

## Religious Prophetic Voices to Affect the Course of Technological Development

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### ABSTRACT

*In an era where advanced technologies permeate daily life, innovations like Augmented Reality (AR), Mixed Reality (MR), Automated Weapon Systems (AWS), and Chatbots such as ChatGPT are omnipresent, influencing diverse sectors from homes and schools to hospitals and military intelligence. While these technologies offer substantial benefits, simplifying various aspects of life, they also present a myriad of challenges that, if left unaddressed, could impede the creative purposes of God. This article explores the multifaceted issues arising from advanced technologies, including unemployment, discrimination, judicial injustices, military escalations, and disinformation, all of which jeopardize global peace. Ethical concerns and regulatory frameworks for these technologies remain inadequately addressed on a universal scale, particularly from a religious standpoint.*

*The proposed solution is prophetic dialogue, advocating for proactive engagement between science and faith to confront the ethical and regulatory dilemmas associated with advanced technologies. While prophetic dialogue is not a novel theological concept, its specific application to the collaboration between technology developers and people of faith is an evolving concept. This dialogue, involving scientists, religious communities, and people of goodwill from various traditions, seeks to harness the diverse knowledge and ethics embedded in different religions to mitigate the adverse effects of advanced technologies. The article envisions*

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*that through prophetic dialogue, which incorporates the perspectives of diverse religious traditions, leaders and inventors can be influenced to address the challenges posed by advanced technologies. This collaborative effort aims to preserve global peace, stability, and justice by appealing to the collective conscience of world leaders and innovators, fostering a harmonious coexistence between technological progress and ethical considerations.*

**Keywords:** *digital technology, prophetic dialogue, technological development, digital future*

## **1. Introduction**

The world has seen great improvements in different forms of technologies. In fact, these technological advancements have improved the quality of life and continue to do so. In factories, childcare, aged-care homes, physiotherapy, healthcare delivery, aviation among others, these new technological advancements are revolutionising society and lives. From self-drive cars, delivery drones, smart home devices etc., everyday life is becoming more comfortable. One can confidently say that through advanced technologies, humankind is gradually being set free, since most time and energy consuming jobs of yesteryears are being executed efficiently and quickly by new technologies, for example robots. However, despite the innumerable opportunities of advanced technologies, these technological advancements have also raised questions and even posed dangers in the very areas of society and life they aim to improve, particularly around the areas of ethics, human rights and regulation.

This paper aims to specifically highlight some of the potential threats these new technological evolutions pose to humanity. But as advanced technologies are realities of life today, churches and religious adherents cannot stay indifferent to the problems of advanced technologies. In view of the challenges and threats posed by the new advanced technologies, I propose prophetic dialogue as a way of engaging the stakeholders, churches and the other faiths to tackle the challenges some of these advanced technologies pose. Anthony Le Duc has described prophetic dialogue in this instance as “a pro-active attitude and strategy

of engaging with the various sectors to ensure that the Church continues to exert the proper influence over the course of human development.”<sup>2</sup> And so, even though prophetic dialogue is not a new theological concept, the specific dialogue between faith leaders and advanced technology developers is still a new area that this paper seeks to delve into. The involvement of prophetic voices, i.e. the different religions and their adherents is crucial as it would bring a religious outlook to development, hence keeping in check soulless development that is on the rise nowadays.<sup>3</sup>

## 2. The Christian View on Science and Technology

Even though the biblical narration of creation says that God had finished the work God had been doing by the seventh day (Gen. 2:1-2), creation has not ended. Being made in the image of God and hence sharing in God’s creative power, God has made humans co-creators who continue to advance the work of creation. Benedict XVI acknowledged how technology helps humankind to exercise stewardship and dominion (Gen.1:26-28) over matter. Technology...is a response to God’s command to till and to keep the land (cf. Gen 2:15) that God has entrusted to humanity, and it must serve to reinforce the covenant between human beings and the environment, a covenant that should mirror God’s creative love.<sup>4</sup>

Likewise, Vatican II’s Pastoral Constitution on the Church in the Modern World, *Gaudium et Spes* puts it succinctly when the Church Fathers explained, “Thus, far from thinking that works produced by man’s own talent and energy are in opposition to God’s power, and that the rational creature exists as a kind of rival to the Creator, Christians are convinced that the triumphs of the human race are a sign of God’s grace and the flowering of His own mysterious design.”<sup>5</sup>

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<sup>2</sup> Anthony Le Duc, “Prophetic Dialogue as Approach to the Church’s Engagement with Stakeholders of the Technological Future,” SSRN Electronic Journal (2023): 2, DOI: 10.2139/ssrn.4461295.

<sup>3</sup> John Paul II, *Redemptoris Missio*, Encyclical Letter (1990), no. 59.

<sup>4</sup> Benedict XVI, *Caritas in Veritate*, Encyclical Letter (2009), no. 69.

<sup>5</sup> Vatican Council II, *Gaudium et Spes*, Pastoral Constitution on the Church in the Modern World (December 7, 1965), no. 34, [https://www.vatican.va/archive/hist\\_councils/ii\\_vatican\\_council/documents/vat-ii\\_const\\_19651207\\_gaudium-et-spes\\_en.html](https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651207_gaudium-et-spes_en.html).

The Compendium of the Social Doctrine of the Catholic Church states that “the Catholic Church is in no way opposed to progress, rather she considers science and technology are the wonderful product of a God-given human creativity, since they have provided us with wonderful possibilities, and we all gratefully benefit from them.”<sup>6</sup>

From the above-mentioned, it is indicative that the Christian view on science and technology is positive. However, science and technology must always seek to promote the quality of life and the common good. Pope John Paul II beckoned humanity “to use science and technology in a full and constructive way, while recognizing that the findings of science always have to be evaluated in the light of the centrality of the human person, of the common good and of the inner purpose of creation.”<sup>7</sup> Despite the advancement and positive impacts of Artificial Intelligence (AI), Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), among others, there are still social injustice, socio-economic, and political problems caused by these technological messiahs. The following section discusses some of the challenges these technological advancements pose. Fundamentally, the issues raised demonstrate that these technologies can replace and displace human beings in different facets of life.

### **3. Negative Effects of Some Advanced Technologies**

#### **3.1. Unemployment**

With the advent of robots and AI, some people have been rendered unemployed and the rate of unemployment is gradually increasing in certain parts of the world.<sup>8</sup> Acemoglu and Restrepo, in their empirical

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<sup>6</sup> Pontifical Council for Justice and Peace, *To His Holiness John Paul II Master of Social Doctrine and Evangelical Witness to Justice and Peace*, Compendium of the Social Doctrine of the Church (2004), no. 457.

<sup>7</sup> John Paul II, *Common Declaration of John Paul II and the Ecumenical Patriarch His Holiness Bartholomew I*, Common Declaration on Environmental Ethics (June 10, 2002).

<sup>8</sup> Carl Benedikt Frey and Michael Osborne, “The Future of Employment: How Susceptible are Jobs to Computerisation?” Oxford Martin School, September 17, 2023, <https://www.oxfordmartin.ox.ac.uk/downloads/academic/future-of-employment.pdf>.



flow from work are part of the broader context of those fundamental rights of the person,”<sup>12</sup> and being unemployed is an infringement of one’s basic rights.

Work is a fundamental right and a good for mankind, a useful good, worthy of man because it is an appropriate way for him to give expression to and enhance his human dignity. The Church teaches the value of work not only because it is always something that belongs to the person but also because of its nature as something necessary. Work is needed to form and maintain a family, to have a right to property, to contribute to the common good of the human family. In considering the moral implications that the question of work has for social life, the Church cannot fail to indicate unemployment as a “real social disaster”, above all with regard to the younger generations.<sup>13</sup>

And so, despite AI bringing efficiency to the labour market, it could on the other hand create joblessness due to its potential to displace and replace workers. Joblessness when created could in turn lead to social unrests, increase in crimes, homelessness, mental health disorders, political fragmentations, economic hardships, anti-immigrant sentiments and xenophobia.<sup>14</sup> The International Labour Organization in its 2011 and 2013 World of Work Reports clearly prove that unemployment particularly among young people is a driving force for social unrests.<sup>15</sup> Also, Yemareshet Demeke, in his research on five Intergovernmental Authority on Development (IGAD) member states in Eastern Africa, demonstrates that youth unemployment is a major cause of political instabilities in these countries.<sup>16</sup>

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<sup>12</sup> John Paul II, *Laborem Exercens*, Encyclical (1981), no. 16.

<sup>13</sup> Compendium of the Social Doctrine of the Church, no. 287.

<sup>14</sup> Amitai Etzioni and Oren Etzioni, “Should Artificial Intelligence be Regulated?” *Issues in Science and Technology* 33, no. 4 (Summer 2017): 35-36.

<sup>15</sup> International Labour Organization, “World of Work Report 2011: Making Markets Work for Jobs,” International Institute for Labour Studies, accessed September 22, 20203, [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_166021.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_166021.pdf).

<sup>16</sup> Yemareshet Hailu Demeke, “Youth Unemployment and Political Instability: Evidence from IGAD Member Countries,” *Cogent Economics & Finance* 10, no. 1 (2022). DOI: 10.1080/23322039.2022.2079211

The instability generated by automation is already a potential driving force in the rise of populist nationalist movements around the world. As powerful interest groups such as coal workers experience significant decline, they become ever more radical in their desire to see change to return to an old status quo that is impossible to achieve. This can drive political polarization.<sup>17</sup>

The social teachings of the Catholic Church had forewarned about these instabilities emerging from unemployment when they asserted, “A society in which this right (the right to work-emphasis mine) is systematically denied, in which economic policies do not allow workers to reach satisfactory levels of employment, cannot be justified from an ethical point of view, nor can that society attain social peace.”<sup>18</sup> If these new technologies are rendering workers redundant and in turn leading to social, psychological and political problems, religious men and women cannot stay unconcerned but wake up and be the voice especially for the voiceless who are being disenfranchised by advanced technologies.

### 3.2. Discrimination and Biases

One sin that the Bible has dealt with in both the Old and New Testaments is the sin of discrimination. St. Paul in his letter to the Galatians asserts the equality of all believers, declaring, “There is neither Jew nor Gentile, neither slave nor free, nor is there male and female, for you are all one in Christ Jesus” (Gal. 3:28). Furthermore, the Second Vatican Council affirmed the equality of all people:

With respect to the fundamental rights of the person, every type of discrimination, whether social or cultural, whether based on sex, race, colour, social condition, language or religion, is to be overcome and eradicated as contrary to God’s intent. For in truth, it must still be regretted that fundamental personal rights are still not being universally honoured.<sup>19</sup>

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<sup>17</sup> Michael C. Horowitz, Gregory C. Allen, Edoardo Saravalle, Anthony Cho, Kara Frederick, and Paul Scharre. “Artificial Intelligence and International Security,” *Center for a New American Security*, July 10, 2018, <https://www.cnas.org/publications/reports/artificial-intelligence-and-international-security>.

<sup>18</sup> John Paul II, *Centesimus Annus*, Encyclical Letter (1991), no. 43.

<sup>19</sup> Vatican Council II, *Gaudium et Spes*, no. 29.

It is however worrying to note that some of these new advanced technologies are becoming means of discrimination. With the introduction of biometric tracking and video surveillances, governments and agencies are now able to monitor the movements and lives of their citizens. This, in the first place, is breaching people's rights of privacy and above all, some of the data collected are in some instances being used by governments to form biases. According to Maria Stefania Cataleta, in the field of advanced technologies, "... one can ascertain that 'algorithmic prejudices' or bias also exist, which are capable of causing social discrimination. Indeed, the increase of available data and individual computing capacities of AI systems risks amplifying discrimination."<sup>20</sup> And so, be it AI, AR, MR, VR, and almost all technological advancements depend hugely on the algorithms the programmer puts in there. The intelligence of these advanced technologies function because programmers or groups of programmers have decided on their ethical principles and how they should react to different people, genders, religions, and social circumstances. If a facial recognition AI is programmed with data specific to male Caucasians, it will accurately identify individuals belonging to that demographic. Conversely, if the data is based on black men, the AI will recognize individuals from that specific group.

Indeed, research conducted on different facial recognition systems (such as IBM Watson, Microsoft Cognitive Services and Face++) has shown that some ethnicities are treated in a more imprecise way compared to others. Notably, identification accuracy for Caucasian men was 99%, but only 34% for women with dark complexion. This is because algorithms of these systems are based on subject-data inputs which are prevalently male and of light complexion.<sup>21</sup>

There are instances in the United States where some AI technologies are believed to have discriminated against African Americans, Asians, and women. A classic example is a lawsuit that was brought against the company Palantir Technologies for having

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<sup>20</sup> Maria Stefania Cataleta, "Humane Artificial Intelligence: The Fragility of Human Rights Facing AI," East-West Center, March 2, 2023, <http://www.jstor.org/stable/resrep25514>.

<sup>21</sup> Cataleta, "Humane Artificial Intelligence," 4.



discriminated against Asian job applicants in the United States.<sup>22</sup> Also, there is a study on Google that discovered ads for executive level positions were more likely to be shown to men than women. Anja Lambrecht and Catherine Tucker in their field test on algorithmic biases prove that STEM ads that were meant to be gender-neutral were mostly shown to 20 percent more to men than women. According to them, “This happened because younger women are a prized demographic and are more expensive to show ads to. An algorithm which simply optimizes cost-effectiveness in ad delivery will deliver ads that were intended to be gender-neutral in an apparently discriminatory way.” The authors further explain that the discriminatory behavior may not necessarily be attributed to a programmer’s actions but could arise from machine learning, which, in turn, is influenced by consumer behavior.<sup>23</sup> In a systematic literature review, Varsha enumerates specific instances where biases have been manifested by AI against individuals due to their gender, race, religion, and even socio-economic backgrounds.<sup>24</sup>

Again, it is believed that some people were more likely denied an insurance offer due to their data held by AI.<sup>25</sup> The biases of these advanced technologies are real, as have been witnessed in Australia’s automated debt recovery scheme, popularly known as ‘robodebt,’ which disadvantaged most welfare recipients by making them pay non-existent debts. It is lamentable to observe the incidence of individuals who have taken their lives due to the error of an automated debt recovery scheme.<sup>26</sup>

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<sup>22</sup> Jessica Guynn, “Palantir Charged with Discriminating Against Asians,” *USA Today*, September 26, 2016, <https://www.usatoday.com/story/tech/news/2016/09/26/palantir-department-of-labor-discrimination-asians-lawsuit/91131284/>.

<sup>23</sup> Anja Lambrecht and Catherine Tucker, “Algorithmic Bias? An Empirical Study into Apparent Gender-Based Discrimination in the Display of STEM Career Ads,” *Management Science* 65, no. 7 (2019): 2966, <https://doi.org/10.1287/mnsc.2018.3093>.

<sup>24</sup> P.S. Varsha, “How Can We Manage Biases in Artificial Intelligence Systems: A Systematic Literature Review,” *ScienceDirect* (2023): 3-4, <https://doi.org/10.1016/j.jjime.2023.100165>.

<sup>25</sup> Ian Tucker, “‘A White Mask Worked Better’: Why Algorithms Are Not Colour Blind,” *The Guardian*, May 28, 2017, <https://www.theguardian.com/technology/2017/may/28/joy-buolamwini-when-algorithms-are-racist-facial-recognition-bias>.

<sup>26</sup> David Taylor, “Federal Court Links Robodebt Scheme with Suicides, Approves Settlement,” *ABC NEWS*, June 11, 2021, <https://www.abc.net.au/radio/programs/pm/federal-court-links-robodebt-scheme-with-suicides/13384888>.

Contrary to our shared belief that all human beings are made in the image of God and, therefore, possess fundamental equality, we must denounce all forms of biases based on race, gender, and other factors.<sup>27</sup>

### 3.3. Judicial Injustice

It is becoming common in law enforcement and judiciary systems to employ AI-augmented technologies particularly machine learning, to help facilitate policing and analysing huge amounts of criminal data.<sup>28</sup> From the use of facial recognition techniques, mobile phone data extraction, social media data extraction to biometric data systems, policing and paralegal jobs are becoming easier and more efficient. By utilizing pre-recorded data of offenders, AI technology can aid a judge in assigning a score to predict the likelihood of a suspect fleeing, reoffending, and experiencing recidivism, influencing decisions accordingly.<sup>29</sup> Even though the final judgement is left to the discretion of the judge, the outcome is very much influenced by the predictions made by a machine. On the flipside, it needs to be mentioned that the biases, discriminations and breach of privacy mentioned above could be as well experienced when law enforcers and legal systems are making decisions based on someone's previously collected data. In a ProPublica investigation on algorithm in American society, it was revealed that some algorithms in the criminal justice system were biased against black offenders as it assigned them poor risk assessment scores.<sup>30</sup> Vatican News reports that Pope Francis has also spoken on this issue. According to Francis,

In social and economic decision-making...we should be

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<sup>27</sup> Vatican Council II, *Gaudium et Spes*, no. 29.

<sup>28</sup> Alexander Babuta and Marion Oswald, "Data Analytics and Algorithmic Bias in Policing," *Royal United Services Institute for Defence and Security Studies*, Accessed February 23, 2023, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/831750/RUSI\\_Report\\_-\\_Algorithms\\_and\\_Bias\\_in\\_Policing.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831750/RUSI_Report_-_Algorithms_and_Bias_in_Policing.pdf).

<sup>29</sup> Harry Surden, "Artificial Intelligence and Law: An Overview," *Georgia State University Law Review* 39, no. 4 (Summer 2019): 1332-1333.

<sup>30</sup> Julia Angwin et Al., "Machine Bias: There's Software Used Across the Country to Predict Future Criminals, and It's Biased Against Blacks," *ProPublica Website*, May 23, 2016, <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>.

cautious about delegating judgments to algorithms that process data, often collected surreptitiously, on an individual's makeup and prior behaviour. He warned that such data can be "contaminated" by societal prejudices and preconceptions. A person's past behaviour...should not be used to deny him or her the opportunity to change, grow and contribute to society.<sup>31</sup>

Alexander Babuta and Marion Oswald in an interview with a police officer, had been informed of the possibility of introducing one's bias to AI-augmented technology which will in turn amplify the said bias in policing. The police officer intimated that during patrols,

Young black men are more likely to be stopped and searched than young white men, and that's purely down to human bias. That human bias is then introduced into the datasets, and bias is then generated in the outcomes of the application of those datasets'. The effects of a biased sample could be amplified by algorithmic predictions via a feedback loop, whereby future policing is predicted, not future crime.<sup>32</sup>

Despite all the strides made by the use of technology in policing and the legal ecosystem, it is also clear that biased algorithms about people's past, socio-economic backgrounds, demographic, race, and religion could be used unjustly against them.<sup>33</sup> Just as the holy prophets in the Bible condemned injustices, particularly within the legal system, contemporary and future religious leaders, including pastors, imams, and others, should actively confront the biases inflicted upon people, particularly those belonging to minority groups.

### **3.4. Misinformation and Intellectual Dishonesty**

Increasingly, it has become commonplace to doubt or question the information encountered, given the proliferation of disinformation generated by AI technologies.

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<sup>31</sup> Deborah Castellano Lubov, "Pope Francis Urges Ethical Use of Artificial Intelligence," *Vatican News*, March 27, 2023, <https://www.vaticannews.va/en/pope/news/2023-03/pope-francis-minerva-dialogues-technology-artificial-intelligenc.html>.

<sup>32</sup> Babuta and Oswald, "Data Analytics and Algorithmic Bias in Policing."

<sup>33</sup> Varsha, "How Can We Manage Biases," 4.

Disinformation is not new, but in a digital era where most of the global population is connected, disinformation is gaining traction as an effective tool of asymmetric warfare to influence and destabilise states while remaining below the threshold of war....Russia notoriously influenced the 2016 US presidential election by purchasing ads on Facebook and Google, utilising automated bot accounts on Twitter, and using troll farms to create and spread disinformation online ahead of the election and disrupt the American democratic process.<sup>34</sup>

In the recently concluded Turkish Presidential election, presidential candidate Muharrem İnce withdrew from the race a few days before the election due to the viral spread of a sex tape on the internet. Intriguingly, Mr. İnce denied his involvement in the video, asserting that it was created by a foreign country using deepfake AI to tarnish his character. He said, “If I had such images of myself, they were taken secretly in the past. But I do not have such an image, no such sound recording. This is not my private life, it’s slander. It’s not real.”<sup>35</sup> Not only is it a human rights abuse but also breach of people’s privacy. In a democratic dispensation, maligning one’s political opponents with AI-generated pornographic videos in order to out-race them in an election, defeats the very existence of democracy. Political enthusiasts are on the alert for the US presidential election now coming, on how AI-generated disinformation could influence that election. The CEO of OpenAI at a hearing before US Senate subcommittee on privacy, law and technology advised that “the more general ability of these models to manipulate, to persuade, to provide sort of one-on-one interactive disinformation...given that we’re going to face an election next year and these models are getting better. I think this is a significant area of concern.”<sup>36</sup>

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<sup>34</sup> Michael Raska and Richard A. Bitzinger, *The AI Wave in Defence Innovation: Assessing Military Artificial Intelligence Strategies, Capabilities, and Trajectories* (Milton: Taylor & Francis Group, 2023).

<sup>35</sup> Ruth Michaelson, “Muharrem İnce Pulls Out Just Days from Close Election Race, Saying Alleged Sex Tape Is Deepfake.” *Guardian*, May 11, 2023, <https://www.theguardian.com/world/2023/may/11/muharrem-ince-turkish-presidential-candidate-withdraws-alleged-sex-tape>.

<sup>36</sup> Cristina Criddle and Hannah Murphy, “OpenAI Chief Says New Rules Are Needed to Guard Against AI Risks,” *Financial Times*, May 17, 2023, <https://www.ft.com/content/aa3598f7-1470-45e4-a296-bd26953c176f>.

In early 2023, a photo of Pope Francis in a white puffer jacket went viral on social media but was later found out that it was deepfake. The photo is believed to have been created by the Midjourney AI tool, an AI that creates images on text prompts.<sup>37</sup> Furthermore, in January 2023, Bill Gates participated in an interview on the renowned Australian Broadcasting Corporation (ABC) show. Subsequently, “an excerpt”<sup>38</sup> from the interview went viral, featuring Gates being questioned by Sarah Ferguson with inquiries such as, “What have you contributed to the world?” and “What exactly makes you, a computer engineer who didn’t even program his initial product himself, a valid representative of the pharmaceutical industry?”<sup>39</sup> In the excerpt, Gates was berated by Ferguson. However, upon viewing the complete interview on the official YouTube channel of ABC, it becomes evident that those specific questions were never posed. This incident is another example of a circulating deepfake video. Furthermore, a more troubling issue involves what has been labeled as deepfake pornography or a sex tape.<sup>40</sup> This refers to a specific type of deepfake wherein realistic pornographic videos are generated using individuals’ photos. These photos can be sourced from anyone on the internet, with a particular emphasis on images of celebrities that are subsequently altered to appear nude, or “nudified.” In a recent ABC Four Corners documentary, it was disclosed that prominent Australian women and celebrities experienced image theft from the internet, resulting in the creation of deepfake pornographic videos using their photos.<sup>41</sup> These instances exemplify the utilization of AI-generated tools to disseminate misinformation and tarnish the established reputations of individuals. The increasing

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<sup>37</sup> Chris Stokel-Walker, “Should You Be Worried That an AI Picture of the Pope Went Viral?” *New Scientist*, March 27, 2023, <https://www.newscientist.com/article/2366312-should-you-be-worried-that-an-ai-picture-of-the-pope-went-viral/>.

<sup>38</sup> <https://twitter.com/AVSBLR/status/1633407967965106176?s=20>.

<sup>39</sup> Reuters Fact Check, “Fact Check-Video of Australian News Interview Featuring Bill Gates Edited Using AI,” *Reuters*, March 23, 2023, <https://www.reuters.com/article/factcheck-bill-gates-interview-idUSL1N35V1UV>.

<sup>40</sup> Daniel Story and Ryan Jenkins, “Deepfake Pornography and the Ethics of Non-Veridical Representations,” *Philosophy & Technology* 36, no. 3 (2023): 1-22, <https://doi.org/10.1007/s13347-023-00657-0>.

<sup>41</sup> ABC News, “Chatbots, Deepfakes and Love: How AI is Changing Our Lives.” May 8, 2023, [https://www.youtube.com/watch?v=Fy0HbbKtM\\_g&pp=ygUPQUkgRm91ciBDb3JuZXJzhttps://www.youtube.com/watch?v=Fy0HbbKtM\\_g&pp=ygUPQUkgRm91ciBDb3JuZXJz](https://www.youtube.com/watch?v=Fy0HbbKtM_g&pp=ygUPQUkgRm91ciBDb3JuZXJzhttps://www.youtube.com/watch?v=Fy0HbbKtM_g&pp=ygUPQUkgRm91ciBDb3JuZXJz).

challenge of distinguishing between falsity and truth<sup>42</sup> raises concerns about the potential escalation of revenge porn and deep fakes' impact on the credibility of news, elections, and contests.

In addition, another topic being discussed today concerns intellectual dishonesty/cheating, particularly with the advent of ChatGPT. ChatGPT, developed by the San Francisco-based start-up OpenAI, was launched on November 30, 2022. "It's part of a new generation of AI systems that can converse, generate readable text on demand and even produce novel images and video based on what they've learned from a vast database of digital books, online writings and other media."<sup>43</sup> ChatGPT is a remarkable and invaluable AI tool revolutionising the field of information and knowledge-seeking. However, as ChatGPT responds to nearly every question posed, albeit in a generic manner at times, certain educators and policymakers are beginning to scrutinize its ethics, particularly when employed in the creation of academic papers. Will students truly engage in learning and research if ChatGPT is tasked with writing their essays and exams? This will not only produce lazy future leaders but less critical thinkers. It is noteworthy that certain Australian and American states and institutions have banned ChatGPT within their jurisdiction.<sup>44</sup> These issues of misinformation and cheating that result from the use of AI tools need to be attended to by experts and the prophets of our time in a forum of dialogue.

### 3.5. Military Escalations

Historically, misinformation has been used by some countries or even ethnicities<sup>45</sup> as a tool to fester armed conflicts. The US administrations

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<sup>42</sup> Raska and Bitzinger, *The AI Wave in Defence Innovation*, 20-22.

<sup>43</sup> Associated Press, "New York City School Officials Block Access to Controversial Artificial Intelligence ChatGPT to Stop Students Generating Essays," *ABC NEWS*, January 8, 2023, <https://www.abc.net.au/news/2023-01-08/artificial-intelligence-chatgpt-chatbot-explained/101835670>.

<sup>44</sup> Liam Beatty, "Australia's Public Education Systems Bans Chatbot," *ABC NEWS*, February 3, 2023, <https://www.news.com.au/national/australias-public-education-systems-bans-chatbot/news-story/6360c35f7ba84da8c9f1263015a0da57>.

<sup>45</sup> David Yanagizawa-Drott, "Propaganda and Conflict: Evidence from the Rwandan Genocide," *Quarterly Journal of Economics* 129, no. 4 (2014): 1947–1994. <http://www.hks.harvard.edu/fs/dyanagi/Research/RwandaDYD.pdf>.

of Polk in the 1840s, McKinley in the late 1890s, Johnson in 1964, and Bush in 2003 are believed to have used misinformation to militarily attack other nations.<sup>46</sup> A common factor that could lead to military escalations today is AI-generated disinformation. In a recent deepfake video, the Ukrainian president, Volodymyr Zelenskyy was seen asking his troops to lay down their weapons and surrender to the Russians in the war. Quickly, Zelenskyy reacted to the video and explained that it was fake.<sup>47</sup> What will happen when such a deepfake video is released about a nuclear attack on North Korea by South Korea? Though generally leaders might verify such a video before reacting, it could well trigger a possible instantaneous pre-emptive reaction when it is mistakenly unverified. This is just an example of how AI-generated deepfakes could trigger military escalations.

Gradually, global powers are entrusting lethal authority to AI technologies in their military endeavors. There is indeed a proliferation of these advanced warfare technologies, and a continuous accumulation of such technologies is often considered indicative of a nation's military prowess. There is a race<sup>48</sup> between countries to outrun one another when it comes to the invention of these technologies for war. "Rapid advancements in the fields of AI-robots have led to an international arms race for the future of the battlefield.... Proliferation will result in large numbers-hundreds of thousands<sup>49</sup> to millions-of AI-robots on the battlefield."<sup>50</sup>

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<sup>46</sup> Daniel Benjamin and Steven Simon, "How Fake News Could Lead to Real War," *Politico Magazine*, July 5, 2019, <https://www.politico.com/magazine/story/2019/07/05/fake-news-real-war-227272/>.

<sup>47</sup> Bobby Allen, "Deepfake Video of Zelenskyy Could Be 'Tip of the Iceberg' in Info War, Experts Warn," *NPR*, May 16, 2022, <https://www.npr.org/2022/03/16/1087062648/deepfake-video-zelenskyy-experts-war-manipulation-ukraine-russia>.

<sup>48</sup> Yori Kamphuis and Stefan Leijnen, "Here's What You Need to Know About the New AI 'Arms Race'," *World Economic Forum*, February 22, 2021, <https://www.weforum.org/agenda/2021/02/heres-what-you-need-to-know-about-the-new-ai-arms-race/>.

<sup>49</sup> Tania Rabesandratana, "Europe Moves to Compete in Global AI Arms Race," *Science Policy* 360, no. 6388 (2018): 474, DOI: 10.1126/science.360.6388.474-a.

<sup>50</sup> Joachim von Braun, Margaret S. Archer, Gregory M. Reichberg and Marcelo Sanchez Sorondo, eds., *AI Robotics, Humanity: Opportunities, Risks, and Implications for Ethics and Policy* (Switzerland: Springer International Publishing, 2021), 141-143.



Pope John XXIII could not have been wrong then, and even today, when he said:

There is a common belief that under modern conditions peace cannot be assured except on the basis of an equal balance of armaments and that this factor is the probable cause of this stockpiling of armaments. Thus, if one country increases its military strength, others are immediately roused by a competitive spirit to augment their own supply of armaments.<sup>51</sup>

In place of armaments, we can put AI-augmented technologies. The United States, China, Russia, North Korea, UK, Australia, etc. are all racing to outpace each other in warfare technologies, possibly as a means to deter potential adversaries. This competition among nations played out vividly in the recent 2023 Avalon Airshow in Australia where China and Russia were not invited.<sup>52</sup> Unmanned Aerial Vehicles (UAVs) and drones are being deployed for military intelligence, surveillance, reconnaissance (ISR), and even takedowns. Those who are in support of these autonomous AI warfare technologies observe that whereas soldiers might react out of anger, fear and fatigue thereby resulting in war crimes, the unmanned technologies experience no anger, fatigue, or fear and would not react irrationally.<sup>53</sup> Despite the precision, lack of fatigue, lack of fear and swiftness of these military technologies, it is becoming alarming when unmanned Lethal Automatic Weapons (LAWs) are used. James Johnson opines:

Pre-delegating authority to machines and taking human judgment further out of the crisis decision-making process, might severely challenge the safety, resilience, and credibility of nuclear weapons in future warfare. The historical record is replete with examples of near nuclear misses, demonstrating the importance of human judgment in mitigating the risk of miscalculation

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<sup>51</sup> Pope John XXIII, *Pacem in Terris*, Encyclical (1963), no. 110.

<sup>52</sup> Andrew Greene, "Australian-designed Lethal Drone to be Unveiled at Avalon Airshow," *ABC NEWS*, February 28, 2023, <https://www.abc.net.au/news/2023-02-28/avalon-airshow-defence-air-force-drones/102028936#:~:text=The%20ABC%20can%20reveal%20that%20a%20new%20Australian-developed,is%20designed%20to%20be%20stored%20in%20shipping%20containers.>

<sup>53</sup> Noreen Herzfeld, "Can Lethal Weapon Be Just?" *Journal of Moral Theology* 11, Special Issue 1 (2022): 78, DOI: 10.55476/001c.34124.



and misperception (i.e., of another's intentions, redlines, and willingness to use force) between adversaries during crises.<sup>54</sup>

In instances of mechanical system failures, human judgement and even intuition have saved our world from nuclear wars.<sup>55</sup> An example of how human decision and intuition saved the world from nuclear war was a decision made by Lt. Col. Stanislav Petrov.<sup>56</sup> Whereas in a battlefield, soldiers could assess a situation, judge, and act ethically and legally on orders from superiors, with AIs, especially unmanned technologies, decision delegated to a machine would be made based on the data and algorithms programmed into the machines involved. In instances where human beings would possibly see less threat based on the context and scenario before them, unmanned automated systems would likely react as they have no conscience and ethics, therefore resulting in escalation and warfare. Noreen Herzfeld sheds further light on the quandary surrounding the use of Lethal Autonomous Weapons (LAWs) when she elucidates:

The US has used “signature strikes” in Pakistan and Afghanistan, authorizing the use of force against any who fit certain behavioral profiles, such as transporting weapons or congregating as large groups of young men. This has, unfortunately, resulted in the targeting of wedding parties in a part of the world where the shooting of rifles is part of the traditional celebration and gender exclusivity separates male and female wedding participants. Discrimination requires a high level of context sensitivity, one that would be complex to program.<sup>57</sup>

This example of the US “signature strikes” is a clear illustration of digital dehumanisation as human beings are profiled, stereotyped, and life and death decisions about them are made by machines. Also,

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<sup>54</sup> James S. Johnson, “Artificial Intelligence: A Threat to Strategic Stability,” *Strategic Studies Quarterly* 14, no. 1 (Spring 2020): 21.

<sup>55</sup> Patricia Lewis et al., “Too Close for Comfort: Cases of Near Nuclear Use and Options for Policy,” *Chatham House Report*, April 2014, [https://www.chathamhouse.org/sites/default/files/field/field\\_document/20140428TooCloseforComfortNuclearUseLewisWilliamsPelopidasAghlani.pdf](https://www.chathamhouse.org/sites/default/files/field/field_document/20140428TooCloseforComfortNuclearUseLewisWilliamsPelopidasAghlani.pdf).

<sup>56</sup> Dylan Matthews, “40 Years Ago Today, One Man Saved Us from World-Ending Nuclear War.” *Vox*, September 26, 1983, <https://www.vox.com/2018/9/26/17905796/nuclear-war-1983-stanislav-petrov-soviet-union>.

<sup>57</sup> Herzfeld, “Can Lethal Weapon Be Just?” 78.

it's a case of algorithmic bias as pre-programmed datasets discriminate against young men with certain labels and identities. There is lack of accountability as LAWs can't be held legally accountable for war crimes.

Even though some argue that “human in the loop” warfare technologies would be safer as they can be controlled by human agents,<sup>58</sup> from what we know so far about these new advanced AI-augmented technologies such as the LAWs, new duplications of AI-augmented advanced conventional capabilities will heighten the risk of military escalation, especially unintended and accidental escalation.<sup>59</sup> The Campaign to Stop Killer Robots sums LAWs problems into the following factors: digital dehumanisation, algorithmic biases, loss of meaningful human control, lack of human judgement and understanding, lack of accountability, inability to explain what happened or why, lowering the threshold to war, and a destabilising arms race.<sup>60</sup> Against this backdrop, we need to reiterate the caution that the Second Vatican Council raised about using these scientific weapons in war:

The horror and perversity of war is immensely magnified by the addition of scientific weapons. For acts of war involving these weapons can inflict massive and indiscriminate destruction, thus going far beyond the bounds of legitimate defence. Indeed, if the kind of instruments which can now be found in the armouries of the great nations were to be employed to their fullest, an almost total and altogether reciprocal slaughter of each side by the other would follow, not to mention the widespread devastation that would take place in the world and the deadly after effects that would be spawned by the use of weapons of this kind.<sup>61</sup>

Pope Francis astutely observes that, notwithstanding significant technological advancements, these innovations lack concurrent progress in human responsibility, conscience, and values. Consequently, caution is warranted regarding the individuals or entities entrusted with the

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<sup>58</sup> Herzfeld, 74.

<sup>59</sup> Johnson, “Artificial Intelligence,” 16.

<sup>60</sup> Stop Killer Robots, “Problems with autonomous weapons,” accessed September 25, 2023, <https://www.stopkillerrobots.org/stop-killer-robots/facts-about-autonomous-weapons/>.

<sup>61</sup> Vatican Council II, *Gaudium et Spes*, no. 80.

deployment of such war technologies.<sup>62</sup> For the sake of peace and protection of lives, especially during these times of Russian-Ukraine war, potential war between China and Taiwan, North Korea against South Korea, there could be regulations guiding or even banning the use of these technologies in warfare as they can have devastating consequences on lives. After all, no war is truly justifiable and just,<sup>63</sup> hence there is no need for these warfare technologies in the first place.

Having enumerated several adverse outcomes associated with advanced technologies, a critical inquiry into potential solutions becomes imperative. Subsequently, the ensuing discussion advocates for the adoption of prophetic dialogue as a strategic approach to address the aforementioned challenges.

## **4. Prophetic Dialogue: A Response to the Negative Effects of Advanced Technologies**

### **4.1. Prophetic Dialogue**

One important way by which religious voices can engage with scientists and AI developers to address the above challenges is by employing “prophetic dialogue.” But what is that? Both Stephen Bevans and Roger Schroeder explain that this term was coined during the Society of the Divine Word (SVD) during its 15<sup>th</sup> General Chapter in the year 2000. According to them, most of the Asian confreres had suggested that the SVD mission approach should be that of dialogue; however, the Latin American confreres considering their concern for the poor and oppressed had proposed that the SVD mission model should be prophetic. At the end of the day, a compromise was reached and hence the term “prophetic dialogue.”<sup>64</sup> It is interesting to mention that the 2000 General Chapter did not really specify what prophetic dialogue is until the next General Chapter in 2006. Fr. Antonio Pernia, the then Superior General observed:

<sup>62</sup> Pope Francis, *Laudato Si'*, Encyclical (2015), nos. 105, 104.

<sup>63</sup> Pope Francis, *Fratelli Tutti*, Encyclical (2020), no. 258.

<sup>64</sup> Stephen B. Bevans and Katalina Tahaafe-Williams, eds., *Contextual Theology for the Twenty-First Century* (Cambridge: The Lutterworth Press, 2011), 103. Roger Schroeder, “Proclamation and Interreligious Dialogue as Prophetic Dialogue,” *Missiology: An International Review* 41, no. 1 (2013): 50-51.

My impression is that there was an initial general openness to, if not an altogether positive reception of, the 15th General Chapter's proposal of "prophetic dialogue" as the term that expresses best our SVD mission today. As a result, there was a general effort to try to understand the concept better. This can be seen in fact that "prophetic dialogue" became the theme of several gatherings of all kinds. On the other hand, however, it seems that, despite the general effort to understand it, "prophetic dialogue" did not quite capture the imagination of many of the confreres.<sup>65</sup>

The 16<sup>th</sup> General Chapter in 2006 observed that the two terms, 'prophetic' and 'dialogue' can sometimes seem contradictory but in fact they are not.

The term "Prophetic Dialogue," at first glance, can seem self-contradictory. There is clearly tension between the two elements. This tension, however, can help overcome a too-limited understanding of both prophecy and dialogue: we might think that dialogue is only a sharing of ideas with others with no clear commitment to our own faith; we might also associate prophecy only with denunciation.<sup>66</sup>

Schroeder observes that there is tension between dialogue and prophecy, but it is a "synthesis in creative tension."<sup>67</sup> It may be important to understand individually what dialogue is and what it means to be prophetic. What then is dialogue? Pope Francis describes it in these words:

Approaching, speaking, listening, looking at, coming to know and understand one another, and to find common ground: all these things are summed up in the one word "dialogue" ... Authentic social dialogue involves the ability to respect the other's point of view and to admit that it may include legitimate convictions and concerns. Based on their identity

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<sup>65</sup> Generalate of the Society of the Divine Word, "Nuntius Societatis Verbi Divini," *Official Documents for Members Only*, Vol. XVI (2004-2008): 331.

<sup>66</sup> SVD Publications, "Documents of the XVI General Chapter," *In Dialogue with the Word*, nr. 6 (September 2006): 20-21.

<sup>67</sup> Schroeder, "Proclamation and Interreligious Dialogue as Prophetic Dialogue," 54.

and experience, others have a contribution to make, and it is desirable that they should articulate their positions for the sake of a more fruitful public debate.<sup>68</sup>

In a spirit of dialogue, we openly, respectfully, authentically, and humbly engage with people of different cultures, religions, ideologies, and technological prowess to discover the inexhaustible riches and truth of God together. To be prophetic is to do as the prophets of old did, i.e., standing up for the truth by speaking against regimes and systems that disenfranchise, dehumanise, and obstruct the divine plan of God. Considering the issues raised above, which include unemployment, discrimination, judicial injustices, and military escalations, the following prophetic dialogue approaches can be proposed.

#### **4.2. Dialogue Between Faith and Science (Scientists and Experts)**

The Pontifical Council for Social Communications in its document “Ethics in Internet” indicated:

That the Catholic Church, along with other religious bodies, should have a visible, active presence on the Internet [in advanced technologies—my words] and be a partner in the public dialogue about its development. The Church does not presume to dictate these decisions and choices, but it does seek to be of help by indicating ethical and moral criteria which are relevant to the process—criteria which are to be found in both human and Christian values.”<sup>69</sup>

Pope Francis succinctly describes this dialogue between faith and science:

Faith is not fearful of reason; on the contrary, it seeks and trusts reason, since “the light of reason and the light of faith both come from God” and cannot contradict each other. Evangelization is attentive to scientific advances and wishes to shed on them the light of faith and the natural law so that they will remain respectful of the centrality and supreme

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<sup>68</sup> *Fratelli Tutti*, nos. 198, 203

<sup>69</sup> Pontifical Council for Social Communications, *Ethics in Internet*, no.18.

value of the human person at every stage of life. All of society can be enriched thanks to this dialogue, which opens up new horizons for thought and expands the possibilities of reason. This too is a path of harmony and peace.”<sup>70</sup>

A forum or a gathering should be organized, facilitating a conducive environment for individuals of various faiths, including Christians, Muslims, Jews, and others, to convene. During such gatherings, participants can engage in a respectful and reciprocal exchange of ideas, striving collaboratively to discern viable solutions for the aforementioned concerns. A relevant example of this proposed dialogue could be like the ‘Minerva Dialogues’.

[The ‘Minerva Dialogues’ is] a high-level annual gathering of scientists and experts, organized by the Vatican’s Dicastery for Education and Culture.... The assembly brings together experts from the world of technology—scientists, engineers, business leaders, lawyers and philosophers and representatives of the Church – curial officials, theologians and ethicists – with the aim of studying and fostering greater awareness of the social and cultural impact of digital technologies, particularly artificial intelligence.<sup>71</sup>

Another forum for dialogue has been the Rome Call for AI Ethics<sup>72</sup> which brings together the Pontifical Academy for Life, Microsoft, IBM and FAO and even the other Abrahamic religious leaders to deliberate on algoethics that would guide the development of AI that serves the common good.<sup>73</sup> An interesting example of a successful dialogue between faith and science is a programme called Equipping Christian

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<sup>70</sup> Pope Francis, *Evangelii Gaudium*, no. 242.

<sup>71</sup> Deborah Castellano Lubov, “Pope Francis Urges Ethical Use of Artificial Intelligence.” *Vatican News*, March 27, 2023, <https://www.vaticannews.va/en/pope/news/2023-03/pope-francis-minerva-dialogues-technology-artificial-intelligenc.html#:~:text=Pope%20Francis%20has%20applauded%20the%20benefits%20of%20technology,has%20warned%20against%20using%20AI%20unethically%20or%20irresponsibly.>

<sup>72</sup> RenAIssance Foundation, “The Call,” accessed May 10, 2023, <https://www.romecall.org/the-call/>.

<sup>73</sup> RenAIssance Foundation, “The Abrahamic Commitment to the Rome Call for AI Ethics,” January 10, 2023, <https://www.romecall.org/the-abrahamic-commitment-to-the-rome-call-for-ai-ethics-10th-january-2023/>.

Leadership in an Age of Science (ECLAS). This program involves scientists within a specific church in the UK, engaging in dialogues with their fellow congregants on various scientific questions.<sup>74</sup> The Scientists in Congregations programme is a similar project that brings together scientists and some local church congregations in around 25 states in the US, one in France as well as one in Canada, to discuss various scientific and theological questions during luncheons, lectures, site visits, shared readings, etc. The churches that serve as models in this dialogue programme report greater benefits and success for both church members and scientists.<sup>75</sup> It is these concrete acts of engagement, mutuality and co-responsibility that need to be emulated among all stakeholders to steer AI to its proper use.

This dialogue between faith and science would help the people of faith to understand each other and be in turn enlightened by the scientific experts and developers. “In a true spirit of dialogue, we grow in our ability to grasp the significance of what others say and do, even if we cannot accept it as our own conviction.”<sup>76</sup> “On the basis of this sympathetic understanding and support [dialogue], it becomes possible to offer meaningful proposals for removing obstacles to human progress and the proclamation of the Gospel.”<sup>77</sup> The presence of the different religions and churches is important to this dialogue as they bring theological and anthropological perspectives that can be corrective to the “atheistic” outlook of some advanced technologies that devalue the human person or even deceive them to think that they have unlimited freedom.<sup>78</sup>

We do not enter this dialogue presuming to have all the answers, but we also allow ourselves to be taught. Bevans captures this point

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<sup>74</sup> Equipping Christian Leadership in an Age of Science, “Scientists in Congregations,” accessed September 27, 2023, <https://www.eclasproject.org/congregations/>.

<sup>75</sup> “Scientists in Congregations,” accessed September 24, 2023, <http://www.scientistsincongregations.org/about-us/>.

<sup>76</sup> Pope Francis, *Fratelli Tutti*, no. 203.

<sup>77</sup> Pontifical Council for Social Communications, *Aetatis Novae*, Pastoral Instruction (1992), no.8.

<sup>78</sup> Pontifical Council for Social Communications, *Ethics in Communications*, Pastoral Instruction (2000), no.5

beautifully when he says, “We need to be evangelized by the people before we can evangelize them; we need to allow the people among whom we work to be our teachers before we presume to teach them.”<sup>79</sup> The fact that we have concerns does not mean that these concerns are automatically true. A forum between scientists and people of faith would help clear most of the doubts each carries, and the problems raised. These dialogues could happen at an international level like the ‘Minerva Dialogues’ or the Rome Call for AI Ethics but could as well happen locally between local religious leaders, local scientists, and local AI developers like what Scientists in Congregations is doing. This specifically could be done through roundtable discussions, lectures, site visits, conferences among others.

### **4.3. Dialogue Between Religious Leaders and Governments**

Another form of dialogue worth mentioning is the dialogue between religious leaders and governments, especially when it comes to regulating AI technologies. Religious leaders could use their voices and influence to appeal to governments to regulate the development of some of these advanced technologies. The different religions with their “long traditions of moral wisdom rooted in divine revelation and human reflection”<sup>80</sup> could help their various governments understand from the religious viewpoint how some of these technologies affect the very being of the human person and society at large, especially when it comes to issues of justice, peace, solidarity, and equity. Dialogue between governments and religious leaders is not a novelty since already, the International Partnership on Religion and Sustainable Development (PaRD),<sup>81</sup> the Transatlantic Policy Network on Religion & Diplomacy

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<sup>79</sup> Bevans and Tahaafe-Williams, *Contextual Theology for the Twenty-First Century*, 104.

<sup>80</sup> Pontifical Council for Social Communications, *Ethics in Communications*, no.5.

<sup>81</sup> International Partnership on Religion and Sustainable Development, “PaRD’s Mission & Vision,” September 25, 2023, <https://www.partner-religion-development.org/about/mission-vision>.



(TPRND),<sup>82</sup> and the G20 Faith Interfaith Forum (IF20)<sup>83</sup> have proven to be avenues where faith leaders have successfully engaged, collaborated, and dialogued with governments and stakeholders on different topics such as peace, famine, Covid-19, etc. In most countries and states, there are religious bodies like the Catholic Bishops' Conference, Council of Churches, Federation of Islamic Societies among others, who in some countries are well-respected and listened to by their respective governments. In view of this trust and openness between governments and religious leaders, religious leaders could either appeal to or even in some instances demand that governments put brakes on or control some technological inventions that are inhumane. This could be done through conferences, workshops, and advocacy among others.

#### 4.4. Prophetic Denunciation and Proclamation

Whereas dialogue between faith and science is important in addressing some of the negative consequences of AI, what happens when science is not open to dialogue or ready to implement the fruits of the dialogue? Here, there is a need for prophetic denunciation or direct proclamation. Gustavo Gutiérrez argues that the prophetic mandate of the Church is both constructive and critical/denouncing. And so, as the Church encourages that which is humanising about the new advanced technologies, it at the same time, points out and challenges that which is dehumanising.<sup>84</sup> Apart from the biblical prophets who engaged in prophetic denunciations, or Jesus who was anointed to proclaim good news to the poor, proclaim freedom to captives and set the oppressed free,<sup>85</sup> we can today mention some 'prophets' in the not-so-distant past like Martin Luther King Jr, Dietrich Bonhoeffer, Oscar Romero, Nelson Mandela among others, who challenged the dehumanising systems of their days. Like these prophets and biblical prophets such as Hosea,

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<sup>82</sup> Berkeley Center for Religion, Peace & World Affairs, "Transatlantic Policy Network on Religion and Diplomacy," accessed September 25, 2023, <https://berkeleycenter.georgetown.edu/projects/transatlantic-policy-network-on-religion-and-diplomacy>.

<sup>83</sup> IF20, "About the G20 Interfaith Forum," accessed September 22, 2023, <https://www.g20interfaith.org/g20-interfaith-forum-about/>.

<sup>84</sup> Gustavo Gutiérrez, *A Theology of Liberation: History, Politics and Salvation* (Maryknoll, NY: Orbis Books, 1973), 114-116.

<sup>85</sup> Luke 4: 18

Amos, Isaiah, etc., who denounced the unjust systems of their days through their preaching, so today's prophetic voices must question any technologies that undermine the dignity of the human person.

Against this backdrop, the Latin American Bishops said in their 1968 Medellín Conference, "To us, the Pastors of the Church, belongs the duty to educate the Christian conscience, to inspire, stimulate and help orient all of the initiatives that contribute to the formation of man. It is also up to us to denounce everything which, opposing justice, destroys peace."<sup>86</sup> Religious leaders in their preaching while being faithful to the Bible could at the same time point out the evils of unemployment, racial/gender discriminations, inequality, military escalations, misinformation, and intellectual dishonesty being perpetrated using AI and other technological advancements. This way of truth-telling does not spring from the place of anger, but love and divine justice for the poor and oppressed. Having these prophetic denunciations about new technologies can awaken the consciousness of technology experts and developers, as well as call for responsible use of them by all people.

## 5. Conclusion

It is undeniable that the new advanced technologies have improved the quality of life, as can be seen in medical care, factories, on streets and even in homes, among others. Most religious traditions, for instance, Christianity, generally see these technologies as a continuation of God's creative power in as much as they are life-giving. On the other hand, it is increasingly evident that certain emerging advanced technologies pose profound challenges to the survival of humanity. This is primarily attributed to the absence of comprehensive regulations governing the ethical dimensions of these technologies by independent bodies. Some of these challenges, as previously discussed, include unemployment, which, in turn, may exacerbate xenophobia, unhealthy nationalistic tendencies, and social unrests. Furthermore, it is evident that certain technologies serve as platforms for perpetuating injustices, biases, and discrimination based on gender, race, religion, as well as demographic and socio-economic backgrounds.

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<sup>86</sup> Latin American Bishops, *Medellin Document: Peace* (1968), no. 20.

Moreover, certain AI-generated technologies are utilized to disseminate misinformation, thereby challenging the credibility of truth in contemporary times. Additionally, the proliferation of deepfakes results in damage to individuals' reputations, while the foundational principles of democracy are jeopardized by the spread of misinformation. In addition, these emerging technologies find application as combat aids in warfare, with their widespread adoption by nations, particularly superpowers, posing a growing threat to global peace. In response to these challenges, individuals of various religious affiliations, including Christians, Muslims, Buddhists, and other people of goodwill, are called upon to actively engage in prophetic dialogue. This proactive engagement involves addressing the ethical and regulatory concerns highlighted in this paper with heads-of-state, technology developers, and stakeholders in pivotal technological industries.

The religious voices during the dialogue could offer good and corrective anthropology as well as sound theology to the development of advanced technologies. These contributions from the prophetic voices would ensure that the God-given creative powers of AI developers could be applied properly for the promotion of humanity and the whole cosmos.

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