ABSTRACT

A Christian Ethic for AI? An Investigation of Statements from the Roman Catholic Church and Southern Baptist Convention

Kara Smeltzer

Director: Dr. Christopher Rios, Ph.D.

This thesis investigates the possibility of a distinctly Christian framework for how to design and use artificial intelligence (AI). It begins with an overview of AI including landmark events since its creation, current areas of application, and ethical questions that accompany AI. It then explores common views of AI and their ethical implications. Next, it studies statements connected with two large Christian denominations, the Southern Baptist Convention (SBC) and the Roman Catholic Church. These documents outline each denomination's ethical framework for designing and implementing AI moving forward. All views investigated are then compared to one another. The conclusion considers the presence of a Christian view of AI. I suggest that Christianity provides specific boundaries for AI development and use that are not exclusive to the religion but rather can be agreed upon by a diverse community.

APPROVED BY DIRECTOR OF HONORS THESIS

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Dr. Christopher Rios, Department of Religion

APPROVED BY THE HONORS PROGRAM

_____

Dr. Elizabeth Corey, Director

DATE: _____

A CHRISTIAN ETHIC FOR AI? AN INVESTIGATION OF STATEMENTS FROM THE ROMAN CATHOLIC CHURCH AND SOUTHERN BAPTIST CONVENTION

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Kara Smeltzer

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CHAPTER ONE

Introduction

In February of 2022, Ben Collins from NBC News alleged that a Russian troll farm created fake pictures of Ukrainians who showed online support for the Russian government's invasion of Ukraine.[1][2] Vladmir Bondarenko and Irina Kerimova were personas created by members of the troll factory to incite division and spread misinformation on social media. AI was used to generate their profile pictures. Their tweets include the identification of Ukraine as a failed state and the accusation that Ukraine's president is modeling the government off Nazi rule.[3] This story demonstrates one of many ethical issues that accompany the rise of AI: power. The Russian troll farm employed AI in attempts to persuade people that the Russian government's invasion of Ukraine was justified. In other words, AI was a tool of power for a corrupt system that is currently subverting another country.

The impetus for this project was the observation that humans have historically implemented new procedures or technologies with little consideration of their ethical implications, leading to ethical failures. AI is an emerging technology that is expected to

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[1] Komando, Kim. "How to Spot Fake Russian Social Media Accounts and Posts." *USA TODAY.* Last modified March 10, 2022. https://www.usatoday.com/story/tech/columnist/komando/2022/03/10/ukraine-war-how-spot-fake-russian-social-media-accounts-and-posts/9444791002/.

[2] A troll farm or factory is an organization whose members create conflict and trouble online "Troll Factory." *Cambridge Dictionary | English Dictionary, Translations & Thesaurus.* Accessed April 18, 2022. https://dictionary.cambridge.org/us/dictionary/english/troll-factory.

[3] Komando, "How to Spot Fake Russian Social Media Accounts and Posts."

become more prevalent in our lives. To avoid ethical failures like the Tuskegee syphilis study and Willowbrook experiments, it is imperative that we investigate the ethics of AI and determine how it ought to be used.[4][5]

As a Christian, I desired to explore the possibility of a Christian framework for how to design and use AI. I found two documents that are connected to prominent Christian denominations: 1) *Artificial Intelligence: An Evangelical Statement of Principles* released by the Ethics & Religious Liberty Commission (ERLC) and 2) *Rome Call for AI Ethics* created in part by the Pontifical Academy for Life (PAL). The ERLC is a branch of the Southern Baptist Convention (SBC), the largest Protestant denomination in the United States.[6] The PAL is an institute created by the Roman Catholic Church. The number of Roman Catholics worldwide exceeds that of almost every other religion.[7] Therefore, the views outlined in these two documents appeal to a large number of Christians.

The two purposes of Chapter 2 are to give a short background of AI and explore common views of AI. The background begins with the definition of AI, major milestones

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[4] The Tuskegee syphilis study ran from 1932 to 1972. 600 Black men, some with syphilis and some without, participated in a study to investigate syphilis. In 1943, penicillin was discovered as an effective treatment for syphilis. However, the men in the study were not offered penicillin, but instead continued to be observed as part of the study. "Tuskegee Study - Timeline - CDC - NCHHSTP," Centers for Disease Control and Prevention, last modified May 3, 2021, https://www.cdc.gov/tuskegee/timeline.htm.

[5] At the Willowbrook State School for Children, disabled children were intentionally infected with Hepatitis as part of a study to create a vaccine against Hepatitis. James M. DuBois, "Hepatitis Studies at the Willowbrook State School for Children," Bioethics Research Center, last modified December 8, 2020, https://bioethicsresearch.org/resources/case-studies/hepatitis-studies-at-the-willowbrook-state-school-for-children/.

[6] Dalia Fahmy, "7 Facts About Southern Baptists," Pew Research Center, last modified August 18, 2020, https://www.pewresearch.org/fact-tank/2019/06/07/7-facts-about-southern-baptists/.

[7] Michael Frassetto, "Roman Catholicism," Encyclopedia Britannica, accessed April 18, 2022, https://www.britannica.com/topic/Roman-Catholicism.

since its inception, current applications, and resulting ethical questions. Finally, commonly held views on AI are described as well as the implications they have for its development and implementation.

Chapters 3 and 4 examine the responses of two Christian denominations. Chapter 3 dives into the response of the ERLC to rising questions connected to AI. Chapter 4 investigates a document created by the PAL and AI scientists. Background information like the authors, audience, and purpose of each document is explored. An analysis of pervading themes follows. Finally, the reception of each document including affirmations and critiques is given.

Chapter 5 inquires about the existence of a distinctly Christian view of AI design and use. First, the two documents from Chapters 3 and 4 are compared, noting key differences and similarities. Then, these are contrasted to the views outlined in Chapter 2. I propose that the Christian faith offers certain limitations on AI creating a distinct framework, but these guidelines are not exclusively Christian.

CHAPTER TWO

Artificial Intelligence and Common Views

AI technology continues to become a larger part of life, raising ethical questions that must be investigated. Responses to these questions vary based on different worldviews and philosophies. This chapter aims to define AI, explain its current state, describe ethical challenges that accompany it, and investigate certain philosophies that influence its development and use.

What is AI?

AI is not easily defined, nor do people agree on what it is. However, AI generally refers to 1) systems that display intelligent behavior and 2) the field of study that produces such systems. Early ideas of AI can be seen in 1942 with Isaac Asimov's short story entitled *Runaround*. It describes two engineers who create a robot and investigates the *Three Laws of Robotics*. This story inspired computer scientists and those who worked in AI and robotics.[1] Around the same time, Alan Turing was prompted by his development of *The Bombe*, a code breaking machine, to investigate machine intelligence.[2] He created the Turing Test in 1950 to determine if an artificial system is

[1] Michael Haenlein and Andreas Kaplan, "A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence," *California Management Review* 61, no. 4 (2019): 6, doi:10.1177/0008125619864925.

[2] Alan Turing created The Bombe to crack codes for the British government. It deciphered the German army's Enigma code in World War II, which no human was able to do. It is thought of as "the first working electro-mechanical computer." Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 6.

intelligent.[3] In 1956, John McCarthy coined the term AI, defining it as "the science and engineering of making intelligent machines, especially intelligent computer programs."[4] Between 1964 and 1966, Joseph Weizenbaum developed ELIZA, a program able to mimic human conversation. It was one of the first programs to pass the Turing Test.

In the US, the 1970s and 1980s experienced a lapse in AI development due to a lack of funding.[5] But toward the end of the century, significant advances were capturing public attention. Deep Blue, an AI program developed by IBM, beat Gary Kasparov, the grandmaster of chess in 1997. About twenty years later, AlphaGo, a program developed by Google, beat the world champion in Go. This game is more complicated than chess, and many people believed a computer would never outplay a human.[6] More recently, AI has been applied to the COVID-19 pandemic, functioning to quickly identify infected patients.[7] Today, AI is considered a subfield of computer science that explores the computation behind intelligent behavior and develops systems that exhibit intelligent behavior.[8] The UK House of Commons uses the following definition: "a set of statistical tools and algorithms that combine to form, in part, intelligent software that specializes in

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[3] The Turing Test says that a machine is intelligent if a human can interact with both a human and a machine without being able to distinguish between the two. Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 7.

[4]John McCarthy, "What is Artificial Intelligence?," November 2004, 2, https://borghese.di.unimi.it/Teaching/AdvancedIntelligentSystems/Old/IntelligentSystems_2008_2009/Old/IntelligentSystems_2005_2006/Documents/Symbolic/04_McCarthy_whatisai.pdf

[5] Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 7-8.

[6] Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 8.

[7] Xueyan Mei et al., "Artificial intelligence-enabled rapid diagnosis of COVID-19 patients," *Nature Medicine* 26, no. 8 (August 2020): 1224-1228, doi:10.1101/2020.04.12.20062661.

[8] Ellis Horowitz, "New Dictionary of the History of Ideas," *Reference Reviews* 2 (2005): 431, doi:10.1108/09504120510622643.

a single area or task. This type of software is an evolving assemblage of technologies that enable computers to simulate elements of Human behavior such as learning, reasoning and classification."[9] This is the definition that will be used throughout this investigation.

The result of the past eighty years is that AI has made much progress and has many applications in our world today. Dr. T Amudha, associate professor in the Department of Computer Applications at Bharathiar University, identified eight domains of current AI applications: gaming, education, agriculture, health care, entertainment, manufacturing, banking and insurance, and automobiles. AI plays against human users in certain games, like online chess. It predicts weather conditions, distinguishes weeds from crops, and tests for nutrients in soil. Research is being conducted to discover applications of AI in education, including the creation of personalized learning strategies for students, evaluation of assignments and tests, and supervision of attendance.[10] AI is used to identify DNA variants related to specific diseases, detect breast cancer, and provide services in mental health.[11] It also has applications in the early detection of diseases, customized patient treatment plans, clinical decision-making, and imaging. Clinicians also use speech to text AI technology in taking notes. AI analyzes customer activity and

[9] "Written Evidence - Transpolitica," last modified April 2016, https://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/science-and-technology-committee/robotics-and-artificial-intelligence/written/32667.html.

[10] T. Amudha, "Artificial Intelligence: A Complete Insight," in *Artificial Intelligence Theory, Models, and Applications* (Auerbach Publishers, Incorporated, 2021), 12-17.

[11] Pavel Hamet and Johanne Tremblay, "Artificial intelligence in medicine," *Metabolism* 69 (January 2017): S37, doi:10.1016/j.metabol.2017.01.011; Michael J. Rigby, "Ethical Dimensions of Using Artificial Intelligence in Health Care," *AMA Journal of Ethics* 21, no. 2 (February 2019): 121, doi:10.1001/amajethics.2019.121; David D. Luxton, "Recommendations for the ethical use and design of artificial intelligent care providers," *Artificial Intelligence in Medicine* 62, no. 1 (March 2014): 2, doi:10.1016/j.artmed.2014.06.004.

interaction with products and designs movie scenarios.[12] It offers many benefits in manufacturing including the assessment of supply versus demand and assembly of parts. Regarding banking, AI technologies are used as virtual assistants, chatbots for customer communication, and decision-making assistants.[13] For automobiles, AI maintains safety by warning drivers of dangerous situations.[14] Companies are applying AI to self-driving cars which will detect patterns in other cars to determine the safest route.[15] In everyday life, cellphones, like iPhones, employ AI in navigation suggestions, facial recognition, and automated text suggestions.[16] Overall, AI is used in many diverse settings, and its prevalence is expected to increase with time.

Ethical Questions in AI

As with virtually all scientific and technology advances, AI raises renewed ethical questions. Among the most prevalent are issues of bias, privacy, power, transparency, and trust. While not an exclusive list, these categories represent many of the ethical questions that are important in AI development and use. Concerns about bias come in two prominent forms. First, since AI is trained by inputting large amounts of data, any bias in the data it is shown will affect the resulting AI. For example, researchers have observed

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[12] Amudha, "Artificial Intelligence," 14.

[13] Pradeep K. Garg, "Overview of Artificial Intelligence," in *Artificial Intelligence: Technologies, Applications, and Challenges* (Boca Raton: CRC Press, 2021), 14-17.

[14] Amudha, "Artificial Intelligence," 16.

[15] Garg, "Overview," 14.

[16] Ralf, "Your IPhone Uses Artificial Intelligence in Ways You Don't Even Know," Techiexpert.com, last modified May 20, 2019, https://www.techiexpert.com/your-iphone-uses-artificial-intelligence-in-ways-you-dont-even-know/.

that sensors in self-driving cars detect lighter skin tones more readily than darker ones based on the pictures that were used to train the AI system.[17] Consequently, racial bias is programmed into this technology because it would identify and protect lighter skinned pedestrians from potential accidents better than those of darker tones. Even if AI designers are unbiased and have good intentions, the AI system can still produce biased results.[18] Another type of bias that could accompany the use of AI is automation bias. This is defined as an "overreliance on clinical decision support systems."[19] In other words, some people are concerned that professionals will give AI systems too much responsibility in making decisions without enough human oversight. As demonstrated, bias can occur both on the design side and the implementation side of AI. Bias is a pertinent ethical issue because it could allow harm to people and unfairly benefit certain populations while neglecting others.

Another primary ethical concern is privacy. Negative implications for human privacy may occur because access to the data required to train AI often includes personal data.[20] Privacy issues may become prevalent when people share information with AI systems which could potentially be hacked or shared without an individual's consent.[21]

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[17] Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 8.

[18] Committee on Technology National Science and Technology Council; Committee on Technology, *Preparing for the Future of Artificial Intelligence*, (Scotts Valley: Createspace Independent Publishing Platform, 2016).

[19] Michael Anderson and Susan L. Anderson, "How Should AI Be Developed, Validated, and Implemented in Patient Care?," *AMA Journal of Ethics* 21, no. 2 (February 2019): 125, doi:10.1001/amajethics.2019.125.

[20] Kadircan H. Keskinbora, "Medical ethics considerations on artificial intelligence," *Journal of Clinical Neuroscience* 64 (June 2019): 278, doi:10.1016/j.jocn.2019.03.001.

[21] Sandeep Reddy et al., "A governance model for the application of AI in health care," *Journal of the American Medical Informatics Association* 27, no. 3 (November 2019): 492, doi:10.1093/jamia/ocz192.

This is especially concerning in reference to health data. A specific example of a privacy breach occurred in 2015 and 2016 when the Royal Free London NHS Foundation Trust shared patient records with Google DeepMind Technologies Limited in efforts to create an app for managing acute kidney injury. Patient consent was not obtained for the use of their data by a third-party.[22] Furthermore, there is a potential for governments to use AI to invade the privacy of its citizens. A 2016 article in the *Economist* describes how the Chinese government was developing a social credit system that utilized AI to "allow the trustworthy to roam everywhere under heaven while making it hard for the discredited to take a single step."[23] In other words, the Chinese government would be using AI to monitor people, requiring access to data about them. Personal privacy is an essential consideration as AI is developed and used.

The example of the Chinese government's social credit system suggests that AI could potentially be used to exert power over people. The power of AI in facial recognition technology raises pressing ethical questions about monitoring people because it could be used to exploit them. To demonstrate, the Chinese government used AI to process biological information collected from its citizens and identify people it deemed problematic. With this AI system, the Chinese government detained thousands of Uyghur Muslim people.[24] In 2018, the UN discovered that the Chinese government had forced them to enter reeducation camps, renounce Islam, and provide DNA samples. It then used

[22] Julia Powles and Hal Hodson, "Google DeepMind and healthcare in an age of algorithms," *Health and Technology* 7, no. 4 (2017): 351, doi:10.1007/s12553-017-0179-1.

[23] "China Invents the Digital Totalitarian State," The Economist, last modified December 17, 2016, https://www.economist.com/briefing/2016/12/17/china-invents-the-digital-totalitarian-state.

[24] Lindsay Maizland, "China's Repression of Uyghurs in Xinjiang," Council on Foreign Relations, last modified March 1, 2021, https://www.cfr.org/backgrounder/chinas-repression-uyghurs-xinjiang.

AI to track them.[25] AI could give extreme power to people who want to use it to restrict and harm others.

Another ethical concern in AI is transparency. This is often illustrated by the black box problem: the lack of insight regarding how an AI system generates certain output from the data it is given. For example, AI systems can be used to assist doctors in recognizing and diagnosing skin cancer, but it is not entirely known how the system makes this diagnosis.[26] When people's health is at risk, it becomes critical that humans understand the process that leads to an AI system's suggestions. If there is the potential for the AI system to make a wrong decision and scientists do not know how it makes the decision, the black box problem remains a relevant ethical concern.[27]

The above ethical issues can be reduced to the following question: To what extent can people trust AI? Can we trust AI to act fairly to all types of people, minimizing bias? Can we trust AI to protect our privacy and data, using it to benefit us? Can we trust AI to protect people, especially the powerless? Can we trust AI to make reliable decisions that we understand? Ultimately, most of these questions can be traced back to the humans who design and use AI systems, reiterating the need for humans to keep ethical concerns at the forefront of their minds at all stages of AI development and implementation.

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[25] Jason Thacker, "Artificial Intelligence Favors the Powerful. But It Doesn't Have To," ChristianityToday.com, last modified April 12, 2019, https://www.christianitytoday.com/ct/2019/april-web-only/artificial-intelligence-facial-recognition-muslims-china.html?&display=checkout.

[26] Haenlein and Kaplan, "A Brief History of Artificial Intelligence," 11.

[27] Anderson and Anderson, "AI in Patient Care," 126-127.

Variety of Views on AI

A range of philosophical positions influence how people view AI and the ethics of its design and use. Some of these perspectives lead to ethical responses that remove human flourishing as a primary concern in AI ethics, promote the integration of humans and technology, and pursue the evolution of humans into a new species. They also lead to the belief that humanity should champion research in technology and the implementation of technology, like AI, with little concern for how it changes the current state or definition of humanity. Other responses to AI emphasize the importance of human responsibility, superiority, and dignity reflecting an overall emphasis on developing and using AI for the benefit of humans.

On the extreme end of this range of views are antihumanism, posthumanism, and metahumanism. Antihumanism opposes humanism, the belief that humanity is the "center of everything that exists."[28] Therefore, it seeks to dethrone humanity from the focus of discourse. It anticipates the end of the current definition of human and accepts the changes that technology will inevitably make to humanity.[29] Some scholars have linked antihumanism to Foucault, a French philosopher who died in 1984. In *The Order of Things*, he writes, "man is only a recent invention, a figure not yet two centuries old, a new wrinkle in our knowledge, and he will disappear again as soon as that knowledge has

[28] Here I use Solzhenitsyn's definition of humanism that he describes in his critique of the West. Alexander Solzhenitsyn, "The Exhausted West," *Harvard Magazine*, July 1978, 25, https://www.harvardmagazine.com/sites/default/files/1978_alexander_solzhenitsyn.pdf.

[29] Ștefan Bolea, "Antihumanism in the Works of E.M. Cioran and Thomas Bernhard," *Philobiblon. Transylvanian Journal of Multidisciplinary Research in the Humanities* 24, no. 1 (July 2019): 81, doi:10.26424/philobib.2019.24.1.04.

discovered a new form."[30] Antihumanism led to the development of posthumanism which predicts the evolution of humans into a new species. Robert Pepperell, professor at Cardiff School of Art and leader of Fovolab, expects the transformation of humanity into a new species saying, "All technological progress of human society is geared towards the transformation of the human species as we currently know it."[31] Metahumanism goes beyond posthumanism, advocating for the constant change of humanity and the expansion of human limitation. It envisions a world that is constantly in flux, adapting, evolving, and becoming, as its components relate to and interact with each other.[32] Jaime del Val, a founding metahumanist, describes this theory as a "radical relationist approach…where 'the human' appears on the one hand as result of certain technologies of perception, on the other as radically entangled with what it perceives to be non-human."[33] Although these are less commonly held philosophies, their rejection of humanism has potential consequences for AI development and implementation.

At least three immediate implications result from these more extreme views, one concerning development and two concerning implementation. They are all related to the rejection of a human-centered framework for AI design and use. Antihumanism,

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[30] "Foucault, Michel," Internet Encyclopedia of Philosophy | An Encyclopedia of Philosophy Articles Written by Professional Philosophers, accessed April 18, 2022, https://iep.utm.edu/foucault/; Michel Foucault, "Preface," in *The Order of Things: An Archaeology of the Human Sciences* (New York, NY: Pantheon Books, 1970), 21.

[31] "Staff Robert Pepperell," Cardiff Metropolitan University - Study in Cardiff, accessed April 18, 2022, https://www.cardiffmet.ac.uk/artanddesign/staff/Pages/robertpepperell.aspx; Robert Pepperell, "The Posthuman Manifesto," *Kritikos* 2 (February 2005): 2, https://intertheory.org/pepperell.htm.

[32] Jaime Del Val, "Metabody – METAHUMANIST MANIFESTO 10 Years After," Metabody, last modified July 15, 2020, https://metabody.eu/metahumanist-manifesto-10-years-after/.

[33] Jaime del Val, "Comparative Posthumanisms - The Human: A Failed Evolution?" (Paper presented at Beyond Humanism Conference, Rome, 2013).

posthumanism, and metahumanism reject that people should design and use technology with human flourishing as the main goal. This denial is based on the rejection of human exceptionality and superiority. They renounce the belief that there is anything special about humans. Therefore, humans are not superior to other species or even to technology. Consequently, they should not be the focus of discussions concerning technology development. A rejection of human exceptionality challenges some commonly held views of humanity's place in nature. Humankind has placed itself at the top of the world's hierarchy, claiming the top spot in superiority and power over the natural environment and other animal species. Under the belief that humanity is no longer superior, this hierarchy is no longer valid.

This rejection of the centrality of humanity in AI design and use leads to three implications. On the development side, the implication is the unlimited development of AI. Regarding implementation, the implications are the integration of humans with technology and the redefinition of what it means to be human. The interests of humankind are no longer the deciding factor in determining what is permissible. Antihumanism anticipates the birth of a new species beyond the human. It therefore promotes technological innovation to its furthest extent. It also advocates for the integration of technology with humans to achieve the development of the posthuman. Similarly, posthumanists envision the development of the posthuman through the integration of technology and current humans. To achieve this goal, technology needs to be as highly advanced as possible. Metahumanism supports far-reaching AI progress because it defines humanity as an amalgamation of the current human with elements that are perceived as non-human. The projected death of the human as we know it and the

resulting species that arises from the potential integration of AI and humans could change the definition of human. These philosophies view AI as a technology that will change the very essence of humanity.

Unlike these more extreme views, transhumanism is a more commonly held philosophy that has ethical implications for AI use. Transhumanism promotes using technology to modify humans to overcome their limitations.[34] Transhumanists consider the current human organism to be a transitional human on an evolutionary journey. Consequently, it is the duty of humans to employ technology to enhance their abilities and characteristics beyond their current capabilities. Ray Kurzweil, recipient of the National Medal of Technology and Innovation in 1999, writes from the view of transhumanism in his book *The Singularity is Near*: "The Singularity will represent the culmination of the merger of our biological thinking and existence with our technology, resulting in a world that is still human but that transcends our biological roots."[35] Kurzweil thus emphasizes maintaining human identity yet looks toward exceeding current human capabilities. His perspective not only preserves human exceptionality but takes it to the extreme. He believes that humans will improve themselves beyond their biological abilities which would underscore their superiority above all other species. AI has emerged as a promising technological advancement, one that has changed and will continue to change our daily lives. Were humans to use AI technology to advance

[34] Allen Porter, "Bioethics and Transhumanism," *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 42, no. 3 (May 2017): 237-238, doi:10.1093/jmp/jhx001.

[35] "1999 Laureates- National Medal of Technology and Innovation," United States Patent and Trademark Office, last modified October 15, 2021, https://www.uspto.gov/learning-and-resources/ip-programs-and-awards/national-medal-technology-and-innovation/recipients/1999; Ray Kurzweil, *The Singularity is Near: When Humans Transcend Biology* (New York, NY: Penguin Group, 2005), 25.

themselves, Kurzweil and transhumanists believe that they would continue to be human yet a better version.

Contrary to the other philosophies, transhumanism enhances the ideals of humanism. While humanism advocates for using education and cultural changes to improve humans, transhumanism adds using technology as another method to improve humanity.[36] In this way, transhumanism is an extension of humanism. It promotes human exceptionality and works toward making humans even more superior through technological enhancement. By integrating technology into the human body to overcome current limitations, humans will improve themselves, solidifying their position of power in the global hierarchy. However, they maintain their identity as humans and do not become a new species, like the other philosophies propose. AI is an integral part of this vision to advance humans. AI would, therefore, be designed with a focus on human benefit. Although transhumanism is distinct from the other theories since it subscribes to humanism, it encourages developing AI as far as possible. The further AI is developed, the more enhanced humans can become.

Still more prevalent than any of the preceding philosophical systems is a more general recognition of the need to maintain human responsibility, superiority, and dignity and the desire to benefit humans through AI. These values are exemplified by the document *Ethically Aligned Design: Prioritizing Human Wellbeing with Autonomous and Intelligent Systems* published by the Institute of Electrical and Electronics Engineers (IEEE); reports from the US government, European Parliament, UK House of Commons, and Australian government; and various articles examining ethics and AI. The IEEE is an

[36] Porter, "Bioethics and Transhumanism," 238.

organization committed to promoting technological innovation for human benefit. It is the largest technical professional society in the world with members including engineers, medical doctors, computer scientists, and many others.[37]

Humans are responsible for creating and using AI ethically. The US government suggests that AI practitioners should be trained in ethics so that they know their responsibilities to all involved in AI.[38] In this way, the obligation for AI falls on humans. The EU report upholds that those who design AI systems must do so in ways that are safe, secure, and appropriate. Further, it states that "at the present stage the responsibility must lie with a human and not a robot."[39] While this statement leaves open the possibility that in the future, responsibility may rest more on robots and AI systems, the EU report proposes that human maintain responsibility for now. The UK House of Commons states that in certain AI applications, a human must always be in control, specifically weapons systems.[40] On the other hand, it quotes Dave Coplin from Microsoft: "the people making the algorithm and the AI need to be held accountable for the outcome."[41] Coplin divides

[37] "History of IEEE," IEEE - The World's Largest Technical Professional Organization Dedicated to Advancing Technology for the Benefit of Humanity, accessed April 18, 2022, https://www.ieee.org/about/ieee-history.html?utm_source=linkslist_text&utm_medium=lp-about&utm_campaign=history.

[38] Committee on Technology National Science and Technology Council; Committee on Technology, "Future of Artificial Intelligence."

[39] European Parliament, *REPORT with Recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL))*, (2018).

[40] Great Britain. Parliament. House of Commons. Select Committee on Science and Technology, *Science and Technology Committee 5th Special Report. Robotics and Artificial Intelligence: Government Response to the Committee's 5th Report of Session 2016-17*, (2017), https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/145/145.pdf.

[41] Great Britain. Parliament. House of Commons. Select Committee on Science and Technology, "Robotics and Artificial Intelligence."

the responsibility between human designers and the AI system itself. In his view, humans are responsible for the results of AI data processing, but he also holds AI accountable. The Australian government returns to the idea of exclusive human responsibility: "the organization and individual accountable for the decision [of an AI system] should be identifiable as necessary. They must consider the appropriate level of human control or oversight for the particular AI system or use case."[42] In one way or another, all four authorities place responsibility on humans to create and use AI ethically. The IEEE takes human responsibility a step further writing, "The responsibility for the behavior of algorithms remains with the designer, the user, and a set of well-designed guidelines."[43] In this way, humans are responsible for the actions and implementations of AI, not simply its design.

Others agree with this emphasis on human responsibility. David Luxton, a clinical psychologist and associate professor at the University of Washington, comments on Watson, an AI system created by IBM with the ability to assist in clinical decision-making. Although Watson can aid health care professionals, Luxton emphasizes that it should not "be viewed as any kind of authoritative decision-making tool" in its current form.[44] In this example, humans are responsible for overseeing AI and making the final

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[42] Australian Government Department of Industry, Science, Energy and Resources, *Australia's Artificial Intelligence Ethics Framework*, (n.d), https://www.industry.gov.au/data-and-publications/australias-artificial-intelligence-ethics-framework/australias-ai-ethics-principles.

[43] The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. *Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems*, First Edition. IEEE, 2019, 60, https://standards.ieee.org/content/ieee-standards/en/industry-connections/ec/autonomous-systems.html

[44] David D. Luxton, "Should Watson Be Consulted for a Second Opinion?," *AMA Journal of Ethics* 21, no. 2 (February 2019): 133, doi:10.1001/amajethics.2019.131.

decision. Kadircan Keskinbora, professor at Bahcesehir University and ophthalmologist, writes, “it is the responsibility of AI researchers to ensure that the future impact is more positive than negative.”[45] He also advocates for the involvement of ethicists and philosophers in developing AI from its early stages. Accordingly, the burden of ethical AI development and use falls on humanity.

Another value that is reflected in the most common view is that humans remain superior to AI in certain aspects. Despite developments in AI, it should never be used to supplant humans in certain professions. The EU report reflects the belief that humans are superior in professions that involve caregiving. It reads, “[humans] will continue to provide an important source of social interaction that is not fully replaceable.”[46] It also addresses surgical robots: “the initial planning of treatment and the final decision regarding its execution will always remain with a human surgeon.”[47] Through its belief that the surgeon must oversee the AI robot’s activity, this report demonstrates the value of human supervision and therefore human superiority. The report from the UK House of Commons echoes this sentiment by referencing an approach to AI as explained by Stephen Muggleton: “this approach…did not replace scientists but it could amplify ‘what they can do.’”[48] On the other hand, it also says AI will replace humans in some areas quoting Tony Prescott, Professor of Cognitive Robotics at the University of Sheffield: “’machine learning and probabilistic reasoning will lead to algorithms that replace human

[45] Keskinbora, "Medical ethics," 277.

[46] European Parliament, "Civil Law Rules on Robotics."

[47] European Parliament, "Civil Law Rules on Robotics."

[48] Great Britain. Parliament. House of Commons. Select Committee on Science and Technology, "Robotics and Artificial Intelligence."

decision-makers in many areas,' from financial decision-making to the development of more effective medical diagnostics."[49] While AI has the potential to supplant humans in certain areas, humanity will remain superior to AI in areas that are highly personal.

Other civilian voices support the importance of human superiority. Luxton argues that Watson "is not intended to replace the judgment of health care professionals."[50] Furthermore, Keskinbora asserts that AI should not replace humans in professions related to human dignity. These include "physicians, surgeons, judges, nurses, [and] police officers."[51] While it may be practical and beneficial for AI to replace humans in some capacities, there are certain professions in which it is imperative that humans remain intimately involved in AI decision-making in order to maintain human dignity. By suggesting that humans must stay in power in professions impacting human dignity, the idea of human superiority is underscored.

This attention to human dignity suggests that many recognize it to be a key consideration in AI development and use. The EU is the only one out of the four governmental authorities that explicitly names human dignity as an essential consideration in AI development. It demonstrates this focus on human dignity through its belief that robotics and artificial intelligence should "be in compliance with…the rights and principles enshrined in the Charter of Fundamental Rights (CFR) of the European

[49] "Professor Tony Prescott | Computer Science | The University of Sheffield," The University of Sheffield, last modified 2022, https://www.sheffield.ac.uk/dcs/people/academic/tony-prescott; Great Britain. Parliament. House of Commons. Select Committee on Science and Technology, "Robotics and Artificial Intelligence."

[50] Luxton, "Should Watson Be Consulted," 133.

[51] Keskinbora, "Medical ethics," 280.

Union, in particular human dignity," among other values.[52] One study compared the documents released by the US, EU, and UK authorities and concluded that those who desire to create a "good AI society" would benefit from using human dignity as the lens for its design.[53] The authors argue that basing AI development and use on human dignity would make the creation of a thorough, responsible, cooperative, and shared framework of AI easier. The IEEE connects human superiority and dignity. It proposes that respecting human dignity "may require some limitations on the functions and capability of A/IS so that they do not completely replace humans."[54] However, it does expect AI systems to replace humans in other capacities. It also declares that "A/IS should be designed and operated in a way that both respects and fulfills human rights, freedoms, human dignity, and cultural diversity."[55] Therefore, human dignity is a primary issue in how AI is designed and used.

These themes converge into one: AI development and use should be human-centered. In addition to all the emphases on human responsibility, superiority, and dignity, other examples of the focus on humans benefiting from AI are present. The US government recommends that both private and public institutions should investigate ways

[52] European Parliament, "Civil Law Rules on Robotics;" European Parliament, Council of the European Union, and European Commission, *Charter of Fundamental Rights of the European Union*, (2000).

[53] Corinne Cath et al., "Artificial Intelligence and the 'Good Society': the US, EU, and UK approach," *Science and Engineering Ethics* 24 (March 2017): 508, https://doi-org.ezproxy.baylor.edu/10.1007/s11948-017-9901-7.

[54] The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. *Ethically Aligned Design*, 39; A/IS stands for autonomous and intelligent systems The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. *Ethically Aligned Design*, 2

[55] The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. *Ethically Aligned Design*, 19

to use AI to benefit society.[56] Additionally, the EU report supports this thought: "whilst it is impossible to hold back technological progress, the present generation has the opportunity as well as the responsibility to shape its course in order to benefit people and the planet."[57] The document from the UK House of Commons emphasizes the urgency with which the ethical and legal questions surrounding AI and robotics must be addressed to ensure humans receive maximum benefit from AI.[58] The Australian government explicitly addresses the need for a human-centered framework through its principle of "Human-centered values," stating, "this principle aims to ensure that AI systems are aligned with human values. Machines should serve humans, and not the other way around."[59] The IEEE echoes this idea: "a key question still facing technologists, manufacturers, and policymakers alike is how to assess, understand, measure, monitor, safeguard, and improve the well-being impacts of A/IS on humans."[60] The themes of human responsibility, superiority, and dignity emphasize that many people think AI development and implementation should be focused on human benefit.

AI is an integral part of human life, affecting business, entertainment, medicine, and everyday life. Theories about AI ethics and the future of AI vary. Some advocate for developing AI to the greatest extent possible, while others uphold human responsibility,

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[56] Committee on Technology National Science and Technology Council; Committee on Technology, "Future of Artificial Intelligence."

[57] European Parliament, "Civil Law Rules on Robotics."

[58] Great Britain. Parliament. House of Commons. Select Committee on Science and Technology, "Robotics and Artificial Intelligence."

[59] Australian Government Department of Industry, Science, Energy and Resources, "Australia's Framework."

[60] The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. *Ethically Aligned Design*, 68

superiority, and dignity. While this chapter has investigated AI, its applications, and views regarding it, the next two chapters will explore two documents about AI related to Christian organizations.

CHAPTER THREE

Artificial Intelligence: An Evangelical Statement of Principles

The previous chapter examined a range of views about AI development and use. This chapter aims to analyze the background, underlying theological commitments, and reception of the ERLC's statement entitled *Artificial Intelligence: An Evangelical Statement of Principles*.

On April 11 of 2019, the ERLC hosted an event on Capitol Hill in Washington, D.C. where the statement was released. The event included discussions among several of the seventy-three signatories.[1] Russell Moore, the President of the ERLC at the time, noted, "It is critical that the church be proactive in understanding AI. It's also critical that the church insist AI be used it [*sic*] ways consistent with the truth that all people possess dignity and worth, created as they are in the image of God. This statement does just that, and much more."[2] The statement outlines the ERLC's vision for the ethical development and implementation of AI, addressing topics like medicine, sexuality, work, and public policy and how Christians should interact with AI in each.

[1] Elizabeth Bristow, "ERLC to Host Convening in D.C. on Artificial Intelligence," ERLC, last modified April 5, 2019, https://erlc.com/resource-library/press-releases/erlc-to-host-convening-in-d-c-on-artificial-intelligence/#.XKeJyvFTXzY.twitter.

[2] Bristow, "ERLC Convening."

Background

The authors of the statement were part of the Research Institute of the ERLC. It was led by a group of eight senior research fellows comprised of presidents from various SBC seminaries and colleges. Each is a white male with a Ph.D. in either the humanities, educational administration, or systematic and historical theology. They led a team comprised of seven research fellows in Christian ethics, five legal fellows, eight associate fellows, and forty-one research fellows from various disciplines. The ERLC says this team represents a wide variety of specializations including "law, theology, business, economics, medicine, ethics, international affairs, and public policy."[3] While there are fellows who come from unique disciplines, like medicine and law, many appear to have similar roles. Twenty-nine are associated with Southern Baptist seminaries. Fourteen work at Baptist universities. Eight are pastors of Baptist churches, many of which are directly associated with the SBC. These fellows make up almost three-quarters of those involved in writing the statement. Additionally, the fellows include medical doctors and ethicists. Only one fellow works explicitly in technology. While there are some women among the fellows, the majority are men who are associated with academics, whether at universities or seminaries, and pastoral care.

One goal of the statement is to enter the broader conversation about AI ethics and contribute the specific view of the ERLC. Jason Thacker, an associate fellow for the ERLC and instrumental figure in the creation of this statement, comments that the ERLC hoped "to foster deep and meaningful dialogue with the larger community" concerning

[3] "Research Institute," ERLC, accessed March 17, 2022, https://erlc.com/initiatives/research-institute/.

the issue of moral and ethical AI implementation and "add [its] perspective to the larger conversations."[4] Since its release, Thacker notes, "we have had the privilege of engaging in rich dialogue with people from nearly every walk of life. From government leaders and technologists to doctors and military leaders."[5] By contributing to the views on AI ethics, the ERLC asserts itself as a participant in the growing movement of ethical technological applications. Although the ERLC represents a highly specific Christian perspective, creating this statement as a gateway into critical conversations about AI ethics is commendable.

This goal reflects a broad audience: anyone involved in thinking about AI ethically. The "larger conversations" to which the ERLC intends to enter include those with both religious and nonreligious entities. By adding its Christian ethical view to all the other approaches to AI ethics, the ERLC hopes to interact with people and groups from other perspectives. Ideally, people from diverse opinions could read about each other's views and engage in conversation so that common ground could be found, and AI could be used more ethically.

The primary goal of the document, however, is to guide Southern Baptist Christians in the ethics of AI development and implementation. According to Thacker, "the central goal of the statement was to be faithful to our understanding of the Christian faith and how it applies to emerging technologies, such as artificial intelligence."[6] "Our"

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[4] Jason Thacker, "Nine Months Later: An Assessment of an Evangelical Framework for Artificial Intelligence," AI and Faith, last modified November 30, 2019, https://aiandfaith.org/nine-months-later-erlc-ai-statement/.

[5] Thacker, "Nine Months Later."

[6] Thacker, "Nine Months Later;" "Research Institute."

refers to the ERLC which reflects the beliefs of the SBC. In other words, the ERLC aims to guide those in its denomination in considering moral applications of AI. It attempts to create a timeless ethical lens for AI use that reflects Southern Baptist values and maintains Southern Baptist principles.[7]

The affiliations of the authors and signatories support the idea that it was written primarily to Southern Baptist Christians. First, many of the people involved in creating the statement are directly affiliated with Southern Baptist institutions like Southeastern Baptist Theological Seminary, Southern Evangelical Seminary, and the Southern Baptist Theological Seminary. These people consult for the ERLC, which is the public policy branch of the SBC.[8] Also, the identity of the signatories aligns with the target audience. It was signed by seventy-three people.[9] Twelve are affiliated with seminaries that receive monetary support from the SBC. Eleven are pastors at churches affiliated with the denomination.[10] Seven work directly for the ERLC. Others work for colleges and universities that are associated with various Baptist conventions that have a relationship with the SBC. Therefore, a large portion of those who wrote and signed the statement have direct SBC ties.

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[7] Thacker, "Nine Months Later."

[8] Ruth Graham, "How Southern Baptists Are Grappling With Artificial Intelligence," Slate Magazine, last modified August 12, 2019, https://slate.com/technology/2019/04/southern-baptist-convention-artificial-intelligence-evangelical-statement-principles.html.

[9] ERLC, *Artificial Intelligence: An Evangelical Statement of Principles*, (2019), https://erlc.com/resource-library/statements/artificial-intelligence-an-evangelical-statement-of-principles/.

[10] While not an official record of churches affiliated with the SBC, this site provides a list of churches who have been in friendly relationship with the SBC and is kept as current as possible. Southern Baptist Convention, "Find a Church," SBC Churches Directory, last modified 2022, https://churches.sbc.net/.

Analysis

The statement begins with a page-long preamble that grounds its claims in the Bible, outlines key beliefs like the image of God and the importance of humanity, and states its purpose. Twelve articles follow. Each article delves into a specific topic, providing the ERLC's view on appropriate ways to use AI. The articles are entitled image of God, AI as technology, relationship of AI and humanity, medicine, bias, sexuality, work, data and privacy, security, war, public policy, and the future of AI. At the end of each article, the ERLC gives Bible verses as support for its claims.

Because the statement was written by Southern Baptist Christians to Southern Baptist Christians certain theological commitments underlie the ERLC's claims: 1) biblicism 2) the benevolence of God and 3) the created order. According to the ERLC, the way Southern Baptists approach life and its issues is born out of the teachings of the Bible. The following analysis will use SBC and ERLC interchangeably since the ERLC is an entity within the SBC. This commitment to biblicism influences the ERLC's perspective on every topic it discusses. Since the SBC is an evangelical denomination, it is not surprising to find a commitment to biblicism.[11] The preamble of the statement makes this clear: "Evangelical Christians hold fast to the inerrant and infallible Word of God, which…dictates how we view God, ourselves, and the tools that God has given us the ability to create."[12] Additionally, the preamble affirms that all ideas within are

[11] David W. Bebbington, "The Nature of Evangelical Religion," in *Evangelicals: Who They Have Been, Are Now, and Could Be* (Grand Rapids: Wm. B. Eerdmans Publishing, 2019), Paper, 41

[12] ERLC, "Artificial Intelligence," Preamble.

approached “in light of Scripture and the gospel message.”[13] Therefore, Bible verses are cited at the end of every article. Article 6, which addresses sexuality and marriage in relation to AI, represents this commitment to biblicism. Some critics question why this article is included in the statement. The ERLC wanted to address a range of issues in AI, even those that may arise in the future. This article reflects the ERLC’s strong commitment to biblical principles and a conservative interpretation of the Bible, rejecting any type of sexual pleasure or union outside of marriage between a man and woman. This includes interactions with technologies like AI. The SBC’s, and therefore the ERLC’s, theological conviction of biblicism influences every affirmation and rejection in the statement.

Perhaps surprising to some, the ERLC’s understanding of God’s benevolence and view of AI as part of God’s grace toward humans leads to a positive view of AI. It uses language like “the promise of technology,” “hope for the future,” and “innovation for the glory of God.”[14] It also identifies AI as “a demonstration of the unique creative abilities of human beings,” “technology [that] can be used in society to uphold human dignity,” “aid [for] human reasoning,” “expressions of God’s common grace,” and as having “legitimate applications.”[15] Through this rhetoric, the ERLC assures its people that AI has good uses that promote human flourishing, alleviate suffering, and glorify God.[16]

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[13] ERLC, "Artificial Intelligence,” Preamble.

[14] ERLC, "Artificial Intelligence," Preamble; ERLC, "Artificial Intelligence," Article 2.

[15] ERLC, "Artificial Intelligence," Article 2; ERLC, "Artificial Intelligence," Article 2; ERLC, "Artificial Intelligence," Article 3; ERLC, "Artificial Intelligence,” Article 4; ERLC, "Artificial Intelligence,” Article 9

[16] ERLC, "Artificial Intelligence," Article 2

Most significantly, the ERLC bases many suggestions and rejections on its theological commitment to the created order, as described in Genesis 1-3. This created order begins first with God creating humans in the image of God. Next, God gives humans dominion over the earth, making them superior to other created things. With this superiority comes the responsibility of stewarding creation. Then, God commands humanity to work in the same way that the Divine labored during creation. However, humankind disobeyed God, creating the need for salvation. God sent Jesus to redeem humanity. The hierarchy that is born out of this creation story influences many of the ERLC's claims about how AI should be used. The statement reflects this order with God as the supreme creator, humans as second in command beneath God, and all other created things under the dominion of humans.

The SBC's belief that humans were created in the image of God affects its perspective on the potential status of AI. The preamble, Article 1, and Article 12 elaborate on this idea. A central idea of the created order is the formation of humans in the image of God. According to the preamble, this fact has implications for how Southern Baptist Christians view God, themselves, and the tools they create. Based on this belief, the ERLC affirms that humans are distinct from the rest of creation, denying that anything in creation could "supplant the image of God in which human beings are created."[17] Thus, it denies that AI can attain the same status as humanity. The first article is wholly dedicated to affirming the image of God in humanity. Here, the authors reiterate *every* person is created in God's image. Article 12 again denies that any creation of

[17] ERLC, "Artificial Intelligence," Preamble.

humans will ever "supplant humanity as His image-bearers."[18] This is seen to be a recurring theme in the statement. The image of God gives grounds for the distinctiveness of humans as well as their power over other species and technologies.

Based on the SBC's belief that humans are superior to all other parts of creation, it maintains that AI will never usurp human superiority. This is most clearly seen in Article 12. In Genesis 1:28, the Divine commands humans to subdue and rule over the earth and its inhabitants. The ERLC believes that humans are superior to the rest of creation because God gave them sole dominion over it.[19] This authority was given only to humans. The ERLC extends human superiority to the idea of technology. The last article describes how humans are superior to AI in "worth, dignity [and] value."[20] Because this superiority was bestowed upon humans by God, the ERLC considers it guaranteed and necessary.

The SBC's commitment to human responsibility results in the belief that AI cannot be held accountable for its actions. This is shown in Article 3 and Article 10. According to God's command for humans to rule over created things, the ERLC upholds human responsibility, even over AI. Humans are the ones who will be judged by God and are the designers of AI, thus AI can never be held responsible for the actions it takes. This applies even if AI capacities exceed that of humans. Humanity will always hold authority and be subject to the consequences of said decisions.[21] In war, "human agents

[18] ERLC, "Artificial Intelligence," Article 12.

[19] ERLC, "Artificial Intelligence" Article 12.

[20] ERLC, "Artificial Intelligence," Article 12.

[21] ERLC, "Artificial Intelligence," Article 3.

bear full moral responsibility for any actions taken by the system."[22] Regardless of future AI development, humans will always be accountable for decisions made with the help of or by AI systems.

In accordance with the SBC's belief that humans were created to work, the statement insists that AI should not absolve humanity of labor. Article 7 develops this idea. During creation, God tasks humans to work the land. Furthermore, the creation account describes God working for six days and resting for one. According to these examples from the Bible, work is a necessary part of life. This affects the ERLC's opinion on AI use, namely, that AI should not be used to entirely remove work from people's lives. The ERLC supports the use of AI to aid humans in work and service of others yet rejects the use of AI to relieve people of all work.

Based on the SBC's conviction that belief in Jesus is the only method of salvation, it rejects that AI will ever be salvific. Article 2 and Article 12 elaborate on this idea. Continuing the story in Genesis, humans sin, become separated from God, and are in need of salvation. The ERLC affirms "the Lord Jesus alone can atone for sin and reconcile humanity to its Creator."[23] Consequently, AI will never be the answer to humans' need for salvation. The statement ends with a reminder that God is the creator of life and will never be superseded by any technology. Furthermore, the Divine is all-knowing and in control of the world's redemption. The ERLC states, "we know that God is omniscient and that nothing we create will be able to thwart His redemptive plan for

[22] ERLC, "Artificial Intelligence," Article 10.

[23] ERLC, "Artificial Intelligence," Article 2.

creation."[24] Only God can save people; technology will never replace the salvation of the Divine. Overall, the created order in Genesis 1-3 and the hierarchy it establishes determines how the ERLC believes AI should be used.

As a result of this created order, the ERLC believes that the advancement of human flourishing should be an important consideration in AI use. The distinction of humans as the only creation made in God's image gives them superiority over all other things. Therefore, in the hierarchy of the created order, humans are of most importance aside from God. Consequently, their well-being is of top concern as AI technology is developed and used. Promotion of human flourishing is done through the maintenance of human rights, love of neighbor, and defense of human dignity.

The SBC's commitment to promote human flourishing leads to the necessity to protect human rights. The ERLC writes that implementations of AI that violate human rights or objectify people are prohibited.[25] The authors specifically mention the freedom of speech in Article 9. Again, in Article 11, they assert that no group should use AI "to infringe upon God-given human rights."[26] Because God has granted rights to all humans, those rights should be protected and not violated by AI.

Articles 2 and 4 connect the commitment to human flourishing to love of neighbor and alleviation of human suffering. The authors believe technology should be used "for the glory of God, the sake of human flourishing, and the love of neighbor."[27] It

[24] ERLC, "Artificial Intelligence," Article 12.

[25] ERLC, "Artificial Intelligence," Article 9.

[26] ERLC, "Artificial Intelligence," Article 11.

[27] ERLC, "Artificial Intelligence," Article 2.

should also be implemented "in ways that lead to greater flourishing and the alleviation of human suffering."[28] Article 4 suggests that this can be done through using AI in ways consistent with the basic principles of medical ethics. Furthermore, all people should benefit from AI use in medicine.[29] Love for others, regardless of identity, should be evident in how AI is used. Jesus commands people to love their neighbors in Matthew 22:39. The ERLC bases this appeal to loving others on this specific command. Consequently, ensuring that love for all people is reflected in AI use safeguards human prosperity.

Another critical piece of human flourishing is the preservation of human dignity. This is a consistent theme throughout the statement. It applies to medicine, bias, work, data collection, and all future technological advancements.[30] Regarding each issue, the ERLC denies the violation of human dignity. It is a fundamental principle that should be guaranteed for all people.[31] Moreover, it denies that AI can have the same level of dignity as humans, regardless of future developments.[32] These claims are again based on the identity of humans as image-bearers of God. Humans, therefore, have "intrinsic and equal worth, dignity, and moral agency" and are "distinct from all creation."[33] The statement ends by reminding its readers that AI will never have the same level of "worth, dignity, or

[28] ERLC, "Artificial Intelligence," Article 2.

[29] ERLC, "Artificial Intelligence," Article 4.

[30] This is demonstrated in Articles 4, 5, 7, 8, and 12. ERLC, "Artificial Intelligence."

[31] ERLC, "Artificial Intelligence," Article 5; ERLC, "Artificial Intelligence," Article 8.

[32] ERLC, "Artificial Intelligence," Article 12.

[33] ERLC, "Artificial Intelligence," Article 1.

value [as] image-bearers."[34] To conclude, the ERLC affirms that human dignity must be maintained due to its biblical conviction that each human has inestimable value as a result of their creation in God's image.

The themes of the image of God, love of neighbor, and human responsibility, rights, dignity, and superiority all reflect the document's larger theme of anthropocentrism. The ERLC is primarily concerned with how the development and use of AI will impact human interaction. The statement shows an emphasis on human flourishing through the maintenance of human rights and dignity. Human authority and superiority over the world show a focus on humanity. The themes of the image of God and anthropocentrism describe the identity of humans and confirm that humans should be the object of AI development. Overall, humans exhibit the image of God and are therefore the center of considerations in AI use.

Reception

The ERLC's statement has received both criticism and support since its release. Those with clear Christian theological convictions have commented on both sides of the argument.

Some Christians who are sympathetic to the ERLC's mission of approaching AI with Christian ideals raise four clear critiques. The first is that the restrictions the ERLC proposes could harm humanity. Joshua Swamidass, an evangelical Christian and specialist in artificial intelligence, observes that "imprecise ethical cautions could cost

[34] ERLC, "Artificial Intelligence," Article 12.

lives."[35] Notably, the ERLC claims informed consent should be requisite.[36] However, Swamidass explains that in academic research, "informed consent can be ethically waived" and "insisting on informed consent…has the effect of shackling life-saving scientific work."[37] Consequently, disregarding the ability to waive the requirement of informed consent "erects a poorly considered religious barrier to the type of medical research [Swamidass] does."[38] The ERLC also affirms that moral decision-making is the responsibility of humanity, not technology. Swamidass points out that AI is responsible for directing Tesla's self-driving cars and could be put in a situation that requires it to make a moral decision, like deciding whether to avoid a pedestrian and risk its passengers' safety or vice versa. He explains that the ERLC appears to oppose this situation which "risks unnecessary prohibitions of life-saving technology."[39] It seems that the ERLC may place humans in harms way through the strict rejection of certain AI uses based on a lack of knowledge or imprecision.

The second major critique is that the language used is imprecise and simplistic. Elias Kruger, a data scientist and Christian blogger, and Joshua Swamidass both speak to this point.[40] Kruger focuses on Article 7 and Article 9 when describing the confusing and

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[35] Joshua Swamidass, "Evangelicals Take On Artificial Intelligence," *The Wall Street Journal*, May 9, 2019, https://www.wsj.com/articles/evangelicals-take-on-artificial-intelligence-11557442994.

[36] ERLC, "Artificial Intelligence," Article 8.

[37] Swamidass, "Evangelicals."

[38] Swamidass, "Evangelicals."

[39] Swamidass, "Evangelicals."

[40] Elias Kruger is a founding member of the AI and Faith organization, Senior Data Scientist and Vice President at Atlanta's Wells Fargo Bank, and blogger at AI Theology. "Founding Members," AI and Faith, last modified December 19, 2021, https://aiandfaith.org/about/founding-members/.

contradictory language. The purpose of Article 7 appears to be addressing job loss caused by AI implementation. According to Kruger, this article does not directly confront that challenge, but rather it rambles in confusing sentences. He opposes the contradictory nature of Article 9 saying that the affirmations and denials counter each other. The article affirms AI use "in policing, intelligence, surveillance, investigation," but denies that it should be used to harm people.[41] According to Kruger, using AI in policing guarantees "that it will be used to harm some."[42] He also believes many of the issues described to be oversimplified and in need of nuance. Swamidass also criticizes certain language choices in the document. To illustrate, the ERLC says, "God alone has the power to create life." [43] Swamidass points out that this is not necessarily true. Technically, organisms create life through procreation and scientists create viruses, which some consider alive and others do not, in the laboratory. While he recognizes that this wording is more of "an affirmation of God's providence and authority," Swamidass comments that this wording acts to categorize "artificial minds [as] either impossible or immoral."[44] Instead, he wishes the ERLC had supported scientific inquiry.

The third critique concerns the narrow view the statement represents. Some critics have observed that the document does not represent the majority of Christians.[45] Swamidass comments that many of the signatories are "relatively conservative American

[41] ERLC, "Artificial Intelligence," Article 9.

[42] Elias Kruger, "ERLC Statement On AI: An Annotated Christian Response," last modified April 12, 2019, https://aitheology.com/2019/04/12/erlc-statement-an-annotated-christian-response/.

[43] ERLC, "Artificial Intelligence," Article 12.

[44] Swamidass, "Evangelicals."

[45] Thacker, "Nine Months."

Protestants," and therefore "represent only a narrow slice of the global evangelical experience."[46] They received training in theology and pastoral care, and almost none have experience in artificial intelligence. Therefore, the lack of diversity in those that support the statement alludes to the restricted view it represents.

The fourth and most significant critique is the lack of input from technologists and scientists in formulating the statement. Kruger advocates for the help of technologists to advise the ERLC in making more informed affirmations and rejections regarding AI. Swamidass laments, "it often reads as if the community of AI scientists and ethicists weren't even consulted."[47] Christopher Benek, a Presbyterian pastor and self-proclaimed "techno-theologian," agrees with other critics that the lack of input from specialists in technology and science negatively impacts the accuracy of the statement.[48] Had more professionals in science and technology been consulted in writing this document, the potential harmful consequences may have been analyzed, the language may have more accurately reflected the issues in AI, and the view presented would have been broadened to include more of the scientific community. In conclusion, some Christians who are interested in the theology behind AI use and knowledgeable in the technological and scientific aspects of AI are concerned with the potential harm caused by the document,

[46] Swamidass, "Evangelicals."

[47] Swamidass, "Evangelicals."

[48] Christopher Benek is a Presbyterian pastor and the founder of CoCreators; "About," ChristopherBenek.com, last modified March 28, 2020, https://www.christopherbenek.com/about/.; Brandon Showalter, "Evangelicals unveil statement on artificial intelligence, say the Church needs to engage," *The Christian Post*, April 16, 2019, https://www.christianpost.com/news/evangelicals-unveil-statement-on-artificial-intelligence-say-the-church-needs-to-engage.html.

the language used, the narrow outlook reflected, and scarcity of involvement from technologists in writing the document.

While responding to unidentified critics, Thacker describes two other critiques of the document. The first critique is that the document only addresses a small subset of the issues in AI ethics to a limited degree. There are only twelve short articles that are each dedicated to one topic and its relationship to AI. Thacker explains, "most of the critical feedback we received was directed at our inability to address every issue head-on."[49] Many of those who critiqued the statement agree that it lacks breadth in the topics it considered and the brevity with which each was explored. The second criticism concerns the relevancy of some of the topics the ERLC chose to include. Some critics believe that certain articles do not directly apply to current issues in AI ethics. They specifically "question the inclusion of articles on sexuality or even the image of God."[50] Because there is little space in the document, critics believe particular topics could have been replaced with other more relevant issues.

Those who support the document refute some of these criticisms. In response to criticism about the narrow, non-ecumenical view of the statement, supporters remind critics of its purpose. Thacker says the restricted view was intentional. In its statement, the ERLC provides affirmations and denials of AI use for people who share its same belief system and values. The authors "were not claiming to speak for all evangelicals, much less for all of Christendom."[51] It is therefore inferred that the statement investigates

[49] Thacker, "Nine Months."

[50] Thacker, "Nine Months."

[51] Thacker, "Nine Months."

only the SBC's perspective and does not attempt to include all Christians' opinions in its recommendations. Considering that many of the drafters and signatories come from institutions affiliated with the SBC, it is logical that the values in the statement specifically reflect those of the SBC.

Responding to those who criticized the limited breadth of the document, supporters cite feasibility and purpose. Thacker defends the document saying the authors made "efforts to keep the document concise," so they were not able to "address every issue head-on."[52] Richard Mouw, who currently serves at Calvin College's Henry Institute for the Study of Religion and Politics as a senior research fellow, also responds to this criticism. In an article published by Biologos, Mouw explains his support for the ERLC statement.[53] He understands that it is not meant to exhaustively address each topic that is mentioned. Instead, "it is urging upon us [Christians] the need to 'test the spirits.'"[54] He praises the document for "raising the right questions" for Christians to consider as they confront emerging technologies.[55]

To counter critiques of the relevancy of some articles, supporters again call attention to purpose. Thacker maintains that the ERLC "wanted this document to be more timeless rather than tied to a specific cultural moment."[56] In other words, the drafters and

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[52] Thacker, "Nine Months."

[53] Biologos is an organization that explores God's Word and God's World. "About BioLogos | Science and Faith Working Hand in Hand," BioLogos, last modified January 16, 2019, https://biologos.org/about-us.

[54] Richard Mouw, "Why I Signed the Evangelical Statement on Artificial Intelligence," BioLogos, last modified April 26, 2019, https://biologos.org/articles/why-i-signed-the-evangelical-statement-on-artificial-intelligence.

[55] Mouw, "Why I Signed."

[56] Thacker, "Nine Months."

signatories wanted the document to be applicable to issues yet to arise that will involve AI and humanity. Although issues involving sexuality are not prominent in the US yet, the ERLC wanted to comment on this issue in preparation for its inevitable arrival. This matches the purpose of the statement outlined in its preamble: “We desire to equip the church to proactively engage the field of AI, rather than responding to these issues after they have already affected our communities.”[57] Others critiqued the inclusion of the image of God. The ERLC included this value in the document because it represents the specific view of the SBC, giving grounds for many of their affirmations and denials. Overall, the authors of the statement tried to address a multitude of issues current and future to inform their audience.

Conclusion

The statement released by the ERLC reflects the specific beliefs of the SBC and a distinct Christian view of AI ethics. It was written and confirmed by many Southern Baptist evangelicals for the purpose of guiding those from the SBC denomination in considering ethical questions that arise in AI use. It inaugurates “the first time that a Protestant Christian group laid out a set of guiding principles aimed at equipping the Church to think wisely about emerging technology and to engage the larger cultural conversations surrounding artificial intelligence.”[58] Despite the statement’s perceived weaknesses, the SBC commitment to equip its members to face difficult ethical questions about AI is admirable.

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[57] ERLC, "Artificial Intelligence," Preamble.

[58] Thacker, “Nine Month.”

CHAPTER FOUR

The Rome Call for AI Ethics

The last chapter explored the ERLC's response to rising ethical questions in AI. This chapter will investigate the response supported by the Roman Catholic Church, examining the background, major themes, and responses to the statement, the *Rome Call for AI Ethics*.

On February 28th, 2020, the Pontifical Academy for Life (PAL) hosted a conference called "RenAIssance – A Human-Centric Artificial Intelligence." At the close of the conference, multiple signatories signed the *Rome Call for AI Ethics*, also known as the *Rome Call.*[1] This document describes the view the PAL supports for the ethics of AI creation and use. It promotes the shared responsibility of multiple stakeholders in the ethical design and implementation of AI, addressing three main areas: ethics, education, and rights. It also gives six principles that contribute to its ethical framework. Overall, the *Call* creates an "algor-ethical" vision for the future of AI.

Background

The authors of the *Rome Call* were united around the cause of AI ethics even though they represent a diverse group. Leaders of the Roman Catholic Church led the writing process. However, they worked with AI experts who were some of the world's

[1] "Artificial Intelligence 2020," Pontificia Accademia Per La Vita, last modified February 28, 2020, https://www.academyforlife.va/content/pav/en/news/2020/intelligenza-artificiale-2020.html.

top professionals in AI. Although members of the PAL were involved and it was submitted to the Secretary of State of the Holy See to be approved, the *Rome Call* is not one of the PAL's official statements.[2] United around the need for a commitment to ethically developing and using AI, those from the Church came together with AI experts to create the *Rome Call*.

The primary purpose of the Academy is "the defense and promotion of the value of human life and of the dignity of the person."[3] The PAL is located in Vatican City State and has existed since its creation by Pope Saint John Paul II in 1994.[4] It is tasked with three responsibilities: 1) studying problems related to promoting and defending human life in an interdisciplinary manner 2) forming people in a "culture of life" in submission to the Church 3) informing "Church leaders, the various biomedical science institutions and societal health care organizations, the media, and civil society" of the conclusions of its study.[5] Therefore, the PAL has advised the Catholic Church about emerging developments in society as well as shared its view with secular institutions.

Many of the problems referred to in the first responsibility of the PAL are scientific in nature. They concern technologies or procedures that are related to human dignity, respect for others and the universe, and quality of life.[6] For example, the PAL

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[2] Cory A. Labrecque, "The Rome Call for AI Ethics: Co-Responsibility and Commitment," AI and Faith, last modified August 6, 2020, https://aiandfaith.org/the-rome-call-for-ai-ethics-co-responsibility-and-commitment/.

[3] "Pontifical Academies Pontifical Academy for Life Profile," Vatican, accessed April 19, 2022, https://www.vatican.va/content/romancuria/en/pontificie-accademie/pontificia-academia-provita/profilo.html.

[4] "Pontifical Academy for Life"

[5] "Pontifical Academy for Life"

[6] "Pontifical Academy for Life"

has investigated euthanasia and its relation to human dignity.[7] The PAL is thus closely connected to both scientific and religious higher education institutions.[8] In this way, the PAL examines scientific advancements in light of certain commitments, like the culture of life.

The "culture of life" spoken of in the second responsibility of the PAL refers to the Church's belief that human life is sacred from its beginning to its end and at all times in between. Although this is a religious idea, Pope John Paul II argued that it appeals to all people regardless of whether they identify as Catholic. This is a result of human reason. As long as the person is willing to recognize truth and goodness, they can recognize the value of human life at all points in time.[9]

Reflecting the third responsibility, the writing of the *Rome Call* involved people from multiple backgrounds, both religious and scientific. It brought together diverse people, some from the PAL and others with specialization in AI. Together, they aimed to create a widely acceptable framework for ethical AI use. As evidenced by the diversity of the signatories, the statement has succeeded in appealing to people from a variety of theological backgrounds.

There were five original signatories, most of whom are influential in the technological sphere and one who is also involved in the religious sphere. Brad Smith,

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[7] Pontifical Academy for Life, *Respect for the Dignity of the Dying*, (Vatican City, 2000), https://www.vatican.va/roman_curia/pontifical_academies/acdlife/documents/rc_pa_acdlife_doc_20001209_eutanasia_en.html

[8] "Pontifical Academy for Life"

[9] John Paul II, *Evangelium vitae*, encyclical letter, Vatican website, March 25, 1995, https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_25031995_evangelium-vitae.html

President of Microsoft, signed the *Rome Call* coming from a career in technology without explicit religious ties. Smith's role at Microsoft includes leading his team in investigating and addressing issues like "cybersecurity, privacy, artificial intelligence, environmental sustainability, human rights, immigration and philanthropy."[10] Hence, he is knowledgeable in the field of technology, and his work centers around how to use technology and protect people. His voice is an authoritative one in regard to technology.

At the time of signing, John Kelly was the Senior Vice President of IBM's Cognitive Solutions and Research team.[11] In this role, he oversaw many projects in technology including the development of Watson and the company's AI pursuits.[12] Overall, he has almost forty years of experience in the Information Technology industry.[13] Although he no longer holds this position, IBM is still committed to the vision of the *Call*.[14]

Another signatory, Qu Dongyu, serves as the General Director of the United Nations' Food and Agriculture Organization (FAO). He was born in China and educated in China and the Netherlands in horticultural science, plant breeding, genetics, and

[10] Microsoft, "Brad Smith," Stories, last modified January 18, 2022, https://news.microsoft.com/exec/brad-smith/.

[11] Applied Materials, "John E. Kelly III, Ph.D," Applied Materials | Semiconductor, Display and Solar, last modified 2022, https://www.appliedmaterials.com/company/about/leadership/dr-john-e-kelly.

[12] Applied Materials, "John E. Kelly III, Ph.D."

[13] Applied Materials, "John E. Kelly III, Ph.D."

[14] "Group Renews Call for AI Ethics – Exaudi," Exaudi, last modified March 1, 2021, https://www.exaudi.org/group-renews-call-for-ai-ethics/.

environmental science.[15] Throughout his career, his work has included making technology available to rural farmers to improve their work.[16] He directs the FAO in using AI "in achieving Food for All… [and] work for Better Production, Better Nutrition, a Better Environment, and a Better Life."[17] Consequently, the FAO has a vested interest in ethical AI use.

Paola Pisano was the Italian Minister for Technological Innovation at the time. She currently works as a professor at two universities, the University of Turin in Italy and Westminster University in London, where she teaches courses on subjects like innovation management, business model innovation, and quantitative research methods.[18] She was named "the most influential woman in the digital industry" by *Digitalic Mag* in 2018.[19] Additionally, she contributes to the University of Turin's E-business lab and Westminster University's IDEaS (Innovation, Design, Entrepreneurship, and Strategy) Research Group.[20] During her time as the Minister for Technological Innovation, she explored ways to use technology to alleviate suffering from the COVID-19 pandemic.[21]

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[15] "Biography | Director General | Food and Agriculture Organization of the United Nations," Home | Food and Agriculture Organization of the United Nations, last modified 2022, https://www.fao.org/director-general/biography/en/.

[16] "Biography Director General."

[17] "Renews Call."

[18] "Paola Pisano," LinkedIn Italia: Accedi O Iscriviti, accessed April 20, 2022, https://it.linkedin.com/in/ministropisano.

[19] "Paola Pisano;" Digitalic Mag is an Italian technology magazine. "Chi Siamo," Digitalic, last modified 2022, https://www.digitalic.it/chi-siamo.

[20] "Paola Pisano."

[21] Yun Xuan Poon, "Paola Pisano, Minister for Technological Innovation, Italy," GovInsider, last modified December 16, 2020, https://govinsider.asia/digital-gov/paola-pisano-minister-for-technological-innovation-italy-women-in-govtech-2020/.

Vincenzo Paglia is not only the president of the PAL, but he is also the Grand Chancellor of the Pontifical John Paul II Institute for Studies on Marriage and Family.[22] He has served in many other roles within the Roman Catholic Church and has received awards including the Gandhi Medal in 1999 and the Mother Teresa Prize from the government of Albania.[23] His education includes philosophy, theology, and pedagogy.[24] As the president of this Academy, Vincenzo Paglia has led the Roman Catholic Church in examining issues of bioethics, palliative care, and euthanasia and assisted suicide, bridging the gap between theology and technology.[25] Overall, the signatories came from different areas, yet agreed to uphold and promote the vision of the *Rome Call*.

As with the original signers, the conference that marked the signing of the document represented a considerable variety of backgrounds and disciplines, illustrating the PAL's attempt to unite a diverse community in examining AI ethics. According to Cory Labrecque, a member of the PAL, the end of the XXVI General Assembly of the Academy involved "intense sessions…a dozen presentations and a handful of moderated discussions on the relationship between – and the challenges arising at the intersection of – artificial intelligence, ethics, human health, and the law."[26] The speakers for this part of

[22] "Vincenzo Paglia," Vincenzo Paglia, accessed April 20, 2022, https://www.vincenzopaglia.it/index.php/vincenzo-paglia-eng.

[23] "Vincenzo Paglia."

[24] "Vincenzo Paglia."

[25] "The President," Pontificia Accademia Per La Vita, accessed April 20, 2022, https://www.academyforlife.va/content/pav/en/the-academy/the-president.html.

[26] "Welcome New Founding Members Cory Labrecque and Derek Schuurman," AI and Faith, last modified September 9, 2020, https://aiandfaith.org/welcome-new-founding-members-cory-labrecque-and-derek-schuurman/; Labrecque, "The Rome Call."

the Assembly were mostly from non-religious entities, which is notable because the Assembly's prior discussions had been ecclesial in nature.[27]

The speakers included many of the first signatories like Paglia, Smith, Kelly, and Dongyu.[28] David Sassoli, the president of the European Parliament, also spoke.[29] Pope Francis had outlined a speech to give at the event, but due to sickness he was unable to attend. Paglia delivered Pope Francis' speech, which addressed the way AI is changing how we perceive "space, time, and the human body" and cautioned against the adoption of a mechanistic view of humanity.[30] He did not, however, claim that humans should avoid using AI; instead, he advocated for uniting "the Church, industry, politics, and science" in plans to ethically develop AI technology for the common good.[31]

Coming from careers in technology, Smith and Kelly declared AI to be possibly "the most powerful tool in the world." They both spoke highly of the need for the ethical development of AI, echoing the pope's words.[32] After the discussions and speakers, the five signatories signed the *Rome Call*, officially supporting the ethical development of AI.

According to Pope Francis' speech given by Paglia, the *Rome Call* was not meant to give prescriptive rules for members of the Catholic Church as they interact with AI in

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[27] Labrecque, "The Rome Call."

[28] Labrecque, "The Rome Call."

[29] Labrecque, "The Rome Call."

[30] Labrecque, "The Rome Call."

[31] Labrecque, "The Rome Call."

[32] Labrecque, "The Rome Call."

their daily lives. Rather its purpose is to incorporate multiple stakeholders in a commitment to maintain an ethical lens as AI progresses.[33] Therefore, the *Rome Call* was written for anyone involved in the creation or implementation of AI, directly or indirectly. The drafters of the *Rome Call* envision the involvement of "public institutions, NGOs, industries, and groups" who all share a common ethical mindset as they work on developing AI technologies.[34] It is meant to start a conversation to examine the ethical criteria that can be accepted by and upheld by these diverse stakeholders. Accordingly, the drafters incorporated widely accepted values.[35] The introduction describes it as an initial step in the cultivation of a shared understanding, language, and solutions for ethical technological innovation.[36] In other words, the drafters of the *Rome Call* attempted to create a universally acceptable document that could speak to the diverse stakeholders involved in designing and using AI. As a result, the statement was written to all those who play a part in AI development and use.

Analysis

The *Rome Call* consists of five parts. First, the introduction acknowledges the presence of potential positive and negative consequences of AI, advocating for the need to unite all stakeholders involved in AI in a shared commitment to maintain humanity and their home as the center of AI design and use. Following is a section entitled "Ethics"

[33] "Artificial Intelligence 2020."

[34] "Artificial Intelligence 2020."

[35] "Artificial Intelligence 2020."

[36] RenAIssance Foundation, *The Rome Call for AI Ethics*, (Rome, Italy, 2020), Introduction, https://www.romecall.org/wp-content/uploads/2022/03/RomeCall_Paper_web.pdf.

which outlines four key necessities: 1) maintenance of the equal dignity and rights of every human 2) protection against discrimination 3) centrality of humanity and the planet and 4) protection of the vulnerable. The next section is about education, describing the need for a commitment to education especially for the young, elderly, and disabled. The fourth section is entitled "Rights" and promotes the development of regulations that protect people and the environment. It also urges the protection of human rights. The last section describes six principles that contribute to the "algor-ethical" development of AI. The principles are transparency, inclusion, responsibility, impartiality, reliability, and security and privacy. The *Rome Call* reflects three major themes: 1) the potential benefits of AI 2) the value of inclusion and 3) recommendations for how to benefit humanity. These demonstrate the overarching view of what the *Rome Call* names as an "algor-ethical" framework for AI design and use.

The *Rome Call* begins with the affirmation that AI has the potential to significantly improve humans' lives. The introduction reads, "AI offers enormous potential when it comes to improving social coexistence and personal well-being, augmenting human capabilities and enabling or facilitating many tasks that can be carried out more efficiently and effectively."[37] The authors describe that AI can advance how humans interact and live with each other and improve each person's individual life. In this way, both the common good and individual good can be enhanced through the application of AI. So then, the authors view artificial intelligence as a tool that can be used positively to aid humans.

[37] RenAIssance Foundation, "The Rome Call," Introduction.

The *Rome Call* demonstrates inclusion both in who should be involved in and who should be considered when creating the ethical framework for AI. The authors desire that all those involved in designing and using AI systems be involved in the construction of the ethical guidelines for AI. They recognize that this issue is complicated and multi-faceted. Consequently, the voices of all stakeholders are necessary to form a framework that considers and incorporates the needs of everyone who is touched by AI. As a result of this desire, the *Rome Call* appeals to the 1948 Universal Declaration of Human Rights (UDHR). Following the end of World War II, the world agreed to prevent atrocities like those that caused it, so international leaders vowed to create a document to protect individuals' rights across the world. Both those who created and agreed to the UDHR were diverse politically, culturally, and religiously. In late 1948, the UDHR was adopted by the General Assembly of the UN.[38] The UDHR has had a profound impact on human rights, ensuring the maintenance of human dignity for individuals across the world. The values of freedom, equality, dignity, and fellowship in the UDHR are used as guidelines for interactions with AI.

Because the Roman Catholic Church holds human reason in such high esteem and desires the *Rome Call* to be applicable for stakeholders with varying or absent theological convictions, the drafters of the document used the UDHR as the foundation for their argument instead of the Bible. As mentioned above, the Church believes that all rational people are endowed with an understanding of natural law according to Romans 2:14-15.[39]

[38] United Nations, "History of the Declaration," United Nations, accessed January 30, 2022, https://www.un.org/en/about-us/udhr/history-of-the-declaration.

[39] John Paul II, *Evangelium vitae*, sec. 2

In other words, every rational human is able to make moral decisions and come to moral conclusions that reflect God's desires for humanity regardless of theological differences. God has given natural law to humans similarly to how God has given them the Bible. The UDHR is an authoritative document because it was created by rational humans using their God-given reason and the natural law that was written on their hearts by God.

When considering what priorities should be examined when making the framework, the *Rome Call* includes several concerns: the common good, individuals' good, the environment, and the vulnerable. Emphasizing both the common and individual good, one of three requirements the *Rome Call* outlines for the progress of AI is that "it must have the good of humankind and the good of every human being at its heart."[40] In other words, both individuals and communities are important in considering how to design and use AI ethically. In the education section, the *Call* explains that the good of the community should still be a goal "even when there is no personal benefit to be gained."[41] The inclusion principle at the end of the *Rome Call* displays the importance of every individual's good, describing that all humans must be considered so that "all individuals can be offered the best possible conditions to express themselves and develop."[42] Within the theme of inclusion, the *Rome Call* considers both the good of the individual and humanity as a whole.

The authors further recognize that the well-being of the environment is vital to the good and progress of humanity. The good of the environment should be included in

[40] RenAIssance Foundation, "The Rome Call," Ethics.

[41] RenAIssance Foundation, "The Rome Call," Education.

[42] RenAIssance Foundation, "The Rome Call," Principles.

ethical considerations of AI. The introduction presents the idea of environmental health, which continues throughout the statement. The *Call* explains that AI should be created with an emphasis on "the good of humanity and of the environment, of our common and shared home and of its human inhabitants, who are inextricably connected."[43] Later, the authors link the idea of environmental good with the need for new regulations to protect people and the natural world. Overall, the *Call* insists that AI ethics should include a focus on maintaining and respecting the environment as it relates to humanity's good.

Consistent with the Roman Catholic Church's continuing emphasis on social justice and supportive of the inclusion theme, the *Rome Call* pays particular attention to the needs of the vulnerable. This includes a rejection of discrimination and an explanation of the need for education for vulnerable populations. Because their voices are often ignored, particular consideration should be given to defending their well-being. The introduction explicitly identifies the protection of the vulnerable as a primary component of designing and using AI ethically. Interestingly, the *Rome Call* not only advocates for the avoidance of exploiting vulnerable people, but it also promotes improving people's capabilities. The statement reads, "AI-based technology must never be used to exploit people in any way, especially those who are most vulnerable. Instead, it must be used to help people develop their abilities (empowerment/enablement) and to support the planet."[44] Additionally, the *Call* teaches that certain vulnerable populations must be educated in AI as it becomes more prevalent. These populations include the young, elderly, and disabled. As demonstrated, the needs of the vulnerable are of paramount

[43] RenAIssance Foundation, "The Rome Call," Introduction.

[44] RenAIssance Foundation, "The Rome Call," Ethics.

importance when creating an ethical framework for AI. The inclusion principle at the end of the statement shows this focus on including every person's needs during this endeavor to design an ethical vision. This principle states "the needs of all human beings must be taken into consideration so that everyone can benefit."[45] All people, especially the vulnerable, must be in the minds of the multiple stakeholders as they work together to create this ethical framework.

The statement offers five ways to ensure that humans and the environment are benefitted when designing and using AI. These include increasing transparency, maintaining human responsibility, offering education, protecting human rights, and defending human dignity. Addressing the need for transparency, the *Call* states that "devices must be able to offer individuals information on the logic behind the algorithms used to make decisions."[46] While regulations could theoretically require that AI systems explain their functioning, it would be impossible for certain AI algorithms to abide by these regulations due to the black box problem. Consequently, technological development and investigation must accompany the creation of new regulations. If transparency is required prior to the ethical use of AI, then certain AI systems cannot be used because their methods of decision-making cannot be explicitly explained. Although this suggestion is meant to protect humans from harmful consequences of potential adverse decisions made by AI algorithms, it is currently difficult to implement in reality.

Ensuring that humans remain responsible for AI will help guarantee that humans benefit from AI advancement. The *Call* is clear that humans are the initiators of AI

[45] RenAIssance Foundation, "The Rome Call," Principles.

[46] RenAIssance Foundation, "The Rome Call," Rights.

development and will continue to be the overseers of its use. This places the responsibility squarely on humanity's shoulders. The introduction describes the positive impact AI could have on humans' lives. It then explains that those benefits "are by no means guaranteed."[47] As a result, humans are responsible for investigating and producing technology in ways that benefit humans. The statement also emphasizes that AI should always continue to be "dependent on [humanity's] ethical integrity."[48] The end of the statement also explains, "there must always be someone who takes responsibility for what a machine does."[49] Ensuring that AI relies on humans will promote AI for the benefit of humankind.

The drafters of this document foresee a defined transition in which AI technology transforms human life. For that reason, education will be critical to facilitate a smooth shift. It must address the needs of all types of people, including the young, elderly, and disabled, and be accessible to all. An education reformation must accompany the technological transition so that everyone can continue performing at their highest ability as new technology changes how humans work. Its purpose is to inform people of the changing opportunities and complications that come with AI, while maintaining the values of inclusivity and respect. This section reflects the emphasis on human benefit in that it focuses on ensuring that every human can adapt to using AI in everyday life and work. It advocates for using AI in ways that support humans, positively impacting all.

[47] RenAIssance Foundation, "The Rome Call," Introduction.

[48] RenAIssance Foundation, "The Rome Call," Introduction.

[49] RenAIssance Foundation, "The Rome Call," Principles.

The statement promotes goals for educating people to adapt to a world where AI permeates every facet of life.

The document also emphasizes that protecting human rights is essential to producing technology that benefits humans. The rights section reads, “In order for AI to act as a tool for the good of humanity and the planet, we must put the topic of protecting human rights in the digital era at the heart of public debate.”[50] The authors go on to argue that protecting people’s rights also protects their freedom and dignity by avoiding discrimination. Freedom and dignity are fundamental conditions to human beings. Therefore, protecting them through upholding human rights in AI development and use is beneficial to humans.

Continuing the idea of human dignity, the *Call* explains that honoring people’s dignity helps guarantee that AI serves humanity. The introduction describes this dignity as inherent to each individual. This idea is developed in the ethics section where the authors characterize all individuals as born with equal dignity. They write, “dignity must also be protected and guaranteed when producing and using AI systems.”[51] Because dignity is equal among all people and is an inherent quality, protecting human dignity as technology advances promotes the good of every person.

All the preceding values and priorities come together to form the “algor-ethical” vision of AI development. Algor-ethical describes “an approach of ethics by design.”[52] In other words, the authors promote the idea that AI should be instilled with certain values

[50] RenAIssance Foundation, "The Rome Call," Rights.

[51] RenAIssance Foundation, "The Rome Call," Ethics.

[52] RenAIssance Foundation, "The Rome Call," Rights.

that advance human progress. This ethical framework also includes using AI ethically according to the principles described at the end of the *Call*. They are transparency, inclusion, responsibility, impartiality, reliability, and security and privacy. Each of these values aims to serve and protect humans. For example, the principle of inclusion preserves the well-being of all humans so that they are able to flourish. Responsibility refers to the duty of AI developers to design AI in ways that benefit humans instead of harming them or depleting their resources. The impartiality principle protects humans from bias in AI systems so that no person is discriminated against or devalued compared to others. It is vital that AI works reliably especially if used in contexts of human health and safety so that no human is harmed through the use of AI. The security and privacy principle aims to make AI dependable and trustworthy for people. All of these principles are centered around the good of humanity. Notably, this algor-ethical vision requires many separate entities to commit to a common goal. While it is difficult to unite multiple people and organizations around a common goal, the issue of ethics in AI design and implementation is a recognized issue that is gaining increasing attention.

Reception

Because the *Rome Call* was released at the end of February 2020, only a couple of weeks before the COVID-19 pandemic shut down much of the world, it did not initially receive the popular attention it might otherwise have been shown. Still, Stanford's *Artificial Intelligence Index Report 2021* notes that the *Rome Call* was among the five news topics related to ethically using AI that received the most attention in 2020.[53]

[53] Daniel Zhang, Saurabh Mishra, Erik Brynjolfsson, John Etchemendy, Deep Ganguli, Barbara Grosz, Terah Lyons, James Manyika, Juan Carlos Niebles, Michael Sellitto, Yoav Shoham, Jack Clark, and Raymond Perrault, "The AI Index 2021 Annual Report," AI Index Steering Committee, Human-Centered

From a religious perspective, many agree that the *Rome Call* is a good start, but insist more explanation, examination, development, and regulations are needed. Henry Karlson, a Byzantine Catholic and intermittent adjunct professor at Georgetown University and the Catholic University of America, has done graduate work in philosophy, theology, and comparative religious dialogue.[54] Bioethicist Cory Andrew Labrecque investigates how religion, medicine, biotechnology, the environment, and ethics intersect as well as the effect of emerging technologies on how philosophers and theologians think about human nature and how human beings, God, and nature relate.[55] Both Karlson and Labrecque call for a continuation of defining and developing the principles outlined in the document as well as thoughtful examination of how the document should impact policymaking and legal regulations on technology companies. Both emphasize the need for careful deliberation and consideration during the creation of new policies because policymakers must avoid causing more problems and complications with hasty regulations. Karlson points out that it is strategic of the Vatican to first investigate and determine the principles that are necessary to underlie the development and use of AI before creating rules, yet he emphasizes the eventual need for legal regulations. Overall, they are both supportive of the Roman Catholic Church's desire to

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AI Institute, Stanford University, Stanford, CA, March 2021, Chapter 5, https://aiindex.stanford.edu/wp-content/uploads/2021/03/2021-AI-Index-Report-_Chapter-5.pdf

[54] "About," *Patheos - A Little Bit of Nothing*, 2021, https://www.patheos.com/blogs/henrykarlson/about/.

[55] "Welcome Cory Labrecque;" "Cory Andrew Labrecque, PhD," Journal of Humanities in Rehabilitation, accessed April 20, 2022, https://www.jhrehab.org/author/cory-andrew-labrecque-phd/.

be involved in encouraging the ethical development of AI technology for the good of humanity while recognizing that more work must be done.[56]

Some people in the technology sector have a more pessimistic view of the statement, criticizing the *Rome Call* for its impracticality, lack of effectiveness, and vagueness. A large complaint multiple critics have made is the lack of practicality in the document. While the *Rome Call* outlines six guidelines for ethically developing and disseminating AI technology, it does not give any definitive ways that these will be upheld. There are no new regulations that have been made or even propositions about what kinds of regulations could be implemented. Thomas Macaulay, who writes for *The Next Web*, and Simon Chandler, a London technology journalist with a focus on emerging technologies and their effects on society and the economy, add their voices to the concern. While Chandler more strongly feels that the *Rome Call* is impractical and simply "a glorified PR stunt," both he and Macaulay are skeptical of its applicability.[57] Macaulay describes how the *Call* "promises to develop technologies that protect the planet and all its people" yet it never gives specific, feasible ways it will day in and day out do that.[58] Chandler clearly takes issue with the *Rome Call* because it does not do what

[56] Labrecque, "The Rome Call;" Henry Karlson, "The Vatican and AI: Rome Calls For AI Ethics," *Patheos - A Little Bit of Nothing*, March 6, 2020, https://www.patheos.com/blogs/henrykarlson/2020/03/the-vatican-and-ai-rome-calls-for-ai-ethics/#_ftn1.

[57] Simon Chandler, "Vatican AI Ethics Pledge Will Struggle to be More Than PR Exercise," *Forbes*, March 4, 2020, https://www.forbes.com/sites/simonchandler/2020/03/04/vatican-ai-ethics-pledge-will-struggle-to-be-more-than-pr-exercise/?sh=7e19694055ea.

[58] Thomas Macaulay, "Vatican's AI Ethics Plan Lacks the Legal Restrictions It Needs to Be Effective," TNW | Neural, last modified March 2, 2020, https://thenextweb.com/news/vaticans-ai-ethics-plan-lacks-the-legal-restrictions-it-needs-to-be-effective.

it says it envisions for AI development.[59] Chandler complains, "There's no practical timetable, no scheduled meetings, workshops, conferences, or projects, so it's hard to envisage how the laudable call for more 'ethical' AI will actually be put into practice."[60] According to these critics, the *Call* must have practical implications for it to be effective.

Relatedly, some believe the *Rome Call* is ineffective because it gives no consequences for breaking the principles or acting unethically. Chandler says, "*The Call for AI Ethics* is intended more as an abstract incitement to AI companies to work towards ethical AI, rather than a concrete blueprint for how they might actually do this on the ground" and "the Vatican's AI principles are too insubstantial and fluffy."[61] In his mind, the *Rome Call* has no teeth. It is simply a powerless piece of paper with good intentions. Macaulay agrees that the *Rome Call* is ineffective without practical methods that transform the principles outlined therein into action. He also suggests independent external oversight as well as having 100% transparency in decision-making processes.[62]

Furthermore, critics argue that the *Rome Call* principles are vague, leaving room for technology companies to evade the ethical purpose behind them. Chandler points out that the principles allow for too much interpretation in addition to the various ways people in technology perceive the meanings of the principles. For example, privacy is one of the principles the *Rome Call* believes should undergird all of AI development. Chandler highlights the multiple interpretations of this word using Facebook as an

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[59] "Simon Chandler," Forbes, accessed April 20, 2022, https://www.forbes.com/sites/simonchandler/?sh=68eca010169a.

[60] Chandler, "Vatican AI Ethics."

[61] Chandler, "Vatican AI Ethics."

[62] Macaulay, "Vatican's AI Ethics."

example. Facebook ensures "privacy" by ensuring the public does not have access to one's Facebook, yet Facebook itself monitors much of one's online activity even outside of its platform. To Facebook, privacy has to do with other people but not companies. Macaulay warns against the vagueness of the principles because it could allow hidden unethical activity to abound. If a company signs a document like the *Rome Call* that promises to create AI ethically, then the government and other regulatory bodies may pass over the company, believing that they are acting ethically. In reality, the vagueness of the principles could leave enough room for nefarious activity to continue.

Lance Eliot, an internationally recognized AI expert, has responded to unidentified critics who have questioned if religion should be involved in AI ethics at all.[63] They suggest that AI may not be a religious issue. Therefore, the issuance of this statement is an example of the Roman Catholic Church inserting itself into a matter in which it does not belong. Then, they question the implications of one religious group creating such a statement. If it causes other religious collectives to create similar statements, then which ones should humans follow? This could lead to a more separated approach to AI ethics, instead of the desired unified approach. [64]

[63] Lance Eliot is also a CodeX fellow at Stanford who writes for Forbes and AI Trends. Currently, he works as Chief AI Scientist at Techbrium Inc. He is also a former professor at the University of Southern California and former Executive Director of an AI research lab. He has been the keynote speaker at the AI World conference and served as an adviser to the Congressional Vice-Chair of the US Congressional Committee on Science & Technology. Stanford Law School, "Lance Eliot," Stanford Law School, accessed April 20, 2022, https://law.stanford.edu/directory/lance-eliot/; "Dr. Lance Eliot," LinkedIn, accessed April 20, 2022, https://www.linkedin.com/in/lanceeliot.

[64] Lance Eliot, "Pope Francis Offers 'Rome Call for AI Ethics' to Step-Up AI Wokefulness, Which is a Wake-Up Call for AI Self-Driving Cars Too," *Forbes*, March 10, 2020, https://www.forbes.com/sites/lanceeliot/2020/03/10/pope-francis-offers-rome-call-for-ai-ethics-to-step-up-ai-wokefulness-which-is-a-wake-up-call-for-ai-self-driving-cars-too/?sh=3ad0244e7bae.

Many of these critiques are related. The impracticality of the *Rome Call* results from a lack of effectual regulations. It is ineffective because it is vague. Overall, critics think the *Rome Call* had good intentions and may be a good starting point, but they doubt it will make an obvious difference in ethically designing and using AI.

These critiques assume more than the *Call* intends. According to the document itself, it was meant to be a launch pad for uniting multiple stakeholders on a quest for creating and using AI ethically. It was not meant to be the final authority and framework for AI ethics. At the signing event, Smith and Kelly emphasized that the *Rome Call* opens conversation and addresses certain big questions surrounding AI. Smith said, "Microsoft is proud to be a signatory of the *Rome Call for AI Ethics*, which is an important step in promoting a thoughtful, respectful, and inclusive conversation on the intersection of digital technology and humanity. I am inspired by his Holiness' commitment and contributions to this important dialogue."[65] Smith supports the PAL's desire to spark discussion about how to create and use AI in a way that uplifts humanity and maintains human dignity. Kelly noted, "*The Rome Call for AI Ethics* reminds us that we have to choose carefully whom AI will benefit and we must make significant concurrent investments in people and skills."[66] Here, he supports the statement's purpose as a reminder of the diligence that must be implemented when examining questions in AI ethics. To conclude, the authors of the *Rome Call* were not trying to create a single document that encompasses the way AI should be developed and implemented. Instead,

[65] "Rome Call for AI Ethics," Pontificia Accademia Per La Vita, last modified February 28, 2020, https://www.academyforlife.va/content/pav/en/events/intelligenza-artificiale.html; Interestingly, Smith attaches his company to the *Rome Call*. This suggests that Microsoft has some responsibility in developing and using AI according to the values outlined in the *Rome Call*.

[66] "Rome Call for AI Ethics."

they wanted to begin the conversation, bringing together the diverse people involved in AI. As a result, it was not written to give specific guidelines for application of its ideas, consequences for acting out of its bounds, or specifics on every idea therein.

Lance Eliot has supported the *Rome Call* for summoning technologists to discuss the best way to develop AI and commit to perceiving AI as a tool for the benefit of humanity. In response to critiques about the practicality of the document, Eliot cedes that there are many loopholes in the statement. However, he predicts that other stakeholders in AI will fill in the gaps and offer specific guidelines for how the ideas in the *Rome Call* can be actualized.[67] This would align with the purpose of the statement. Because the authors want to unite everyone involved in AI in this algor-ethical vision, they aim to start an ethical conversation surrounding AI in which multiple stakeholders contribute to the formation of the ethical framework. The input of others in the field of AI to create specific guidelines would be the next step which builds on the statement.

To the critics who worry that the vagueness of the document will allow companies to operate unethically, Eliot claims that the public will hold them accountable. Although there are no explicit penalties for signatories who do not abide by the *Rome Call*, Eliot explains that the potential publicity damage that would result from the Church calling out a signatory would be enough to dissuade companies from deviating from the *Call*. He points out that a blow to one's public image could impact business and reputation. Overall, while there are not consequences imposed by the statement itself, there are certainly public consequences for breaking the pledge.[68]

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[67] Eliot, "Pope Francis."

[68] Eliot, "Pope Francis."

Regarding whether religion should be included in discussions on AI ethics, Eliot claims that there is nothing in the statement that is explicitly religious. None of the ideas expressed are obviously related to specific theological beliefs or Catholic doctrine. Accordingly, if one were to compare it to another similar statement without religious ties, it might be difficult to find clear differences. To those who worry about creating diverse religious ethical frameworks leading to a conundrum on which one to follow, Eliot reminds his readers that there is already a variety of ethical visions for AI use, as evidenced by Chapters 1 and 2. Some are outside of the religious sector. In summation, the statement does not demonstrate explicitly religious ideas, and competing ethical views about AI already exist.[69]

The signatories continue to develop the *Call* and promote its message as the statement receives more attention from other organizations. On February 26, 2021, they celebrated the first anniversary of the *Call*, reiterating its purpose and citing their continued efforts to improve it. Paglia reminds readers, "The complexity of the technological world requires a more articulated ethical reflection, to make our commitment truly incisive. We need a new alliance between research, science, and ethics, because we stand at a crucial crossroads, in order to build a world where technology is actually used for the development of peoples."[70] Smith highlighted the importance of the *Call* to help "ensure that technology continues to serve humanity."[71] The current Senior Vice President and Director of IBM Research, Dario Gil, described that "for all of us to

[69] Eliot, "Pope Francis."

[70] "Renews Call."

[71] "Renews Call."

benefit from AI, it requires a commitment to actively develop, deploy, and use it responsibly in order to prevent adverse outcomes."[72] He goes on to share how IBM has demonstrated its commitment to ethically using AI: "Our work in support of AI Ethics permeates our entire company, which includes a centralized governance framework, risk assessment protocols, trustworthy AI development methodologies, education and training initiatives, research innovations, and open-source toolkits to help others bolster their AI ethics efforts."[73] Dongyu restated FAO's commitment to AI ethics related to agri-food systems.

Additionally, over the past year, more organizations have begun to recognize the importance of the *Rome Call*. Paglia described in 2021 that "the 'family' of signatories has grown and we are working to make the document more and more known."[74] For example, Euroconsumers, an organization that advocates for consumers' rights, joined the *Call* to promote "responsibility among organizations, governments, institutions and the private sector to create a future in which digital innovation and technological progress serve humans."[75] As time passes, the authors and signatories hope that this document will continue to inspire and unite people in its mission for ethical AI use.

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[72] "Renews Call."

[73] "Renews Call."

[74] "Renews Call."

[75] Euroconsumers, "Euroconsumers Becomes Ambassador of the Rome Call for AI Ethics," Euroconsumers - Consumer's Rights Organisation, last modified September 17, 2021, https://www.euroconsumers.org/activities/euroconsumers-becomes-ambassador-of-the-rome-call-for-ai-ethics; Euroconsumers, "About Us," Euroconsumers - Consumer's Rights Organisation, accessed April 20, 2022, https://www.euroconsumers.org/about.

Conclusion

The *Rome Call* represents an effort to unite multiple entities who have a role in AI in an ethical framework for developing and using AI. Many notable people have signed it, affirming their commitment to AI ethics within their companies. The *Call* embodies three major points that culminate in the formation of an algor-ethical vision: 1) AI has the potential to be extremely beneficial to humans and the environment 2) inclusion must be demonstrated in those who are part of creating the ethical framework for AI and those whose needs are considered in the framework 3) there are specific commitments that must be maintained to ensure AI benefits humans. While the *Call* has received some criticism, its supporters remind people that it is meant to start conversation and lead to further development.

CHAPTER FIVE

A Christian Response?

The previous chapters have looked in depth at statements released by the Ethics & Religious Liberty Commission (ERLC) and the Pontifical Academy for Life (PAL). This chapter aims to investigate whether these statements suggest that there may be a distinct Christian ethical view of AI. Although both statements were produced by institutions affiliated with prominent Christian denominations, the obvious differences may lead some to reject the idea of a single Christian view. However, there are many similarities that suggest one can find within them aspects of a distinctly Christian view. Although the guidelines themselves do not appear to be exclusively Christian, aspects of the ethical framework created in each are distinctly Christian.

This chapter assumes that these two documents represent Christian perspectives based on the involvement and support of two large Christian institutions. This is significant because it suggests shared values influenced the creation of the two statements. Regarding the relationship between man and Jesus Christ, the SBC and ERLC assert that "God created man in His own image, and…Christ died for man; therefore, every person of every race possesses full dignity and is worthy of respect and Christian love."[1] Additionally, they value salvation through Jesus Christ who "obtained eternal

[1] Southern Baptist Convention, "Baptist Faith & Message 2000," The Baptist Faith and Message, last modified 2000, https://bfm.sbc.net/bfm2000/.

redemption for the believer."[2] Moreover, they maintain that all human life is sacred "from conception to natural death."[3] The PAL was created by Pope Saint John Paul II in 1994 based on beliefs in the culture and Gospel of life.[4] The culture of life involves the sacredness of human life from beginning, through its duration, and to the end. The Gospel of life is the view that Jesus Christ came to give people eternal life, and it is an obviously theological belief. The culture of life and the Gospel of life are clearly connected in the encyclical *Evangelium Vitae* released by Pope John Paul II. According to Catholic belief, because Jesus Christ came to give people abundant and eternal life, it is obvious that human life is of infinite value even here on earth.[5] Both the ERLC and the PAL share origins in large Christian denominations and beliefs in the sanctity of human life, dignity of all humans, and gospel of Jesus.

The following sections outline major differences and key similarities between the statements. I argue that they represent a consistent and distinct Christian perspective. This Christian framework is compared to other views from Chapter 2.

Differences

Even from a casual reading of the statements, one can identify five significant differences: 1) broadness of view 2) degree of practicality 3) target audience 4) appeals to authority and 5) purpose. The first key difference is the broadness of perspective. This is seen in views on the environment. The ERLC demonstrates a more focused perspective

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[2] Southern Baptist Convention, "Baptist Faith."

[3] Southern Baptist Convention, "Baptist Faith."

[4] "Pontifical Academy for Life."

[5] John Paul II, *Evangelium vitae*, sec. 80

with an emphasis on AI issues and how they relate specifically to humans. It considers humans in a way that upholds their dominion over creation. Not once does the ERLC reference the "planet" or the "environment" but seems to be exclusively concerned with how AI will impact humanity. One of its primary claims upon which the rest of the statement is based is "that nothing will ever supplant the image of God in which human beings are created."[6] The rest of the statement emphasizes this concentration on humans and lack of concern for the natural world.

Alternatively, the *Rome Call* emphasizes the effects of AI on both humans and the environment, recognizing that taking care of the planet is essential to human well-being. It has a more integrated and connected view of humans and the earth. Five times the *Rome Call* addresses the "environment" and six times it speaks of the "planet." In all but one, the phrase about the planet or environment is immediately preceded by a parallel phrase about humanity, showing the unbreakable bond between the two. In this way, it seems that the authors of the *Rome Call* view the human race and the environment as two highly integrated units whose health each affects the other. It says, "the good of humanity and of the environment, of our common and shared home and of its human inhabitants, who are inextricably connected," reflecting the connection between the earth and humanity.[7]

Another difference in broadness of view is displayed in the emphasis on the individual versus the common good. The ERLC emphasizes individual rights writing that the common good never supersedes the rights and choices of individuals. Individual

[6] ERLC, "Artificial Intelligence," Preamble.

[7] RenAIssance Foundation, "The Rome Call," Introduction.

rights should be protected from big entities like governments even when the common good is being sought.[8] Later, it discusses that human rights should be maintained in AI use by governments, businesses, or other groups.[9] The *Rome Call* advocates for the protection of individual rights and freedoms, but it also considers the common good, emphasizing in the education section that people should work for the common good even when they do not benefit personally.[10] The *Rome Call* presents a broader approach to using AI ethically than the ERLC through addressing the environment and the collective of humanity.

The second significant difference is the degree of practicality. The ERLC gives big guiding ideals for AI development but not many practical steps. It contains twelve articles that give many affirmations and denials about what is right and wrong that create a specific worldview through which Christians should think about issues in AI both current and future. It also constructs a theory of AI use and describes the values that should underlie it. It does not provide specific actions that would practically propel its adherents toward more ethical uses of AI or give steps to unite people around this worldview. To demonstrate this point, the statement provides a summary of some of its values: "we do not fear what is to come because we know that God is omniscient and that nothing we create will be able to thwart His redemptive plan for creation or to supplant

[8] ERLC, "Artificial Intelligence," Article 8.

[9] ERLC, "Artificial Intelligence," Article 11.

[10] RenAIssance Foundation, "The Rome Call," Ethics; RenAIssance Foundation, "The Rome Call," Education.

humanity as His image-bearers."[11] However, it does not discuss how to promote the vision it has created.

While much of the language in the *Rome Call* is reminiscent of the value-based discussions in the ERLC document, a large portion of it is dedicated to practical applications. It tries to give practical steps forward for ethically using AI. One example is in the education section which gives a potential plan for how to ensure that people are prepared for the drastic change AI will bring to daily life. It says that humans must work toward "developing specific curricula that span different disciplines in the humanities, science and technology" and "overhaul school curricula."[12] Also, at the end of the document, there are six principles to which it is hoped all stakeholders in the field of AI will agree. These principles represent a clear step forward in deciding exactly how AI will be developed and used. The statement defines the principles of transparency, inclusion, responsibility, impartiality, reliability, and security and privacy as part of an "algor-ethical" perspective that "political decision-makers, UN system agencies and other intergovernmental organizations, researchers, the world of academia and representatives of non-governmental organizations" can agree to.[13] By explaining their desire for specific groups to work together to create this algor-ethical vision and promote it, the authors of the *Rome Call* offer a practical way to realize this need for ethics in AI. While the ERLC constructs an ethical worldview for Christians to consider AI, it stops short of giving practical applications, unlike the *Rome Call*.

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[11] ERLC, "Artificial Intelligence," Article 12.

[12] RenAIssance Foundation, "The Rome Call," Education.

[13] RenAIssance Foundation, "The Rome Call," Rights.

The third notable difference is the intended audience. The ERLC document was written primarily for evangelical Christians, appealing to its audience by emphasizing beliefs such as Christ, the gospel, and God's design, and exclusively citing the Bible. In the preamble, it is made clear that the target audience is evangelical Christians. The *Rome Call*, however, was written to any individual or group involved in the field of AI in efforts to unite multiple stakeholders around an ethical framework of AI use. Its authors avoid any overt connection between their theology or faith and the values therein. Their hope is that using inclusive language will allow anyone involved in AI to share in this ethical framework. Therefore, by avoiding explicit references to any Christian theological values, it does not limit itself to acceptance by only Christian groups. In this way, diverse people can agree to its values and work together to develop AI ethically.

The fourth key distinction is that the ERLC and the *Rome Call* appeal to different authorities. The ERLC cites the Bible as the authority and basis for its claims, using biblical references to support its ideas. The authors of the *Rome Call*, however, cite the UDHR and speak of their desire for all stakeholders involved in AI development to commit to a common ethical view. They use the UDHR as the basis for their claims because it is widely accepted by many different people internationally. This reinforces the theme of broadness, showing the desire that people from different theological convictions agree to and uphold their document.

The differences in the practicality, target audiences, and appeals to authority all stem from a difference in purpose, the fifth and most critical difference. The purpose of the ERLC's statement is to prepare the church to encounter AI, and thus gives overarching guidelines for how Christians should think about AI and uses the Bible as the

basis for its claims. Although the drafters of the ERLC statement say one of the purposes of the document is to enter the diverse conversation surrounding AI ethics, they do not desire for it to be authoritative for diverse people. Rather, it is meant to represent the specific view of the SBC and guide its adherents. The ERLC tries to give an overarching framework for evangelical Christians to think about AI that includes many topics instead of trying to create practical steps to use AI more ethically.

The authors of the *Rome Call* have a different purpose: to unite everyone involved in AI in an ethical vision for its use, regardless of religious commitments. Resultingly, the *Rome Call* addresses a broad audience, gives practical steps for realizing this ethical vision, and uses the UDHR to back its ideas. Overall, the unique purposes of each statement affect their levels of practicality, intended audiences, and authorities to which they appeal.

The differences of broadness of view, level of practicality, intended audience, authoritative documents, and purpose exhibit the unique views supported by the Roman Catholic Church and the SBC. They may lead one to think that there are not distinct Christian aspects of AI ethics. However, the following section examines key similarities between the two documents, suggesting there are particular values that Christians must uphold in AI design and use.

Similarities

Five important similarities are apparent upon analysis: 1) the good of technology 2) the importance of protecting the vulnerable 3) the emphasis on human superiority 4) the equality of humans in dignity and rights and 5) anthropocentrism. First, the ERLC and the authors of the *Rome Call* support the development and use of technology because

it is a good that comes from human ingenuity and creativity. In Article 2, the ERLC says that AI shows the "unique creative abilities of human beings" and affirms that people should create and use AI technology as an outflowing of the way they have been made by God. In Article 4, the statement declares that God has shown His grace to people through the application of AI in medicine. The ERLC promotes developing technology because it can help people share the message of the gospel, lead to increased human flourishing, and be an avenue for loving others.

The *Rome Call* similarly identifies the good AI can bring to humans. The introduction recognizes that "AI offers enormous potential when it comes to improving social coexistence and personal well-being, augmenting human capabilities and enabling or facilitating many tasks that can be carried out more efficiently and effectively."[14] Later, the authors argue that the ingenuity of humans should be clear in technological advancements, suggesting that developing AI can show the creativity of humanity and affirm "the brilliance of the human race."[15] Both documents promote AI as a good that can be used well and support pursuing AI technology.

The second similarity is that the ERLC statement and the *Rome Call* believe the protection of the vulnerable to be an essential consideration to further development of AI. In the ERLC statement, the protection of the vulnerable is evident throughout, but it is particularly obvious in four of the twelve articles. The ERLC expresses the importance of protecting the weak by saying that "human beings should develop and harness technology

[14] RenAIssance Foundation, "The Rome Call," Introduction.

[15] RenAIssance Foundation, "The Rome Call," Introduction.

in ways that lead to…the alleviation of human suffering."[16] It calls attention to bias, which inherently addresses certain populations of people who are susceptible to being taken advantage of.[17] Regarding data and privacy, the ERLC incorporates the care of the vulnerable by explicitly saying, "Data should not be mishandled, misused, or abused for sinful purposes to reinforce bias, strengthen the powerful, or demean the weak."[18] It also reiterates the importance of upholding the dignity of everyone, not just those who hold the power. Concerning war, the ERLC communicates its desire to protect the vulnerable, specifically those who could be subjugated to control by a large entity.[19] Additionally, the ideas that all humans are created in the image of God, are infinitely valuable to the Divine, and therefore have dignity contribute to the emphasis on caring for the vulnerable. Although these are not explicit references to the Christian's care for the vulnerable, they contribute to that idea through emphasizing that every human, even the vulnerable, are made in God's image.

In the *Rome Call*, the importance of caring for the vulnerable is consistent throughout. The introduction declares that it is essential that everyone's dignity is respected and the needs of the vulnerable are considered. The ethics section upholds the protection of vulnerable populations by calling for the prohibition of discrimination according to "race, color, sex, language, religion, political or other opinion, national or

[16] ERLC, "Artificial Intelligence," Article 2.

[17] ERLC, "Artificial Intelligence," Article 5.

[18] ERLC, "Artificial Intelligence," Article 8.

[19] ERLC, "Artificial Intelligence," Article 10.

social origin, property, birth or other status."[20] The authors say that AI technology "must never be used to exploit people in any way, especially those who are most vulnerable." The education section promotes both the protection and the advancement of vulnerable people, like children, the elderly, and those with disabilities. These specific groups of people are potentially susceptible to being left behind in the predicted AI technological revolution and so are individually addressed in the document. The rights section begins with the claim that the regulations and principles that govern AI should ensure that people, especially "the weak and the underprivileged," are benefitted.[21] Both statements regard the protection of the vulnerable to be a non-negotiable value in AI.

The third significant similarity is that both statements maintain that human beings are superior to technology and other species regardless of any advancements made in AI. In the ERLC document, human superiority is based on the belief that God created humans in the image of God and gave them dominion over the earth. The preamble introduces this idea: "every human being is made in God's image and thus has infinite value and worth in the eyes of their Creator."[22] It goes on to describe that despite whatever technological advancements occur, "nothing will ever supplant the image of God in which human beings are created."[23] The eleventh article explains that human beings are superior to AI because God has given humanity dominion over all creation, including AI technology. It says, "AI, even in a highly advanced state, should never be

[20] United Nations General Assembly, *Universal Declaration of Human Rights*, (1999), https://www.un.org/en/about-us/universal-declaration-of-human-rights.

[21] RenAIssance Foundation, "The Rome Call," Rights.

[22] ERLC, "Artificial Intelligence," Preamble.

[23] ERLC, "Artificial Intelligence," Preamble.

delegated the governing authority that has been granted by an all-sovereign God to human beings alone."[24] One of the ERLC's foundational beliefs is that God is all-powerful and has the ability to give power and authority to humans.[25] In this way, humans are acting agents of God's authority. AI systems should never be given the responsibility of governance because that authority is reserved only for humans by God.

In the introduction of the *Rome Call*, the authors communicate that human superiority supersedes all future development in technology. They believe it is essential that future developments of AI uphold humanity as gifted creators who are therefore superior to their creations. The introduction confirms that advancements in technology should reflect "the brilliance of the human race."[26] Additionally, it argues that technology should remain "dependent on [humans'] ethical integrity." In other words, the authors imply that human ethical integrity is more reliable and more capable of ethical decision-making than technology. Also, the *Rome Call* explains that humans are responsible for every action an AI system takes. This implies that humans are superior because they have responsibility and therefore authority over AI.

Another shared value is the equality of all humans regarding their dignity and rights, the fourth key similarity. In the ERLC statement, this is immediately evident. The first article opens with, "We affirm that God created each human being in His image with intrinsic and equal worth, dignity, and moral agency."[27] It continues, "nor should

[24] ERLC, "Artificial Intelligence," Article 11.

[25] Southern Baptist Convention, "Baptist Faith."

[26] RenAIssance Foundation, "The Rome Call," Introduction.

[27] ERLC, "Artificial Intelligence," Article 1.

technology be assigned a level of human identity, worth, dignity, or moral agency."[28] Concerning bias, people should develop and use AI in ways that reflect the equality of dignity among people. AI should never be created or used to "violate the fundamental principle of human dignity for all people."[29] While AI could be used to gather information, this collection of information should maintain every person's dignity.[30] The government has a responsibility to honor human rights, so in their use of AI, this value should be maintained.[31] Furthermore, any method of AI implementation that suppresses "basic human rights granted by God to all human beings" is condemned.[32] The statement concludes with a call to the evangelical church to continue upholding the dignity of every human person in the face of whatever the future of AI holds.

The *Rome Call* also emphasizes equal human dignity and rights. The ethics section claims that equality of dignity and rights are connected. The authors cite the UDHR, simply stating that all people are inherently equal in both dignity and rights. Consequently, every AI system should protect each person's individual dignity regardless of the system's purpose. The protection of human dignity can be accomplished by ensuring people's individual rights to prevent discrimination. Equality of human dignity is also supported by the principle of impartiality which is described at the end of the document. Ethically using AI according to this principle and five others outlined by the

[28] ERLC, "Artificial Intelligence," Article 1.

[29] ERLC, "Artificial Intelligence," Article 5.

[30] ERLC, "Artificial Intelligence," Article 8.

[31] ERLC, "Artificial Intelligence," Article 9.

[32] ERLC, "Artificial Intelligence," Article 9.

Rome Call explains the term "algor-ethics," the way in which the authors believe people worldwide should design and use AI. Specifically, the principle of impartiality stipulates that AI should not be developed with or carry out actions that reflect bias. If it were, then the dignity of certain people would be compromised because they would be unfairly discriminated against. Overall, both the ERLC and the authors of the *Rome Call* stress equal dignity and rights for all people to be a leading concern in AI development and use.

A sharp focus on maintaining human superiority, dignity, and rights reflects an underlying theme of anthropocentrism, the fifth similarity. Although the anthropocentrism of the *Rome Call* is recognizable by its attention to the environment, which the ERLC's statement lacks, both documents place humanity and human well-being as the most important consideration in AI development and use. Throughout the ERLC statement, it is obvious that the authors believe that the effect of AI on humans is of primary concern through their singular focus on the human good. Aside from the articles that uphold human superiority, dignity, and rights, other examples of anthropocentrism occur in Article 2 and 4. The second article asserts that technology should be used to increase human flourishing and decrease human suffering. Throughout the fourth article, humans appear to be the most important species because the benefit AI can bring to human health is examined without including applications for the well-being of the environment or other species. The ERLC views the use of AI in medicine as a demonstration of God's grace through and to people. In other words, the ERLC considers AI applications in medicine as a gift from God to humanity alone. The focus of the statement as a whole is on the implications of AI development and use on humanity, neglecting the effects it may have on the planet and its other inhabitants.

The *Rome Call* also demonstrates a major emphasis on the human good, reflecting a similar theme of anthropocentrism as the ERLC statement. Aside from the examples of human superiority, dignity, and rights, the ethics, rights, and principles sections demonstrate a focus on humanity's good. The ethics section declares, "AI systems must be conceived, designed, and implemented to serve and protect human beings and the environment in which they live," and technological advancement, "must include every human being, discriminating against no one," and having, "the good of humankind and the good of every human being at its heart."[33] The statement does not specify other species who may be impacted by technology but instead simply groups everything into "the complex reality of our ecosystem" and "the planet (our 'common and shared home')."[34] In both examples, nature is spoken of in relation to humanity by using the demonstrative "our" and defining the planet as humanity's habitation. It seems that the authors are concerned with the good of the planet because it is important for the good of humanity. In this way, humans are the focus of all the recommendations in the *Rome Call*, making them the most important and therefore superior species. Humanity is the concentration of every suggestion in the rights section. Notably, the authors advocate for human rights to be the center of discussion in the face of digital advancement. The principle of inclusion promotes the idea that AI should allow every human to benefit and give each of them the opportunity "to express themselves and develop."[35] Overall, the

[33] RenAIssance Foundation, "The Rome Call," Ethics.

[34] RenAIssance Foundation, "The Rome Call," Introduction.

[35] RenAIssance Foundation, "The Rome Call," Principles.

good of humanity seems to be the driving force behind ethical considerations for AI development.

Conclusion

Through a comparison of statements released by the ERLC and the PAL, this chapter investigated if they reflect a distinct Christian view of AI ethics. On the one hand, there are many differences between the two which could demonstrate that there is not a distinct Christian framework. However, there are key similarities that suggest they represent a consistent view.

There are both variation and consistency between the two documents that reflect diversity in Christian thought, yet a distinct Christian view. The differences in the documents, like varying emphasis on the environment, show the variety of perspectives in Christianity. However, the similarities relate to underlying foundational beliefs in Christianity, which may be seen as forming the basis for specific considerations in AI ethics related to a Christian view. For example, an important belief in Christianity is that humans were created in the image of God which has specific implications for how they believe humans should use AI, one being that technological progress cannot be considered more important than upholding human good.[36] The ERLC is clear that the image of God is of primary importance throughout its statement. Although the Rome Call does not explicitly mention the image of God, it is easy to see how this would be in the minds of those of the Roman Catholic Church.[37] While there is room for variation, as

[36] ERLC, "Artificial Intelligence," Article 1.

[37] International Theological Commission, "Communion and Stewardship: Human Persons Created in the Image of God," Vatican, last modified 2000,

evidenced by the differences in the documents, the similarities suggest boundaries for or minimum affirmations necessary for the creation of a distinctly Christian view.

In the end, Christian values appear to place limitations or boundaries on how Christians can use AI. While the framework these boundaries create may not be exclusively Christian, they are distinctly Christian. As a result, Christians are in agreement with some views on AI that are not religiously affiliated but are compelled to reject others.

Compared to the perspectives outlined in Chapter 2, Christians are obligated to reject the extremist views of antihumanism, posthumanism, and metahumanism. This rejection is founded on divergent values concerning human superiority, dignity, and rights, which can be summed up in anthropocentrism. These philosophies deny that human flourishing should be the primary consideration in AI development and use. This is in direct opposition to the arguable Christian view of the ERLC and PAL statements that humans should be the center of AI development and use. Therefore, Christians must entirely reject these philosophies and how they promote AI use.

Transhumanism, on the other hand, regards humans as the primary benefactors of AI use. Consequently, it seems that the Christian view is compatible with this philosophy. Depending on the limitations one expects for how AI can aid humans or augment their abilities, it is possible for a Christian to also be a transhumanist. For example, the *Rome Call* recognizes the potential benefits AI offers in "augmenting human capabilities."[38] It

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https://www.vatican.va/roman_curia/congregations/cfaith/cti_documents/rc_con_cfaith_doc_20040723_communion-stewardship_en.html#top.

[38] RenAIssance Foundation, "The Rome Call," Introduction.

supports the use of technology to improve what human beings are able to do. However, the statement does not describe the extent to which humans can be augmented by technology and still receive its support.

In the same way, the document from the ERLC encourages its audience to "harness technology in ways that lead to greater flourishing and the alleviation of human suffering."[39] This suggests its support for the use of AI potentially in ways that reflect a transhumanist approach. According to the statement, the image of God must be recognized within every human. Would transhumanist advancements corrupt the image of God? Transhumanists would say they value the human and desire to uplift humanity through technology, in the same way education has augmented humanity's abilities. Assuming that human augmentation through AI technology maintains the image of God, it seems that the ERLC would support its use to aid humans.

The ERLC statement's requirement that technology is not substituted as human's salvation can be maintained in transhumanism. As AI technology becomes more prevalent and its benefits to humanity are increasingly available, people may tend to view technology as something that can save them. Considering transhumanism, some may think a certain technological advancement will save them. However, the ERLC maintains that Christ is the only one who can "atone for sin and reconcile humanity to its Creator."[40] In this way, as long as Christians recognize that salvation comes through Christ, AI technology has a beneficial role in augmenting human abilities.

[39] ERLC, "Artificial Intelligence," Article 2.

[40] ERLC, "Artificial Intelligence," Article 2.

Compared to the ethical implication of the most prevailing views in Chapter 2, there are certain similarities that demonstrate this distinctly Christian view is not exclusive. Documents released by the US government, European Parliament, UK House of Commons, Australian government, and the IEEE demonstrate many of the same elements as the statements produced by the ERLC and the PAL. Most significantly, the emphasis on the centrality of humans in the development and use of AI is consistent among them all. They also agree on the importance of human dignity, responsibility, and superiority. Although these documents are not Christian, they contain similar ethical implications for AI use. This reflects that the Christian view is not exclusive.

There appears to be a distinct Christian view for designing and using AI, as shown through key similarities between statements released by the ERLC and PAL. This view requires that certain values be upheld. Consequently, Christians must reject views that remove humanity from the focus of AI development and use. However, other non-Christian perspectives are consistent with the Christian perspective, as shown through a comparison of the Christian framework to other views from Chapter 2. While these statements demonstrate a distinctly Christian view, the principles they recommend are not exclusive to Christians. Overall, the Christian faith places limitations on how AI can be designed and implemented, but the ethical implications of this view are widely acceptable.

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