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PROJECTION OF MASS EXTERMINATION IN DAN BROWN'S INFERNO: AN APOCALYPTIC STUDY

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Abstract There has been a wave of renewed interest in overpopulation and its solution originating in movies like Soylent Green (1973), Logan's Run (1976), and novels like "Make Room! Make Room!" by Harry Harrison (1966), "The Wanting Seed" by Anthony Burgess (1962), and "The Children of Men" by P.D. James (1992), the concept has exploded as the central theme of multiple modern forms of literature like movies Kingsman: Secret Service (2014), Avengers; Infinity War (2018), to Novels like Inferno and even famous video games like Deus Ex: Human Revolution (2011) and Bioshock Infinite (2013). It is a pressing concern for both the press as well as electronic media; with every paper and news channel having a column or show about it, proposing solutions like increasing production, more efficient use of resources, and birth control to extreme measures like genocide and mass murder. This study aims to analyse the projection of Mass Extermination in Dan Brown's Inferno as "The Final Solution" and the viability of the solution presented therein through the lens of Apocalyptic Theory in general and Malthusian Theory in specific. Analytical, qualitative analysis has been taken up as the research methodology, for gaining a deeper understanding of the nuances, cultural contexts, and meanings embedded in literary works, allowing a more holistic view of the overpopulation treated within the novel. The study's findings show that Dan Brown's Inferno projects

mass extermination as a solution to overpopulation and scarcity of resources; such a solution is illogical and ineffective. Keywords: Extermination, brown, apocalyptic, inferno,

Malthus

Mass Extermination is the removal of a huge population that includes but is not limited to genocide, banishment, or forced migration. The idea was first time presented and implemented by Nazi Germany. Although at first it was just an innocent expression like reducing the population to improve progress in Germany what followed through was a history written in blood and violence. (Black, 2003) It started by using poison gas on patients with mental and physical disabilities as they were unable to contribute to society and therefore were considered a burden, followed by mass killing and placing in concentration camps of the Jew population in Germany and any states it had occupied at the time, which is known in history as "the holocaust", the term formulated for this brutality was called 'The Final Solution' by Extermination Nazis. Mass has been presented literature extensively. in lt originated in dystopian literature that emerged after World War-I, the emergence of Nazi Germany and Stalinist Russia had broken the mirror of optimism built in the enlightenment of Renaissance and 18thcentury progress in reason and science. From The Handmaid's Tale (1985) to Inferno (2013) there is a long list of literature treating the topic in different lights, from calling it the apex of brutality to the last hope of humanity and earth's survival. Projection is a defensive technique wherein the thoughts of an entity that may be angry and unwanted are displaced onto the other and are then accused of harboring belligerent intentions. Apocalyptic Study is the study of a piece of literature under the lens of Apocalyptic Theory. It is an ensemble of many theories which suggest different ways the world may end or that may lead to the collapse of human civilization. (John Joseph Collins et al., 2000) Inferno originates from the Italian word "Infernus" which means hellfire. ("Oxford Latin Dictionary (2nd Edition)," 2012). The

word is used to depict the severity of the calamity that may befall humankind due to overpopulation, and by the negative protagonist of the novel the Zobrist for his creation; the virus that is extremely effective at reducing the population like a raging hellfire. the current project is an attempt to establish the use of literature like novels but is applicable all the same to movies, songs, television, and other forms of literature for establishing certain beliefs in human minds that may not be easily acceptable normally but, are fed to the public through conceit and sweet words. Although this research is limited in scope, studying the ideas of mass extermination in Dan Brown's Inferno. But the same principle is applicable in other forms of literature and ideas like rising anti-Islamic ideologies, nationalistic sentiments, and other senile ideas.

Research Questions

- Is the projection of overpopulation as an immediate crisis in Dan Brown's *Inferno* to further his goal of justifying extreme measures like mass extermination?
- 2. What is "The Final Solution" offered by Dan Brown's *Inferno* for overpopulation as well as its moral aspects and effectiveness?

Research Objectives

- 1. To analyze if Dan Brown's *Inferno* is projecting overpopulation as an immediate crisis to further his goal of justifying extreme measures like mass extermination.
- 2. To analyze "The Final Solution" offered by Dan Brown's *Inferno*, focusing on its moral aspects and effectiveness.

Research Methodology

The research is qualitative and analytical. The study analyses the projection of mass extermination in *Inferno* by Dan Brown. The data is collected from the novel itself. The study used qualitative textual analysis through the Apocalyptic/Malthusian Theoretical Framework as a research method for the data analysis. Qualitative analysis involves a range of methodologies, including contextual analysis; which allows researchers to understand the context in which a piece of literature was created or the context within which certain themes emerged, thematic analysis; involves identifying, analyzing, and reporting patterns in recurring ideas, motifs, or concept, discourse analysis; aim to explore the meanings behind words, symbols, or actions, and narrative analysis; to uncover underlying meanings, patterns, and structures.

Problem Statement

The world population is rising at exponential rates and will soon over-grow the resources which will lead to starvation and ultimately apocalypse, such an analogy can be found in the population explosion of African elephants leading to their localized extinction and their population management through mass killing in Zimbabwe and other South African countries. It is estimated that almost 50,000 African elephants were killed in Zimbabwe only, between 1966 and 1996 (Slotow, 2008). Scientists and scholars around the globe are busy trying to find a solution. Dan Brown in Inferno grapples with this problem and comes up with a similar solution of sterilizing one-third of the population that although unique, opens a Pandora's box of moral implications, and issues of effectiveness.

Significance of the Study

The study analyses "The Final Solution" to control the problem of overpopulation as presented by Dan Brown in *Inferno*. The study will provide insight into practicality and moral implications in a real-world scenario. The study will further provide insight into how literature is used to instill certain ideas into the minds of the people through sugarcoating and through manipulation that they may otherwise reject and resist and how they are presented to be beneficial when in reality they are very troublesome. Although this study is limited in scope to the novel *Inferno*. But the same principle is extendable to other forms of literature and ideas such as how different forms of literature are being used in presenting Islamophobia, Gender segregation, and anti-Semitism, to the public and their minds are being affected.

Literature Review

Robert Malthus argued that any species in the world reproduces at an exponential rate while resources regenerate at an excessively slow rate which results in a misbalance of the two. This results in the eradication of resources which results in complete annihilation of that species. He argued that since the human population is growing at such a remarkable pace very soon it would become just too much for the earth to support. The power of population is so superior to the power of the earth to produce subsistence for man that premature death must in some shape or other visit humans. The vices of mankind are active and able ministers of depopulation. They are the precursors in the great army of destruction and often finish the dreadful work themselves. But should they fail in this war of extermination, sickly seasons, epidemics, pestilence, and plague advance in terrific array, and sweep off their thousands and tens of thousands. Should success be still incomplete, gigantic inevitable famine stalks in the rear, and with one mighty blow levels the population with the food of the world (Malthus, T. R, 1798)? This will lead to overconsumption of the resources. Humans would consume even the resource share of other species leading to their extinction until the entire ecosystem of the planet collapses, causing an apocalypse or the end of humans (Ashraf, Quamrul & Galor, 2008). Malthusian theory further found solace in an experiment called 'Universe 25' or 'The Mouse Utopia' conducted by John B. Calhoun. He provided limitless food, multiple levels, and secluded little rodent condominiums to mice and rats. The out-of-control overcrowding eventually led to population collapse and seemingly sinister behavior patterns. At the apex of the population, mice spent most time in the company of hundreds of other mice. They would gather in the main squares to be fed, occasionally attacking each other. Most females did not carry pregnancies to term, and those did simply forget about their babies. A population Calhoun called, "the beautiful ones" was found in a few secluded places, generally guarded by one male. The females and few males inside did not breed fight or do anything except eat, groom, and sleep. When the population started to decline the beautiful ones escaped violence and death, but also lost touch with social behaviors entirely, including having sex and caring for their young (Calhoun, 1973). Malthus' claim regarding the relationship between population growth and productive capacity has been criticized harshly. Malthus propounded a fixed amount of farmland and a growing population, where marginal productivity decline would cause people to live at an almost constant subsistence level. Simon (1977), on the other hand, emphasizes the long-term benefits of population growth and claims the negative effect of population growth on living conditions in the short-term owing to reduced yields and temporary burden on society, but the population increased because of developments and economies of scale, would have a positive impact on living standards in the long run. Further in the theory, it has been emphasized that the growth rate of the population is dependent on the economic growth rate, ignoring other economic factors. Other factors such as cultural structure and education level may also affect population growth (Üzümcü, 2018, p.115). Although Malthusian theory was remarkable and distinctive, it was erroneous in overlooking a point of enormous importance; that is scientific progress and technological

advancement. According to R. Malthus human population would go extinct after the world population reaches a billion, but we still survive today showing the loopholes in this theory. This was taken up in Boserupian theory countering Malthusian theory which states that when humans face severe conditions, they respond by increasing production, or rising mortality rate, or a declining birth rate for survival (Peura, 2013). Malthus did not present a problem only as he was not a cynic but a thinker, so he presented a wide pre-set of solutions as well which he divided into approaches and models.

The First Approach: Changing Human Behaviour

It states that human reproduction is not an autonomous or natural phenomenon but a conscious effort that can be controlled. He argues that the larger a family gets the more constrained becomes its resources and it has to live in misery. It included four models by Malthus: the worker, the utilitarian, the procreator, and the consumer.

The Worker Model

It [the principle of population] keeps the inhabitants of the earth always fully up to the level of the means of subsistence; and is constantly acting upon man as a powerful stimulus, urging him to the further cultivation of the earth, and to enable it, consequently, to support a more extended population. (Malthus, 1798). So, for Malthus, one solution for the population problem was working hard as a human is sluggish by birth and only incentives or extreme needs can make him work hard which increases subsistence. Whenever he is threatened by scarcity of resources, he manages by working harder.

The Utilitarian Model

Malthus argues here that the distribution of wealth from rich to poor is not going to improve anybody's life as it cannot bring any greater good. The poor people who will get more money will increase their family likewise and the result will be the same. On the other hand, if the economy is competitive the workers or lower class will be drawn to not marry and make families which will decrease their number, increase output, and thus improve their conditions. But though the rich by unfair combinations contribute frequently to prolonging a season of distress among the poor, no possible form of society could prevent the almost constant action of misery, upon a great part of mankind (Malthus, 1798).

The Procreator Model

Malthus suggests that humans, (although he used the word Christians keep in view his readers at the time) should postpone marriages and try to establish themselves financially. He also talked about chastity and its importance in population control. *These considerations are calculated to prevent and certainly do prevent, a great number in all civilized nations from pursuing the dictate of nature in an early attachment to one woman.* (Malthus, 1798).

The Consumer Model

Malthus argues that population can be controlled by changing the behavior of humans toward subsistence consumption that is whether they tend to have larger families or a more luxurious and comfortable life. The increase in wages can either result in bigger families or spent on luxuries and comforts which would ultimately result in an acceleration in increase of subsistence or income. "the prospect of a good meal, a warm house and a comfortable fireside in the evening" (Malthus, 1826).

Second Approach: Changing the Quantity of Subsistence

This approach states that the alternative solution to the population problem is an increase in subsistence as first there were hunting and gathering societies, then people formed pastoral societies, the third stage was farming, and then Industrialization arrived. "In the actual circumstances of every country, the principle of population seems to be always ready to exert nearly its full force..." (Malthus, 1826).

Third Approach: Changing the Structure of the Economy

This approach makes it requisite to change economic models to solve population problems. Following are some such models of the economy:

The Specialized Economy

Malthus argues that a country selfsufficient in manufacturing and commerce can buy food and other sustenance from abroad that it cannot grow itself. He gave the example of Switzerland which is frozen and cannot produce its sustenance.

... such is the force of industry and commerce that using them many more inhabitants may be maintained in a country than the produce of the lands can support, as their produce may be brought from a distance. (Wallace, 1753). By industrial economies, western countries can utilize more products like coffee than their producing countries in Africa can.

The Diversified and Balanced Economy

Malthus argued that there must be a balance in the economy that is there must be a balance between food supply and population and if the population overgrew the food supply it would lead to starvation and reduce population. So, there is no solution without human suffering. Similarly, he asked for a balance between agriculture and cattle farming.

Malthus Accounting Framework

It was Robert Malthus who gave the concept of economic growth in terms of balance between production and consumption. He extended the argument to; Labour and luxury, saving and income, and Demand and supply (Rutherford, 2007). How overpopulation of a single species affects an ecosystem can be observed in Africa. The giant animals called elephants that roam through its jungles may outgrow their resources as they are quite large and strong and therefore are mostly ignored by the predators but as a last resort. A single elephant is estimated to consume 200-600 pounds of food and 50 gallons of water spending 12-18 hours feeding daily (Slotow, Rob & Whyte, 2008). This results in the misbalance of the ecosystem; the situation keeps worsening until there is nothing to eat in the entire area which leads to the extinction of entire life in that region including the great tusks. To control this problem the authorities came up with a solution that is rather immoral to a majority of the world but very effective. The term "culling" was introduced which meant killing an entire herd of elephants. This controlled the elephants population in the locality and no psychologically disturbed elephants escaped into the wild to kill or harm other animals or human beings (Slotow, Rob & Whyte, 2008). Inferno incorporates many scientific contemporary knowledge and personalities like EMPERIE acronym for 'European Management Platform for **Emerging and Re-emerging Infectious Disease** Entities' and Fouchier who is their chief scientific investigator. This denotes a major overlap between science and literature refuting the claim that these are two separate fields when both scientists and writers quote each other's work to support their own (Zwart, 2015). Population and environmental pollution or climate are very closely related or interconnected, but they are such sensitive topics that discussions held on them on worldwide platforms like the United Nations and the European Union have created more problems than solutions. The problem lies in the inherent world economic and resource distribution system. The rich countries are not ready to reduce emissions because they do not want to lose their Hegemony yet underdeveloped countries refrain from any action claiming that they are being targeted for their economic weakness and higher birth rates (Lendrum, & Narasimhan, 2009). The

subject is treated in Mathew Vaughn's 'Kingsman: The Secret Service' in which Valentine presents a view that when a living organism is infected by a virus or a pathogen, it gets a fever, wherein the body of the infected organism tries to raise temperature to eradicate the virus. So, we humans are like a virus slowly eating away at the planet Earth, consuming its resources, causing pollution, and destroying it, and global warming is the planet trying to raise its temperature. Now either way if we kill the planet or the planet kills us first. We are dead all the same (Vaughn, 2014). It can further be found in James Lovelock's hypothesis wherein he states that the earth is "a self-regulating system, analogous to a living organism" (Garrard, 2011). He states that the entire world is a single machine or ecosystem in which everything acts in perfect harmony to balance out the system, including animals, plants, temperature, sea level, etc. (Sagan & Margulis 353). Zobrist the antagonist in Dan Brown's Inferno does not want to kill anyone, even his gift "the Inferno" is not the ultimate solution but a temporary patch. The sterilization of two-thirds population will allow humans enough time to realize the problem and find a solution to control humans' inclination to reproduce and help them evolve (Zwart, 2015).

Discussion

Apocalyptic theory originated in religions but was later taken up by scientists and researchers, it is based upon the notion that the world as we know will come to an end due to some catastrophe like the collision of an asteroid with the earth, an earthquake, or a tsunami (Bull, 1996). The Very first page of the novel opens with a quote from Dante Alighieri's poem *Inferno* "The hottest places of hell are reserved for those who, in a period of moral crisis maintain their neutrality" (Brown, 2013). This quote is the central ideology of the whole novel, that is to take an initiative in time, instead of holding talks and meetings. To do something about the menace of overpopulation, or we will see the worst of hell right here on earth. In the Prologue Brown (2013) writes, "O, Wilful ignorant! Do you not see the future? Do you not grasp the splendor of my creation? The necessity?" and at the end of the prologue he writes Dearest God, I pray the world remembers my name not as a monstrous sinner, but as the glorious savior you know I truly am. I pray Mankind will understand the aift I leave behind. My aift is the future. My gift is salvation. My gift is the Inferno (Brown, 2013, P. 06-07). Dan Brown is foreshadowing the coming events. He is talking about some impending events of paramount importance that the people do not understand which makes some radical decisions necessary. He is explaining the Zobrist's position from the very start lest people start thinking of him as a villain, thus creating his perception of a savior saving the world through his hellfire, which is ironic. In chapter 01 of his novel Brown depicts the picture of the world if left to its own under the burden of overpopulation. When Langdon raised his eves again to the veiled woman, the bodies at her feet had multiplied. There were hundreds of them now, maybe thousands, some still alive, writhing in agony, dying unthinkable deaths... consumed by fire, buried in feces, devouring one another. He could hear the mournful cries of human suffering echoing across the water (Brown, 2013, P. 10). Here Brown has created a painful picture of a world of overpopulation much like that of hell in Dante Alighieri's Divine Comedy, containing death, agony, and violence. The picture is also closer to the slums of Africa where the population is much higher than the resources thus resulting in war, famine, death, suffering, and even cannibalism. In chapter 10 Brown alludes to the black plague that raged across Europe in 1300s A.D through Zobrist "These are the new Dark Ages. Centuries ago, Europe was in the depths of its misery---the population

huddled. starving, mired in sin and hopelessness. They were as a congested forest, suffocated by deadwood, awaiting God's lightning strike---the spark that would finally ignite the fire that would rage across the land and clear the deadwood, once again bringing sunshine to the healthy roots. Culling is God's Natural Order. Ask yourself, what followed the Black Death? We all know the answer. The Renaissance. Rebirth. It has always been this way. Death is followed by birth. To reach paradise, man must pass through an inferno. This, the master taught us. And yet the silver-haired ignorant dare call me a monster? Does she still not grasp the mathematics of the future? The horrors it will bring? I am the Shade. I am your Salvation. And so, I stand, deep within this cavern, gazing out across the lagoon that reflects no stars. Here in this sunken place, Inferno smolders beneath the waters. Soon it will burst into flames. And when it does, nothing on earth will be able to stop it" (Brown, 2013, P. 47-48). Renaissance, an era of rebirth, an era of discovery. Changing the world, as we know it. Which Brown uses as an inspiration to remove a portion of the population without accounting for the suffering that accompanied it. The solution presented by Brown is clear in these lines "Assuming Bertrand's virus has taken hold, one-third of the world's population is now sterile ... and one-third of the population will continue to be sterile for all time. The effect would be like that of a recessive gene... which gets passed along to all offspring, and yet exerts its influence in only a small percentage of them." He further explains it "There will be no hospitals overflowing with the sick and dying, no bodies rotting in the streets, and no anguished survivors enduring the death of loved ones. Humans will simply stop having so many babies. Our planet will experience a steady reduction in our birth rate until the population curve inverts, and our total number begins to decrease" (Brown, 2013, P.

438-439). He further clarifies that there will be no death, no war no bodies rotting in the streets, and no pain. But he overlooks many important points. Viruses may be excellent vectors but there is only one problem they can mutate which is to change their DNA or RNA and thus change their intended function. Therefore, a virus that may have been designed to sterile one-third population may sterile all of it, leading to human extinction thus doing what it was exactly designed to prevent (Sanjuán, & Domingo-Calap, 2016). Furthermore, as the virus is affecting randomly it may affect one gender more than the other thus although technically it has sterilized one-third the humanity but technically it has sterilized more than that (Thomas, Ehrhardt, & Kay, 2003). Also, as human beings have sexual reproduction, and if such a virus sterilizes one-third population the population doesn't need to be paired in such a way that only one-third population is affected. In fact, in a real scenario in most cases, a sterilized person may have been paired with a normal one but the result would be more than half the population not reproducing.

Triage

From a moral point of view Brown states, "Triage is always a messy process. A man who serves the leg of a three-year-old child is a horrific criminal...until that man is a doctor who saves the child from gangrene. Sometimes the only choice is the lesser of two evils" (Brown, 2013, P. 437). Further, he states "Isn't it possible that nature found a different way this time? Instead of sending us horrific disasters and misery ... maybe nature, through the process of evolution, created a scientist who invented a different method of decreasing our numbers over time. No plagues. No death. Just a species more in tune with its environment" (Brown, 2013, P. 453-454). Here Brown is well aware of and acknowledges the immorality of his concept but presents it as a necessity like cutting off a limb to save a life. But is it the case? Brown is taking the problem in a very literal way as if reproduction works in a 1:1 mathematical progression, but that is not the case.

The First Approach: Changing Human Behaviour

The whole solution can backfire and may have quite the opposite result. That is, if suddenly many people stop having children because of medical reasons. People who have fewer children due to economic constraints now may start having more children as the population-to-resource ratio has decreased but they may not know when to stop. So, the population may fall in the short term but will rise in the long term. Furthermore, it may divide society into two parts; haves and havenots as described by Carl Marx that may lead to a clash between them. Furthermore, children may then be seen as a luxury and the illegal child trade will top the chart and even the governments will be forced to kneel before the demands of their people, thus the wars that were fought for oil may be fought for children. The children may become a commodity in such a world. Then there is the problem of surrogacy where poor people will get exploited in such conditions to act like stock animals providing children for those who cannot have children themselves in return for money. The problem of manpower will also prevail as there will be more old people who are dependent and fewer young people who are producers. So, there will be more dependent people than workers which will lead to market crashes in the international economy, and thus the conditions of hunger, famine, war, death, chaos, and pain that Brown wants to avoid may very well spread.

The Worker Model

Applying Malthusian Approaches and models to the novel. First of all, under the lens of The Worker Model, if Brown's final solution is executed the population will remain the same for the time being but the

old aged population would suddenly grow to gigantic proportions while the younger population would suddenly fall this would result in a sudden loss of essential labor due to which resources generation of the world will suddenly collapse leading to turmoil and apocalypse rather than avoiding it.

The Utilitarian Model

Applying The Utilitarian Model; the final solution may have a blowback that although fewer people will be capable of reproduction, the fewer people capable of reproduction will have lesser economic constraints which will increase their likelihood of having much larger families thus population may show minor down curve and then rise much higher than before. Furthermore, children will become commodities as they will not be easily available, so such families might even sell children and have more in the process.

The Consumer Model

Applying The Consumer Model; our perception towards something as desirable or undesirable is collective; that is, we tend to like or dislike what others like or dislike as we think like a society. For example, we tend to purchase the clothes brand our friends buy or buy the mobile that is trending on the media. Thus, as there will be a huge population longing for children, the couples capable of reproduction will also have a higher desire for children. This would result in higher reproduction and population.

The Second Approach;

Changing the Subsistence would suggest that necessity is the mother of invention. That is human progress is because of a race condition, when human beings are threatened by a reduction in subsistence we tend to evolve and progress, using our minds to make better, more efficient societies. Since all the inventions are

usually made by younger, brighter, and more energetic minds. The lesser availability of young, fresh minds would result in intellectual deficiency which would slow down human progress and thus resource generation which would result in a misbalance between resource and population.

The Third Approach: Changing the Structure of the Economy

Applying The Third Approach: Changing the Structure of the Economy, the virus spreads through a carrier as it is airborne. Thus, the virus will only spread in the countries with a lot of travel and less developed countries will thus be less affected. This would result in population disparity to further increase between the countries. But since the young population of developed countries will collapse their subsistence production will collapse as well. This would render them unable to hold their power, the world power system would collapse, and wars would ensue.

Conclusion

Brown provides sterilization of two-thirds of the population using vector virus as "The Final Solution". Stating that the whole problem of overpopulation may very well be solved without any war, famine, death, or suffering. But it will not only cause all the above but at the same time will not even be an effective solution to the overpopulation pandemic. This paper demonstrates that the only thing it will do is a sudden fall in the young population which would result in less labour, decreasing resource production. The fewer people capable of reproduction will increase their family size which may result in an overall increase in population instead of a decrease. The decrease in the number of younger, fresher minds would also decrease the amount of ingenuity and will slow down world progress and development. This would result in a decrease in subsistence as well. Finally, the world power system may also collapse due to such catastrophic changes leading to wars and suffering.

Recommendations

Any attempt to immediately reduce or eliminate the extra population would have serious consequences that would rather destroy the very world we are keen to save. Keeping in view the extremities of any radical step, we must make calculated and practical decisions of helping nature to heal, rather than attempt to try and correct it ourselves. For we will cause more damage than good. The first and foremost is to change our attitude of ownership of this world. We must use limited resources responsibly and avoid waste.

There should be a collaboration of technology and mutual trust must prevail, so we can use billions of dollars for finding better alternates of energy and other needs that are wasted on armaments.

Innovation/Research Gap:

Through meticulous analysis of Dan Brown's 'Inferno' and its portrayal of mass extermination as 'The Final Solution' to the much-debated global issue of overpopulation, this research contributes a nuanced perspective to the ongoing discourse. Employing an analytical and qualitative approach, much rooted in the rich traditions of Apocalyptic Theory and Malthusian Theory, for unraveling the complexities embedded in the narrative. This exploration not only sheds light on the logical and ethical aspects of such extreme solutions but challenges prevailing notions proposed by popular culture. By dissecting the cultural contexts and meanings within the novel, this study empowers readers through a deeper understanding of the issues at hand, with the goal of informed discourse and critical thinking. In doing so, it seamlessly aligns with the overarching goal of 'Empowering humanity with knowledge through research,' offering a valuable contribution to the global conversation population-related on challenges."

References

- Ashraf, Quamrul & Galor, Oded. (2008). Dynamics and Stagnation in the Malthusian Epoch: Theory and Evidence.
- Ashraf, Quamrul & Galor, Oded. (2008). Malthusian Population Dynamics: Theory and Evidence.
- Black, P. (2003). The Holocaust Encyclopedia. Edited by Walter Laqueur and Judith Tydor Baumel. New Haven: Yale University Press. 2001. Pp. xxxix + 766. \$60.00. ISBN 0-300-08432-3. Central European History, 36(2), 307–312. https://doi.org/10.1017/s000893890000
 - 6877
- Brown, Dan. (2013). "Inferno." Random House Large Print.
- Bull, Malcolm. (1996). "Apocalypse Theory and the Ends of the World."
- Calhoun, John. (1973). "Death Squared: The Explosive Growth and Demise of a Mouse Population."
- Garrard, Greg. (2007). Ecocriticism. Routledge.
- John Joseph Collins, McGinn, B., & Stein, S. J. (2000). Encyclopedia of Apocalypticism. Continuum.
- Malthus, T. R. (1826). An Essay on the Principle of Population. (Vol. 2).
- Malthus, T. R. (1926). First essay on population, 1798. Macmillan & Company Limited.
- Oxford Latin Dictionary (2nd edition). (2012). Reference Reviews, 26(7), 38–40. https://doi.org/10.1108/0950412121127 1004
- Peura, P. (2013). "From Malthus to sustainable energy—Theoretical orientations to reforming the energy sector. Renewable and Sustainable Energy Reviews, 19, 309-327."
- Rutherford, D. (2007). "Malthus and Three Approaches to Solving the Population Problem." I.N.E.D. ISBN: 9782733230794.
- Sagan, Dorion and Lynn Margulis. (1993). "God, Gaia and Biophilia." The Biophilia

Hypothesis, edited by Stephen R. Keller and Edward O Wilson, Island Press, pp. 345-364.

- Sanjuán, R., & Domingo-Calap, P. (2016). Mechanisms of viral mutation. Cellular and molecular life sciences: CMLS, 73(23), 4433–4448. doi:10.1007/s00018-016-2299-6
- Simon, J. L. (1977). The economics of population growth. Princeton University Press.
- Slotow, Rob & Whyte, I & Hofmeyr, M & Kerley, Graham & Conway, T & Scholes, Robert. (2008). "Lethal management of elephants. Elephant Management: A Scientific Assessment for South Africa." 370-405.
- Thomas, C. E., Ehrhardt, A., & Kay, M. A. (2003). Progress and problems with the use of viral vectors for gene therapy. Nature Reviews Genetics, 4(5), 346.
- United Nations. (2019). https://www.un.org/en/climatechange/u n-climate-summit-2019.shtml
- Üzümcü, A. (2018). İktisadi büyüme. (3rd Ed.). Istanbul: Beta Yayınevi
- Vaughn, M. (Director). (2014). Kingsman: The Secret Service [Film]. Marv Films.
- Wallace, R. (1753). A dissertation on the numbers of mankind in ancient and modern times: in which the superior populousness of antiquity is maintained. Edinburgh: G. Hamilton and J, Balbour.
- Zwart, H. (2015). "Viral pandemics, transhumanism, and bio-art gadgets: a Lacanian reading of Dan Brown's inferno."