

TED Ankara College Foundation High School

Extended Essay

English B

Session: May 2014

Name of the Candidate: Gökçe Özdemir

Candidate Number: D1129035

Supervisor: Emine Efecioglu

TITLE

Research Question: In what ways does Dan Brown's latest novel "Inferno" reflect the global health problem of overpopulation and through what events and characters does he reflect his idea of hell?

Word Count:

Abstract

This essay aims to point out one of the greatest global health problems through the work of Dan Brown, *Inferno*. The main investigation topic of this essay is constructed around the issue of overpopulation. Throughout the analysis of this issue, apart from the message given in Brown's novel, modern public health literature and data are also used in order to advocate the crucial point of population growth. Hence, to define the purpose of this essay, the following research question can be put forward:

“In what ways does Dan Brown’s novel “Inferno” reflect the global health problem of overpopulation and through what events and characters does he reflect his idea of hell?”

For a clear flow of ideas and concepts, this essay is subdivided into 9 parts. The first part is the “*Introduction*” in which the main idea of overpopulation and how it is interpenetrated into *Inferno* is introduced. The next part, “*A wake-up call through fiction*”, aims to expand the consequences of overpopulation and analyze to what extent it is responsible for a world that shall resemble, as proposed by the villain, the image of hell created by Dante Alighieri in the 14th century. The following parts include; analysis of the role of Dante and his *Divine Comedy*, interpretation of nature's balance in terms of overpopulation, and the evaluation of the concept of hell from different perspectives embedded in the novel. The “*Conclusion*” will draw upon the present situation of the world and point out where it is headed if its natural resources were to be consumed with higher and higher amounts.

(262 words)

Table of Contents

Abstract.....	i
Table of Contents.....	ii
Introduction.....	1
A Wake-up Call through Fiction.....	
A Path Leading to Dante’s Inferno.....	
Inspiration from Dante.....	
The Sacred Black Death.....	
Constantinople – Istanbul.....	
Main Characters	
Bertrand Zobrist.....	
Elizabeth Sinskey.....	
Hell for whom?	
Conclusion.....	
Bibliography.....	

Introduction

Wars, communicable diseases, accidents, natural disasters...every day we are having a great number of losses of human lives because of these reasons. However, mankind is facing another challenge: overpopulation.

Today, the world population has reached a number of 7 billion and within the last 24 hours only, the world population has increased by 325.000 through newborns though nearly half of them could not survive infancy. The most recent estimation of the United Nations is that the world population will reach 8 billion people in the spring of year 2024.¹

The fact that the world population increases by great numbers puts pressure on already limited natural resources and affects countries' struggles for socioeconomic development. Since developing countries have the highest birth rates, they are also prone to dilution and problematic distribution of resources and wealth. As a result, severe destitution is passively introduced to the over populated community. For instance, in South Asia alone, 515 million people suffer from financial hardship. The number of people living under poverty threshold is 110 million in Latin America and Caribbean only.² Unemployment rates increase on an everyday basis in poor and developing countries. What's more, the population increase in rural areas drive people into cities in search for a better life, resulting in high emigration rates. These factors combined, create accessibility problems to proper education, health care and infrastructure that root from high population density.

Pronatalist actions put women's health at risk too. Extraordinary numbers of pregnancy brings out complications resulting with the loss of life. Although health care providers are working

¹ World Population (<http://www.worldometers.info/world-population/>)

² Güler,Çağatay (2006). *Halk Sağlığı (Public Health)*. Ankara: Hacettepe Üniversitesi Yayınları

on prevention of deaths related to pregnancy, child and mother mortality rates are still at high stakes.

Dan Brown's *Inferno* takes us to a journey of threats awaiting us. In his novel, Brown pointed out the problem of overpopulation from different perspectives. The conspiracy theories about communicable diseases, radical solutions of some scientists on the problem of high birth rates, the disruption of health politics by missionaries, and constricted organizations trying to find a reasonable way to solve the problem of excessive birth, such as World Health Organization, are embedded in the novel. By using Dante's *Inferno* as a reference, Brown remarks the final threshold where the word "hell" is going to have a real time experience. Brown set up a series of irrelevant events that are all merged under the name 'Bertrand Zobrist' who thinks he has a solution to the problem of overpopulation and wants to avoid a future resembling Dante's image of hell.

A Wake-Up Call through Fiction

“The darkest places in hell are reserved for those who maintain their neutrality in times of moral crisis.” (Dante Alighieri, 1265-1321)

With this epigraph from Dante, Dan Brown begins his novel which resolutely takes its name from one of the three parts Dante Alighieri’s 14th-century work, *The Divine Comedy*. His work is not purely a fictional thriller but also a strident call to readers all around the world to wake up to the largely unnoticed, yet ferociously growing threat to humanity: overpopulation.

With the rapid population growth and technological developments, the world keeps changing. We do not have the same abundance in resources anymore due to overconsumption: “*The demand for dwindling natural resources is skyrocketing. Clean water is harder and harder to come by.*” (102) Water pollution affects all living organisms and results with communicable diseases in humans, destruction of habitats of animals and extinction of plants. Today, nearly 3 billion people are lack of consistent household access to clean and safe piped water.³ This is only one of the major health problems we have been facing all around the world, along with poverty, lack of nutrition and infectious diseases. It is a kind of a vicious cycle nourishing from one another.

Because of overpopulation, the natural resource usage has increased. Scarcity of resources leads to an increase in the use of technological aspects to create substitutes. The more technology is used the more pollution is created and the more scarce resources are. This scarcity leads to a higher demand in the market which eventually causes a soared price of survival which many people cannot afford.

³ Güler,Çağatay (2006). *Halk Sağlığı (Public Health)*. Ankara: Hacettepe Üniversitesi Yayınları

Because of all problems caused by rapid growth in the human population, one of the main concerns became to teach how to use contraception methods. World Health Organization (WHO), agency of the United Nations, tries to educate women and teach safe contraception methods to be able to reach a sustainable growth of human population⁴: “(...) *sending doctors into Africa to deliver free condoms and educate people about birth control.*” (102).

Although the efforts of WHO are countable, other factors act like counter measures. Today in the 21st century two opposing ideas are at war. While scientists are trying to emphasize the importance of contraception, missionaries are inhibiting protection and promoting reproduction. What missionaries are trying to do is to dominate the world with their religion and the only way to achieve this mission is to impose contraception as a sin: “(...) *if they used condoms, they'd all go to hell.*”(102). Another fact is that the educated people mostly do use contraceptives while the uneducated keeps reproducing under the pretext of religion, which shifts the balance at a great extent. On the other hand, governments, too, are strong advocates in favor of reproduction with the fear of educated and aware generation fading away. Thus, while one side promotes population growth due to political and religious reasons, the other side tries to limit reproduction for sake of global health and the future. What will be the result of this conflict? Who's going to win this war? With the escalated growth of human beings, there will be no winner because: “*When they face desperation... human beings become animals.*”(351)

As Dan Brown stated in *Inferno* there is one thing for sure. Since the most adaptable one is going to survive (321) and the access to resources is getting more difficult, there will be a hell in our living world created by human beings trying to survive: “*...fighting to death to feed out young. This is Dante's nine-ringed hell. This is what awaits.*” (144)

⁴ Family Planning (<http://www.who.int/mediacentre/factsheets/fs351/en/index.html>)

A path leading to Dante's inferno

In the novel the dangers and possible consequences of overpopulation are brought upon the readers' attention through many characters. The expressions may even lead the readers to emphasize with the villain Bertrand Zobrist from whose point of view the hell for which overpopulation clears a path for is explained through his obsession with Dante's work. Sienna Brooks, who is a doctor helping the protagonist Robert Langdon finding the virus Zobrist has created, tells to Langdon:

"I can tell you without a doubt that without some kind of drastic change, the end of our species is coming. And it's coming fast. It won't be fire, brimstone, apocalypse, or nuclear war . . . it will be total collapse due to the number of people on the planet. The mathematics is indisputable."(214).

These words openly bring out the issue of overpopulation and the idea that the population numbers will lead the world to nowhere but a total collapse of the planet. The global health issue is verbalized also from the character Elizabeth Sinskey, the director of World Health Organization in the novel: *"This is the future I would be giving my child?"*(138). Thus, the book not only mentions how overpopulation leads our world into a living hell: *"the rings of hell await, just beneath our feet, waiting to consume us all."* (137), but also focuses on the inadequacies of social organizations and groups on this issue of global health.

Inspiration from Dante

Inferno is one of the chapters of Dante's Divine Comedy which inspired many artists like Botticelli, Michelangelo, Da Vinci, etc. in creating images of hell, demons and corrupted souls. It is a journey of Dante and his guide Roman Poet Virgil through the nine circles of hell.

All circles represent a sin except the first circle limbo in which pagans and unbaptized reside, those who are not acknowledging Christ. The rest of the circles represent lust, gluttony, greed, anger, heresy, violence, fraud and treachery. Those reside in lust, second circle, are the ones to be truly punished in hell. The third circle, gluttony, symbolizes the cold, selfish, and empty sensuality of gluttons' lives where the overindulgence in food, drink and other addictions is included. Those who give importance to the material goods are punished in the fourth circle which is for the greedy. The souls in the fifth circle, representing anger, are active sinners and guarded by fallen angels. The sixth circle, heresy, is the lower part of the hell where violent and malicious sins are punished. The seventh circle represents violence: those who are violent against people, property, god and nature. The eighth and ninth circles punish sins that involve conscious fraud and treachery.⁵

Dan Brown's villain Bertrand Zobrist suggests that the sins of lust, gluttony and greed will result in the occurrence of the rest of the sins: anger, heresy, violence, fraud and treachery through causing overpopulation: "*All of Dante's deadly sins will begin percolating...rising up to the surface of humanity.*"(103). As population keeps increasing, the limited resources and declining life quality causes greed, anger, heresy, violence, fraud and treachery. Since the capacity of the world is limited as resources, the uncontrollable increase in the population will cause more poverty, hunger and deaths. It shall also cause diminished global health resulting

⁵ Dante Alighieri. (1265-1321). *Inferno*. Translated by Longfellow, Henry. New York: The Modern Library

in a world of hell where all criminal activities shall occur and all the sins will be committed. That's the reason why Dan Brown called his novel *Inferno*, for if the population increase keeps going on as fast as it does now, it will be a world of hell humanity will face and it shall resemble the image of "inferno" created by Dante Alighieri in the fourteenth century: *"To do nothing is to welcome Dante's hell...cramped and starving, weltering in Sin."*(346).

The Sacred Black Death

“What followed the Black Death? The Renaissance. Rebirth. Death is followed by birth. To reach Paradise, man must pass through Inferno.” (48)

In “Inferno,” Brown’s protagonist Robert Langdon is trying to save the world from a cataclysmic disaster. The villain is a famous geneticist named Bertrand Zobrist, whose obsession with the work Dante Alighieri is more than apparent throughout the story’s twists and turns, is against many global measures seemingly aimed at improving human existence. His adversary in the novel is the World Health Organization, and more specifically, its director Elizabeth Sinskey, with whom he first discloses some of his more “radical” persuasions. With Langdon’s help, Sinskey and her allies spend the majority of the novel trying to keep Zobrist from executing his plan which is first thought as releasing a plague but then turns out to be a virus that would sterilize one third of the world population.

Throughout the history there have been lots of communicable diseases resulting with great population decrease. The most known would be the second plague pandemic known as Black Death which occurred between 14th and 19th centuries. The Black Death caused the world’s population to drop by at least 75 million people in the 14th century only.⁶ In addition to being obsessed with Dante’s work – and the Renaissance artwork depicting it – Zobrist is also infatuated with, and oddly appreciative of, the outbreak of the bubonic plague during the 14th century: the so-called Black Death.

⁶ The Black Death (<http://www.eyewitnesstohistory.com/plague.htm>)

Bertrand Zobrist is certain that the global population level is rising far too fast, without a corresponding level of natural resources to sustain it, and his critique of the WHO's measures to combat disease are notably unsympathetic: "(..) *does not have the guts to deal with this issue head-on?*"(102). When Dr. Sinskey tries to defend WHO with the actions being taken about communicable diseases, Zobrist tells her: "*Dr. Sinskey, you talk about controlling epidemics as if it's a good thing,*" (104).

The villain Zobrist sees Black Death as a necessity for the sake of the nature to obtain the balance of the nature by death of many: "*the best thing that ever happened to Europe was the Black Death*".(177). For Zobrist, the Black Death was nature's way of correcting an imbalanced ratio of human growth: there were far too many people, most of whom were living filthy, wretched lives, and the plague relentlessly kept it all in check by reducing the population to as low as 50 percent its size in some of the more congested cities.

He believes that the world needs something like that right now or else: "*Under the stress of overpopulation, those who have never considered stealing will become thieves to feed their families. Those who have never considered killing will kill to provide for their young.*" (103)

Zobrist is ideologically bent on forcing nature to correct the repeating imbalance that has escalated ever since. With the Dante-plague-themed messages he left behind, Sinskey fears that the geneticist has set something horrible in motion: a fabricated pandemic, a plague, meant to wipe out most of the earth's population in accordance with Zobrist's own vision for saving humanity and securing its evolutionary future.

Constantinople - Istanbul

Zobrist chose Istanbul to spread the virus: “...a city of opposing forces-religious, secular; ancient, modern; Eastern, Western. Straddling the geographic boundary between Europe and Asia, (...) the bridge from the Old World...to a world that was even older.”(375). Istanbul is a bridge between Europe and Asia; it works as a connection point of the east and west. It is also a highly preferred city for tourism because of its importance in the history of many religions, cultures and empires.

Istanbul, or by the Latin name Constantinople, was the capital city of the Eastern Roman Empire, also named as the Byzantine Empire, and was conquered by the Ottoman Empire in the year 1453.⁷ The city was the heart of the empire and the Christendom. Therefore the fall of Constantinople to the hand of Ottomans, who are Muslims, brought the effect of a catastrophe on the people of the Christendom. The fact that Zobrist chose Istanbul to spread the virus can be analyzed in means of his trying to changing the world right at the place where the Roman Empire fell hence making Istanbul a center associated with the concept of hell through the fallings of empires, populations and a starting point of a new era since the conquest of Istanbul is accepted as the end of middle ages by many historians⁸.

Another fact about Istanbul concerning its history is that the city had “at numerous times in history, succumbed to deadly plagues that killed off enormous portions of its population.” (382).

⁷ Conquest of Constantinople (<http://www.eyewitnesstohistory.com/constantinople.htm>)

⁸ Fall of Constantinople (<http://www.u-s-history.com/pages/h1046.html>)

Because Zobrist has a belief that today's world is so much close to Middle Ages in such concepts, it is not a coincidence that he chose Istanbul as a mark point of the new order he wanted to achieve.

Bertrand Zobrist

Bertrand Zobrist is a character whose actions contradict in a sense of irony. From his perspective, nature can no longer hold itself at a balance and that it is headed towards a living hell. The ironies embedded in Brown's *Inferno* that are correlated with Zobrist can be examined in two aspects: first one is that Zobrist applies to destruction which would bring 'hell' together with it just to avoid his image of 'inferno'. He finds the solution against hell in creating another one: *"Some will recoil in horror, but all salvation comes at a price. One day the world will grasp the beauty of my sacrifice. For I am your Salvation."* (145). While he thinks that the living hell is created by sinners and those acting like God, he tries to avoid this hell by acting like God himself through fertilizing one third of the world's population with his virus.

Another irony which contains both Zobrist and Robert Langdon is the ambiguity of the real hero. Langdon is always Brown's hero who fixes things and avoids further destruction. This time Zobrist is involved, seeing himself as "the salvation". Statistically, Zobrist has proven himself as a potential hero by showing that there is a need for a change but to what extent is deciding on people's fate to reduce population growth acceptable?

Overpopulation occurs because of uncontrollable birth rates happening in underdeveloped/developing countries and causes unbalanced rise of races. Some scientists, rare in number, believe that because of this unbalanced growth after sometime some races will go extinct. Considering many hints embedded throughout the novel, it can be concluded that Zobrist, being one of those scientists, claims that the ones who will become extinct will be the ones

most civilized and educated. On the other hand, the ones to invade the world will be those who are uncivilized, uneducated and of low class. Zobrist believes that world is too precious to give away to the uncivilized races.

Elizabeth Sinskey

All the health problems in the world are examined, analyzed and researched for solutions by World Health Organization, a branch of United Nations. All countries are responsible for attending the meetings and presenting reports about their countries' health status. According to the reports the specialists working at WHO designs solutions to the problems and prepares declarations which are under the control of governments. For this reason one of the main characters of Dan Brown's *Inferno* is the director of WHO; Elizabeth Sinskey. Through this character, Brown shows the insufficiencies and foulness hidden underneath innocent looking masks. He shows the great role WHO has for the *Inferno* through these words said by Zobrist to Sinskey: *"Madness is the WHO staring into the abyss and denying it is there. Madness is an ostrich who sticks her head in the sand while a pack of hyenas closes around her."* (137)

When a pandemic arises, the scientists working under the name of WHO and Center of Disease Control (CDC) goes to the region to take control and find the solution to the problem.

In *Inferno* there is a challenge quite difficult to cope with. Even though WHO has all the power to control all kinds of diseases, when it comes to an airborne disease spreading from a place where millions are visiting, it looks almost impossible to take this pandemic under control. As the director of WHO, Sinskey found herself in a situation where she confronts the actions of the organization she directs and in desperation of knowing that there is nothing she could have done to stop that biological weapon.

Hell for whom?

Symbols differ according to the person analyzing them. The message hidden in them differentiates according to cultural background, religion, gender, race, the psychology of decoder and the ideology he believes in. This diversified meaning makes symbols both strong and weak depending on the way the symbol is used.

In *Inferno*, hell is reflected through characters' eyes in a variety of ways. The way Zobrist defines Hell is different from the way Robert Langdon and Dr. Sinskey does. Just like it is in most Dan Brown novels ("The Da Vinci Code", "Angels and Demons", etc.), Robert Langdon has the talent of seeing the events from all perspectives but takes no side and stays neutral throughout the happenings. Other characters such as Dr. Sinskey and Sienna Brooks are used to help the reader to be able to understand Zobrist's psychology and purpose more, along with the main subject of the story, "overpopulation". Sinskey and Brooks are both used to emphasize the point being come in terms of increasing numbers, both taking part in this as scientists. On the other hand, Sienna plays a role also in getting involved with the psychology in which Zobrist is trapped through explaining the concept of transhumanism: "*(...)a philosophy stating that humans should use all available technologies to engineer our own species to make it stronger.*"(321)

In usual common sense, heaven and hell are created by God as either for awarding or punishing. By whom is the hell mentioned by Zobrist created? Dante's *inferno*, correlating with Zobrist's, is created by no one but the people themselves: It is created as a result of the

seven deadly sins. In this sense, heaven and hell are gone through whilst alive, in the world that we were born into. Inferno is what we experience, or will experience, because of Dante's seven deadly sins coming out on the surface not after we die, instead while we are still alive, fighting to survive.

Conclusion

Dan Brown's *Inferno* differs from his other novels in several ways. Although the character patterns, storytelling and the plot, use of language and locations are similar in his novels, with *Inferno*, Brown chose to interpret a global health issue, that is overpopulation, and make a wake-up call for his readers through fiction.

To reflect his idea of hell, Brown created a scientist villain, one obsessed with Dante, in order to put forward a correlation between population statistics and the uprising of seven deadly sins in creating an 'inferno'. Whereas Sinskey functions as an antagonist who is partly responsible for today's present data concerning population, Langdon, as a protagonist, is responsible for decrypting symbols left behind by the villain mainly using Dante's *Inferno*.

Through Brown's references concerning history, such as the Black Death and the rate at which population numbers change, he supports his villain's idea of the necessity of a happening that would bring back some kind of balance to nature. Although the extent to which Zobrist takes action is disputable in terms of ethics, Brown brings out the reasonable motive for Zobrist's actions by explaining the effects of overpopulation concept over and over with use of Dante's *Inferno* references.

An omission within the novel to be mentioned is the fact that although enough support is presented for the altercation that the world is approaching a catastrophe through overpopulation, not enough disputes take place between characters about sustainable growth and

path necessary for a better world. In this regard, the novel serves merely as a warning call to a sinister global problem rather than aiming to be solution-based.

With this work, Dan Brown has created a hell of his own like Dante did. The main difference between the two images of 'inferno' is that Brown's modernized hell is created and embedded in our living world. Brown's depiction of hell is dreadful because of the idea of chaos invading and capturing the modern world.