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Christian Ethics toward Artificial Intelligence and Its Impacts on Humanity

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ABSTRACT: Innovation in Artificial Intelligence raise a plethora of moral concerns, the majority of which are being thoughtfully explored by organizations ranging from small societal groups to large organizations and governments. Nevertheless, they raise ethical concerns that are not being adequately addressed. This research offers a comprehensive overview of the main ethical issues linked to the impact of Artificial Intelligence on human society from the perspective of Christian ethics. Christian ethics stresses human individuals' intrinsic dignity as being made in the image of God (Imago Dei). It emphasizes the relevance of human dignity, well-being, and autonomy in the development and implementation of Artificial Intelligence. Having established a number of potential qualities of human identity, we then turn to the Scriptures in order to discover some biblical notions that may be helpful in addressing Artificial Intelligence and the meaning of being human, organized around the themes of creation, fall, and redemption. The report concludes with a call for accountability and humility.

Keywords: Christian Ethics, Artificial Intelligence, Humanity

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INTRODUCTION

We live in an age where technology plays a crucial part in human life (Szymkowiak et al., 2021). According to Murad et al. (2019), "A study by Goldman Sachs found that almost half of generation Z are connected online for 10 hours a day or more." Another study revealed that one-fifth of generation Z members have experienced negative effects when deprived of their smartphones devices (Hood, 2020). In recent years, technology has increasingly been used to educate youngsters while their parents are busy at work (Williamson et al., 2020). However, the development of Artificial Intelligence will unquestionably alter society and influence numerous spheres of life in ways that have never been seen or anticipated.

Since Turing, when the topic of whether machines can think emerged, we have been entering an era of a knowledge revolution, in which the power of a nation is decided not by the number of its warriors but by the knowledge it holds. Stephen Hawking has warned us in this light that, "the development of full artificial intelligence could spell the end of the human race." Furthermore, Elon Musk, a prominent technology entrepreneur, has stated that Artificial Intelligence is "our biggest existential threat" (Cellan-Jones, 2014). Delgado (2018) has also emphasized that Artificial Intelligence algorithms can gradually learn human behavior to the point where they know individuals better than they know themselves. These cautions from Artificial Intelligence scientists should not be disregarded. Therefore, it is crucial to explore how Artificial Intelligence impacts humanity and to consider the ethical perspective for addressing these challenges.

One of the most important issues to consider is who will benefit from this technological revolution. It is evident that those in positions of authority will benefit the most. The capital owners are the most obvious group to benefit from this revolution. Kaplan (2016) has argued that, Artificial Intelligence accelerates the replacement of capital for labor, so those with capital will benefit at the expense of humans whose main asset is their ability to work. Income inequality is already a pressing social issue, and is likely to get worse. In the near future, robots will replace the works of humans in houses, factories, hospitals, schools, etc.

In addition to the threat posed by capital owners, there is an even greater concern in the form of technologically superior nations. According to M.K. Spencer (2019), Vladimir Putin, the President of Russia, has emphasized that Artificial Intelligence is not only the future for Russia, but for all of humanity. While Artificial Intelligence presents tremendous opportunities, it also carries unpredictable threats. The nation that emerges as the leader in the field of Artificial Intelligence will likely become the dominant power in the world. The primary objectives of Artificial Intelligence agents typically involve sensing, modeling, planning, and action. However, current applications of Artificial Intelligence encompass a wide range of areas, including perception, text analysis, natural language processing (NLP), logical reasoning, game-playing, decision support systems, data analytics, predictive analytics, autonomous vehicles, and various forms of robotics (Müller, 2020).

Facebook, Google, Microsoft, Amazon, and many others have become an integral part of people's daily lives. Li and Du (2008) emphasized the favorable effects of these technologies on society, underscoring the widespread integration of Artificial Intelligence into various aspects of our daily lives, such as education, healthcare, and telecommunications. The remarkable from transformations resulting Artificial Intelligence technologies are readily apparent and palpable. Artificial Intelligence has empowered computers to possess diverse, adaptable, and userfriendly interfaces, facilitating seamless and natural communication with individuals. Furthermore, the incorporation of embedded computers in domestic appliances has led to their intellectualization and automation, liberating individuals from menial

household tasks. Additionally, Artificial Intelligence technologies are assisting people in areas like healthcare and children's education (Li & Du, 2008).

With the vast expanse of the internet, these companies assist users in accessing accurate and useful information. They have transformed conventional communication methods. Voice calls and handwritten text messages have won over the hearts of communicators. Additionally, as the intelligence capabilities of mobile phones continue to grow, they are becoming increasingly personalized and user-friendly. However, many individuals are unaware of the pervasive presence of surveillance systems, face recognition technology, and extensive data collection in the modern world. M.K. Spencer (2019) emphasizes that humanity has gone down a dangerous path when Amazon sold facial recognition technology to police in 2018. Today, the global population relies on the efficiency of technology without giving sufficient consideration to the security of their personal data. In the realm of Artificial Intelligence's deep learning systems, personal health data is stored in within these systems. Behind all the conveniences it offered, M.K. Spencer (2019) further reminded, using machine learning for lethal purposes is a notable example in 2018. The increasing involvement of tech companies in healthcare means they have access to individuals' sensitive "on and off" data. This development raises the alarming vulnerability that personal data can be hacked.

The issue for Christians lies in their perspective on Artificial Intelligence and its impact on humanity. Given the fact that Artificial Intelligence now exists and directly interacts with humans, there is a need for ethical studies from a theological standpoint. Such studies are essential for engaging in discourse and providing theological insights. Ethical studies contribute to an endeavor to present a comprehensive understanding of reality (Salurante, 2021). Therefore, this research was conducted as a form of Christian ethical study on Artificial Intelligence and its effects on humanity.

METHOD

This article employs descriptive research with a qualitative approach; hence, this research method is regarded as descriptive qualitative research. The qualitative descriptive method is a research method based on the philosophy of positivism which is used to examine the state of a natural object. In qualitative research, the researcher becomes the key instrument. The data collection technique is done by triangulation, data analysis is inductive. Qualitative research emphasizes meaning rather than generalization. The objective of qualitative descriptive research is to describe, explain, and answer research questions in greater detail by studying as much as possible about an individual, group, or event. Humans are the research instruments in qualitative research, and the results are written in the form of words or statements that correspond to the actual situation. (Gilbert et al., 2018; Lambert & Lambert, 2021; Merriam, 2009; Sugiyono, 2013).

This study's analysis begins with a discourse on humanity's response to the risks and challenges of our time, specifically the advancement of Artificial Intelligence. Within this discussion, we will delve into the Ethics of Care: the emergence of a generation that is more machine-like and less human. This section aims to describe and elucidate the human condition in relation to the progress of Artificial Intelligence and the rise of the Less-Humans phenomenon, particularly among the Alpha and Z generations. In the synthesis of this discussion, it describes how human life ethically becomes the image of God in light of Christian values.

RESULT AND DISCUSSION

Humanity is in Danger

If solely the goal of conquering the world were permitted, ethics and the freedom of individual rights would likely be prohibited. There exist massive weapons and tools intended solely to control the people. How can humanity live in peace

knowing that they could be attacked at any moment? As argued by J. Spencer (2022), this truth becomes increasingly evident with each passing day. Killer drones serve as an initial example, but the realm of autonomous weapons encompasses a wide spectrum in a world where manipulation and exploitation for profit occur from all sides. If left unchecked, the military organizations and national security agencies of our world are unlikely to utilize Artificial Intelligence in a benevolent manner.

There are too many military applications to list, and it may be harmful to do so. The popular imagination conjures up images of terminator-style robotic soldiers galloping around a battlefield filled with lethal weapons, but the reality is much different. Military robots are not designed to simply wield weapons; they are weapons in themselves. Examples of such technologies include guns that can independently identify and engage targets, aerial drones capable of accurately delivering explosives to specific locations, and landmines that only detonate when certain enemy vehicles come within range.

Kaplan (2016) disclosed that the goal of many Artificial Intelligence projects is for them to operate without human intervention or supervision, make independent decisions, and adapt to varying conditions. However, it raises concerns about the precautions in place if this technology becomes too powerful and starts to dominate humanity in the future. As Purkayastha (2017) has stated that the robots we produce may deem us obsolete model and deserving of "retirement." Several researchers in Artificial Intelligence have claimed that this is unachievable because machines are still machines under human control. One of them is Yan LeCun, the director of Artificial Intelligence Research at Facebook, who asserts that this perspective is unfounded when considering the most recent advancements in Artificial Intelligence research.

LeCun (in Sofge, 2015) explains that the general public remains largely unaware of the simplicity of the systems we currently design, and regrettably, unfounded fears about Artificial

Intelligence are propagated by some media outlets and even scientists. We would be baffled if we could instantly develop machines with the intelligence of a mouse, but we are still quite a distance from that point. Nonetheless, there are already various technological applications for these algorithms, and more will emerge in the future. He firmly convinced that humanity will someday develop technology that is, for the most part, as intelligent as people (Sofge, 2015). Le Cun (in Sofge, 2015) continued to emphasize that this will occur in the extremely distant in the future, rendering the current topic largely irrelevant. As the subject becomes significant, it will absolutely be necessary to bring together scientists, philosophers, and jurists to establish the most effective way to prevent science fiction-like bad repercussions (Sofge, 2015).

As explained by Bostrom (2014), many influential voices have attempted to downplay the negative effects of Artificial Intelligence because far too much effort has been invested in these inventions. For those who have participated in or followed the research, this is an extremely intriguing new Artificial Intelligence technique. Even though there is discussion concerning ethics and safety, the outcome is already determined. Too much effort has been invested to turn back now. Considering it has taken more than a century for Artificial Intelligence researchers to achieve human-level artificial general intelligence, it seems improbable that they will abruptly forsake their efforts just when they are poised to bear fruit (Bostrom, 2014).

However, other researchers' concerns concerning machines taking over the planet are not unfounded. Bostrom (2014) mentions the concept of a "treacherous run," where the dynamics change when a previously successful strategy suddenly becomes counterproductive. He states, "we observe here how it could be the case that when dumb, smarter is safer; yet when smart, smarter is more dangerous" (Bostrom, 2014). Furthermore, he suggests that a superintelligence project possesses significant power and would likely have a tactical

advantage. However, it is the system itself where immediate power resides (Bostrom, 2014).

A powerful machine Artificial Intelligence might be an extraordinarily powerful agent, capable of expressing itself effectively against both the project that generated it and the global community. This aspect is of utmost importance. Strong Artificial Intelligence may appear out of reach, but that does not mean it cannot be achieved. Just as when Turing initially posed the question, "Can machines think?" prior to the invention's inception, it was unimaginable, and now the majority of the world's population is enthralled by the advancement of technology.

Although many have argued for the benefits of Artificial Intelligence, a closer examination reveals that technology primarily benefits the wealthy and the state. It is governed by the market and the military system. Artificial Intelligence will validate the 'winner takes all' system, while at the same time, for the majority, robots will soon take over our jobs, hence widening the divide between the rich and the poor. In addition, it will place individual freedom under the control of the state, making it impossible to escape the surveillance systems that surround us. It is also likely that humanity may be facing the threat of World War III. The last threat emanates from the machine itself, which will become super intelligent and super powerful. In this scenario, the machine will govern and destroy the world. As such, it is essential to consider Artificial Intelligence in light of Christian ethics, as it is a significant ethical issue. Artificial Intelligence has the potential to cause harm, ensure dangers, and a fraction of the unintended harmful effects of interruptions into humans' psychological spaces associated with the emerging field of neurotechnology. Alan Weissenbacher (in Hrynkow, 2020) highlights the coercive tendencies of these largely unexamined interventions and argues for the importance of a "worthiness across ideologies" undue standard to prevent regulation neuroinnovation in alignment with rigid consumerist and political frameworks (Hrynkow, 2020).

Ethic of Care: More Machine-Like and Less-Human Generation

The study conducted by Deloitte in Switzerland provides an impactful analysis of automation, specifically highlighting the secure nature of care professions. The findings of this analysis indicate that machines are incapable of experiencing empathy to the same extent as humans. While there is a growing presence of technology in sectors such as the sex industry and elder care, machines are unable to match the effectiveness of human care providers. While many view this as an opportunity for future job creation, it also presents a compelling ethical argument against the current system.

The arguments advocating for the development of Artificial Intelligence predominantly focus on the positive impact of intelligent technology on society. These advancements in Artificial Intelligence offer convenience and ease, enabling individuals to accomplish various practical tasks. However, this convenience-driven society has also led to the emergence of abstract social lives. The prevalence of social media dominates our current age, but genuine face-to-face communication is diminishing. Life is becoming increasingly convenient, but at the cost of diminishing empathy. This convenient lifestyle promotes an instant gratification mindset and a lack of perseverance, particularly among the younger generation. Despite being more educated than previous generations, studies indicate that they experience greater feelings of loneliness. These are the characteristics of generation Z, the first truly global generation, formed in the 21st century, linked through digital devices, and engaged through social media (Sladek & Grabinger, 2016).

Many online markets are specifically targeting generation Alpha, the upcoming generation following the current one. This generation will have significant control over consumerism. As one young participant expressed in a recent video discussing the role of technology in children's lives, "I'd rather have an iPad—better than a dog." (Pasquarelli &

Schultz, 2019). According to Hotwire, which surveyed 8,000 parents of children ages 4 to 9 in eight countries, including the U.S., for its "Understanding Generation Alpha" report, two-thirds of parents say that their children's habits and needs influenced their most recent technology purchase, including TVs, smartphones, and tablets. Eighty-one percent of parents in the United States said that their children's desires influenced their tech purchases (Pasquarelli & Schultz, 2019). Throughout childhood, they have been a major marketing target because they will determine the family's expenditures.

Future generations Z and Alpha may be significantly better educated than the generation before them. However, being human encompasses more than just rationality; it includes emotions, love, compassion, family, and belonging to a society. Musopole (2009) emphasized that we are designed to live in community and that life is meant to be a interdependent loving and relationship. Individualism, which involves striving independence and living as such, is not a virtue; it is a capitalist vice, a phony autonomy that exploits others without assuming responsibility for them. Our individuality has meaning and godly value only within the context of community. Destroy the community, and the individual perishes; destroy the individual, and the community perishes as well. These are the two sides of a single coin (Musopole, 2009).

The question arises: Will the Alpha generation become more desperate, materialistic, and individualistic while losing their true meaning in life? The rapid advancements in Artificial Intelligence and its implementation fundamental questions about the essence of human life, the nature of humanity, the significance of respect, and the relationship between Artificial Intelligence systems and social interaction with related machines. Determining the moral and ethical frameworks within which Artificial Intelligence operates, as well as the extent to which self-learning mechanisms and independent behavior should be

allowed, has become an increasingly complex and advanced topic in the context of Artificial Intelligence frameworks utilized for social interaction (Walz & Firth-Butterfield, 2018).

It is most likely for this hi-tech generation to be more 'machine-like and less-human.' "The target outcomes of Artificial Intelligence are automatic consultants, advisors, tutors, computer psychiatrists, marriage counselors, sophisticated knowledge bases, picture processors, identification and recognition systems, intelligent industrial and domestic robots, and so on are or will be realized in a variety of products." (Havel, 1985). As a result, there will be several transformations in life behavior.

In the past, a physical teacher was required to teach and train students, but machine learning has since replaced these roles. Formerly, we sought guidance from our parents; today, however, the majority of rules and practical wisdom have been acquired from online resources. In the medical field, we have previously relied on doctors, nurses, and therapists; however, it appears that in the near future, our disease treatment will be handled by a collection of advanced medical technology. In our past society, we were delighted to meet each other in a real fellowship, having face-to-face conversations in community and a real sense of touching that brought warmth and inner satisfaction. However, the invention of social media has led to less expensive and globally accessible conversation, but with a lack of deep understanding and conversation.

Furthermore, it has introduced phenomenon of abstract social life, where people prefer to communicate with those who are far away rather than with those nearby. Family, friends, and relatives often miss out on moments of fellowship due to preoccupation with their cellphones, as smartphones have taken precedence over immediate relationships. Not to mention the concept of sex industries in the current era, which have transformed the need for human relationships into the pleasure derived from sex toys and robots. It suggests that humans are currently

trained by machines and are closer to machines than to other people.

Nevertheless, can a machine truly replace the presence of a human being? Kaplan (2016) offers a compelling perspective on this matter. He explains about creating a robot that reacts by flinching, crying out, or saying, "Ouch, that hurts" when pinched is not a challenging task. However, as Peter Singer argues, such reactions do not imply that the robot actually experiences pain. We can discern this because we can look beyond its external responses and examine its internal structure. The robot reacts in this way because that is how we programmed it, not because it genuinely feels pain. Although some individuals may form inappropriate emotional attachments to their possessions, like falling in love with their cars, the majority of us understand that this is an improper application of our nurturing instinct (Kaplan, 2016).

The tools we create, whether basic or complex, lack the vitality necessary for moral consideration. Computers, being human-made instruments, are no exception. They do not possess true emotions, and it is unlikely they ever will. Machines cannot comprehend the hardships of display compassion, or suffer personhood, alongside humanity because they lack a physical body and feelings. Their actions are predetermined by the programs installed in them, and they lack the capacity for genuine love and free will. Robots and machines do not possess life that come from the breath of God, which has given humanity the ability to love and live in a relationship like God lives in a community from the beginning of time. This is the work of the Holy Spirit to bind believers in fellowship with God in His love and to transform believers to become more Christ-like through sanctification in preparation for His return (Wibowo et al., 2022).

In addition to disrupting the interrelationship between humans and nature, Steiner argued further on the impact of technology to humanity, stating that when we construct a machine complex from raw elements, we integrate

spiritual beings. The structure we build is anything but spiritless. We give a home for other spiritual beings, but the beings we summon into our machines are hierarchical members of the Ahrimanic order. This indicates that by living in today's modern society, we create an Ahrimanic atmosphere for everything that occurs within us while we sleep, whether during the day or night (Seddon, 1993).

The point he was attempting to make was that it will be especially challenging for individuals to maintain a connection with the divine spiritual beings with whom we are born. Musopole (2009) asserts, "without God's breath or spirit, human reality is nothing more than a lifeless piece of decaying matter reverting to earth. God breathed God's very life into the physical human form. Human life is evidence of the presence of the Spirit of God in humanity" (Musopole, 2009). When people remain unaware of their inner selves, they unknowingly follow the patterns established for them by the current education system and media advertising, resembling machines in their behavior and actions. They become detached from their spiritual essence, losing sight of the connection with their divine origins.

Havel (1985) puts forth the argument that the main intellectual contribution of Artificial Intelligence lies in its development of a computer metaphor for the mind. This brings the mind, along with the enigmatic concept of the "self," into the realm of scientific interest. Havel suggests that this gives some hope that Artificial Intelligence will overcome the feared dehumanizing effects it may bring (Havel, 1985). Nevertheless, there is also the possibility that Artificial Intelligence may lead humans to become more machine-like and less human, as Arbib (1985) has proposed in support of the presence of Artificial Intelligence. Modern mechanical developments surrounding the implementation and use of Artificial Intelligence will therefore raise fundamental questions about the essence of human life, the nature of humanity, the boundaries of cruelty towards human life and respect, and the nature of social interaction between Artificial Intelligence systems and their corresponding machines. These questions extend to the moral and ethical dimensions of how such frameworks should operate and the extent to which self-learning processes and independent behavior should be permitted. This is an evolving and complex issue that arises in the context of Artificial Intelligence frameworks employed for social interaction (Jansen et al., 2019).

Simply put, we are creating individuals who behave like things rather than humans as they should. Hence, the world's disorder is worsening every day. Humans lack genuine empathy, sincerity, compassion, and love as a result of our daily interactions with machines rather than humans. If they have the courage to delve within their soul, they will find nothing but emptiness. There is no longer any genuine joy in life. The prospect of Artificial Intelligences with superhuman insights and superhuman abilities presents us with the unusual issue of formulating a calculation that generates super ethical behavior. These challenges may sound visionary, yet it seems likely that we will encounter them, and they are not devoid of suggestions for contemporary research subjects (Bostrom & Yudkowsky, 2011).

Humans will place their faith in machines rather than in God and will develop a dependence technology rather than other people. Some experts have predicted that Artificial Intelligence would become a new deity by 2042, when it will know more than humans on an intellectual level. In the next 50 to 100 years, an Artificial Intelligence may know more than the whole human population combined. Eventually, it will then attract others to worship him and be able to compose its own bible (Brandon, 2017; Weber, 2013). As individuals worship and devote themselves to Artificial Intelligence, there is a concern that humanity may become more machinelike and lose touch with its essential humanity. As Manopole has argued, humanity is no longer defined spiritually as being created in God's image; rather, it is technologically and functionally defined. As a result, we have become a collection of individuals rather than communities-in-communion (Musopole, 2009).

Among the theological principles underlying technology-related ethics are: First, humans are prohibited from deifying technology since it contradicts the first law, which states: "you shall not have other gods before Me" (Ex. 20:3). Second, the creation of robots to replace humans is a form of dehumanization and idol worship. This contradicts the second commandment, which states: "You shall not make an image for yourself in the likeness of anything that is in the heavens above, or that is on the earth below, or that is in the waters under the earth (Ex. 20:4), (Emina, 2023). Third, the use of technology must consider both its good and negative effects (Mude, 2022). Fourth, human dignity is determined by the fact that humans are God's creations. God created man in His own likeness and image (Imago Dei), (Gen. 1:27-28). This is what differentiates the essence of humans from other living creatures and inanimate objects. Fifth, humans must always place their relationships with God, other people, and nature above all else. It is important to live a life in accordance with God's purpose for creating humanity and to maintain a harmonious balance with one's surroundings; otherwise, the real joy of living will diminish.

In the Image of God

Life in this era of advanced technology is both threatening yet challenging. It is threatening in light of its destructive potential, but it is also a c hallenge for Christians to rise up and unite in order to revitalize humanity's roots. Internet accessibility can also serve as a means for us to advocate for the voiceless. It provides a platform to educate individuals about the intrinsic value of every human being. The true essence of being human and the pursuit of genuine happiness cannot be fully satisfied by machines. Thus, there is an opening to enlighten people about their true identity and purpose, which resonates deep within the human

heart. It is in this unexplored territory that we can address the fundamental questions of human existence and offer an alternative to the superficial promises of technology.

The account of creation has recorded that the origin of human was created in the image of God 1:26). Sherlock (1996) provides explanation stating that the inherent dignity of human beings, being made in God's image, is manifested through their creative relationship with God, with one another, and with the world. It was the rejection of this relationship with God by humans that led to the corruption of the image and consequently affected all other relationships that stem from it. In the New Testament, it is proclaimed that through Christ and the ongoing work of the Holy Spirit, a new reality of reconciliation is brought forth. This includes the reconciliation of humanity with God, the subsequent reconciliation of human beings with one another, and the anticipation of the reconciliation of all things in heaven and on earth (Col 1:20).

Despite the fact that numerous interpretations of the term "image of God" have been proposed by numerous scholars, they have the common ground that formed in the image of God can be represented in the relationship between God and humans, with one another, and with creation. Simply said, if any aspect of this relationship is warped, an individual becomes no longer whole and must be reconciled. Musopole (2009) highlights that humanity has been fundamentally unchanged since the beginning of time. Modernity is a cultural concept, not even an ontological one. Humanity has not improved in terms of living and socializing, despite modern man's remarkable technological our advances. Despite technical progress, knowledge, and experience, we have been falling behind. Even in the face of modernity, the major concern of the Bible is how we live, our relationship with God and with one another (Musopole, 2009).

In the absence of advanced technology, the ontological status of humanity remains unchanged, as the presence of the breath of God that gives life

to humans persists. True expression and vitality come from spiritual renewal and being part of a complete community. Artificial Intelligence, which is the result of human advancement, can be considered as a development of the human soul and used to create machines that can execute tasks that do not require innovative functions. The human context, including the mind, is too complex for anyone to comprehend or compare with a wired machine (Olaore et al., 2014).

Intelligence and power give us choices (Geisler, 2017; Geisler & Anderson, 1987). Ethics enables us to identify which possible options are acceptable. We should strive to be efficient at doing good and inefficient at doing evil. If we are efficient at committing evil but inefficient at committing good, we would live in a miserable world. Artificial Intelligence will improve our performance in every endeavor we choose to employ it for. We should use it to decrease our efficiency at doing evil and increase our efficiency at doing good.

Artificial Intelligence poses an existential threat to humanity due to its power. It is a smart means that can be employed for either intelligent and beneficial or unintelligent and wicked purposes. As such, it only makes us more useful at action, whether for good or evil. To prevent ourselves from becoming engrossed in foolishness and wickedness, we must strive to improve self-management, recognize and resist the temptations of evil, and foster care for one another.

Artificial Intelligence provides even the finest human masters the chance to further develop their understanding and ability. Ke Jie, the Go world champion, compared playing AlphaGo to playing a "god of Go" and confessed that he will now utilize it as his teacher. In what other fields of human effort will Artificial Intelligence teach us new ideas? Can theology and ethics coexist? The search for flexible problems that maximize Artificial Intelligence's advantage has been ongoing and is advancing for years (Green, 2018).

Furthermore, several theological principles support the Christian ethical perspective on

Artificial Intelligence. First, Artificial Intelligence is the alternative for God, who is prophesied as a "human-like image" in the scriptures. It is recorded in Romans 1:23 which reads: "They replaced the glory of the incorruptible God with an image similar to that of a mortal man..." The word "mortal likeness" in the original Greek "είκόνος φθαρτοῦ ἀνθρώπου (eikonos phthartou anthrōpou) more accurately is translated into "mortal likeness". This phrase can be interpreted as "human-like robots". The word "similar" (eikonos) from the word "eiko" is defined as "similarity, namely statue, profile, or representation, resemblance." While the word "mortal" (phthartou) means "perishable, perishable, rotting." Then the word "man" (anthropou) means "A man, one of the human race; has a human face, that is, a human." So, the definition of "mortal human-like" can be interpreted as a statue or object that is similar to a human face or has a human face. This image can be regarded as depicting a robot with a human face. No wonder it is likely that in the future, humans would worship robots; Secondly, do not equate robots with humans as both have distinct essences. God created man to exalt Himself (1 Cor. 10:31). While robots are created by humans to serve human interests, the usage and treatment of Artificial Intelligence must not disregard its moral and spiritual aspects; otherwise, it can have negative effects on human life. Examples include causing financial crimes, reducing human privacy and controlling humans (Yohanes, 2022); Fourth, Artificial Intelligence is merely a means to support rather than its life, purpose. development of technology must be dealt critically and creatively so as not to undermine the Christian faith (Saputra & Serdianus, 2022).

CONCLUSION

If this were the conclusion to the narrative, we would all be ecstatic. There is however much more to the story. In Genesis 3, we see the significant impact of sin on our world. In addition to creating a division between God and humanity, the fall also created a barrier between individuals

and their labor. Its effect on work illustrates how we adjust to changes in our surroundings, particularly those produced by technology. Our technology opportunities and drawbacks in society are both genuine. The consequences of Artificial Intelligence systems, both now and in the future, will challenge our presumptions and bring us to unfamiliar territory. Even in this world, we must live completely for God. The fact that we live in the twenty-first century is no coincidence. Some may interpret this as a call to withdraw, yet God calls us to be the salt and light of the world. This suggests that rather than avoiding or accepting changes as inevitable, we should seek to understand them through the lens of the Scripture.

We are tasked with employing Artificial Intelligence in a manner that promotes human flourishing while exhibiting humility to avert potential harm. We are also aware that there are circumstances in which Artificial Intelligence should not be implemented and constraints may be necessary. Regarding the function and application of Artificial Intelligence, diverse philosophical presumptions lead to a variety of different conclusions. The majority of technologies are not neutral, not just because of their underlying assumptions, but also because of their expanding influence on our work, culture, and planet.

The Christian ethical perspective on Artificial Intelligence is supported by several theological principles. Firstly, humans and robots are seen as having distinct essences, making them unequal. Humans were created by God to glorify Him, while robots, created by humans, serve human

REFERENCES

Arbib, M. R. (1985). On Being Human in Computer Age, in "Impacts of Artificial Intelligence: Scientific, Technological, Military, Economic, Societal, Cultural, and Political (R. Trappl (Ed.)). Elsevier Science Publishers B.V.

Bostrom, N. (2014). Super Intelligence: Paths, Dangers, Strategies. Oxford.

Bostrom, N., & Yudkowsky, E. (2011). The Ethics

interests. The Bible refers to God as a "human-like image," and Romans 1:23 warns against replacing the glory of God with an image resembling a mortal man. The Greek phrase used in this verse, " $\varepsilon i \kappa \acute{o} v o \varsigma$ $\varphi \theta \alpha \rho \tau o \tilde{v} \acute{o} v \theta \rho \acute{o} \pi o v$ ($e i konos phthartou anthr \bar{o} po u$) can be interpreted as "mortal likeness," suggesting a resemblance to human-like robots.

Furthermore, the possibility of humans deifying robots in the future is acknowledged. Secondly, human dignity is rooted in being created in God's image (Imago Dei), as described in Genesis 1:27-28. This sets humans apart from other living beings and inanimate objects, including robots. Thirdly, humans are called to prioritize their relationships with God, fellow humans, and the natural world. Leading a virtuous life as intended by God is emphasized. Considering these theological principles, the development of Artificial Intelligence should incorporate ethical considerations and safety standards. With humility and acknowledgment of our fallen condition, we should try to develop instruments that mitigate the repercussions of sin, enhance justice, and exhibit mercy. Our instruments should facilitate our work as agents of redemption.

To navigate the intricate ethical landscape and ensure that Artificial Intelligence technology benefits all of humanity, it is crucial to maintain ongoing discourse, collaboration, and research at the intersection of Artificial Intelligence and Christian ethics. By doing so, we can foster a more ethical and human-centered approach to Artificial Intelligence that serves the greater good for humanity.

of Artificial Intelligence. In W. R. and K. Frankish (Ed.), *Cambridge Handbook of Artificial Intelligence* (p. 18). Cambridge University Press.

Brandon, J. (2017, October 2). An AI god will emerge by 2042 and write its own bible. Will you worship it? *VentureBeat*. https://venturebeat.com/ai/an-ai-god-will-

- emerge-by-2042-and-write-its-own-bible-will-you-worship-it/
- Cellan-Jones, R. (2014, December 2). Stephen Hawking warns artificial intelligence could end mankind. *BBC News*. https://www.bbc.com/news/technology-30290540
- Delgado, A. (2018, June 12). *Three Impacts of Artificial Intelligence On Society*. https://www.forbes.com/sites/forbestechcouncil/2018/06/13/three-impacts-of-artificial-intelligence-on-society/?sh=6437a9386ec0
- Emina, K. A. (2023). The Ethical Values and Leadership Practices in Deuteronomy. Evangelikal: Jurnal Teologi Injili Dan Pembinaan Warga Jemaat, 7(1), 1–12. https://doi.org/10.46445/ejti.v7i1.584
- Geisler, N. L. (2017). *Etika Kristen: Pilihan dan Isu Kontemporer-Edisi Kedua* (C. Yusuf (Ed.); Kedua). Literartur Saat.
- Geisler, N. L., & Anderson, K. (1987). *Origin science*. Baker Book House.
- Gilbert, M., Johnson, A. R., & Lewis, P. W. (2018). *Missiological Research* (M. Gilbert, A. R. Johnson, & P. W. Lewis (Eds.)). William Carey Publishing.
- Green, B. P. (2018). Ethical Reflections on Artificial Intelligence. *Scientia et Fides*, 6(2), 9–31.
 - https://apcz.umk.pl/SetF/article/view/18064
- Havel, I. M. (1985). Artificial Intelligence: A Lesson in Human Self-Understanding. In R. Trappl (Ed.), Impacts of Artificial Intelligence: Scientific, Technological, Military, Economic, Societal, Cultural, and Political. Elsevier Science Publishers B.V.
- Hood, D. (2020). Engaging Gen Z: Toward a Paracletic Leadership Framework [George Fox University]. In *Doctor of Ministry*. https://digitalcommons.georgefox.edu/dmin/4 00
- Hrynkow, C. (Ed.). (2020). Spiritualities, ethics, and implications of human enhancement and artificial intelligence. Vernon Press.

- Jansen, P., Brey, P., Fox, A., Maas, J., Hillas, B., Wagner, N., Smith, P., Oluoch, I., & Lamers, L. (2019). *Ethical Analysis of AI and Robotics Technologies*. SIENNA. https://doi.org/10.5281/zenodo.4068083
- Kaplan, J. (2016). Artificial Intelligence: What Everyone Needs to Know. Oxford University Press.
- Lambert, V. A., & Lambert, linton E. (2021). "Qualitative Descriptive Research: An Acceptable Design. *Pacific Rim International Journal of Nursing Research*, 16(4), 255–256. https://he02.tci-thaijo.org/index.php/PRIJNR/article/view/58
- Li, D., & Du, Y. (2008). *Artificial Intelligence with Uncertainty*. Chapman & Hall/CRC.
- Merriam, S. B. (2009). *Qualitative Research A Guide to Design and Implementation*. Jossey-Bass.
- Mude, E. (2022). Implementasi Pendidikan Warga Gereja Meneguhkan Sikap Etika Moral Menjawab Pengaruh Disrupsi Teknologi. *Integritas: Jurnal Teologi*, 4(1), 48–61. https://doi.org/10.47628/ijt.v4i1.102
- Müller, V. C. (2020). Ethics of Artificial Intelligence. In *The Routledge social science handbook of AI*. Routledge. https://www.researchgate.net/publication/340 885907_Ethics_of_Artificial_Intelligence
- Murad, R., Hussin, S., Yusof, R., Miserom, S. F., & Yaacob, M. H. (2019). A Conceptual Foundation for Smart Education Driven by Gen Z. *International Journal of Academic Research in Business and Social Sciences*, 9(5), 1242–1253. https://doi.org/10.6007/IJARBSS/v9-i5/6226
- Musopole, A. C. (2009). *Discovering the Joy of Living*. Evangel Publishing House.
- Olaore, I. B., C, N. J., Oladipo, S., & Oyenuga, E. O. (2014). Artificial Intelligence (AI): The Christian Perspective. *Journal of Information Engineering and Applications*, *4*(11), 96–100. https://iiste.org/Journals/index.php/JIEA/artic

- le/view/17677
- Pasquarelli, A., & Schultz, E. J. (2019, January 22).

 Move over Gen Z, Generation Alpha is the one to watch. *Ad Age*. https://adage.com/article/cmo-strategy/movegen-z-generation-alpha-watch/316314
- Purkayastha, P. (2017, June 30). Artificial Intelligence and the Threat to Humanity. *NewsClick*. https://www.newsclick.in/artificial-intelligence-and-threat-humanity
- Salurante, T. (2021). Wawasan Dunia Kristen Sebagai Penunjuk Arah Gereja Modern Bermisi. *Evangelikal: Jurnal Teologi Injili Dan Pembinaan Warga Jemaat*, *5*(1), 16–26. https://doi.org/10.46445/ejti.v5i1.328
- Saputra, T., & Serdianus, S. (2022). Peran Pendidikan Agama Kristen Dalam Menjawab Tantangan Perkembangan Teknologi Di Era Posthuman. *Jurnal Gamaliel: Teologi Praktika*, 4(1), 44–61. https://doi.org/10.38052/gamaliel.v4i1.91
- Seddon, R. (Ed.). (1993). *Understanding the Human Being: Selected Writings of Rudolf Steiner*. Rudolf Steiner Press.
- Sherlock, C. (1996). *The Doctrine of Humanity:* Contours of Christian Theology (G. Bray (Ed.)). InterVarsity Press.
- Sladek, S., & Grabinger, A. (2016). *The first generation of the 21st Century has arrived!* XYZ University. www.xyzuniversity.com
- Sofge, E. (2015, January 31). Bill Gates Fears A.I., But A.I. Researchers Know Better. *Popular Science*. https://www.popsci.com/bill-gatesfears-ai-ai-researchers-know-better/
- Spencer, J. (2022, December 9). *Human Skills in a World of Artificial Intelligence*. Spencerauthor. https://spencerauthor.com/human-skills/
- Spencer, M. K. (2019, January 6). *The Dangers of Artificial Intelligence in 2019*. Indian Strategic Studies.
 - https://www.strategicstudyindia.com/2019/01

- /the-dangers-of-artificial-intelligence.html Sugiyono. (2013). *Metode Penelitian Pendidikan*,
- Pendekatan Kuantitatif, Kualitatif, dan R & D.
 Penerbit Alfabeta.
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565. https://doi.org/10.1016/j.techsoc.2021.10156
- Walz, A., & Firth-Butterfield, K. (2018).

 Implementing Ethics Into Artificial
 Intelligence: a Contribution, From a Legal
 Perspective, To the Development of an Ai
 Governance Regime. *Duke Law & Technology*Review, 18(1), 176–231.
 https://scholarship.law.duke.edu/dltr/vol18/is
 s1/17/
- Weber, M. (2013). *The Protestant Ethic and the Spirit of Capitalism*. Merchant Books.
- Wibowo, M., Tanhidy, J., & Ming, D. (2022). The role of the Holy Spirit for Church Believers in the Hermeneutic context between Biblical Authority, Illumination and Interpretation. *Pharos Journal of Theology*, 103(2). https://doi.org/10.46222/pharosjot.103.2039
- Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: digital technologies and distance education during the coronavirus emergency. *Learning, Media and Technology*, 45(2), 107–114. https://doi.org/10.1080/17439884.2020.1761 641
- Yohanes, H. (2022). Resensi Buku 2084 Pandangan Kristen Tentang Kecerdasan Buatan (Artificial Intelligence) dan Masa Depan Umat Manusia. *Ritornera - Jurnal Teologi Pentakosta Indonesia*, 2(1), 71–86. https://doi.org/10.54403/RJTPI.V2I1.32