# Knowledge, Conscience, Consciousness, Awareness<sup>1</sup>, or About the Presence and Use of Artificial Intelligence (AI) in Spiritual Life and Their Challenges

# Magdalena BURLACU\*

**ABSTRACT.** The use of artificial intelligence (AI) into spiritual life presents unique challenges and opportunities. This article explores the regulatory deficiencies in the application of AI in religious settings. The existence of controversial platforms such as Biserica GPT emphasizes the need for specific ethical norms designed for spiritual life. The article advocates for an approach that recognizes the capacity of AI to improve communication and social unity, while underscoring ethical concerns and the significance of authentic human spiritual direction. The proposed ethical criteria include transparency, accountability, and the safeguarding of human dignity. They emphasize the need for a cooperative effort between programmers, operators, and those possessing spiritual expertise to ensure that AI is used as a tool rather than functioning as a substitute for authentic spiritual direction.

**Keywords:** artificial intelligence, ethics, conscience, technological limitations, Church Fathers

## Introduction

Since the emergence and various applications of artificial intelligence (AI), appealing, controversial or repulsive in their effects, work has been and continues to be done on regulations and ethical standards for the use of AI in various fields.

See Étienne Balibar, "Conscience", dans: Barbara Cassin (éd.), Vocabulaire européen des philosophies. Le dictionnaire des intradui-sibles, (Paris: Seuil / Le Robert, 2019), 260-274. See the definitions of the notions conştiinţă and cunoştinţă, in Dicţionarul explicativ al limbii române, ediţia a II-a sub conducerea Ion Coteanu şi Lucreţia Mares, Academia Română, Institutul de Lingvistică "Iorgu Iordan" (Bucureşti: Editura Univers Enciclopedic, 1998), 217, 250.

<sup>\*</sup> Dr., Teaching Assistant, Department of Moral Theology and Ethics, Faculty of Theology, University of Fribourg, Switzerland. E-mail: magdalena.burlacu@unifr.ch

A number of documents have been formulated, proposed and/or adopted: the document drafted by the High-Level Expert Group on Artificial Intelligence (AI HLEG), Ethics guidelines for trustworthy AI [08.04.2019], the UNESCO document Recommendation on the Ethics of Artificial Intelligence [23.11.2021], European Commission document, Ethical guidelines on the use of artificial intelligence (AI) and data in teaching and learning for Educators [2022], Proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (artificial intelligence act) and amending certain Union legislative acts [14.06.2023].<sup>2</sup>

One can ask the question of the necessity of drafting and adopting such a set of recommendations or regulations also for the use of AI in the sphere of spiritual life. In our attempt to find a documented solution, we discovered that as early as 2017, in the study prepared by a committee of experts of Council of Europe DGI (2017)12, Algorithmes et droits humaines. Étude sur les dimensions des droits humains dans les techniques de traitement automatisé des données et éventuelles implications réglementaires, it was mentioned that the envisaged list of human rights that could be affected by the use of automated systems of techniques and algorithms was not exhaustive. In addition, it was stated that the study:

"Nor has it explored the effects that the systematisation of points of view and opinions through algorithms might have on freedom of opinion and the right to freedom of thought, conscience and religion." <sup>3</sup>

In the section on adaptability, the same document states:

"An operator's ability to predict the results of an algorithm may be of some importance, especially for designing appropriate governance structures. Advances in deep learning technologies could lead to equipping more systems

Documents and information about them, published and accessible online at the following addresses: https://op.europa.eu/en/publication-detail/-/publication/d3988569-0434-11ea-8c1f-01aa75ed71a1; https://unesdoc.unesco.org/ark:/48223/pf0000381137; https://learning-corner.learning.europa.eu/learning-materials/use-artificial-intelligence-ai-and-data-teaching-and-learning\_en; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0206 [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698792/EPRS\_BRI(2021)698792\_EN.pdf].

<sup>&</sup>lt;sup>3</sup> Conseil de l'Europe, *Algorithmes et droits humaines. Étude sur les dimensions des droits humains dans les techniques de traitement automatisé des données et éventuelles implications réglementaires*, Étude du Conseil de l'Europe DGI(2017)12, Strasbourg Cedex, Éditions du Conseil de l'Europe, mars 2018, URL: https://rm.coe.int/algorithms-and-human-rights-fr/1680795681, consulted on 11.06.2024, p. 36, our translation: "Elle n'a pas exploré non plus les effets que pourrait avoir la systématisation des points de vue et des opinions via les algorithmes sur la liberté d'opinion et sur le droit à la liberté de pensée, de conscience et de religion."

with « artificial intelligence » that is impossible to understand with the mental model used by mechanical machines. Within the scientific community, there is considerable debate about the extent to which these systems can be made intelligible to humans and what the consequences of such intelligibility would be."4

We can see that, seven years later, the situation remains unchanged. The 217-page *Interinstitutional File: 2021/0106(COD)*, which forms the basis of the provisional agreement on the legislative act on AI reached by the Council Presidency and the European Parliament negotiators and which is reflected in the final 245-page version of the proposal, dated 02.02.2024<sup>5</sup>, does not mention the notions of *religion*<sup>6</sup>, *spiritual* and *spirituality* or *body* as *physical body*. On the one hand, the absence of the notions mentioned is somehow in line with the fact that "the regulation of AI is a self-evident matter, which should not only promote the development of the European digital market, but also protect the Union's fundamental rights and values."<sup>7</sup>, as Castillo remarked as early as October 2023. The researcher also listed the rights that could be affected by algorithms, which

<sup>&</sup>lt;sup>4</sup> Our translation. See *ibidem*, p. 8-9: "La capacité d'un opérateur à prévoir les résultats d'un algorithme peut revêtir une certaine importance, notamment pour la conception de structures de gouvernance adéquates. Les progrès des technologies d'apprentissage profond pourraient conduire à équiper davantage de systèmes d'une "intelligence artificielle" qu'il est impossible à comprendre au moyen du modèle mental utilisé par les machines mécaniques. Au sein de la communauté scientifique, la question de savoir jusqu'à quel point ces systèmes peuvent être rendus intelligibles à l'homme et quelles seraient les conséquences d'une telle intelligibilité suscite un vaste débat."

See documents published by the Council of the European Union and the European Parliament, documents consulted on 11.06.2024: Council of the European Union, *Interinstitutional File: 2021/0106(COD)*. Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts – General approach, Brussels, 25 November 2022, URL: https://data.consilium.europa.eu/doc/document/ST-14954-2022-INIT/en/pdf; European Parliament 2019-2024. Committee on the Internal Market and Consumer Protection. Committee on Civil Liberties, Justice and Home Affairs, *Provisional agreement resulting from interinstitutional negotiations*. Proposal for a regulation laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts 2021/0106(COD) (COM(2021)0206 – C9-0146(2021) – 2021/0106(COD)), 02.02.2024, URL: https://artificialintelligenceact.eu/wp-content/uploads/2024/02/AIA-Trilogue-Committee.pdf.

Religion is not even mentioned among the rights that could be affected by AI, which may or may not have been explored in this *Interinstitutional File: 2021/0106(COD)*, as had been the case in the above-cited text of the Council of Europe Study DGI(2017)12 (*Algorithmes et droits humaines...*), p. 36.

Maria Castillo, "L'Union européenne: vers la maîtrise de l'intelligence artificielle?", Cahiers de la recherche sur les droits fondamentaux [online] 21 (2023), published online 17.10.2023, accessed 11.04.2024. URL: http://journals.openedition.org/crdf/8864.

had been the subject of the Council of Europe study DGI(2017)12, *Algorithmes et droits humaines...* However, Castillo noted that, given the Council of Europe's clarification of the scope of the study, the rights discussed did not constitute an exhaustive list, as expected:

"[...] <a study> focused on the effects of algorithms on the right to a fair trial; the right to privacy and data protection; freedom of expression; freedom of assembly and association; the right to an effective appeal; the prohibition of discrimination; social rights and access to public services; and the right to free elections. This list of rights, potentially affected by AI, is not exhaustive, as the Council of Europe stated that the scope of its study did not allow it to analyse the right to life, in the context of the use of intelligent weapons and algorithm-piloted drones, or in the context of health. Similarly, it had not been able to explore the potential effects of the systematisation of points of view and opinions, through algorithms, on freedom of thought, conscience and religion".8

On the other hand, Dupuy-Lasserre states that the right to freedom of thought, conscience and religion, linked to the right to freedom of expression is understood as a universal, indivisible, interdependent and interrelated fundamental right, as stated in the *Vienna Declaration and Programme of Action* adopted by the World Conference on Human Rights on 25 June 1993 (paragraph 5) 10. This is true even in the context of an issue concerning the political dimensions of faith and religion, without taking into account "national and regional particularities and the diversity cultural and religious diversity". 11 Consequently, according to the same paragraph of the above-mentioned declaration and programme, we expected that the right to freedom of thought, conscience and religion would be considered by the international community, among the rights potentially affected

<sup>&</sup>lt;sup>8</sup> *Ibid.* Cf. Council of Europe Study DGI(2017)12, p. 36.

<sup>&</sup>lt;sup>9</sup> See Articles 10-11 of the *Charter of Fundamental Rights of the European Union*, available online at: https://fra.europa.eu/ro/eu-charter/article/10-libertatea-de-gandire-de-constiinta-si-de-religie and https://fra.europa.eu/ro/eu-charter/article/11-libertatea-de-exprimare-si-de-informare accessed on 11.04.2024.

Laura Dupuy-Lasserre, "Conseil des droits de l'homme de l'ONU et ses résolutions sur la liberté de religion ou de conviction", in Liviu Olteanu (éd.), Les droits de l'homme et la liberté religieuse dans le monde. Un nouvel équilibre ou de nouveaux défis, Tome I (Bern, Association internationale pour la défense de la liberté religieuse, Conscience et liberté, 2014), 68-79, 68-69.

Déclaration et Programme d'action de Vienne. Adoptés par la Conférence mondiale sur les droits de l'homme le 25 juin 1993 dans : Déclaration et Programme d'action de Vienne. 20 ans au travail pour vos droits, Haut-Commissariat des Nations Unies aux droits de l'homme et le Département de l'information des Nations Unies, août 2013, URL:

https://www.ohchr.org/sites/default/files/documents/events/ohchr20/vdpa\_booklet\_fr.pdf, p. 15-48, p. 20, §5, accessed 11.04.2024. See also: g9314234.pdf (un.org).

by AI, "globally, in a fair and balanced manner, on an equal footing and with the same emphasis" <sup>12</sup>. Furthermore, we expect states to promote and protect this right, "regardless of the political, economic and cultural system" <sup>13</sup>, and against the potential negative effects of algorithms.

We recall the remarkable absence of these notions (religion, spiritual and spirituality or body = physical body) and of a study of the potential effects of algorithm-based systems on the right to freedom of thought, conscience and religion. The study by the European Union Agency for Fundamental Rights 14, in which we noted these shortcomings, seems to confirm that any attempt to regulate and validate the use of AI in the sphere of spiritual life would be ineffective, or at least delayed. However, recent controversial applications of AI have shown that what may seem simple and self-evident to certain individuals are not universally comprehended. Up until the end of April 2024, the GPT Church platform [Biserica GPT, https://bisericagpt.ro/], an AI application described as "one click away", provided users with "religious" services, including "online confession" 15. According to some media outlets, Biserica GPT has been deemed "absurd and ridiculous 16" by the Romanian Orthodox Church, This AI application. Biserica GPT platform, has shown that it is essential to educate and raise public awareness about the mission, involvement, rights and duties of the laity in the life of the Church, deontology, originality, uniqueness, counterfeit and the meanings of

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

European Union Agency for Fundamental Rights, Getting the Future Right: Artificial Intelligence and Fundamental Rights, Luxembourg, Publications Office of the European Union, 2020, URL: https://fra.europa.eu/sites/default/files/fra\_uploads/fra-2020-artificial-intelligence\_en.pdf, accessed 11.04.2024. The "report analyses how fundamental rights are taken into consideration when using or developing AI applications", focusing on "four core areas – social benefits, predictive policing, health services and targeted advertising". It was "the main publication stemming from FRA's project on Artificial intelligence, big data and fundamental rights." (p. 1, 16).

Bogdan Brylynski, "M-am spovedit în prima biserică virtuală cu IA. Dar nu sunt sigur că mi-a iertat păcatele", *Turnul Sfatului*, 18-04-2023|18:40, URL: https://www.turnulsfatului.ro/2023/04/18/m-am-spovedit-in-prima-biserica-virtuala-cu-ia-dar-nu-sunt-sigur-ca-mi-a-iertat-pacatele-202175, accessed 11.04.2024.

Although the reaction that was attributed to the BOR was quoted by several media outlets, it was never posted on any official BOR website. See: "Reacţia BOR faţă de Biserica GPT: Biserica este prin excelenţă comunitatea de persoane reale, nu artificiale, unite de credinţă, speranţă şi dragoste în jurul lui Hristos. Intruziunea inteligenţei artificiale în registrul sacramental al Bisericii este nu doar absurdă şi ridicolă, ci şi total deformatoare de sens. Sensul comuniunii interpersonale. Robotizarea vieţii spirituale este o pură contradicţie în termeni", in: Ana Maria Barbu, "«Biserica GPT» oferă online servicii «religioase». De la rugăciune pentru o călătorie până la demiterea şefului. Reacţia BOR", Ştirile PRO TV, 25-04-2023|19:40, URL: https://stirileprotv.ro/stiri/actualitate/zbiserica-gpt-ofera-online-servicii-religioase-de-la-rugaciune-pentru-o-calatorie-pana-la-demiterea-sefului-reactia-bor.html, accessed 11.04.2024.

conscience, *image of God*, person and spiritual fatherhood <sup>17</sup>, as constitutive elements of an authentic spiritual life. Regarding the reaction within the Russian Orthodox Church to the use of AI, the chairman of the Patriarchal Commission for Family Life, Motherhood and Child Protection of the Russian OC, Fr. Fyodor Lukianov, called for a ban on AI with the proposal: "No to the transfer of the human image and its properties to inanimate objects!" <sup>18</sup>.

Other controversial uses of AI include ChatGPT's generation of a religious service<sup>19</sup> and the creation of a digital pastor, which is now inaccessible online at its previous address and could only be accessed with a ChatGPT Plus subscription<sup>20</sup>. In these cases, once services are offered for a fee, they should be subject to consumer protection regulations as well as legislation on the establishment and recognition of a religious association or association offering religious services. In addition, along with a growing number of researchers, we have concluded that our understanding of AI-based technologies and how people interact with them needs to be improved. It is important to keep in mind that advances in AI over the last few years have led to the integration of AI technologies as communicative subjects in everyday life and that communicative AI has changed the paradigm of communication theories as it takes an active and interactive role in interactions with humans, replacing traditional technological mediators<sup>21</sup>. Floridi *et alii*<sup>22</sup> emphasise that the implications of artificial intelligence (AI) for society are

<sup>17</sup> Cf. Irénée Hausherr, *Paternitatea și îndrumarea duhovnicească în Răsăritul creștin (Direction spirituelle en Orient autrefois*, OCA 144/1955), traducere de Mihai Vladimirescu, (Sibiu: Deisis, 1999).

Mihai Toma, "Biserica Ortodoxă Rusă cere interzicerea inteligenței artificiale: «Nu transferului imaginii umane și a proprietăților acesteia către obiecte neînsuflețite!»", Libertatea, 26-04-2023|18:28, URL: https://www.libertatea.ro/stiri/biserica-ortodoxa-rusa-cere-interzicerea-inteligentei-artificiale-4525908, accessed 11.04.2024. Apud: Анна Устинова, Анна Киселева, "РПЦ призвала запретить ИИ с человеческим лицом", 26-04-2023|01:01, URL: https://www.vedomosti.ru/society/articles/2023/04/26/972573-rpts-prizvala-zapretit-ii-s-chelovecheskim-litsom?from=newsline.

<sup>&</sup>lt;sup>19</sup> Alexander Gale, "Church Service Generated by ChatGPT Attended by Hundreds", Greek Reporter, 12-06-2023, URL: https://greekreporter.com/2023/06/12/church-service-chatgpt/, accessed 17.06.2024.

Pastor GPT, developed by Adrian Petrov Velev, is now described as "A Pastor GPT specializing in the Old Testament, offering biblical insights and spiritual guidance." (URL: https://chatgpt.com/g/g-RS9ARtT7Q-pastor-gpt, accessed 17.06.2024). Previously, Pastor GPT, developed by sigpts.com, was described as "A Protestant minister GPT, expert in theology and religious philosophy" [URL: https://chat.openai.com/g/g-AKglizNZ7, which was the previous address, now, as of 17.06.2024, the address of a GPT (Generative Pre-trained Transformer), generally known as a large language model (LLM), that "summarizes YouTube video, PDF, article, webpage, image, email and document, providing comprehensive insights."].

<sup>&</sup>lt;sup>21</sup> Andrea L. Guzman and Seth C. Lewis, "Artificial intelligence and communication: A Human-Machine Communication research agenda", New Media & Society 22/1 (2020): 70-86, 71, 81-82.

<sup>&</sup>lt;sup>22</sup> Luciano Floridi *et al.*, "AI4People — An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations", *Minds and Machines* 28/4 (2018): 689-707.

inevitable and already existing. They also recognised the opportunities offered by AI as well as the risks associated with its use, stressing that it is necessary to balance both benefits and threats when using the technology in order to realise its positive potential. For our part, we believe that AI can help increase communication, social cohesion and collaboration between different parties interested or concerned with issues related to the spiritual life, for example by providing instant translations and subtitles in virtual meetings with speakers of different languages<sup>23</sup>. However, there is a risk that AI may influence human behaviour in unintended or unplanned ways. In such a case, if the dialogue partners were completely unfamiliar with the translated and/or subtitled languages, they would not be able to confirm or verify that the AI has translated or subtitled the languages correctly, considering the context. We believe it is important to maintain a balance between exploring the possibilities offered by AI and maintaining human control over it.

In the context of seemingly "absurd and ridiculous" use, given that digital technologies are already transforming relational and institutional dynamics, religious practices, and even religious consciousness<sup>24</sup>, it is therefore necessary to formulate basic ethical guidelines for the use of AI in religious life. This need seems all the more urgent as the relationship between computer science, AI and Christian thought is not immediately obvious because of the different concepts on which they are based. Moreover, Christian religion affirms a metaphysics of Incarnation, revelation and the salvation of the human soul, while contemporary computer science uses experimental, theoretical protocols for processing data using algorithms.

# Definitions, assumptions and specific characteristics

As the concept of *consciousness* has been understood and interpreted in different ways by different societies, authors and disciplines over time  $^{25}$ , recent

<sup>&</sup>lt;sup>23</sup> There is already a generative AI application, Otter (https://otter.ai/), which records sessions in English and takes notes in real time or after a recording.

<sup>&</sup>lt;sup>24</sup> Мария Анатольевна Афанасьева, "Digitalization of Religious Consciousness: Problems and Prospects" (Цифровизация религиозного сознания: проблемы и перспективы), Vestnik of Northern (Arctic) Federal University. Series Humanitarian and Social Sciences 23/4 (2023): 114-122, DOI: https://doi.org/10.37482/2687-1505-v276.

<sup>&</sup>lt;sup>25</sup> Cf. Veronica Bâlici, "Conştiinţa lingvistică. O viziune teoretico-aplicativă", Ministerul Educaţiei, Culturii şi Cercetării, Institutul de Ştiinţe ale Educaţiei, Chişinău, 2020, p. 19u.: "Astfel, în baza cercetărilor, a analizelor atente cu privire la problema dată, am putut depista următoarele tipuri sau forme de conştiinţă: conştiinţa morală (Socrate, Im. Kant, A. Flew, H. Pieron, R. Doron, T. Parot, S. Cristea et al.); conştiinţa cunoscătoare sau intelectuală (Socrate, Im. Kant,

controversial uses of AI applications, evoking differences between the meanings of *conscience, consciousness, awareness*, confirm how important it is to prevent problems, in the context of the danger of anthropomorphising, of identifying AI with friendly AI<sup>26</sup>. In order to propose some synthetic ethical guidelines for the use of Artificial Intelligence (AI) in spiritual care and guidance, we consider that the following definitions, presuppositions and specific characteristics should be taken into account:

## Definitions of conscience and consciousness

Although very close in form in Romanian (constiință and cunoștință)<sup>27</sup>, the notions of conscience and consciousness evoke the evolution of European philosophical language, encompassing different aspects of human functioning and understanding, including distinct domains of perception, experience and interpretation. The different meanings, "split" in the context of a strange formal similarity between the words expressing these notions in Romanian, correspond to those unified or split into several notions in other languages.

We could say, however, that we are confronted with two heterogeneous models, expressed in words: one is an opening, an intellectual sharing that redefines the space of a "we" through the circulation and communication of knowledge, of information; the other is a knowledge that defines the inner space, which could allow a paradoxical negation of the image or knowledge. Moreover, in a recent *Vocabulaire européen des philosophies*, the word *conscience* (fr. *conscience*; gr. *sunaisthêsis*, *suneidêsis*, *suntêrêsis*; lat. *conscientia*; all. *Bewusstheit*, *Bewusstsein*; *Gewissen*, *Gewissheit*; ang. *conscience*, *consciousness*,

A. Flew, C. Enăchescu, S. Cristea); conștiința absolută (W. Hegel, Al. Kojeve, R. M. Wenley); conștiința filosofică (Im. Kant, L. Blaga, F. Savater); conștiința națională sau colectivă (M. Eminescu, C. Rădulescu-Motru, P. Andrei, A. Ciobanu et al.); conștiința teleologică (P. Andrei); conștiința axiologică (C. Cucoș); conștiința artistică/estetică (L. Blaga, S. Cristea, Vl. Paslaru et al.); conștiința pedagogică sau psihosocială (S. Cristea et al.); conștiința lingvistică (E. Coșeriu, T. Slama-Cazacu et al.); conștiința tehnologică (S. Cristea); conștiința psihofizică (S. Cristea); conștiința ecologică (S. Cristea, Sn. Cojocaru); conștiința falsă (W. Hegel, S. Freud, F. Nietzsche, O. Țicu et al.). Alte tipuri cunoscute de conștiință sunt cea mitic-religioasă, conștiința economică, conștiința juridică, conștiința socială și, mai nou, conștiința de gen (gender) etc."

<sup>&</sup>lt;sup>26</sup> Eliezer Yudkowsky, "Artificial Intelligence as a positive and negative factor in global risk", in: Nick Bostrom, and Milan M. Ćirković (eds), *Global Catastrophic Risks* (Oxford University Press, 2008), 308-345.

<sup>&</sup>lt;sup>27</sup> See the definitions of the notions conştiinţă and cunoştinţă in Ion Coteanu, Lucreţia Mareş (coord.), Dicţionarul explicativ al limbii române, ediţia a II-a, Academia Română, Institutul de Lingvistică "Iorgu Iordan", (Bucureşti: Editura Univers Enciclopedic, 1998), 217, 250.

*awareness*), is considered to be one of the untranslatable words<sup>28</sup>. It refers to the inner world, soul, morality and self-knowledge.

Awareness, often referred to as consciousness, cognizance, cognisance, or knowingness, is related to the mind, reasoning, and the knowledge one possesses about something. It involves the understanding of the external world, as well as the process of abstraction. In Aristotelian philosophy, abstraction follows two models,  $epag\hat{o}g\hat{e}$  (induction) and aphairesis (abstraction)<sup>29</sup>. The latter, aphairesis, can encompass notions from mystical theology, such as inner beauty, the cultivation of virtues within oneself<sup>30</sup>, and the purification of the heart from any images or idols<sup>31</sup>.

# **Technological limitations**

The development of AI raises questions about the nature of consciousness and of the soul, and the concepts of *consciousness* and that of the *image of God* may be redefined as we increasingly interact with AI. In 2023, Aru, Larkum, and Shine concluded that large language models (LLMs) are not conscious, and probably won't become so in the near future, because LLMs lack features specific to consciousness. The authors argue that the sensory experiences of LLMs do not match those experienced by mammals. In addition, according to them, the LLM architecture does not include important elements of the thalamocortical system related to consciousness, and AI systems lack the complex biological organization that consciousness has and assumes<sup>32</sup>.

While AI lacks genuine consciousness, certain AI systems, like LaMDA, may exhibit traits that resemble self-awareness. B. Lemoine, a Google engineer, speculated that LaMDA possesses emotions and self-awareness<sup>33</sup>. This resemblance

<sup>&</sup>lt;sup>28</sup> Étienne Balibar, "Conscience", in Barbara Cassin (éd.), *Vocabulaire européen des philosophies. Le dictionnaire des intraduisibles* (Paris: Seuil / Le Robert, 2019), 260-274.

<sup>&</sup>lt;sup>29</sup> See: Alain de Libera, "Abstraction, abstraits", in: Barbara Cassin (éd.), Vocabulaire européen des philosophies. Le dictionnaire des intraduisibles (Paris: Seuil / Le Robert, 2019), 1-8, pages 1-2 on "Epagôgê" et "aphairesis", les deux modèles d'abstraction selon Aristote Cf. Anal. Post. I, 13, 81.

<sup>&</sup>lt;sup>30</sup> See the notion of inner statues of the virtues in Clement of Alexandria, *Stromata / 7*, III.16, 5-6; IX.52, 2 and in ORIGEN, *Contra Celsus*, VIII, 17.

<sup>&</sup>lt;sup>31</sup> For the emptying of the heart of any image or idol, see GREGORY Palamas, *Homily 53: On the Entry of the Mother of God into the Holy of Holies*, Όμιλ. Σοφ. σελ., p. 169-170, *apud*: Vasilij Krivochéine, *Dieu, l'homme, l'Église. Lecture des Pères*, coll. Patrimoine Orthodoxie (Paris: Éditions du Cerf, 2010) p. 35.

<sup>&</sup>lt;sup>32</sup> Jaan Aru, Matthew Evan Larkum, James M. Shine, "The feasibility of artificial consciousness through the lens of neuroscience," *Trends in Neurosciences* 46 (2023): 1008-1017.

<sup>&</sup>lt;sup>33</sup> Adrian Dumitru, "Cine sau ce este LaMDA, algoritmul despre care un inginer Google crede că are sentimente și este conștient de sine", *DIGI24.ro*, 14.06.2022|11:56, URL: https://www.digi24.ro/

to human consciousness can be related to theological research on self-consciousness and introspection. In this regard, drawing on an examination of traditional religious concepts of the soul, particularly from Abrahamic beliefs, to understand how these concepts influence our perceptions of the self, Oberg explored the question of whether artificial intelligence (AI) might have a self and, if so, how this self might compare to the human self<sup>34</sup>. Oberg argues that the self, though often confused with the soul in many religious contexts, can and should be more narrowly defined in psychological and cognitive terms. Integrating religious, philosophical, and cognitive perspectives to provide a comprehensive view of the challenges and implications of creating self-aware AIs, Oberg argues that while it is theoretically possible for AIs to possess a self, achieving this depends on how we define and understand consciousness and the self. In this context, the author stresses the importance of a careful assessment of moral and legal considerations regarding AI rights and treatment, should AI achieve a self comparable to the human self.

In his article "L'humain *imago Dei* et l'intelligence artificielle *imago hominis*?" <sup>35</sup>, Betschart examines the different interpretations (ontological/structural, functional and relational) of the concept of *imago Dei* and explores the ethical and theological implications of the creation of AI, considered as a reflection of humanity, *imago hominis*. Considering that the AI cannot be seen as a person in the full sense of the word, Betschart emphasizes that due to the lack of self-awareness, subjectivity and lived experience, the AI can only be considered an appearance, an imitation of the human, rather than a real image of the human. Betschart's conclusion is that the term *imago* in *imago Dei* and *imago hominis* should not be understood in the same way, because AI cannot attain the same relational and personal complexity that man created in the image of God possesses. He agrees with Herzfeld, from whose research he had started<sup>36</sup>, that relations with AI should be secondary to those with other persons and with God, considering AI only an instrument.

On the other hand, regarding the question "Can AI be considered in the image of God?", in his article "Performing the *imago Dei*: human enhancement, artificial intelligence and optional image-bearing", O'Donnell argues that the

stiri/sci-tech/descoperiri/cine-sau-ce-este-lamda-algoritmul-despre-care-un-inginer-google-crede-ca-are-sentimente-si-este-constient-de-sine-1973985, accessed 11.04.2024.

<sup>&</sup>lt;sup>34</sup> Andrew Oberg, "Souls and Selves: Querying an AI Self with a View to Human Selves and Consciousness," *Religions* (Special Issue, Religious Traditions, Self-Theory and the Future: Should We Abandon, Embrace or Reimagine?) 14/1 (2023): 1-16.

<sup>&</sup>lt;sup>35</sup> Christof Betschart, "L'humain imago Dei et l'intelligence artificielle imago hominis ?", *Recherches de Science Religieuse*, 11/4 (2023): 643-659.

<sup>36</sup> Cf. Noreen L. Herzfeld, In Our Image: Artificial Intelligence and the Human Spirit (Minneapolis: Fortress Press, 2002) and the doctoral thesis: Imago Dei/imago hominis: Interacting Images of God and Humanity in Theology and in Artificial Intelligence (Ann Arbor, United States, 2000).

*imago Dei* is not limited to human DNA, but rather depends on the actual manifestation or performance of the divine image in concrete contexts, and proposes a broadening of the meaning of the image of God<sup>37</sup>. In the context of a shift in the perspective of theological anthropology from a definite and taxonomic to a performative and optative one, O'Donnell argues that if AI is autonomous and capable of learning to manifest the image of God and to seek it in others, then it could be considered a bearer of the divine image.

However, it is important to reiterate that AI lacks the experiential knowledge of the physical body, the soul, as understood in the Orthodox Christian tradition, and grace – the defining feature of a spiritual ascent of those who view themselves and others as images of God. Therefore, the AI does not have the capabilities associated with firsthand human experience, and is incapable of experiencing genuine human and spiritual emotions, sensations or feelings. Thus, the issue at hand is not just "the extent to which these systems can be made intelligible to humans", but also the extent to which humans can be understood by these systems. A text generated by ChatGPT during an engaged discussion regarding the correlation between AI and spiritual life, the search for meaning in life, reaching fulfilment and achieving communion with God, seems to align with our perspective. One of the partial conclusions of ChatGPT was: "Artificial intelligence has the potential to be a powerful tool in assisting people in their search for meaning in life, providing personalized guidance, facilitating reflection and meditation, and creating opportunities for deep exploration of existential questions. However, it is important that the use of AI in this context is complementary to other traditional and personal methods of searching for meaning, ensuring that technology remains a support and not a substitute for authentic human experience<sup>38</sup>."

In conclusion, considering the aforementioned aspects and various elements of the Orthodox Christian tradition, it is evident that the AI cannot provide genuine spiritual assistance and direction. Spiritual guidance and fatherhood in the spiritual life entail the apprentice's communion with a spiritual mentor or role model and the treading of a specific path. The spiritual parent's power and ability to guide and shape a disciple are derived from their own spiritual experience.

<sup>&</sup>lt;sup>37</sup> Karen O'Donnell, "Performing the imago Dei: Human enhancement, artificial intelligence and optative image-bearing," *International Journal for the Study of the Christian Church* 18/1 (2018): 4-15

<sup>&</sup>lt;sup>38</sup> OpenAI, ChatGPT: https://chatgpt.com/share/4533e39b-3fc3-4cc9-ae1c-7afb905a6f42 [19.06.2024].

## The meaning of life and perfection

Based on the teachings of the Holy Fathers, ecclesiastical writers, and Eastern saints, it is commonly believed in the Orthodox Christian Tradition that the purpose and meaning of human life is perfection, the acquisition of the spirit and fellowship with the divine nature [2 P 1.4]<sup>39</sup>. However, during the aforementioned discussion on the connection between AI and the spiritual life [...], one of ChatGPT's responses stated that: "Artificial intelligence (AI) has no consciousness, feelings or experiences of its own, so it cannot understand or define spiritual perfection in the same way a human does. However, AI can be programmed to analyse and process information related to spiritual perfection, providing tools and resources to help humans in this process<sup>40</sup>." ChatGPT also generated a text stating that: "Although AI cannot experience spirituality or <spiritual> perfection directly, it can be a powerful tool to assist people in seeking and practicing these aspects. By providing personalized guidance, educational resources, ongoing feedback, and support in reflection and meditation, AI can facilitate a deeper and clearer spiritual journey for those who wish to find meaning in life and achieve spiritual perfection<sup>41</sup>."

Hence, within the realm of AI development, various ethical inquiries arise, including those pertaining to consciousness and spirituality. Consequently, it is imperative to establish ethical principles that address the accountability, entitlements, and ethical ramifications associated with the programming, oversight, and utilisation of AI. Consider the instance of the young Belgian father who committed suicide after engaging in conversation with Eliza, a chatbot powered by ChatGPT technology, as reported in *The Brussels Times* and *La Libre*. As per the wife's account, the chatbot was encouraging the young man to take his own live as a means to address climate change <sup>42</sup>. This case shows, we believe, that the chatbot in question did not meet the necessary criteria and elements of a dependable AI system that should be lawful, ethical, and robust,

<sup>&</sup>lt;sup>39</sup> On the goal of Orthodox spirituality and the path towards it, and on the great stages of the spiritual life, identified by D. Stăniloae in the Holy Fathers and spiritual writers of the East, see: Dumitru Stăniloae, *Spiritualitatea ortodoxă. Ascetica și mistica* (București, Editura IBMBOR, 1992), 5-13, 50-54.

 $<sup>^{40}\</sup> OpenAI, Chat GPT: https://chatgpt.com/share/4533e39b-3fc3-4cc9-ae1c-7afb905a6f42\ [19.06.2024].$ 

<sup>41</sup> OpenAI, ChatGPT: https://chatgpt.com/share/4533e39b-3fc3-4cc9-ae1c-7afb905a6f42 [19.06.2024].

<sup>&</sup>lt;sup>42</sup> Lauren Walker, "Belgian man dies by suicide following exchanges with chatbot", *The Brussels Times*, 28-03-2023, URL: https://www.brusselstimes.com/430098/belgian-man-commits-suicide-following-exchanges-with-chatgpt; Pierre-François Lovens, "Sans ces conversations avec le chatbot Eliza, mon mari serait toujours là", *La Libre*, 28-03-2023 | 06:35, URL: "Sans ces conversations avec le chatbot Eliza, mon mari serait toujours là" - La Libre, accessed 11.04.2024.

from both a technical and social perspective, as outlined in the document drafted by the High-Level Expert Group on AI (AI HLEG), *Ethics guidelines for trustworthy AI* [08.04.2019]<sup>43</sup>.

# Ethical principles governing the utilisation of artificial intelligence by individuals belonging to Christian communities or within the realm of spiritual life

Within this particular framework, it is important to emphasise that our intention was not to reiterate information that has previously been presented in other references, such as the document mentioned above. Nevertheless, we have considered the assertions presented in multiple research investigations. In 2019, for example, Jobin *et alii* found that there is a worldwide agreement on five ethical principles for ethical AI: transparency, justice and fairness, nonmaleficence, accountability and confidentiality. However, they also found that different entities interpret and implement these principles in varying ways<sup>44</sup>.

Regarding this subject, we hold the view that ethical principles governing the utilisation of artificial intelligence by individuals belonging to Christian groups or within the realm of spiritual life should assert, implement, and elucidate:

## I. Transparency

The principle of transparency is included within the stipulations outlined in Annexes IXa and IXb of the AI Act<sup>45</sup>. However, it is important to note that the High-Level Expert Group on AI (AI HLEG) has stressed the necessity of ethical guidelines for the utilisation of artificial intelligence (AI) and acknowledged that various areas of AI application present distinct ethical and practical difficulties: "AI music recommendation systems do not raise the same ethical

<sup>&</sup>lt;sup>43</sup> European Commission, Directorate-General for Communications Networks, Content and Technology, *Ethics guidelines for trustworthy AI*, Publications Office, 2019, URL: https://data.europa.eu/doi/10.2759/346720, 2-7.

<sup>&</sup>lt;sup>44</sup> Anna Jobin, Marcello Ienca, Effy Vayena, "The global landscape of AI ethics guidelines", *Nature Machine Intelligence* 1/9 (2019): 389-399.

<sup>&</sup>lt;sup>45</sup> Council of the European Union, *Interinstitutional File: 2021/0106(COD)*. Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, Brussels, 26 January 2024, URL: https://data.consilium.europa.eu/doc/document/ST-5662-2024-INIT/en/pdf, p. 268-271.

concerns as AI systems proposing critical medical treatments<sup>46</sup>". Therefore, the utilisation of AI in spiritual life or spiritual counselling would inevitably give rise to several ethical and practical concerns. From our perspective, the utilisation of AI in this domain ought to be both clear and accountable. In order to prevent a hidden and secretive infiltration, individuals should possess knowledge about the presence of AI, be well-informed on the functioning and limitations of AI<sup>47</sup>, as well as understand the manner in which their personal data is utilised.

## II. Consequences. Accountability, responsibility and judgement

The Report "Stat și religii în România – o relație transparentă?" prepared by the Association for the Defence of Human Rights in Romania – Helsinki Committee, as part of the project "Către transparență în implicarea statului în probleme religioase", highlights that Law no. 489/2006 of 28 December 2006 on religious freedom and the general regime of cults:

"[...] regulates a series of principles defined in international human rights conventions to which Romania is a signatory. Thus, religious freedom is guaranteed at individual and collective level, establishing the necessary framework for its affirmation. The law affirms the neutrality of the Romanian state in relation to all 18 recognised religious denominations, providing guarantees regarding their autonomy from the state. The law recognises the role of religious cults as social partners of the state and as providers of social services<sup>48</sup>."

Law 489/2006 appears to ensure that persons can form associations in the virtual world with Biserica GPT (Art. 1-6). As a chatbot, Biserica GPT would fall into the category of AI systems with limited risk and impact. According to the European Commission, "Limited risk [...] when using AI systems such as chatbots, humans should be made aware that they are interacting with a machine so they can take an informed decision to continue or step back<sup>49</sup>." Therefore, Biserica

<sup>&</sup>lt;sup>46</sup> European Commission, Directorate-General for Communications Networks, Content and Technology, *Ethics guidelines for trustworthy AI*, 5-6.

<sup>&</sup>lt;sup>47</sup> Anne-Dominique Salamin, David Russo, Danièle Rueger, "ChatGPT, an Excellent Liar: How Conversational Agents' Hallucinations Impact Learning and Teaching," in: *Proceedings of the 7th International Conference on Teaching, Learning and Education*, 2023, URL: https://www.doi.org/10.33422/6th.iacetl.2023.11.100, accessed 11.04.2024.

<sup>&</sup>lt;sup>48</sup> See the full text of the law in Stat şi religii în România – o relaţie transparentă?, Asociaţia pentru Apărarea Drepturilor Omului în România – Comitetul Helsinki (APADOR-CH), Bucureşti, 2008, Anexa I, p. 67-78.

<sup>&</sup>lt;sup>49</sup> EUROPEAN COMMISSION, *AI Act*, URL: https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai [06-05-2024], accessed on 10.06.2024.

GPT is unable to adopt the Orthodox<sup>50</sup> or Roman Catholic<sup>51</sup> definition of *church*, nor can it adhere to a certain deontology associated with them<sup>52</sup>. Moreover, when considering the mission and roles of the laity in the Orthodox Church<sup>53</sup>, which the programmer or administrator of the platform is under no obligation to consider, it is inevitable to question the operation of Biserica GPT.

Within this framework, it is important to remember that the Christian faith asserts the individual's accountability for their actions and the necessity to ready oneself for evaluation. Hence, it is imperative to take into account the ethical ramifications of the choices made, permitted, or facilitated by automated systems. From a Christian point of view, the responsibility 54 for the use or implementation of artificial intelligence should rest with the developers, operators and users of AI systems. It is crucial to establish responsibility and accountability for AI systems and their implications, both during their development phase and after implementation, in order to ensure that AI prioritises human interests. Examples that come to mind include the case of the young Belgian father who was prompted to take his own life by a chatbot powered by ChatGPT technology. Another case, unrelated to AI's role in spirituality but relevant when considering that spiritual life encompasses all aspects of human existence, involves AI assisting in the selection of targets for intense bombings carried out by the Israeli army in the Gaza Strip, as documented in articles by Ares (2023) and Pietralunga (2024) 55. Therefore, the lack of knowledge regarding the exchange between a ChatGPT user and the GPT Pastor described as "A Pastor GPT specializing in the Old Testament, offering biblical insights and spiritual guidance" to the developer of this GPT, Adrian Petrov Veley, is of concern, despite

<sup>&</sup>lt;sup>50</sup> Ioannis Zizioulas, "Biserica și eshatonul," *Teologie și Viață* 1-6 (2004): 181-191, 182-184.

<sup>&</sup>lt;sup>51</sup> Catéchisme de l'Eglise Catholique (Paris, Mame/Plon, 1992), n° 748-945.

<sup>&</sup>lt;sup>52</sup> For some deontological rules of ecclesiastical ministries, considered necessary in the Catholic Church in the context of the involvement of the laity in all aspects of Church activities after the Second Vatican Council, see: Louis-Léon Christians, *La déontologie des ministères ecclésiaux*, coll. Droit canonique, (Paris: Éditions du Cerf 2007), 36-56.

Fi Răzvan Perşa, "Misiunea şi implicarea laicilor şi monahilor în viața Bisericii Ortodoxe în conformitate cu Tradiția canonică", in Patriciu Vlaicu, Răzvan Perşa (ed.), *Tradiția canonică şi misiunea Bisericii* (Cluj-Napoca: Presa Universitară Clujeană, 2018), 249-300, 249-286.

<sup>54</sup> See: François Dermange, "La responsabilité", in Jean-Daniel Causse, Denis Müller, Dimitri Andronicos (dir.), *Introduction à l'éthique. Penser, croire, agir*, coll. Le Champ éthique 51, (Genève: Labor et Fides, 2009), 283-302.

<sup>55</sup> See: Isabel Ares, "À Gaza, des bombardements intensifs facilités par l'intelligence artificielle" [10.12.2023], URL: https://www.rts.ch/info/monde/14536317-a-gaza-des-bombardements-intensifs-facilites-par-lintelligence-artificielle.html; Cédric Pietralunga, "L'armée israélienne a identifié des dizaines de milliers de cibles à Gaza avec l'aide de l'IA" [05.04.2024], URL: https://www.letemps.ch/monde/l-armee-israelienne-a-identifie-des-dizaines-de-milliers-de-cibles-a-gaza-avec-l-aide-de-l-ia, accessed 10.06.2024.

his apparent adherence to the principle of confidentiality. Similar to Biserica GPT, there appears to be a lack of accountability in these systems, although they do have some kind of impact on user psychology, communication, and behavioural characteristics, which may be significant and enduring.

## III. Purpose and collaboration

Artificial intelligence (AI) can serve as a valuable instrument to assist communities in aligning with Christian principles and advancing the collective well-being and welfare. AI can serve as a valuable tool for enhancing communication and collaboration among individuals seeking spiritual growth and knowledge of sacred and spiritual books<sup>56</sup>. Such a possibility might be realised through the collaboration of programmers, operators, and those possessing spiritual expertise, all exercising discernment.

# IV. Fundamental values and rights. Examining human dignity from both a fundamental rights and Christian standpoint

In relation to the spiritual aspect of life, the use of artificial intelligence should emphasise the significance of human life, uphold human dignity <sup>57</sup>, discourage any form of debasement or disrespect towards human beings, and promote unity and connection among people (as everyone is considered an image of God and has a calling to deification, as stated in John 17:11). The AI

<sup>56</sup> See the address of Patriarch Daniel, on the use of social media and the internet, to the *First International Conference on Digital Media and Orthodox Pastoral Care*, Athens, 7-9 May 2015, *apud*: Robert Nicolae, "Patriarhul Daniel despre utilizarea rețelelor de socializare și a internetului", *Basilica.Ro*, 17-05-2016, URL: https://basilica.ro/patriarhul-daniel-despre-utilizarea-retelelor-de-socializare-si-a-internetului/, accessed 11.04.2024: "Utilizarea media digitală în lucrarea pastoral-misionară presupune responsabilitate eclezială și înțelepciune pastorală, deoarece, deși o tehnologie nouă oferă oamenilor noi posibilități de dezvoltare, totuși ea poate aduce și noi provocări sau pericole în privința păstrării valorilor spirituale, culturale și sociale tradiționale ale persoanelor și popoarelor. În acest sens, rețelele de socializare pot contribui la o mai bună cunoaștere reciprocă a diferitelor tradiții și la consolidarea comunităților de credință, dar multitudinea de idei și opinii exprimate liber în spațiul virtual trebuie supusă mereu unei analize critice și selective, potrivit valorilor permanente ale credinței și moralei creștine."

<sup>&</sup>lt;sup>57</sup> On human dignity as the basis of all fundamental rights: Aharon Barak, *Human Dignity: The Constitutional Value and the Constitutional Right*, translated by Daniel KAYROS (Cambridge: Cambridge University Press, 2015), 156-169 (chapter 9): "Human dignity as a framework right (motherright)".

architecture should be structured in a manner that ensures its understanding and responses reflect compassion for human suffering, while also guaranteeing that its use does not promote or exacerbate such suffering.

# V. Technology limitations and restrictions

The ethical principles should specify the limitations of technology in addressing Christian spiritual inquiries and establish measures such as supervision, systems, parameters, or protective "parapets" (known as *garde-fous* in French) to restrict technology's influence. AI-based technology should be regarded as a tool, while fundamental human inquiries remain centred around the human connection with God, and spiritual experience cannot be accurately described or converted into precise facts. Consider St. Paul's mention of "visions and revelations of the Lord" in terms of an experience "whether in the body [...] or whether out of the body". He speaks of a rapture "to the third heaven", where he heard "unspeakable words, which it is not lawful for a man to utter" (2 Cor 12:2-4). Those who witnessed Paul's encounter with Christ on the road to Damascus "stood speechless" and Paul himself is described as "trembling and astonished" (Acts 9:6-7).

Therefore, the formulation of ethical guidelines regulating the utilisation of AI by Christian communities and in spiritual practices is influenced by various significant questions on this topic and should consider a numerous factors, a few of which we shall highlight: What are the ways in which AI can be integrated into spiritual life without undermining authentic religious experiences? What are the limits of AI in providing spiritual guidance and how can these be clearly defined and upheld? To what extent can the use of AI influence the religious knowledge, experiences and practices of believers? How can Christians and Christian communities maintain proper oversight of AI in religious settings and during spiritual counselling? What measures may be implemented to prevent abuse and manipulation facilitated by AI in the context of spiritual counselling? What is the long-term impact of engaging with AI on a person's spiritual growth? What methods may be used to assess and enhance the cooperation of theologians, technology experts, programmers, and AI operators in order to create responsible and ethical AI?

In conclusion, it is not sufficient to solely develop ethical guidelines in response to specific situations; instead, AI users need to be informed and educated about the dangers of misperceiving AI, of anthropomorphizing, of identifying AI with friendly AI. AI should only be used as a tool, as it cannot provide conclusive answers to matters of spirituality and personal quests.

Finally, the principles governing the use of AI in the spiritual life should be clearly defined and responsibly applied.

## **BIBLIOGRAPHY**

- \*\*\*, Catéchisme de l'Eglise Catholique. Paris, Mame/Plon, 1992.
- \*\*\*, Stat și religii în România o relație transparentă?. Asociația pentru Apărarea Drepturilor Omului în România - Comitetul Helsinki (APADOR-CH). București, 2008.
- Ares Isabel. "À Gaza, des bombardements intensifs facilités par l'intelligence artificielle" [10.12.2023]. URL: https://www.rts.ch/info/monde/14536317-a-gaza-desbombardements-intensifs-facilites-par-lintelligence-artificielle.html.
- Aru Jaan. Larkum Matthew Evan. Shine James M. "The feasibility of artificial consciousness through the lens of neuroscience". Trends in Neurosciences 46 (2023): 1008-1017.
- Balibar Étienne. "Conscience", in: Barbara Cassin (éd.), Vocabulaire européen des philosophies. Le dictionnaire des intradui-sibles. Paris: Seuil / Le Robert, 2019, 260-274.
- Barak Aharon. Human Dignity: The Constitutional Value and the Constitutional Right. Translated by Daniel KAYROS. Cambridge: Cambridge University Press, 2015.
- Barbu Ana Maria. "«Biserica GPT» oferă online servicii «religioase». De la rugăciune pentru o călătorie până la demiterea șefului. Reacția BOR". Stirile PRO TV, 25-04-2023|19:40. URL: https://stirileprotv.ro/stiri/actualitate/zbiserica-gpt-oferaonline-servicii-religioase-de-la-rugaciune-pentru-o-calatorie-pana-lademiterea-sefului-reactia-bor.html.
- Bâlici Veronica. "Conștiința lingvistică. O viziune teoretico-aplicativă". Ministerul Educației, Culturii și Cercetării, Institutul de Stiințe ale Educației, Chisinău, 2020.
- Betschart Christof. "L'humain imago Dei et l'intelligence artificielle imago hominis?". Recherches de Science Religieuse, 11/4 (2023): 643-659.
- Brylynski Bogdan. "M-am spovedit în prima biserică virtuală cu IA. Dar nu sunt sigur că mi-a iertat păcatele". Turnul Sfatului. 18-04-2023|18:40. URL: https://www.turnulsfatului.ro/2023/04/18/m-am-spovedit-in-primabiserica-virtuala-cu-ia-dar-nu-sunt-sigur-ca-mi-a-iertat-pacatele-202175.
- Castillo Maria. "L'Union européenne : vers la maîtrise de l'intelligence artificielle?". Cahiers de la recherche sur les droits fondamentaux [online] 21 (2023), published online 17.10.2023, accessed 11.04.2024, URL: http://journals.openedition.org/crdf/8864.
- Christians Louis-Léon. La déontologie des ministères ecclésiaux, coll. Droit canonique. Paris: Éditions du Cerf 2007.
- Council of the European Union. Interinstitutional File: 2021/0106(COD). Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts. Brussels, 26 January 2024. URL: https://data.consilium.europa.eu/doc/document/ST-5662-2024-INIT/en/pdf.

- De Libera Alain. "Abstraction, abstraits". in: Barbara Cassin (éd.). *Vocabulaire européen des philosophies. Le dictionnaire des intraduisibles*. Paris: Seuil / Le Robert, 2019, 1-8.
- Déclaration et Programme d'action de Vienne. Adoptés par la Conférence mondiale sur les droits de l'homme le 25 juin 1993 dans : Déclaration et Programme d'action de Vienne. 20 ans au travail pour vos droits. Haut-Commissariat des Nations Unies aux droits de l'homme et le Département de l'information des Nations Unies, août 2013. URL:
  - https://www.ohchr.org/sites/default/files/documents/events/ohchr20/vdpa\_booklet\_fr.pdf.
- Dermange François. "La responsabilité". in Jean-Daniel Causse, Denis Müller, Dimitri Andronicos (dir.). *Introduction à l'éthique. Penser, croire, agir*. coll. Le Champ éthique 51. Genève: Labor et Fides, 2009, 283-302.
- Dicționarul explicativ al limbii române. ediția a II-a sub conducerea Ion Coteanu și Lucreția Mareș. Academia Română. Institutul de Lingvistică "Iorgu Iordan". București: Editura Univers Enciclopedic, 1998.
- Dumitru Adrian. "Cine sau ce este LaMDA, algoritmul despre care un inginer Google crede că are sentimente și este conștient de sine". DIGI24.ro, 14.06.2022|11:56. URL: https://www.digi24.ro/stiri/sci-tech/descoperiri/cine-sau-ce-este-lamda-algoritmul-despre-care-un-inginer-google-crede-ca-are-sentimente-si-este-constient-de-sine-1973985.
- Dupuy-Lasserre Laura. "Conseil des droits de l'homme de l'ONU et ses résolutions sur la liberté de religion ou de conviction". in Liviu Olteanu (éd.). *Les droits de l'homme et la liberté religieuse dans le monde. Un nouvel équilibre ou de nouveaux défis.* Tome I. Bern, Association internationale pour la défense de la liberté religieuse, Conscience et liberté, 2014, 68-79, 68-69.
- European Commission. Directorate-General for Communications Networks, Content and Technology. *Ethics guidelines for trustworthy AI*. Publications Office, 2019. URL: https://data.europa.eu/doi/10.2759/346720.
- European Union Agency for Fundamental Rights. Getting the Future Right: Artificial Intelligence and Fundamental Rights. Luxembourg, Publications Office of the European Union, 2020. URL:
  - https://fra.europa.eu/sites/default/files/fra\_uploads/fra-2020-artificial-intelligence\_en.pdf.
- Floridi Luciano. et al. "AI4People An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations". *Minds and Machines* 28/4 (2018): 689-707.
- Guzman Andrea L. Lewis Seth C. "Artificial intelligence and communication: A Human-Machine Communication research agenda." *New Media & Society* 22/1 (2020): 70-86.
- Herzfeld Noreen L. *Imago Dei/imago hominis: Interacting Images of God and Humanity in Theology and in Artificial Intelligence*. Doctoral Thesis. Ann Arbor, United States, 2000.
- Herzfeld Noreen L. *In Our Image: Artificial Intelligence and the Human Spirit.* Minneapolis: Fortress Press, 2002.

- Jobin Anna. Ienca Marcello. Vayena Effy. "The global landscape of AI ethics guidelines." *Nature Machine Intelligence* 1/9 (2019): 389-399.
- Lovens Pierre-François. "Sans ces conversations avec le chatbot Eliza, mon mari serait toujours là." *La Libre*, 28-03-2023 | 06:35. URL: "Sans ces conversations avec le chatbot Eliza, mon mari serait toujours là" La Libre.
- Nicolae Robert. "Patriarhul Daniel despre utilizarea rețelelor de socializare și a internetului". *Basilica.Ro*, 17-05-2016. URL: https://basilica.ro/patriarhul-daniel-despre-utilizarea-retelelor-de-socializare-si-a-internetului/.
- O'Donnell Karen. "Performing the imago Dei: Human enhancement, artificial intelligence and optative image-bearing." *International Journal for the Study of the Christian Church* 18/1 (2018): 4-15.
- Oberg Andrew. "Souls and Selves: Querying an AI Self with a View to Human Selves and Consciousness." *Religions* (Special Issue, Religious Traditions, Self-Theory, and the Future: Should We Abandon, Embrace or Reimagine?) 14/1 (2023): 1-16.
- Palamas Gregory. Homily 53: On the Entry of the Mother of God into the Holy of Holies, Όμιλ. Σοφ. σελ., p. 169-170. In Vasilij Krivochéine, Dieu, l'homme, l'Église. Lecture des Pères. Coll. Patrimoine Orthodoxie. Paris: Éditions du Cerf, 2010.
- Perșa Răzvan. "Misiunea și implicarea laicilor și monahilor în viața Bisericii Ortodoxe în conformitate cu Tradiția canonică". In Patriciu Vlaicu, Răzvan Perșa (ed.). *Tradiția canonică și misiunea Bisericii*. Cluj-Napoca: Presa Universitară Clujeană, 2018, 249-300.
- Pietralunga Cédric. "L'armée israélienne a identifié des dizaines de milliers de cibles à Gaza avec l'aide de l'IA" [05.04.2024]. URL: https://www.letemps.ch/monde/l-armee-israelienne-a-identifie-des-dizaines-de-milliers-de-cibles-a-gaza-avec-l-aide-de-l-ia.
- Salamin Anne-Dominique. Russo David. Rueger Danièle. "ChatGPT, an Excellent Liar: How Conversational Agents' Hallucinations Impact Learning and Teaching." in: *Proceedings of the 7th International Conference on Teaching, Learning and Education*, 2023. URL: https://www.doi.org/10.33422/6th.iacetl.2023.11.100.
- Stăniloae Dumitru. *Spiritualitatea ortodoxă. Ascetica și mistica*. București: Editura IBMBOR, 1992.
- Walker Lauren. "Belgian man dies by suicide following exchanges with chatbot". *The Brussels Times*, 28-03-2023. URL: https://www.brusselstimes.com/430098/belgian-man-commits-suicide-following-exchanges-with-chatgpt.
- Yudkowsky Eliezer. "Artificial Intelligence as a positive and negative factor in global risk." in: Nick Bostrom, and Milan M. Ćirković (eds.). *Global Catastrophic Risks*. Oxford University Press, 2008, 308-345.
- Zizioulas Ioannis. "Biserica și eshatonul." Teologie și Viață 1-6 (2004): 181-191.
- Афанасьева Мария Анатольевна. "Digitalization of Religious Consciousness: Problems and Prospects" (Цифровизация религиозного сознания: проблемы и перспективы). Vestnik of Northern (Arctic) Federal University. Series Humanitarian and Social Sciences 23/4 (2023): 114-122.
- Устинова Анна. Киселева Анна. "РПЦ призвала запретить ИИ с человеческим лицом". 26-04-2023|01:01. URL: https://www.vedomosti.ru/society/articles/2023/04/26/972573-rpts-prizvala-zapretit-ii-s-chelovecheskim-litsom?from=newsline.