a hardship to the Jewish Family.

Putting the utilitarian theory into practice, the morally right choice in this case would be lying to the Gestapo, as saving the family creates more net 'happiness'.

However, this is also one of the very examples where the two main theories clash in terms of their definition of what is good. While a utilitarian would argue that hiding the Jewish family while lying to the Gestapo would be the morally right course of action, deontologists would argue otherwise. If there is such a rule that dictates that lying is always going to be wrong, then telling the Gestapo the truth about the Jewish family would be right instead. This demonstrates the very complexity of ethics as a whole and showcases how several philosophers might tackle the same issue differently.

While ethics are sometime viewed as a purely philosophical and theoretical field, some might consider ethics to be a discipline largely based on religion, as many sources directly cite religion or are based on various religious values. Singer argues that theists tend to say that it is impossible to have ethics without religion, since the exact meaning of 'good' is equal to 'what God approves' and mentions that Plato himself has disproven these claims by saying that if gods approve of an action, it is because the action itself is good, and it is not the approval of gods that makes it good.<sup>10</sup>

Singer then explains this further to clear up this misconception. He argues that the link between religion and ethics was to give a reason for doing what is morally right in the sense that those who do good are going to be rewarded by "an eternity of bliss", whereas those who do not will "roast in hell." According to Singer, not all religious thinkers have thought this way, such as Immanuel Kant who said that people must obey the moral law for its own sake, and not because of a self-interested motive.<sup>11</sup>

<sup>&</sup>lt;sup>8</sup> Singer, *Practical Ethics*, 2.

<sup>&</sup>lt;sup>9</sup> Singer, *Practical Ethics*, 2.

<sup>&</sup>lt;sup>10</sup> Singer, *Practical Ethics*, 3.

<sup>&</sup>lt;sup>11</sup> Singer, Practical Ethics, 3.

Singer writes that the origins of morality lie not within religion, but in ancestors, possibly passed onto us through evolution, and our morality developed thanks to being able to acquire language. Humans share some of the same moral intuition with primates, as they also have a sense of reciprocity, and could be described as having the same sense of justice as humans do. This comes from an observation conducted by Frans de Waal, a Dutch ethologist and primatologist, whose observation Singer uses: While observing chimpanzees who lived together, Frans de Waal had noticed that one chimpanzee called Puist helped another, Luit, fend off and attack from a third chimpanzee, Nikkie. Nikkie then attacked Puist, who wanted support from Luit, but Luit refused to help. Afterwards, Puist was furious about this and attacked Luit.<sup>12</sup>

However, ethics themselves are sometimes argued to be invented, and some say that a unified and universal way to judge the morality of things does not exist. In other words, some philosophers argue that there are no objective values. John L. Mackie writes about this in great detail in his book *Ethics: Inventing Right and Wrong*. He states that many a philosopher have thought they would come upon more information about moral goodness once they find out what 'good' really means.<sup>13</sup>, and writes about how G. E. Moore, another philosopher, thought that those who attempted to define 'good' often 'confused the question of what sorts of things are good with the question of what goodness itself is.<sup>14</sup> What is good therefore depends purely on what definition the word 'good' has. Whether something good is in accordance to God's will, socially acceptable, or leads to larger net happiness, the definition of the word can greatly vary from case to case, and thus, this makes defining what is right or wrong an immensely difficult task.

Utilitarianism comes under scrutiny as well, for example. Mackie states in his book, that while the views of utilitarianism "has its merits" as it seems sensible for humans to balance happiness or pleasure against pain or distress, the view itself does not seem to be universal and objective either. He asks: "What are we to include in 'all who are in any way affected'? Does this mean 'all human beings' or all sentient beings'? Are non-human animals included?<sup>15</sup>

To summarize this, ethics are evidently quite complex and their goal, as well as their definition of what is good, is difficult to define. Different ways of thinking and different

<sup>&</sup>lt;sup>12</sup> Singer, *Practical Ethics*, 4.

<sup>&</sup>lt;sup>13</sup> Mackie, Ethics: Inventing Right and Wrong, 50.

<sup>&</sup>lt;sup>14</sup> Mackie, Ethics: Inventing Right and Wrong, 51.

<sup>&</sup>lt;sup>15</sup> Mackie, Ethics: Inventing Right and Wrong, 126.

cultures might interpret what is morally right a bit differently. Some might argue that they are not purely based on religion but rather simply stemming from issues that both religion and ethics faced in the past and even today, some may hold the view that the majority of people today have a moral compass that has been acquired from their ancestors, peers, and, generally speaking, society in which they exist, while some might deny this and offer their own view on what is ethical, what is not, and why it is so. In short, it seems that any action can be justified and spoken of as 'ethical' as long as the outcome brings about more good than bad, and maybe even more so if it is simultaneously in accordance with moral rules. The best possible solution could therefore be one that is morally right in multiple theories and views of ethics.

#### **1.1 Practical ethics in the context of the series**

As was mentioned in the beginning of chapter 1, practical ethics is concerned in applying ethics to practical issues. Nowadays, this means equality, abortion and such. With the book series being set few hundreds of years in the future, one would expect that a lot would have changed during that time period.

The series does not illustrate or document these issues to great detail and therefore it is a bit hard to say for certain whether something had changed over such a long time. There is however one issue that occurs occasionally and sometimes even drives the plot of the series, similar to racism.

#### 1.1.1 Disdain between Belters and Inners

While racism seems to be no longer present in the series, it has evolved into something different, and that would be disdain towards groups based on origin. This is due to the fact that Earth, Mars, and the Belt have a mixed population each.

Throughout the book, descriptions of characters and their names imply that each major power's population consists of mixed ethnicities as a result of multiculturalism and global government. People from Earth in the series no longer consider others from Earth as different, and the same applies for the population of Mars, and the Belt. There are however some minor differences between the people of Earth and the people of Mars (both of whom are often collectively addressed as 'Inners' – due to the fact they originate from the inner planets of the Solar System), and a few major differences between Belters and the others. One of them would be physiological. Due to the difference in gravity the people grow up accustomed to, the ones who live on the two planets are more like the people of today, whereas Belters are slender and tall, and therefore more fragile.<sup>16</sup>

Another area the Belters differ in is language. While the population of Earth and Mars speak English (which had become the universal language for them), Belters speak in a creole unique to them, which is based on English as well, but incorporates numerous languages that the first settlers of the Belt used. These languages are mostly "Chinese, Romance, Hindi", "Slavic, Bantu" according to the author of this fictional language.<sup>17</sup>

Due to these differences and their origin, Belters are seen by the inner planets as something different from humans and are often mistreated or ostracized.<sup>18</sup> Since the population of the planets looks down upon them like this, it causes the Belters to look down upon the people from the planets as well. The more radical Belters may even commit violent acts upon Martians and Earthers.

The first chapter of the first book shows that some individuals will despise anything made by Inners without a rational reason. A supporting Belter character has had a part of his arm amputated by a heavy block of ice during manipulation. While receiving medical treatment, he learns that the inners planets have developed a biogel which is able to regrow a lost limb. His reaction is quite negative: "Fuck the Inners, and fuck their magic Jell-O. I'd rather have a good Belter-built fake than anything those bastards grow in a lab. Just wearing their fancy arm probably turns you into an asshole,"<sup>19</sup>

Apart from this simple example that shows the attitude Belters have toward the inhabitants of inner planets, acts of violence further prove the existence of this disdain. In a further chapter in the first book, a riot breaks out on Ceres thanks to a broadcast that detailed the destruction of Canterbury, an ice hauler ship. Belters gathered together into a mob and wreaked havoc in one of the tunnels, and brutally assaulted and murdered a person. It is later shown that the victim was a female most likely affiliated with a Martian freight line.<sup>20</sup> This attack had been a direct result of the broadcast implicating Mars from destroying Canterbury. The Belters were visibly angry about this fact and decided that they will not stand idly.

<sup>&</sup>lt;sup>16</sup> James S. A. Corey, *Leviathan Wakes* (New York: Orbit, 2011), Chap. 1, Kindle.

<sup>&</sup>lt;sup>17</sup> Nick Farmer (@Nfarmerlinguist), "First and foremost Creole, of course. Superstrate is English, substrates predominantly Chinese, Romance, Hindi Slavic, Bantu," Twitter post, February 9, 2016, https://twitter.com/Nfarmerlinguist/status/697283495257731072.

<sup>&</sup>lt;sup>18</sup> Corey, Leviathan Wakes, chap. 6.

<sup>&</sup>lt;sup>19</sup> Corey, Leviathan Wakes, chap. 1.

<sup>&</sup>lt;sup>20</sup> Corey, Leviathan Wakes, chap. 6.

This sort of behavior seems to be prevalent among Belters. It is also implied that Belters tend to stereotype Earthers and Martians, and judge them based on their origin, rather than what they are. One occasion of this would be when Havelock, a security officer originally from Earth is having a bad night and is somewhat looking for a fight in a bar, as he feels like he is underestimated due to his origin. His partner comes in and upon reassuring him that he is in fact a 'good cop', the partner adds that the Captain of the security force looks down on him because he's an Earther by origin: "People look at you, they don't see Dmitri Havelock, good cop. They see Earth."<sup>21</sup>

It was mentioned before that in the series, racism has changed into this sort of phenomenon. Upon further inspection, given the fact that Belters tend to be working class and the inhabitants of Inner Planets are usually better off in terms of social standing, this phenomenon of disdain could also be sometimes described as classism, if the disdain or hatred is based on class itself.

It also draws a parallel with a current situation in the modern world, as the acts of violence tend to resemble racially motivated attacks between various races. Today, any sort irrational prejudice, discrimination, or attack towards someone, solely based on the difference in race or origin is largely considered to be morally unacceptable by the vast majority of the society. As long as the reason behind it is not based on appearance or traits alone, but rather deeds, its definition as a racially motivated attack is debatable, and might even be justified. Racism itself cannot be considered ethical though, as it never produces any goodness.

Nevertheless, a question therefore arises, whether this sort of disdain that is portrayed in the series is justified. From the examples shown, it seems that the judgment of the Belters is misguided. In one case, a beneficial technology that may be able to repair one's arm was refused solely because it has been developed by someone who was not a Belter, and on another occasion, positive traits or deeds of someone are ignored because of somebody's origin as an Earther. In the worst case, an innocent civilian who had no part in the destruction of Canterbury was murdered for the same reason: origin.

In this regard, Belters seem to be the ones who tend to act on impulse and with extreme prejudice, and would very much rather be around their peers, rather than any outsiders, and this is similar to being racist in today's society. The justifiable attack that the Belters at large could have planned and executed instead would be attacking the true perpetrators behind the

<sup>&</sup>lt;sup>21</sup> Corey, Leviathan Wakes, chap. 4.

destruction of the ice hauler Canterbury. It would hinder, or even prevent a truly unethical act, which is described in chapter 3 of this thesis, and thus, would amount to creating more good and happiness, rather than suffering.

# 2 MILITARY ETHICS

Moving on from the generalized concept of ethics, military ethics can be understood as being a subsection of ethics, more specifically professional ethics, dealing with what is right and wrong in military context. Just like medical ethics help medical professionals understand ethical issues stemming from working in their profession, military ethics do the same for professionals engaged in the fields of military.<sup>22</sup> There is no absolute definition of military ethics, however, and often any ethical issue that has some sort of relation to military forces, its usage, its inner workings or conduct, can fall under the classification of military ethics.

One of the common terms that might come to mind in relation to military ethics would be the *just war*, a theory that implies that war, or by extension, any armed conflict, can be morally justified in certain situations. According to Brough, Lango and Linden, this just war tradition can be seen as an evolving concept, and rather than there being one theory, they suggest there are multiple theories, each similar or different in some respects.<sup>23</sup>

Nowadays, the principles of just war seems to be widely accepted as a "moral framework."<sup>24</sup> The Preamble to the United Nations Charter states one particular aim that illustrates this well: "to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest."<sup>25</sup>

Moreover, Brough, Lango and Linden note that a report to the UN was commissioned by Secretary-General Kofi Annan in December 2004, and its purpose was to provide criteria that should be considered whenever the Security Council aims to authorize the use of military forces.<sup>26</sup> The criteria are as follows:

- Seriousness of threat which asks questions about how severe the threat is, if it involves genocide or violations of international humanitarian law, and thus, if the threat is severe enough to require the use of military.
- Proper purpose which asks the question whether the main purpose behind the use of military forces is to avert the threat.
- 3. Last resort which asks questions about whether other options have been thoroughly explored with sufficient evidence that such alternatives would be unsuccessful

<sup>&</sup>lt;sup>22</sup> Martin L. Cook, and Henrik Syse, "What Should We Mean by 'Military Ethics'?" *Journal of Military Ethics* 9, no. 2, (Summer 2010): 119, https://doi.org/10.1080/15027570.2010.491320

<sup>&</sup>lt;sup>23</sup> Michael W. Brough, John W. Lango, and Harry van der Linden, eds., Introduction to *Rethinking the Just War Tradition* (Albany: State University of New York Press, 2007), 1.

<sup>&</sup>lt;sup>24</sup> Brough, Lango and Linden, *Rethinking the Just War Tradition*, 2.

<sup>&</sup>lt;sup>25</sup> "Preamble," Charter of the United Nations, United Nations, accessed January 3, 2019,

http://www.un.org/en/sections/un-charter/preamble/index.html

<sup>&</sup>lt;sup>26</sup> Brough, Lango and Linden, *Rethinking the Just War Tradition*, 2.

- 4. Proportional means which asks the question about the proportion of the proposed act, if it is the bare minimum needed to avert harm.
- Balance of consequences which asks the question whether the use of military will not actually worsen the situation consequently by being successful in averting the original threat in question.<sup>27</sup>

These criteria coincide with the core principles of the just war tradition,<sup>28</sup> and thus seem to be present in one form or another even today, with international laws being structured in the same vein. The authors say that the just war tradition should be rethought just like they were rethought in the past.<sup>29</sup>

Apart from the principles of just war, the International Humanitarian Law (IHL), which is also known as Laws of Armed Conflict (LOAC), also affects military conduct. Its purpose is to limit the effects of war on non-combatants and also limits the available methods of warfare.<sup>30</sup> According to Martin L. Cook and Henrik Syse, the "critical assessment of LOAC is a fundamental component of military ethics," and they state that every professional should be knowledgeable when it comes to their corresponding professional laws. In addition to that, since the use of military keeps "continually changing and evolving," the law needs to be reinterpreted to stay relevant.<sup>31</sup>

If the International Humanitarian Law is to be perceived as either the successor or a 'sibling' to the old just war tradition, it is possible that in the future, be it near or distant, it will be updated to fit more modern concepts just like just war is being rethought over time. The increasing usage of military drones, which themselves seem to raise numerous questions regarding ethics, might signal that it is time to reevaluate said laws.

War can be seen somewhat just from an utilitarian point of view, as the idea of a soldier serving in the army, effectively giving up on many comforts of life and facing danger, all for the greater good of the country or society he is fighting for, seems moral and rather virtuous. Consequently, serving in the army is the right thing to do, in this case. However, on a larger scope, it is possible to ask questions such as whether the side the soldier is fighting for is in the right or wrong, if it adheres to the criteria of just war, if the war that is being fought by one side is going to produce greater happiness rather than suffering, and such.

<sup>&</sup>lt;sup>27</sup> Brough, Lango and Linden, *Rethinking the Just War Tradition*, 2–3.

<sup>&</sup>lt;sup>28</sup> Brough, Lango and Linden, *Rethinking the Just War Tradition*, 3.

<sup>&</sup>lt;sup>29</sup> Brough, Lango and Linden, *Rethinking the Just War Tradition*, 1.

<sup>&</sup>lt;sup>30</sup> "War & Law," International Committee of the Red Cross, accessed January 8, 2019, https://www.icrc.org/en/war-and-law.

<sup>&</sup>lt;sup>31</sup> Cook and Syse, "What Should We Mean by 'Military Ethics'?" 120–121

According to Andrew Fiala, war sacrifices individuals "for the greater good", and needs "individuality to be subordinated to the centralized authority" which deploys groups of soldiers to destroy "other similar groups of soldiers,"<sup>32</sup> It is also implied that in a war, individuality simply does not exist, and soldiers involved in a conflict have no say in for what cause they fight, what battles they fight, etc. These decisions are made solely by authorities.<sup>33</sup>

The only moral difference that matters between individuals in a war, Fiala states, is "the general and slippery one between combatant and noncombatant."<sup>34</sup> That said, it also does not tell of the values of said individuals, as some soldiers might fight because they are told to, maybe even unwilling to fight, and they might be killed during the war because they directly participate in it, whereas some individuals, which are genuinely bad, yet do not fight in the war and could be classified as noncombatants, get to live as they are not considered soldiers but civilians, which, generally speaking, should not be killed. Moral distinctions in this context are therefore quite blunt. To quote Fiala: "The fearful, conscripted youth is a legal target; but his fanatical uncle or patriotic mother is not."<sup>35</sup>

Considering this, while individuality is somewhat lost in the war, each soldier most likely has different views on things. If war was fought between individual soldiers, rather than sides under their respective superiors, the differences in morality between them would be evident, and at that point, each soldier would be responsible for his own deeds.

However, the individual soldiers follow orders from their superiors. With each soldier having their own views on morality, they also have the ability to doubt whether an order is in line with what is ethical. In fact, at least in the United States, soldiers are required to follow only legal orders and disobey any illegal ones, such as ones that require committing a war crime. American soldiers also receive training regarding moral responsibility and illegal orders in order to limit the occurrence of following illegal orders to a minimum.<sup>36</sup> In this regard, soldiers should know what orders are right and which are wrong, and thus, they are not the only ones who are morally responsible. Following legal orders thus makes the soldier ethical, while following illegal orders makes the soldier complicit.

<sup>&</sup>lt;sup>32</sup> Andrew Fiala, *Public War, Private Conscience: The Ethics of Political Violence*, (London: Continuum, 2010), 3.

<sup>&</sup>lt;sup>33</sup> Fiala, Public War, Private Conscience, 5.

<sup>&</sup>lt;sup>34</sup> Fiala, *Public War, Private Conscience*, 6.

<sup>&</sup>lt;sup>35</sup> Fiala, Public War, Private Conscience, 7.

<sup>&</sup>lt;sup>36</sup> William C. Cockerham, and Lawrence E. Cohen, "Obedience to Orders: Issues of Morality and Legality in Combat among U.S. Army Paratroopers," *Social Forces* 58, no. 4, (June 1980): 1274, www.jstor.org/stable/2577325.

The one morally responsible is not the soldier himself, then, but also the authority of the side under which the soldiers operate, as it has the right or power to decide upon courses of action and presumably, full power over the military. A state and its assets could be thought of as tools and weapons to a statesman and could be evil to the extent of using these assets for evil purposes. Thus, if an evil statesman commands its state's military to commit evil deeds, one cannot blame all the soldiers.<sup>37</sup> Of course, some of them might take great pleasure in following these orders, but there would also be a considerable portion of the army that would only do so because they are told to, or out of fear. The one to blame is then seemingly the one who decides the military should do the morally wrong act. By extension, if a soldier kills another combatant with an intention to kill, it could be considered murder, and a question arises, whether the soldier is to be blamed for this murder, or yet again, the leaders of the war.

To summarize this, military ethics are not simple either. The ethical questions war poses are numerous, and oftentimes even contradict themselves. Almost every war has its casualties, which can be considered murders, which cannot be considered good, but as Fiala argues, "the killing of war does appear to be, in some circumstances, necessary for the common good."<sup>38</sup>

#### 2.1 Military ethics in the context of the series

As was mentioned before in the introduction to this thesis, the series takes place in the future of the Solar System, in which relations between certain factions are uneasy, and due to the meddling of some sides, tensions rise, and the unstable environment that is a direct consequence of this provides the reader with many situations in which questions concerning ethics arise, especially ones that have to do with war, military, and armed conflict.

Since the book series has a large number of installments, listing each and every situation that contains even a slight moral dilemma in the small scope of a bachelor thesis seems infeasible. This chapter will therefore list at least the most important examples and deal with them in some detail, such as those that may have similarities with today's ethical issues as well.

<sup>&</sup>lt;sup>37</sup> Fiala, Public War, Private Conscience, 11.

<sup>&</sup>lt;sup>38</sup> Fiala, Public War, Private Conscience, 15.

#### 2.1.1 Destruction of Canterbury

The first book in the series, *Leviathan Wakes*, begins with one important plot point, which is the destruction of spaceship called Canterbury. This ship's purpose was to supply stations in the asteroid belt with water in the form of ice, mined from planet Saturn's rings. It was not the only spaceship with this purpose, but it is clear to the reader that it plays an important role, as it is common knowledge that water is important to the survival of all known living beings, not just humans.<sup>39</sup>

On one of its journeys, it encounters a distress signal, and through dialogue, it is implied that it is common courtesy to respond to such signals in space and investigate, especially so if one expects this in return.<sup>40</sup> One of the protagonists is sent off in a shuttle with a couple of other crewmembers to investigate the signal. The group finds out that the source of the signal is inside a ship which has been boarded, and upon further investigation, they find the beacon transmitting the distress signal<sup>41</sup> which is later revealed to have been powered by a battery of the Martian Congressional Republic Navy.<sup>42</sup> At that point, the group decides to return to Canterbury, but before they manage to return, the vessel is destroyed with a nuclear torpedo fired from unidentified stealth ships. Considering the battery and the fact that only Mars should have access to stealth technology, the group decides to broadcast a message that provides the information about the destruction of Canterbury, implying that it was destroyed by the Martian Congressional Republic.<sup>43</sup>

It is only later in the series that it becomes clear who is to blame for the destruction. The secretive Earth-based corporation called Protogen, which had access to its own stealth frigates, one of which was the exact one that destroyed Canterbury. The destruction of Canterbury was part of a plan by the corporation to ignite war or at the very least some sort of conflict between the two major superpowers – Earth and Mars – in order to distract the Solar System from the events that would be happening on Eros: Protogen was involved in experimenting with what is called the Protomolecule – a substance of extraterrestrial origin – for their own ends, most likely to gather as much information as possible and brand it as

<sup>&</sup>lt;sup>39</sup> Corey, *Leviathan Wakes*, chap. 1.

<sup>&</sup>lt;sup>40</sup> Corey, *Leviathan Wakes*, chap. 1.

<sup>&</sup>lt;sup>41</sup> Corey, Leviathan Wakes, chap. 3.

<sup>&</sup>lt;sup>42</sup> Corey, Leviathan Wakes, chap. 5.

<sup>&</sup>lt;sup>43</sup> Corey, Leviathan Wakes, chap. 5.

their own technology,<sup>44</sup> and Eros was the target for a large-scale experiment on the populace in order to test the capabilities of the substance.<sup>45</sup>

The attack on Canterbury was somewhat successful, as it had at least increased the tension between the major superpowers and led to disorder among the inhabitants of the belt with at least one riot happening on the largest inhabited asteroid in the belt, Ceres.<sup>46</sup>

Due to this aim, the fact that Canterbury was not affiliated with any of the political powers and did not pose any threat whatsoever, being only a civilian ship that supplied stations with water, the act of destruction of this ship can be viewed as unethical and immoral, and its destruction cannot be classified as collateral damage or a necessary sacrifice.

The usage of an armed force allows the incident to be examined under the five criteria mentioned in the theoretical part of the military ethics. Earth is governed by the UN, and thus, a corporation based on Earth should be subject to the laws or moral framework about when the use of such force is authorized and justified. It already fails in the first criterion, as there was no initial threat to respond to. The second criterion is not met either, as the purpose was to ignite war, rather than avert a threat. The rest of the criteria do not need to be considered, as it is quite clear the corporation had ulterior motives.

With all things considered, the corporation acts purely in its own interest and shows capability of doing absolutely anything in order to reach its goals.

Therefore, it becomes clear they are capable of ignoring basic morals, breaking laws and engaging in crime as severe as a mass killing, to maximize their profit, as they seem to show no remorse over what they do and view the Protomolecule as an opportunity that they would not shy of instigating a war for, the destruction of a vessel full of civilians being one example of their unethical behavior.

The ethics of the corporation's experimentation with the Protomolecule are going to be further explored in the Bioethics chapter of this thesis and will further prove the corporation's disdain of ethics.

<sup>&</sup>lt;sup>44</sup> Corey, Leviathan Wakes, chap. 34.

<sup>&</sup>lt;sup>45</sup> Corey, Leviathan Wakes, chap. 37.

<sup>&</sup>lt;sup>46</sup> Corey, *Leviathan Wakes*, chap. 6.

#### 2.1.2 Destruction of MCRN Donnager

Another event that happens early in the first book, following the destruction of Canterbury and the broadcast of this event, is the destruction of the MCRN flagship Donnager.

After the broadcast detailing the destruction of Canterbury that implicates the MCRN responsible for the attack, the corporation that owned the destroyed spaceship contacts the protagonist and instructs him and his group to rendezvous with the MCRN flagship Donnager to assist with the investigation.<sup>47</sup> Before they arrive, six stealth ships much like the one that destroyed the Canterbury show up and move towards the flagship.<sup>48</sup> Once the group arrives, it is questioned about the incident. The six stealth ships intercept the flagship, and due to having been underestimated, they attack the flagship<sup>49</sup> and board it later on. The main characters are escorted to safety and use a frigate stationed aboard the Donnager to escape. <sup>50</sup>

Realizing that the flagship is fighting a losing battle and being successfully boarded by intruders from the stealth ships, the crew of the Donnager follows what are considered standard operating procedures in the event of being boarded, which is the self-destruction of the ship once one of the three most vital areas of the ship has been breached, these areas being the bridge, the command information center, and engineering.<sup>51</sup> This self-destruction annihilates the ship with its crew, presumably taking down the six ships along with itself, as they were in range of the blast.<sup>52</sup>

This provides a question whether the sacrifice of the entire ship, including its crew could be considered ethical. Logically speaking, during any armed conflict, leaving important units, technology, intelligence behind for the enemy to exploit would be unbeneficial and counterproductive, as the enemy could gain an upper hand or other advantage. This was probably never the actual purpose of the boarding, and it is not clear why the intruders truly boarded the flagship, but the damage this act has done furthered the plans of Protogen for distracting the system from their Eros experiment, as the news spread quickly,<sup>53</sup> and it was even debated whether the Outer Planets Alliance had a hand in this.<sup>54</sup>

<sup>&</sup>lt;sup>47</sup> Corey, *Leviathan Wakes*, chap. 7.

<sup>&</sup>lt;sup>48</sup> Corey, *Leviathan Wakes*, chap. 9.

<sup>&</sup>lt;sup>49</sup> Corey, Leviathan Wakes, chap. 11.

<sup>&</sup>lt;sup>50</sup> Corey, Leviathan Wakes, chap. 13.

<sup>&</sup>lt;sup>51</sup> Corey, Leviathan Wakes, chap. 13.

<sup>&</sup>lt;sup>52</sup> Corey, Leviathan Wakes, chap. 15.

<sup>&</sup>lt;sup>53</sup> Corey, *Leviathan Wakes*, chap. 15.

<sup>&</sup>lt;sup>54</sup> Corey, *Leviathan Wakes*, chap. 16.

One of the criteria mentioned in chapter 2 of this thesis leads to considering the consequences of this situation. The use of this protocol might be justified if one takes the point of view of the MCRN. They never knew what the true purpose of the boarding was, and assuming the enemy was after valuable information or were planning to hijack the flagship, the consequences could be catastrophic. Gaining control of a flagship could provide an advantage to the side that owns it, and the information contained within as well, and the enemy could then use the said flagship against the rest of the army, or even threaten the civilian population. Self-destruction of this ship prevents these consequences and denies the enemy this advantage at the price of the entire crew.

Two courses of action present themselves with two most likely outcomes: Follow the protocol and sacrifice everyone on it to potentially save many other lives or attempt to defend the ship against the attackers at all costs, potentially saving the lives of the soldiers on board, with failure to do so bringing dire consequences.

This is reminiscent of the well-known ethical dilemma, called the *Trolley Problem*. This dilemma puts a person in a situation in which they assume the position of a trolley driver, and ahead of them on the tracks there are five people who cannot leave the track. The brakes do not work, but the driver has the ability to turn the trolley into a second track on which there is only one person who cannot leave. It is similarly a situation where the person can sacrifice a lesser number of lives to save the greater number. This, according to Judith Jarvis Thomson is the widely accepted option, and the people who were presented with this case say it is morally permissible and the person turning the trolley would not be morally wrong to do such thing.<sup>55</sup>

There is no clear answer to the question of what would happen if the boarders successfully hijacked the ship, but due to the uneasy diplomatic situation in the Solar System and the previous, for the characters yet unexplained destruction of the ice hauler Canterbury, assuming the worst when facing a boarding is on point, and then the self-destruction is justified. The series never mentions how soldiers are recruited into the Martian Navy, so if military service is not compulsory, the soldiers should therefore know well enough what possible situations might happen in space, they know about said protocols, and thus know of the possibility of self-sacrifice and know what they are doing.

<sup>&</sup>lt;sup>55</sup> Judith Jarvis Thomson, "The Trolley Problem," *The Yale Law Journal* 94, no. 6 (May 1985): 1395–6, https://www.jstor.org/stable/796133.

One must assume that this sacrifice is morally justifiable. There may have been alternatives to consider, but the weight of the risk of a strong ship falling into the wrong hands outweighs them, especially so as the identity of the boarders was not known to the characters at the time.

# **3 BIOETHICS**

Bioethics is defined in the Oxford Dictionary as "The ethics of medical and biological research."<sup>56</sup> Some sources state that the term bioethics was coined from the world 'biology' and 'ethics', and the later 20th century brought about many improvements and overall growth of medicinal technology, which also began to raise questions regarding ethics.<sup>57</sup> Considering this, bioethics can therefore encompass anything that has to do with medicine and biology.

For quite some time, bioethics was primarily concerned with issues such as abortion, contraception, euthanasia, or issues like cloning, organ donation and xenotransplantation.<sup>58</sup> While these issues are still prevalent even today, more recent sources also list moral questions concerning artificial wombs or exoskeletons for elderly people as important.<sup>59</sup>

Bioethics, like other areas of ethics, are complex as well. The widely discussed topic of abortion is still discussed and debated today, with various sides asking questions about whether it is morally acceptable to terminate a pregnancy, if it is considered murder or not, as it takes the life of an unborn human, and if it is considered alright, from which point is it considered unethical.

Nevertheless, it is not only a bioethical issue, but a practical one as well. According to Singer, this is a complex issue that requires a careful consideration, as the growth of a human from a single cell "is a gradual process"<sup>60</sup> There are two common positions nowadays that concern abortion, and that would be the conservative one and the liberal one.<sup>61</sup>

Conservatives base their argument on two premises, one being that it is wrong to kill an innocent human being, and the other being that a human fetus is considered to be an innocent human being. Based on these, the conclusion is "it is wrong to kill a human fetus." The conservative position also considers every stage from conception to birth to be a human life, whereas the liberal positions deny the second position and debate from which point the human life truly begins.<sup>62</sup>

<sup>&</sup>lt;sup>56</sup> "Definition of bioethics in English," Oxford Dictionaries, accessed April 18, 2019, https://en.oxforddictionaries.com/definition/bioethics.

<sup>&</sup>lt;sup>57</sup> Azir Muzur, "The Nature of Bioethics Revisited," *Bioethics* 14, no. 2 (July 2014): 109, https://doi.org/10.1111/dewb.12008.

<sup>&</sup>lt;sup>58</sup> "Bioethical Issues," Adelaide Centre for Bioethics and Culture, accessed April 19, 2019, http://www.bioethics.org.au/Resources/Bioethical%20Issues.html.

<sup>&</sup>lt;sup>59</sup> "Eight Biological Issues to Know in 2017" Hofstra University, accessed April 19, 2019, https://onlinelaw.hofstra.edu/blog/eight-bioethical-issues-to-know-in-2017/.

<sup>&</sup>lt;sup>60</sup> Singer, *Practical Ethics*, 124.

<sup>&</sup>lt;sup>61</sup> Singer, Practical Ethics, 125.

<sup>&</sup>lt;sup>62</sup> Singer, Practical Ethics, 125.

It is difficult to say when human life begins or when the fetus becomes conscious. As this issue is widely discussed in today's world, and has been for some time, it shows how complex such issues can be, and how difficult it is to reach the conclusion about their rightness or wrongness.

# 3.1 Bioethics in the context of the series

Since the book series is set in a relatively near future, it is clear that quite a few technological advancements have been made in that universe. With advancements in technology, bioethical questions change a bit as well. Instead of providing questions about whether abortion or euthanasia is ethical, it gives the reader situations that may raise questions about different issues, such as experimentation on humans or whether it is moral to improve humanity artificially through the use of implants or other enhancements.

#### 3.1.1 Eros experiment

The first large bioethical issue that the series explores is mass experimentation on unknowing humans, which was the entire population of Eros. The experimentation was conducted by the Protogen corporation previously mentioned in chapter 2 of this thesis.

Having conducted smaller scale experiments, the corporation had decided that the next step in researching the protomolecule's capabilities would be to let it loose in an environment full of people. The protomolecule is said to be infectious and works in such a way that it guides replicating systems. One of the researchers, captured on an old video file the main characters find, speaks of a technological breakthrough possible by using the protomolecule, the application of which is limitless, and states that Protogen should take immediate action, take exclusive control of it, and proceed to large-scale testing, as they might be scalable.<sup>63</sup>

The experiment itself consisted of rounding up the populace in radiation shelters under the false guise of a looming emergency. The shelters were then filled with gas to keep the people inside quiet and radiation was let in. The groups that were locked in shelters had been previously infected with the protomolecule and the radiation was meant to speed up its growth.<sup>64</sup>

<sup>&</sup>lt;sup>63</sup> Corey, Leviathan Wakes, chap. 34.

<sup>&</sup>lt;sup>64</sup> Corey, Leviathan Wakes, chap. 27.

Some time later, the shelters have been opened, and the infected people started shambling out. The infection had completely taken control over them, and they were now addressed as 'zombies.' They spread the infection further through vomit.<sup>65</sup>

The result of this experiment was that the entire population was infected and later assimilated by the protomolecule. The whole incident has been covered up partially and was theorized by many to be either related to war-related shortage of supplies or an attack from Mars, and such. The incident had also helped fuel the tension between the major powers.<sup>66</sup>

Meanwhile, Protogen was in fact monitoring the entire asteroid and documenting the situation. The main characters do not know the exact reason or what could be gained from this scientific experiment, but they reach the conclusion that Protogen must be stopped.<sup>67</sup>

Once the main characters reach the station that is actively monitoring the asteroid, they get to the vice-president of biological research for Protogen, Anthony Dresden, who is questioned about the reasons why Protogen conducted this experiment. His justification of the whole event is that finding the protomolecule has been the most important thing to happen to humankind, that is it a "ticket out of the limitations that bind us to our little bubbles of rock and air" and even states that the million and a half of people which were used in the experiment "is small potatoes" compared to what they are truly working with.<sup>68</sup>

It is then explained why such a large number was needed. The protomolecule works like a program, and it requires a large amount of mass to fulfill the orders it has. The researchers wished to figure out how to program the protomolecule and advance the human race beyond what would normally be possible.<sup>69</sup>

At that point, it becomes clear that what Protogen was doing might have been justified in the minds of the employed researchers, as they truly believe what they were doing was done for the greater good of the human race, even though they were practically playing God at that point.

From a basic consequentialist point of view, Protogen has failed in being ethical. The experiment was performed on innocent and unwilling individuals. The people inhabiting Eros were living lives that were suddenly sacrificed in the name of science without them having any say in it. It is quite clear that such an experiment is most definitely a crime.

<sup>&</sup>lt;sup>65</sup> Corey, Leviathan Wakes, chap. 30.

<sup>&</sup>lt;sup>66</sup> Corey, Leviathan Wakes, chap. 33.

<sup>&</sup>lt;sup>67</sup> Corey, Leviathan Wakes, chap. 37.

<sup>&</sup>lt;sup>68</sup> Corey, *Leviathan Wakes*, chap. 41.

<sup>&</sup>lt;sup>69</sup> Corey, Leviathan Wakes, chap. 41.

The experiment is also considered unethical when one considers the Nuremberg Code, which is a document that lists ten items that specify the basics for conducting experiments on humans. This document has been written after the end of the well-known Nuremberg trial, in which 23 physicians were found guilty of conducting unethical human experimentation during World War II.<sup>70</sup>

The ten criteria present in the list are as follows, paraphrased for conciseness:

- Voluntary (and legal) consent of the human subject is essential.
- The experiment should provide fruitful results for the good of society, which are not possible to procure by other methods.
- The experiment should be based on results of animal experimentation and knowledge of the studied problem, that the results will justify the experiment.
- The experiment should avoid unnecessary physical or mental suffering and injury.
- The experiment should not be conducted if theory implies that either death or disablement will occur, with the exception of experiments where the physicians are subjects as well.
- The risk should never exceed the one determined by the importance of the studied problem.
- Preparations must be made to prevent injury, disability, or death of the experimental subject.
- The experiment must be conducted only by qualified people possessing the highest possible skill, and extreme care is required.
- During the experiment, the subject should have the right to end it whenever he deems the experiment to be impossible.
- The scientist in charge of the experiment must be ready to stop the experiment at any stage if he believes the experiment will harm the subject in any way.<sup>71</sup>

By examining these criteria, one can deduce whether an experiment is in line with ethics or not. The experiment conducted by Protogen on Eros fails the very first requirement. The people on Eros did not agree to this, or in other words, they were not volunteering.

<sup>&</sup>lt;sup>70</sup> Alan T. Lefor, "Scientific misconduct and unethical human experimentation: historic parallels and moral implications," *Nutrition*, 21 (2015): 879, https://doi.org/10.1016/j.nut.2004.10.011.

<sup>&</sup>lt;sup>71</sup> "Nuremberg Code," United States Holocaust Memorial Museum, accessed April 23, 2019,

https://www.ushmm.org/information/exhibitions/online-exhibitions/special-focus/doctors-trial/nuremberg-code

The greater good for the whole of human society the result of the experiment would bring is debatable. At the point, the experiment had unknown results and there was no hypothesis to be proved true. The experiment was done with a simple question in mind: what would happen if they fed the entire asteroid to the protomolecule.

The suffering of the experimental subjects was minimized through the prior use of what seemed to be an anesthetic gas, but in the end, resulted in de facto death of the victims, as their control over their bodies was hijacked by the protomolecule.

The experiment did yield results, as it was found later that the protomolecule had begun using the assimilated mass, and at first, used it to broadcast speech across space. It could be said that the asteroid became a living entity, borrowing the personality of the first infected human on it.<sup>72</sup> Furthermore, the asteroid demonstrated the ability to move on its own as well, as when a ship attempted to ram into it to destroy it, the asteroid shouted "DON'T *YOU* FUCKING TOUCH ME!" and proceeded to dodge the ship, accelerating towards Earth on a collision course afterwards.<sup>73</sup>

To conclude this, despite the never-before-seen capabilities of the protomolecule, the results do not justify the means. Not only were the people of Eros sacrificed for this experiment, but it also threatened Earth for some time, before being redirected into Venus, and the risk largely outweighed the initial goal and purpose of advancing humanity. While it is true that Protogen had fulfilled some of the criteria in the Nuremberg Codex, it is required to fulfill the Codex as a whole, not only parts of it.

#### 3.1.2 Protomolecule-human hybrids

The protomolecule was used later in a similar project which raises similar issues as well, as it also concerned protomolecule experimentation on humans conducted by Protogen. However, it was done with a different, much more specific goal in mind, and with different subjects.

The project chronologically took place after the Eros experiment, therefore implying that Protogen had acquired deeper understanding of how the protomolecule works, and thus, instead of conducting research to see what could happen, they now had the specific goal of creating supersoldiers for military usage.<sup>74</sup>

<sup>&</sup>lt;sup>72</sup> Corey, Leviathan Wakes, chap. 40.

<sup>&</sup>lt;sup>73</sup> Corey, Leviathan Wakes, chap. 48.

<sup>&</sup>lt;sup>74</sup> James S. A. Corey, *Caliban's War* (New York: Orbit, 2012), Chap. 41, Kindle.

To achieve this, Protogen had been using suitable subjects, in this case children with a deficiency in their immune system.<sup>75</sup> The reason behind using children with such specific deficiency was that the protomolecule would be easier to control and program once the subject is infected by the protomolecule.<sup>76</sup>

Using children as experimental subjects in order to create these enhanced hybrids is undoubtedly unethical if we consider the ten previously mentioned items in the Nuremberg Codex. However, it can be considered even worse, as the greater good for all of mankind cannot be found here, and instead, the reason behind the experiment was to profit from new groundbreaking military technology. Also, children cannot legally give consent, which is important to consider in relation to the criteria. If a subject cannot consent to their usage in an experiment, they must not be used for such scientific research.

While the project shows promise (at a terrible cost), it proves to be unreliable, as the hybrid soldiers still contain the protomolecule within themselves, which regains control over the hybrid over time, disregarding any programming the human scientists had done.<sup>77</sup> Thus, the result of the experiment becomes a threat, rather than an opportunity for humans.

This issue shows yet another piece of evidence that the Protogen corporation completely disregards even the most basic of ethics and acts purely out of its personal agenda, and plays an antagonistic role in the first two books, as their experiments do not create goodness, but rather tend to get out of control and threaten humanity instead.

#### 3.1.3 Enhancement implants

While implants and enhancements are a discussed topic today as well, the issues in the Expanse are no longer merely theoretical, but practical instead, as implants are widely used, unlike in today's world. The stance toward implants is therefore somewhat different in the series.

To provide an example, one of the kinds of implants widely used in the series are advanced prosthetics. By advanced, it is meant that the prosthetic fully replaces the lost limb and apart from the appearance, the person using it does not feel any difference from a natural limb, and are also covered by medical plans.<sup>78</sup>

These kinds of implants are used today to a lesser degree, as not all amputees require them or have the chance to obtain them due to financial or other issues. As far as ethics are

<sup>&</sup>lt;sup>75</sup> Corey, *Caliban's War*, chap. 24.

<sup>&</sup>lt;sup>76</sup> Corey, Caliban's War, chap. 41.

<sup>&</sup>lt;sup>77</sup> Corey, *Caliban's War*, chap. 41.

<sup>&</sup>lt;sup>78</sup> Corey, Leviathan Wakes, chap. 1.

concerned, even such implants are the topic of various ethical questions. Engineers tasked with creating prosthetics like bionic arms need to keep ethical standards in mind as well. One of the issues that rises from the usage and implementation of bionic arms is that it provides an unfair advantage to its wielder and can be viewed as objectively better than a natural arm, as the artificial arm is not composed of flesh, but metal. Also, when it comes to creating and designing prosthetics, it must be done with high quality and on an individual basis, as there is no universal solution. Rushing the creation of these products may not be entirely ethical.<sup>79</sup>

In the book series, it is evident that such problems are no longer prevalent, as the production of prosthetics is no longer that costly or difficult. However, there is a kind of implants in the series that are illegal, mostly because the technology was unreliable, but also due to long-term health issues they bring to the user. This implies that they are not in line with the rules of bioethics.<sup>80</sup>

The implants in question are glandular implants which give their user intense short-term focus through chemical means, removing any inhibitions the user might have, even fear. Attacks by the user also happen on instinct rather than intentionally. However, the chemical used in these implants leaves the user debilitated and confused after the short time passes, which is the one main reason they were not used in the military and the source of their unreliability, as soldiers using these would become temporarily weakened and by extension useless after using them.<sup>81</sup>

Enhancements for use in military are beginning to be a discussed topic in the present times as well, and with their current increased use, more and more enhancements in any form may become widely available, bringing more questions with them as well. Enhancements are defined to be medical or biological interventions in the body with the aim of improving performance or capability beyond what is necessary.<sup>82</sup> Some of the enhancements may bring opportunities such as a decreased number of deployed soldiers, since soldiers with increased capabilities can in fact function in the place of multiple soldiers, which brings the decreased

<sup>&</sup>lt;sup>79</sup> Cole VanNostrand, *Prosthetics: the Ethical Issues Surrounding Them*, Essay, 3. www.pitt.edu/~cmv36/wa3.pdf.

<sup>&</sup>lt;sup>80</sup> James S. A. Corey, *Abaddon's Gate* (New York: Orbit, 2013), Chap. 3, Kindle.

<sup>&</sup>lt;sup>81</sup> Corey, *Abaddon's Gate*, chap. 3.

<sup>&</sup>lt;sup>82</sup> Matthew Beard, Jai Galliott, and Sandra Lynch, "Soldier Enhancement: Ethical Risks and Opportunities," *Australian Army Journal* 13, no.1 (Autumn 2016): 6.

risk of casualties that may happen during a conflict or a war, and thus brings ethical advantages.<sup>83</sup>

Through drugs, it is also possible to increase a soldier's decision-making or enhance their mental state in a positive way. The US military is already using a drug that helps US Air Force pilots remain alert and function without sleep for up to 60 hours. One of the ethical advantages in using such medication to maintain a high state of alertness is protection of non-combatants, as the soldiers will be able to recognize civilians, friends and foes easily, and would not be as easily affected by mental exhaustion or loss of focus.<sup>84</sup>

However, enhancements also carry ethical risks, too. As the example from the series suggests, dangerous or otherwise undesirable effects of enhancements must be mitigated in order for their positive effects to outweigh the risks. Using a health-endangering drug to enhance soldiers could increase casualties, rather than reduce them, and render said enhancements counterproductive.

Another risk linked with enhancements could also be a development of disdain culture among soldiers, as respect and honor play a large role in military communities. If enhanced soldiers fulfilled tasks better than the unenhanced ones, it could create such an environment that would have negative influence on respect and teamwork between fellow soldiers.<sup>85</sup>

Concluding this, in the case of the glandular enhancements, the risk of using them makes the enhancement questionable, as their enhancement potential becomes debatable, and a question arises whether it is worth using something that only works for a short amount of time, makes the user succumb to instinct, and renders the user weak after the effect wears off. As they have been outlawed, it is safe to say that the military leaders or other authorities knew of their limited use, and due to their negative qualities, banned them as they were considered unethical. Such enhancements could therefore be banned in today's world as well, as the reasoning behind their ban resembles the one that would be common today.

<sup>&</sup>lt;sup>83</sup> Beard, Galliott, and Lynch, "Soldier Enhancement," 7.

<sup>&</sup>lt;sup>84</sup> Beard, Galliott, and Lynch, "Soldier Enhancement," 9.

<sup>&</sup>lt;sup>85</sup> Beard, Galliott, and Lynch, "Soldier Enhancement," 14.

# CONCLUSION

The presence of ethical issues is prevalent in the book series, and it illustrates ethical issues from various areas. Through applying various studies and literature that concerns ethics in a modern or historical context, it is possible to see whether the illustrated issues are right or wrong, and most of the time, one can also find the reason behind such classification. The range of ethical issues ranged from a couple of trivial ones, where the rightness or wrongness was easy to deduce even with common sense, and some were complicated issues that required further study to reach a sensible conclusion.

In the first chapter, the theory about ethics in general was written. Most of the theory applied to the entire thesis as well. The only prevalent and important ethical issue that falls within the purview of general ethics was the group disdain between Belters and Martians, which was proven to be sort of natural, although acting upon it was unethical.

In the second chapter, military ethics theory was explained, and two major ethical issues from the series were presented. The destruction of Canterbury was proven to be unethical, as it had no good reasoning and was done with the purpose of furthering one's ends, and the second one, the sacrifice of MCRN Donnager was shown to be justified, given the weight and risk of the situation.

In the third and final chapter, theory related to contemporary bioethics was explained, and subsequently three unethical bioethical issues have been shown. Two of them were related to unethical human experimentation, which had been done almost in a similar manner as the experiments done by Nazi medical experts during World War II, and the third issue was explained to be unethical due to the unreliability of its technology, and its crippling sideeffects.

The book series and the ethical issues contained within provide an almost realistic foresight in what sort of issues the descendants and new generations may or may not face in the future. Some readers may read the book series purely for entertainment, but the more astute readers are bound to notice some parallels with the modern world, and see the potential future of mankind within the series.

To further reinforce the realism of its peek into a potential future, it can be said that while the books are technically a science fiction series, they avoid the often used dystopian or utopian illustration of our future. The setting the characters are in is not by any means overly negative, bleak, or dysfunctional, nor is it a perfect world with no flaws and zero suffering. Thus, it is possible to say that this setting, one day, could be real. With multiple ethical issues having been identified, subsequently analyzed and their degree of rightness deduced, the purpose and general aim of the thesis can therefore be considered fulfilled.

#### **BIBLIOGRAPHY**

- Adelaide Centre for Bioethics and Culture. "Bioethical Issues." Accessed April 19, 2019. http://www.bioethics.org.au/Resources/Bioethical%20Issues.html.
- Beard, Matthew, Jai Galliot and Sandra Lynch. "Soldier Enhancement: Ethical Risks and Opportunities." *Australian Army Journal* 13, no. 1 (Autumn 2016): 5-20.

Brough, Michael W., John W. Lango, and Harry van der Linden, eds. *Rethinking the Just War Tradition*. Albany: State University of New York Press, 2007.

- Cockerham, William C., and Lawrence E. Cohen. "Obedience to Orders: Issues of Morality and Legality in Combat among U.S. Army Paratroopers." *Social Forces*, vol. 58, no. 4, 1980, pp. 1272–1288. JSTOR, www.jstor.org/stable/2577325.
- Cook, Martin L., and Henrik Syse. "What Should We Mean by 'Military Ethics'?" Journal of Military Ethics 9, no. 2 (Summer 2010): 119–22. https://doi.org/10.1080/15027570.2010.491320
- Corey, James S. A. Abaddon's Gate. New York: Orbit, 2013. Kindle.
- Corey, James S. A. "Books by James S. A. Corey." Accessed January 7, 2019. https://www.jamessacorey.com/writing-type/books/.
- Corey, James S. A. Caliban's War. New York: Orbit, 2012. Kindle.

Corey, James S. A. Leviathan Wakes. New York: Orbit, 2011. Kindle.

- Corey, James S. A. "Short Fiction Archives." Accessed March 18, 2019, https://www.jamessacorey.com/writing-type/short-fiction/.
- Fiala, Andrew G. *Public War, Private Conscience: The Ethics of Political Violence.* London: Continuum, 2010.
- Hofstra University. "Eight Biological Issues to Know in 2017." Accessed April 19, 2019. https://onlinelaw.hofstra.edu/blog/eight-bioethical-issues-to-know-in-2017/.
- International Committee of the Red Cross. "War & Law." Accessed January 8, 2019. https://www.icrc.org/en/war-and-law.
- Lefor, T. Alan. "Scientific misconduct and unethical human experimentation: historic parallels and moral implications." *Nutrition*, 21 (2015): 878-882. https://doi.org/10.1016/j.nut.2004.10.011.
- Mackie, John L. *Ethics: Inventing Right and Wrong*. 1977. Reprint, London: Penguin, 1990.
- Muzur, Azir, "The Nature of Bioethics Revisited." *Bioethics* 14, no. 2 (July 2014): 109-110. https://doi.org/10.1111/dewb.12008.

- Orbit Books. "TIAMAT'S WRATH Coming in Spring 2019!" Last modified August 27, 2018. https://www.orbitbooks.net/2018/08/27/tiamats-wrath-coming-in-spring-2019/.
- Oxford Dictionaries. "Definition of bioethics in English." Accessed April 18, 2019. https://en.oxforddictionaries.com/definition/bioethics.
- Oxford Dictionaries. "Definition of ethics in English." Accessed April 5, 2019. https://en.oxforddictionaries.com/definition/ethics.
- Singer, Peter. Practical Ethics. 3rd ed. Cambridge: Cambridge University Press, 2017.
- Thomson, Judith Jarvis. "The Trolley Problem." The Yale Law Journal 94, no. 6 (May

1985): 1395–415. https://www.jstor.org/stable/796133.

- United Nations. "Preamble." Charter of the United Nations. Accessed January 3, 2019. http://www.un.org/en/sections/un-charter/preamble/index.html.
- United States Holocaust Memorial Museum. "Nuremberg Code." Accessed April 23, 2019. https://www.ushmm.org/information/exhibitions/online-exhibitions/specialfocus/doctors-trial/nuremberg-code
- VanNostrand, Cole. *Prosthetics: the Ethical Issues Surrounding Them.* Essay. www.pitt.edu/~cmv36/wa3.pdf.