Studie Tématické

Artificial Intelligence as a Challenge for Spiritual-theological Reflection in the Context of the Encyclicals Laudato si' and Fratelli tutti

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Abstract
The development of generative artificial intelligence in the last three years has fundamentally transformed the forms of education, the shape of the labour market and the competencies needed for a successful life in modern society. Church documents have commented on technical and social changes since the late 19th century, but the perception of selected social changes and their spiritual and social risks is broader. This study aims to create a field of thought constituted by reflection on contemporary socio-religious themes and to contextualise these themes through the themes of two encyclicals of Pope Francis—Laudato si' and Fratelli tutti. The study shows that technological changes will mean significant transformations in the field of spirituality and social work, for which it is necessary to prepare, both in terms of theoretical reflection and the practical training of individual professionals.

Keywords: encyclical, Pope Francis, artificial intelligence, logic, spirituality, social work, algorithms, technology.

Introduction

The development of generative artificial intelligence, most often associated in broader society with dialogue systems such as ChatGPT or Google Gamini (formerly Bard) or image generators such as Dalle or Midjourney,[1] represents one of the most significant economic and cultural changes that contemporary society is undergoing.[2] We can thus encounter a new AI literacy related to the

1 T. Hoppner and L. Streatfeild, 'Chatgpt, Bard & Co.: An Introduction to Ai for Competition and Regulatory Lawyers', in *An Introduction to AI for Competition and Regulatory Lawyers*, 2023, 9; M. Coeckelbergh and D.J. Gunkel, *ChatGPT: Deconstructing the Debate and Moving It Forward* (AI & SOCIETY, 2023); Peter J. Cobb, 'Large Language Models and Generative AI, Oh My!: Archaeology in the Time of ChatGPT, Midjourney, and Beyond', *Advances in Archaeological Practice* 11, no. 3 (August 2023): 363–69, https://doi.org/10.1017/aap.2023.20.

2 Spyros Makridakis, 'The Forthcoming Artificial Intelligence (AI) Revolution: Its Impact on Society and Firms', *Futures* 90 (1 June 2017): 46–60, https://doi.org/10.1016/j.futures.2017.03.006; Marilyn Binkley et al., 'Defining Twenty-First Century Skills', in *Assessment and Teaching of 21st Century Skills*, ed. Patrick Griffin, Barry McGaw, and Esther Care (Dordrecht: Springer Netherlands, 2012), 17–66, https://doi.org/10.1007/978-94-007-2324-5_2; Fiona Fui-Hoon Nah et al., 'Generative AI and ChatGPT: Applications, Challenges, and AI-Human Collaboration', *Journal of Information Technology Case and Application Research* 25, no. 3 (3 July 2023): 277–304, https://doi.org/10.1080/15228053.2023.2233814.

ability to use these tools critically, as well as a growing need to understand this topic in the broader context of law, education or the transformation of the labour market.[3] In Catholic settings, it was previously the case that magisterial documents addressed social issues with a considerable historical lag, which reduced their social and spiritual-theological relevance. It is undeniable that both Rerum Novarum (1891) and Quadragesimo anno (1931) can be judged in these terms, which, despite their partial qualities, were produced too late and left too many questions or problems long without real attention.

In this respect, Laudato si' (2015)[4] also comes fundamentally late (despite its positive moments, it can be said that environmental issues and climate change have been a public debate in social contexts since at least the 1980s), focusing on the environment. By contrast, Fratelli tutti (2020)[5] is perhaps one of the few encyclicals to respond to the specific transformation of the world after 2010, i.e., with relatively little distance.

Suppose it can be traced that the social encyclicals reflect society's social crises and transformations, and try to create an environment for a morally and spiritually good experience of the Christian way of life. In that case, one may ask what the social-spiritual challenges connected precisely with the advent of artificial intelligence and what transformation must be undergone by the ways of living the faith in a world entering with complete determination into a post-industrial information environment.[6] As Luciano Floridi points out— technologies do not play the role of a tool among tools in the contemporary world; they are not Heideggerian handheld beings[7] but rather part of social or techno-social interactions, in a way and with an impact that is quite unprecedented in the history of the relationship between technology and man.[8]

Pope Francis is quite explicit on the topic—the phrase 'artificial intelligence' appears in a total of 22 documents indexed by the Holy See, and two documents from 2024 in particular—*Intelligenza artificiale e pace*[9] and *Intelligenza artificiale e sapienza del cuore: per una comunicazione pienamente umana*[10]—are devoted to it in a significant way. Individual references are also found in other documents. This study will analyse the approach of the papal discourse on this issue and situate it in a broader research and social field. In this way, we will try to identify the challenges and threats fundamental to the social and spiritual aspects of the Church related to this issue.

3 S.C. Necula, 'Artificial Intelligence Impact On The Labour Force–Searching For The Analytical Skills Of The Future Software Engineers', 2023; T. Kőkuti, 'Artificial Intelligence in a Transforming Labour Market–New Skills Are Needed?', *Journal of Recycling Economy & Sustainability Policy* 2, no. 1 (2023); David Baidoo-Anu and Keticia Owusu Ansah, 'Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning', 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4337484; Meng-Leong How and Wei Loong David Hung, 'Educing AI-Thinking in Science, Technology, Engineering, Arts, and Mathematics (STEAM) Education', *Education Sciences* 9, no. 3 (15 July 2019): 184, https://doi.org/10.3390/educsci9030184.

4 Francis, *Laudato Si* (Dicastero per la Comunicazione - Libreria Editrice Vaticana, 2015), https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.

5 Francis, 'Fratelli tutti' (Dicastero per la Comunicazione - Libreria Editrice Vaticana, 2020), https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_enciclica-fratelli-tutti.html.

6 Frank Webster, *Theories of the Information Society* (Routledge, 2014); Bruno Latour, *After Lockdown: A Metamorphosis* (Cambridge, UK ; Medford, MA: Polity Press, 2021).

7 Martin Heidegger, *Being and Time* (Blackwell, 1967); Martin Heidegger, *Die Frage Nach Der Technik ; Wissenschaft Und Besinnung ; Überwindung Der Metaphysik ; Wer Ist Nietzsches Zarathustra?* (Pfullingen: Neske, 1967).

8 James Bridle, *New dark age: Technology and the end of the future* (Verso Books, 2018); Bruno Latour, *Zpátky Na Zem: Jak Se Vyznat v Politice Nového Klimatického Režimu*, 1., vol. 2020 (Praha: Neklid, 2020); Václav Bělohradský, *Čas Pléthokracie: Když Části Jsou Větší Než Celky a Světový Duch Spadl z Koně*, 1., vol. 2021 (Praha: Nakladatelství 65. pole, 2021).

9 Francis, 'LVII Giornata Mondiale Della Pace 2024 - Intelligenza Artificiale e Pace', La santa sede, 2024, https://www.vatican.va/content/francesco/it/messages/peace/documents/20231208-messaggio-57giornatamondiale-pace2024.html.

10 Francis, 'Intelligenza Artificiale e Sapienza Del Cuore: Per Una Comunicazione Pienamente Umana', Vatican.va, 2024, https://www.vatican.va/content/francesco/it/messages/communications/documents/20240124-messaggio-comunicazioni-sociali.html.

The definition of spirituality is ambiguous in the literature,[11] and one clear definition cannot be provided.[12] For our study, it will be understood as a relation to a transcendent being that manifests itself in the experience and structuring of the everyday. It is thus associated with a relationship to transcendence experience, hope and meaningfulness, often in the ritualised form of religious experience (ritual) or prayer or meditation.[13] We will, therefore, not follow a descriptive (sociological) perspective (although it can serve as a starting point) but a theological perspective that is not divorced from the social and cultural environment of the one who experiences spirituality.[14] As much as our analysis focuses on documents issued by Pope Francis, it offers broader ecumenical perspectives. In some places in the paper, we will emphasise the spiritual-theological specificity, the religious (Christian) dimension of spirituality, where it will not be completely obvious.
However, we perceive a certain vagueness or ambiguity of the notion of spirituality with Tomas Špidlík as essential for a theologically adequate statement. We incline to Špidlí's view that those rigid definitions lead to a technification of statements about spirituality that is antithetical to its liveliness.[15] Following this, we want to build the study epistemically based on a content analysis of selected documents issued by Pope Francis and interpret them in continental thought. In it, we will relate primarily to the postmodern tradition (Bělohradský, Bauaman) and their phenomenological starting points (Bělohradský is an authentic disciple of Patočka).[16] This field makes it possible to sufficiently reflect on the interaction between lived experience[17] and the social environment and to work with the critical methodological approach in Francis' documents, namely the concept of Ignatian distinction.[18] It is in this field that our methodological and epistemological foundations are situated.

Generative AI and Spirituality: the Current Research Field

The relationship between artificial intelligence and religion is reflected in the current literature in different ways or perspectives.[19] It is outside the scope of our study to offer a systematic analysis of the whole issue. Still, we would like to focus on selected social-spiritual phenomena (by this term

11 Jane Dyson, Mark Cobb, and Dawn Forman, 'The Meaning of Spirituality: A Literature Review', *Journal of Advanced Nursing* 26, no. 6 (1997): 1183–88, https://doi.org/10.1046/j.1365-2648.1997.00446.x; David H. Rosmarin and Harold G. Koenig, *Handbook of Spirituality, Religion, and Mental Health* (Academic Press, 2020).

12 Sandra M. Estanek, 'Redefining Spirituality: A New Discourse', *College Student Journal* 40, no. 2 (1 June 2006): 270–82, https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=01463934&v=2.1&it=r&id=GALE%7CA147389132&sid=googleScholar&linkaccess=abs.

13 Dyson, Cobb, and Forman, 'The Meaning of Spirituality'; hosaini Maryam et al., 'A Review Study on Spiritual Intelligence, Adolescence and Spiritual Intelligence, Factors That May Contribute to Individual Differences in Spiritual Intelligence, and the Related Theories', *International Journal of Psychological Studies* 6 (21 November 2010), https://doi.org/10.5539/ijps.v2n2p179.

14 Michal Altrichter, *Příručka spirituální teologie* (Refugium Velehrad-Roma, 2007); Michal Altrichter, *Žijeme v době papeže Františka* (Refugium Velehrad-Roma, s.r.o., 2018).

15 Tomáš Špidlík and Marko Ivan Rupnik, *Integrální poznání: symbol jako nejdokonalejší výpověď* (Refugium Velehrad-Roma, s.r.o., 2015).

16 Špidlík cannot be counted in the postmodern tradition. Still, at the same time, it can be said that his approach throughout his work transcends analytical conceptualisations in theology or the need to offer one clear definition. His works are characterised by a systematic layering of perspectives in theology, literature, or the visual arts, linking Eastern and Western thought, not in the unified form of a single statement, but in a critically reflected plurality that corresponds to the incompleteness of knowledge of the human being found in the world. In this view, we can say that phenomenology and postmodernism represent a specific conservative concept of interpellation of Špidlík's approach to spirituality as they clearly emphasise the existence of Truth as a person. While Špidlík focuses on purely Christian spirituality, we can see from Pope Francis' texts a shift towards a particular ecumenical perspective, especially on morality, the environment and spirituality.

17 Altrichter, *Žijeme v době papeže Františka*; Heidegger, *Being and Time*.

18 Philip Endean, *Karl Rahner and Ignatian Spirituality* (OUP Oxford, 2004); Somy Mathew, 'The Interpretations of the Ignatian Examenin History : Between Morality and Spirituality', 2018, https://repositorio.comillas.edu/xmlui/handle/11531/30002.

19 Mark Graves, 'Embodied Experience in Socially Participatory Artificial Intelligent', *Zygon* 58, no. 4 (2023): 928–51, https://doi.org/10.1111/zygo.12910; Andrea Vestrucci, 'Introduction: Five Steps Toward a Religion–Ai Dialogue', *Zygon* 57, no. 4 (2022): 933–37, https://doi.org/10.1111/zygo.12828; Sara Lumbreras, 'Lessons from the Quest for Artificial Consciousness: The Emergence Criterion, Insight-Oriented Ai, and Imago Dei', *Zygon* 57, no. 4 (2022): 963–83, https://doi.org/10.1111/zygo.12827.

we mean the relationship of spirituality and social environment, not a descriptive sociological reflection of spirituality) related to changing the possibilities of pursuing a religious life.

The first essential issue mentioned in the papal document *Intelligenza artificiale e pace*[20] is the question of morality or, rather, the relationship between moral theology and artificial intelligence.[21] Graves believes that the task of moral theology should be to develop a timetable for critical reflection on the relationship between artificial intelligence and human beings so that artificial intelligence can be seen as a tool for the development of humanity and human society,[22] but this will not happen automatically or only based on market demands.[23] The question of morality is generally relevant as it inscribes itself in how life schedules are enacted. However, one can agree with Heidegger that it is a secondary manifestation of a particular lived ontology.[24] Other authors also lean towards this conception, offering a broader thought anchoring the whole issue. Graves is systematically concerned with incorporating corporeality into ontological models, which is necessary to genuinely consider morality or the self of sociotechnical systems.[25] In doing so, he continues the pragmatist tradition, emphasising the importance of the body of corporeality in the process of thought and action.[26]

The relationship between man and technology in creating sociotechnical systems and metaphysical reality appears crucial. As Latzer points out,[27] a new relationship between man and technology transforms the fundamental metaphysical, ontological and evolutionary schemes. Technology has become an integral part of evolution and has essentially deistic attributes—it is associated with omnipresence, eternal memory, and power; religious professionals can control it, and it has the character of a shamanistic religion. Suppose Luckmann, in his vision of an invisible religion, worked with a particularly optimistic outlook that society would retain rituals that were essentially dominantly Christian and would secondarily profane them. In that case,[28] Latzer shows that the relationship between humans in Western culture and religion may be considerably flat, linked to the need for mythic interpretation and control of the world.[29] Or at least to feel comfortable and secure in it.[30]

A critical issue addressed in the relationship between spirituality and technology is the question of trust. Smith notes that technology can inspire trust, unencumbered by human failings and weaknesses, abuses, and power discourses. They seem to be less selfish in some ways, which is very desirable for a portion of people experiencing trauma from interpersonal communication.[31]

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20 Francis, 'LVII Giornata Mondiale Della Pace 2024 - Intelligenza Artificiale e Pace'.

21 Mark Graves, 'Theological Foundations for Moral Artificial Intelligence', *Journal of Moral Theology* 11, no. SI1 (2 April 2022): 182–211, https://doi.org/10.55476/001c.34130.

22 C. Narvaez Rojas et al., 'Society 5.0: A Japanese Concept for a Superintelligent Society', *Sustainability* 13, no. 12 (2021): 6567, https://doi.org/10.3390/su13126567.

23 Bělohradský, *Čas Pléthokracie: Když Části Jsou Větší Než Celky a Světový Duch Spadl z Koně*; Zygmunt Bauman and Leonidas Donskis, *Liquid Evil* (John Wiley & Sons, 2016).

24 Heidegger, *Being and Time*; Martin Heidegger, *Martin Heidegger: rozhovory k osmdesátým narozeninám* (OIKOYMENH, 2013).

25 Mark Graves, 'Emergent Models for Moral AI Spirituality', *International Journal of Interactive Multimedia and Artificial Intelligence* 7, no. 1 (2021): 7, https://doi.org/10.9781/ijimai.2021.08.002.

26 M. Johnson, *Embodied Mind, Meaning, and Reason* (University of Chicago Press, 2017); G. Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind* (University of Chicago press, 1990); Radim Šíp, *Proč školství a jeho aktéři selhávají* (Masarykova univerzita, 2019).

27 Michael Latzer, 'The Digital Trinity—Controllable Human Evolution—Implicit Everyday Religion: Characteristics of the Socio-Technical Transformation of Digitalization', *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie* 74, no. S1 (June 2022): 331–54, https://doi.org/10.1007/s11577-022-00841-8.

28 Thomas Luckmann, *The Invisible Religion* (Macmillan, 1967).

29 Latzer, 'The Digital Trinity—Controllable Human Evolution—Implicit Everyday Religion'.

30 Ronald Purser, *McMindfulness : How Mindfulness Became the New Capitalist Spirituality* (London: Repeater, 2019); Zygmunt Bauman, *Liquid Modernity* (John Wiley & Sons, 2013).

31 Gregory Smith, 'Christianity and Libraries: A "Conversation" with ChatGPT', *Faculty Publications and Presentations*, 8 March 2023,

At the same time, however, he points out that systems with generative AI hallucinate, unable to distinguish when they generate factual statements and when they create fabrications. This hallucination is seen as one of the significant communication risks.[32] However, as Reed notes, every conversation (unless held in a single thread in systems with registration) starts over, so the dimension of trust is embedded not in a single digital avatar but in an entire system of spiritual advisors.[33] These are often shaped (across religions and communities) by drawing on the ChatGPT-4 language model, which provides a very fluid language. Their value and content bases are linked to training on sacred texts that are interpreted literally, leading to the concept of digital fundamentalist religious leaders.[34]

We thus stand in a remarkable space where, on the one hand, an inevitable crisis of Christian practice[35] and human disillusionment can lead to a turn to technology, to the creation of a new god (cf. Ex 32); on the other hand, these technologies are associated with a considerable number of risks that believers are often unaware of.[36] In part, this is because they lack a specific AI literacy, the ability to understand AI systems and the skill to use them, but this is coupled with a critical assessment of the limits of these tools.[37] At the same time, we cannot neglect the impact of the absence of spiritual literacy, that is, a particular ability to critically reflect and live one's spirituality.[38] We are thus faced with a paradoxical situation where technology permeates all areas of human life. On the other hand, it has created a world so complex and complicated that many people cannot navigate it.[39]

Bauman puts this transformation of society in the context of the transformation of modernity—from rigid to fluid, for which the dissolution of specific fixed ties, authorities and institutions is significant.[40] Identity ceases to be—according to Bauman—a question of status but a task.[41] In other words, asking for the identity of the Christian, a previously popular question associated with the middle of the last century, is not only not meaningful but not even possible in the contemporary world. Identity[42] is fluid and dynamic. The fact that identity is not fixed but fluid[43] presents an inherent challenge, both theological and social pedagogical or social work related. There is both

https://digitalcommons.liberty.edu/lib_fac_pubs/214.

32 Smith; Hassan Alkaissi and Samy McFarlane, 'Artificial hallucinations in ChatGPT: implications in scientific writing', *Cureus* 15, no. 2 (2023).

33 Randall Reed, 'The Theology of GPT-2: Religion and Artificial Intelligence', *Religion Compass* 15, no. 11 (2021): e12422, https://doi.org/10.1111/rec3.12422.

34 Hazel T. Biana, 'Feminist Re-Engineering of Religion-Based AI Chatbots', *Philosophies* 9, no. 1 (February 2024): 20, https://doi.org/10.3390/philosophies9010020; Andie Rothenhäusler, '„Creating God": Religiöse Metaphorik in KI- Und Technikdiskursen', in *KI:Text*, ed. Gerhard Schreiber and Lukas Ohly (De Gruyter, 2024), 183–98, https://doi.org/10.1515/9783111351490-013.

35 Tomáš Halík, *Odpoledne Křesťanství: Odvaha k Proměně*, vol. 2021 (Praha: Lidové noviny, 2021).

36 Reed, 'The Theology of GPT-2: Religion and Artificial Intelligence'; Smith, 'Christianity and Libraries'.

37 Davy Tsz Kit Ng et al., 'Using Digital Story Writing as a Pedagogy to Develop AI Literacy among Primary Students', *Computers and Education: Artificial Intelligence* 3 (2022): 100054, https://doi.org/10.1016/j.caeai.2022.100054; Davy Tsz Kit Ng et al., 'A Review of AI Teaching and Learning from 2000 to 2020', *Education and Information Technologies* 28, no. 7 (July 2023): 8445–8501, https://doi.org/10.1007/s10639-022-11491-w; Amy Eguchi, Hiroyuki Okada, and Yumiko Muto, 'Contextualizing AI Education for K-12 Students to Enhance Their Learning of AI Literacy Through Culturally Responsive Approaches', *KI - Künstliche Intelligenz* 35, no. 2 (June 2021): 153–61, https://doi.org/10.1007/s13218-021-00737-3.

38 Maryam et al., 'A Review Study on Spiritual Intelligence, Adolescence and Spiritual Intelligence, Factors That May Contribute to Individual Differences in Spiritual Intelligence, and the Related Theories'; Geoff Taggart, 'Spiritual Literacy and Tacit Knowledge', *Journal of Beliefs & Values* 23, no. 1 (April 2002): 7–17, https://doi.org/10.1080/13617670220125638.

39 Frank Webster and Raimo Blom, eds., *The Information Society Reader* (London: Routledge, 2020); J.A. Van Dijk, *The deepening divide: Inequality in the information society* (Sage publications, 2005).

40 Bauman, *Liquid Modernity*; Zygmunt Bauman, *Modernity and the Holocaust*, Reprint (Cambridge: Polity Press, 2007).

41 Zygmunt Bauman, *The Individualized Society* (John Wiley & Sons, 2013).

42 Luciano Floridi, 'The Construction of Personal Identities Online', *Minds And Machines* 21, no. 4 (2011): 477–79, https://doi.org/10.1007/s11023-011-9254-y.

43 AZIZ Talbani and PARVEEN Hasanali, 'Adolescent Females between Tradition and Modernity: Gender Role Socialization in South Asian Immigrant Culture', *Journal of Adolescence* 23, no. 5 (1 October 2000): 615–27, https://doi.org/10.1006/jado.2000.0348.

an erosion of expected outcome states and a transformation of what have been conventionally referred to as the target groups of social interventions.[44] Luckman's concept of an invisible religion[45] only confirms this transformation—the boundaries of traditional categories cease to exist, and the possibility of working with the early modern figure of 'either/or', i.e., the binary oppositional division of the world ends. We enter an environment with an order of magnitude higher degree of complexity and an entirely new way of interpreting the world.[46]

The information revolution also transforms work and the social perception of work associated with it in at least three ways. The first change is related to the transformation of the entire labour market, with the emergence of new professions and probably a specific sectoral transformation of jobs.[47] Studies agree on the difficulty of predicting change, but at the same time it is clear that the labour market has never undergone such a rapid transformation as now. Beyond the general observation of market changes related to fluidity (the need to change occupations repeatedly during working life), there is no consensus on a more precise impact prediction. Oschinski[48] points to a possible increase in unemployment, especially in blue-collar occupations, as activities will be automated (it may partly affect, as shown by the medical support staff); Hui et al.[49] believe that the impact will be on information specialists, whose work will be replaceable by artificial intelligence in the short term for many institutions. It is thus paradoxical that those who should be at the core of the information revolution, as Reich argues, become threatened by the change.[50] One can agree with Bauman's broader point[51] that the sense of permanently belonging to a particular profession or even an organisation where one works all one's life does not correspond to the current state of the globalised world. Suppose we have talked about identity as a task. In that case, the idea of professional identity as a permanent part of identity is not strong enough for a significant part of people in the contemporary world. This fact alone is a substantial source of uncertainty to which spirituality and social and pastoral work must respond.

The second transformation is the relationship to technology. While in *Being and Time*, Heidegger still understood technology as a specific passive element, a handy being, a tool; in his later works, he gradually clarified this relationship. He points out that we live in the drag of technology, that thinking becomes dependent on technology, but at the same time, it reveals the world's hiddenness.[52] Bridle then draws attention to the autonomy of technology, which can no longer be

44 Stanislav Bendl, *Nárys sociální pedagogiky* (Univerzita Karlova, 2014); Jan Kaňák, 'Nedefinovaná Profesionalita: Vztah Diskursů Spirituality a Profesionality v Sociální Práci v Soudobé Odborné Literatuře' 16 (15 September 2016): 72–91; Jitka Navrátilová, Pavel Navrátil, and Masaryk University, Faculty of Social Studies, 'Vzdělávací diskurzy v sociální práci', *Sociální pedagogika / Social Education* 4, no. 1 (15 November 2016): 38–56, https://doi.org/10.7441/soced.2016.04.01.03.

45 Luckmann, *The Invisible Religion*; Kelly Besecke, 'Seeing Invisible Religion: Religion as a Societal Conversation about Transcendent Meaning', *Sociological Theory* 23, no. 2 (2005): 179–96.

46 Latour, *Zpátky Na Zem: Jak Se Vyznat v Politice Nového Klimatického Režimu*; Latour, *After Lockdown*; Luciano Floridi, *The Logic of Information: A Theory of Philosophy as Conceptual Design* (Oxford University Press, 2019).

47 Dilek Cetindamar et al., 'Explicating AI Literacy of Employees at Digital Workplaces', *IEEE Transactions on Engineering Management*, 2022, 1–14, https://doi.org/10.1109/TEM.2021.3138503; Carl Benedikt Frey and Michael A. Osborne, 'The Future of Employment: How Susceptible Are Jobs to Computerisation?', *Technological Forecasting and Social Change* 114 (1 January 2017): 254–80, https://doi.org/10.1016/j.techfore.2016.08.019; Anthony E. Davis, 'The Future of Law Firms (and Lawyers) in the Age of Artificial Intelligence', *Revista Direito GV* 16, no. 1 (2020): e1945, https://doi.org/10.1590/2317-6172201945; Frey and Osborne, 'The Future of Employment'.

48 Matthias Oschinski, 'Assessing the Impact of Artificial Intelligence on Germany's Labor Market: Insights from a ChatGPT Analysis', MPRA Paper, 14 August 2023, https://mpra.ub.uni-muenchen.de/118300/.

49 Xiang Hui, Oren Reshef, and Luofeng Zhou, 'The Short-Term Effects of Generative Artificial Intelligence on Employment: Evidence from an Online Labor Market', SSRN Scholarly Paper (Rochester, NY, 31 July 2023), https://doi.org/10.2139/ssrn.4527336.

50 Robert B. Reich, *The Work of Nations: Preparing Ourselves for 21st Century Capitalis* (Knopf Doubleday Publishing Group, 2010).

51 Bauman, *Liquid Modernity*.

52 Heidegger, *Die Frage Nach Der Technik ; Wissenschaft Und Besinnung ; Überwindung Der Metaphysik ; Wer Ist Nietzsches Zarathustra?*; Martin Heidegger and William McNeill, *Pathmarks*, Reprinted (Cambridge: Cambridge University Press, 1998).

understood as value-neutral, as an active actor in the space of our lives.[53] According to Rupert, following Clark Chalmers,[54] technology is not just part of the environment, a working tool, but increasingly part of a particular field of the extended mind. As Latour and Floridi point out, technology is not a tool but an actor of informational interactions. Work is thus not done by man through the machine, typical of industrial societies, but by man together with the machine[55] within a socio-technical system.[56] Suppose some people tend to trust artificial intelligence to the extent that they make it their religious leader. In that case, it can be said that this may be a manifestation associated with the transference of experience of working with these systems, for example in employment.

In this respect, it can be said that the social, economic and labour changes associated with the advent of the Industrial Revolution seem to be much smaller and more gradual than the current informational ones. Suppose the Industrial Revolution has created a whole new group of orders, congregations, prelatures and spiritualities. In that case, it can be said that it is highly probable that the development of artificial intelligence will bring about a similar change.

With the change in the social structure, the educational environment is being transformed simultaneously. It appears that a fundamental rethinking of the school concept will be necessary, as it has entered a long-term crisis[57] closely linked to the crisis of modernity. Reflections on the new role of education in this environment are the subject of several partial analyses.[58] Essential to our study is the approach taken by Codnerey,[59] who points not only to the transformation of educational content and forms but, above all, to the need to rethink the task of the Christian educator. The aim is not to replace the human or human teacher but to shape the requirements for a new structuring of the identity of the Christian teacher.

Artificial Intelligence in the Context of the Encyclicals Fratelli tutti and Laudato si'

Laudato si' (2015) approaches technology and the technological transformation of society and spirituality in a somewhat sceptical and more profound way. In particular, paragraphs 102-115 present a fairly robust systematic insight into the issue, although artificial intelligence is not mentioned here, and intelligence is understood as an intrinsically human characteristic (paragraphs 68, 69, 78, 79, 83, 192). Compared to the following encyclical, Fratelli tutti, technology appears here predominantly without adjectives.

53 Bridle, *New dark age: Technology and the end of the future*.

54 A. Clark and D. Chalmers, 'The Extended Mind', *Analysis* 58, no. 1 (1998): 7–19.

55 Morteza Ghobakhloo, 'Industry 4.0, Digitization, and Opportunities for Sustainability', *Journal of Cleaner Production* 252 (April 2020): 119869, https://doi.org/10.1016/j.jclepro.2019.119869; A. Benešová and J. Tupa, 'Requirements for Education and Qualification of People in Industry 4.0', *Procedia Manufacturing* 11 (2017): 2195–2202.

56 Steven H. Appelbaum, 'Socio-technical Systems Theory: An Intervention Strategy for Organizational Development', *Management Decision* 35, no. 6 (1 January 1997): 452–63, https://doi.org/10.1108/00251749710173823.

57 Šíp, *Proč školství a jeho aktéři selhávají*; Sabine Seufert, Josef Guggemos, and Eric Tarantini, 'Digitale Transformation in Schulen – Kompetenzanforderungen an Lehrpersonen', *Beiträge zur Lehrerinnen- und Lehrerbildung : Zeitschrift zu Theorie und Praxis der Aus- und Weiterbildung von Lehrerinnen und Lehrern* 36, no. 2 (2018): 175–93, http://nbn-resolving.de/urn:nbn:de:0111-pedocs-170969; Baidoo-Anu and Owusu Ansah, 'Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning'.

58 How and Hung, 'Educing AI-Thinking in Science, Technology, Engineering, Arts, and Mathematics (STEAM) Education'; I. Atmosukarto et al., 'We Are Enhancing Adaptive Online Chemistry Course with AI-Chatbot', in *2021 IEEE International Conference on Engineering, Technology & Education (TALE* (IEEE, 2021), 838–43; Ismail Dergaa et al., 'From Human Writing to Artificial Intelligence Generated Text: Examining the Prospects and Potential Threats of ChatGPT in Academic Writing', *Biology of Sport* 40, no. 2 (2023): 615–22, https://doi.org/10.5114/biolsport.2023.125623; Fauzi Fauzi et al., 'Analysing the Role of ChatGPT in Improving Student Productivity in Higher Education', *Journal on Education* 5, no. 4 (6 April 2023): 14886–91, https://doi.org/10.31004/joe.v5i4.2563.

59 B.J. Condrey, 'The Christian Educator as Prophet, Priest, and King: Nurturing Moral Formation in a ChatGPT Era', *International Journal of Christianity & Education*, 25 August 2023, 20569971231196809, https://doi.org/10.1177/20569971231196809.

If we want to identify certain discourses, the first is the **relationship between technology and change**. 'Humanity has entered a new era' (§ 102), which, however, may not only bring positive effects but is associated with several adverse effects. It is the product of human creativity, which is a gift of God but simultaneously reveals man's weakness. Laudato si' is a technologically dominant sceptical text. According to the Pope, technology is a source of political and economic change (§105-106); it is part of the difficulties of the contemporary world (§107) because the technocratic paradigm seeks to dominate the whole economy and politics, it is the source of new consumerism—the market alone does not ensure integral human development (*sviluppo umano integrale*) or social inclusion, it is wasteful.

In other words, the changes that the world is undergoing represent a fundamental redistribution of political and economic power, not leading to greater social reconciliation but, perhaps, on the contrary, to growing disparities. Poverty has both an objective definition, and in this respect, the world is, on average, getting better, and a subjective one, and here we can see the dimension of significant economic and market imbalances and disparities in access to education and other social services. In the context of AI, we can say that there will be changes in the occupational structure of the world of work,[60] which may lead to new social differences and problems. More and more people will find it challenging to have an indeed developed ability to work with AI in specific fields,[61] which will impact their position in the labour market.[62] One of the essential forms of change is the weakening of the power of nation-states and the rise of the power of technology companies,[63] a phenomenon whose effects we have not yet seen enough of.[64]

The second critical discourse, also present in Fratelli tutti, is the **technological or technocratic paradigm**. Although these are two phenomena partially separate from each other, they form a specific integral unit in the papal documents—technology is a means of control, exercising power, changing its distribution, and simultaneously a form of a particular inhumanistic reduction of man. The intentions of Freire's[65] reflections can be read, *'There needs to be a distinctive way of looking at things, a way of thinking, policies, an educational programme, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm. [...] Liberation from the dominant technocratic paradigm does in fact happen sometimes.'* (§111-112) Technology can only be morally justified when it becomes the source of a certain communal emancipation (§112) when directed towards the search for an authentic humanity that seems to be completely obscured and neglected by these cultural backdrops (§112).

The question of new humanism in the context of artificial intelligence is one of the critical topics of current research. Benedikter and Fahi talk about the humanisation of technology,[66] which they see as a path to a new understanding of the human phenomenon. Lollini argues that technology allows humanity to be understood more broadly than before the information revolution; Floridi makes humans just one of the information agents.[67] We are in a situation where it is impossible to ask what is the place of man in the universe[68] but to ask anew who the man is, what constitutes

60 Frey and Osborne, 'The Future of Employment'; Frey and Osborne.
61 Astrid Carolus et al., 'Digital Interaction Literacy Model – Conceptualizing Competencies for Literate Interactions with Voice-Based AI Systems', *Computers and Education: Artificial Intelligence* 4 (2023): 100114, https://doi.org/10.1016/j.caeai.2022.100114.
62 Cetindamar et al., 'Explicating AI Literacy of Employees at Digital Workplaces'.
63 Bridle, *New dark age: Technology and the end of the future*.
64 Bělohradský, *Čas Pléthokracie: Když Části Jsou Větší Než Celky a Světový Duch Spadl z Koně*.
65 Paulo Freire, *Pedagogy of the Oppressed: 30th Anniversary Edition* (Bloomsbury Publishing USA, 2014).
66 Roland Benedikter and Karim Fathi, '"Humanised" Technology Instead of a New Humanism?', in *The Coronavirus Crisis and Its Teachings* (Brill, 2021), 63–69, https://doi.org/10.1163/9789004469686_013.
67 Luciano Floridi, *The Philosophy of Information* (Oxford University Press, 2013).
68 Pierre Teilhard de Chardin, *Le phénomène humain* (Éditions du Seuil, 1964).

his core, the authentic humanity of which Laudato si' speaks (§ 112). The argumentation of intelligence found in this encyclical (§ 112) is accepted in some literature by other authors but very much questioned, especially in the longer term. [69]

The third discourse we can identify from this encyclical, which is fundamental for a spiritual-theological reflection on artificial intelligence, is **logic**. For Pope Francis, logic has long been something artificial and harmful: *'Technology tends to absorb everything into its ironclad logic'* (§108). Logic leads to sexual abuse (§122), to the use of disposable things (§122), is a source of domination over creation (§155), violence (§230), has no concern for the environment (§196), and leaves no room (§196) so that it can be perverse (*logica perversa*) (§197). Rarely in the text can we find a positive logic, the logic of the gift (§ 159).

Logic is understood as a way of creating a narrative of the world, as a relativistic arbitrary creation of interpretive frameworks of rationality in which there is no room for humans. It is not without interest that Floridi shows that logic represents a field of thought that needs to be rebuilt and reinterpreted into a more organic, dynamic form that is more relevant to life.[70] Artificial intelligence works with its logic of 'probability'. A logic in the sense of a sequence of operations that does not allow to come out with a preconceived scheme that depends on trust in itself. Spirituality seems to be the step of abandoning this arbitrary logic, referring to a God standing outside its limits. This—almost anti-Scholastic or anti-Aristotelian—thesis would deserve further analysis in the future. We believe ending the whole encyclical with two prayers is not accidental. Still, it shows the importance of spirituality as a particular opposite conception of logic: *'An integral ecology is also made up of simple daily gestures which break with the logic of violence, exploitation and selfishness.'* (§230) and *'Christian spirituality proposes an alternative understanding of the quality of life, and encourages a prophetic and contemplative lifestyle'* (§222), thus opposing the discourse of logic.

The encyclical Fratelli tutti (2020) does not fully address the topic of artificial intelligence, but it contains several essential points. The very notion of technology is included thirteen times in the Italian version of the text. It is supplemented by exciting adjectives—modern (*moderne*) (§ 24), domain-defining (*nella)* (§ 29), new (*nuove)* (§ 258), progressive (*progresso)* (§ 27)—and this even though the resulting tone of the entire encyclical is reserved, though no longer entirely sceptical, towards technology. In the first part of the text, we can perceive a more optimistic discourse, and the relationship between technology and war or socio-economic evil is gradually emphasised.

As for the discourses related to artificial intelligence from the encyclical Fratelli tutti, several can be identified, so we will try to outline and complete some of them with a brief commentary and conceptualisation precisely about artificial intelligence.

A discourse of **social injustice and threat**. Technology is something that minimises the costs associated with human labour (§33) and can be a source of abuse and deviance (§167) and, most importantly, a source of some dictate determining how the world can look and function (§177). Technology is seen in § 177 as the efficiency or productivity paradigm source. Here, the human being becomes a means of production or a tool whose performance can be quantified by fitting it into pre-existing categories and structures. The goal of the technological revolution is to remove the human as too high a labour cost, directly impacting their sense of security and value. 'It would be great if the growth of scientific and technological innovation was accompanied by greater equality and social inclusion.' (§ 31)

69 Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford, United Kingdom ; New York, NY: Oxford University Press, 2016).
70 Floridi, *The Logic of Information: A Theory of Philosophy as Conceptual Design.*

Generative AI has raised the same question, only in a more concrete form—it has started to name the fields and professions that will be replaced clearly.[71] Let us consider how tightly linked profession and identity are still in our society. We can say that we may be on the threshold of one of the critical crises of identity and spirituality in general. There is no way to prevent such a change; it is essential to prepare for it—through theological and social reflection.[72]

The second discourse can be described as **moral**. Its content is a critique of how technology enters into human interactions, human actions and human decision-making. Thus, the Pope speaks directly to moral decline (§29) or the decline of ethics (*deterioramento dell'etica*), related to technology alienating society and weakening spiritual values. It is unclear from the text or the context which technologies are directly in question. The point is that technology impacts ethics; it is not value-neutral.[73] The challenge before us is how to create environments and modes of information interaction that are morally acceptable.

In this respect, paragraph 166, in which the Pope stresses that the regulation of technology cannot be aimed at limiting individual partial excesses and punishing them but must be linked to a transformation of institutions and the attitudes of individuals who work with partial technologies and tools. We believe this position is well considered by both Floridi[74] and Bridle, who emphasise the need for new approaches, not analysis of partial problems. At the same time, we can see the crucial emphasis for Francis, namely the focus on a social, ethical or moral perspective,[75] which cannot be separated from the individual. The development of artificial intelligence fundamentally accentuates this view. It can be said that it is clear that it is not possible to reflect the critical challenges of today only individually or only socially, but that we must look for new interaction network models to describe reality and ethics.[76]

The security discourse follows the moral discourse. Technology enables advances in medicine, economics, and the arms industry. Pope Francis' approach to this area has long been distinctly anti-militarist. He clearly states, 'Never has humanity had such power over itself, yet nothing ensures that it will be used wisely' (§258). It must be said that the development of artificial intelligence has the potential to change the structure of warfare and security policy fundamentally.[77] This is one of the themes that, while not resounding as strongly in the public sphere as other areas of security about AI, may be quite fundamental in that it will transform the political and military ordering of the capabilities of individual actors.

The last discourse could be described as **educational-political**. This refers to the fact that there is a change in the distribution of power: '*politics must not be subject to the economy, nor should the economy be subject to the dictates of an efficiency-driven paradigm of technocracy*' (§177).[78] This

71 Necula, 'Artificial Intelligence Impact On The Labour Force–Searching For The Analytical Skills Of The Future Software Engineers'.

72 Halík, *Odpoledne Křesťanství: Odvaha k Proměně*.

73 Michael Stephen Burdett, 'Proximate and Ultimate Concerns in Christian Ethical Responses to Artificial Intelligence', *Studies in Christian Ethics* 36, no. 3 (1 August 2023): 620–41, https://doi.org/10.1177/09539468231180135; Sarah Bankins and Paul Formosa, 'The Ethical Implications of Artificial Intelligence (AI) For Meaningful Work', *Journal of Business Ethics* 185, no. 4 (1 July 2023): 725–40, https://doi.org/10.1007/s10551-023-05339-7.

74 Luciano Floridi, *The Ethics of Information* (Oxford University Press, 2013), https://doi.org/10.1093/acprof:oso/9780199641321.001.0001.

75 W.H. Dutton, *Social Transformation in an Information Society: Rethinking Access to You and the World*, vol. 13 (Paris: UNESCO, 2004).

76 Latour, *Zpátky Na Zem: Jak Se Vyznat v Politice Nového Klimatického Režimu*; B. Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oup Oxford, 2007); R. Šíp and V. Švec, 'Pojetí tacitních znalostí v paradigmatu sjednoceného pole', *Pedagogická orientace* 23, no. 5 (2013): 664–90; G. Siemens, 'Connectivism: A Theory of Learning for the Digital Age', *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005).

77 Mitt Regan and Jovana Davidovic, 'Just Preparation for War and AI-Enabled Weapons', *Frontiers in Big Data* 6 (12 May 2023), https://doi.org/10.3389/fdata.2023.1020107; Noel Sharkey, 'Cassandra or False Prophet of Doom: AI Robots and War', *IEEE Intelligent Systems* 23, no. 4 (2008): 14–17, https://doi.org/10.1109/MIS.2008.60.

78 This statement is also contained in the previous encyclical Laudato si'.

issue is elaborated, for example, by Bělohradský when he says that large companies with technological capabilities, such as Alphabet (Google) or Meta (Facebook), have more power than nation-states.[79] Not only can these tech companies easily manipulate elections and public opinion,[80] but their power is in all respects more significant than that of nation-states; in some respects, they do not need them.[81] Artificial intelligence is leading to the emergence of a society in which these companies will undoubtedly become increasingly important, and it does not seem possible or workable to regulate them sufficiently.

At the same time, with this discourse, the Pope reveals another perspective, every day in academic discussion but still not fully emphasised in Church documents, that of critical thinking, information literacy, i.e., the overall relationship between education, free-thinking and democratic society.[82] He states literally: '*Education and upbringing, concern for others, a well-integrated view of life and spiritual growth: all these are essential for quality human relationships and for enabling society itself to react against injustices, aberrations and abuses of economic, technological, political and media power*' (§ 167).

Spiritual Perspective in Social Environment

The above analysis of the social encyclicals, as well as of the broader theological framework of the relationship between artificial intelligence and spiritual-social matters, does not, of course, represent a comprehensive or exhaustive map of the whole issue. Still, it does reveal several specific points that can be seen as essential elements for a broader discussion in the Christian thought environment. Although we have focused primarily on papal documents, the conclusions below are ecumenical rather than confessional.

First, it must be stressed that technological change, the Fourth Revolution, as Floridi[83] refers to it, is a natural phenomenon that cannot be disregarded, nor is it reasonable to make a moral judgement about this revolution. What proves to be essential is to consider the impact of such a change on the lives of specific people. The advent of artificial intelligence can further accelerate changes in the labour market, which may have serious social consequences.[84] There is a need to shape a human identity that is not so closely linked to one's work but rather to an authentically experienced humanity; their acquisition and work do not determine the value of a person.[85] This new question of identity needs not only to be fundamentally thought through but also socially implemented.

When Pope Francis speaks of the need for a deeper conceptualisation of a new humanity, of who the man is, he builds on the Council's foundations and states:

> *'On a more positive note, if artificial intelligence were used to promote integral human development, it could introduce important innovations in agriculture, education and culture, an improved level of life for entire nations and peoples, and the growth of human fraternity and social friendship. In the end, the way we use it to include the least of our brothers and sisters, the vulnerable and those most in need, will be the true measure of our humanity. An authentically humane outlook and the desire*

79 Bělohradský, *Čas Pléthokracie: Když Části Jsou Větší Než Celky a Světový Duch Spadl z Koně.*

80 Tiffany Hsu, 'For Many Facebook Users, a "Last Straw" That Led Them to Quit', *The New York Times*, 21 March 2018, sec. Technology, https://www.nytimes.com/2018/03/21/technology/users-abandon-facebook.html; Allison J. Brown, '"Should I Stay or Should I Leave?": Exploring (Dis)Continued Facebook Use After the Cambridge Analytica Scandal', *Social Media + Society* 6, no. 1 (1 January 2020): 2056305120913884, https://doi.org/10.1177/2056305120913884.

81 Bělohradský, *Čas Pléthokracie: Když Části Jsou Větší Než Celky a Světový Duch Spadl z Koně.*

82 P. Jarvis, *Learning to Be a Person in Society* (Routledge, 2009).

83 Luciano Floridi, *The Fourth Revolution: How the Infosphere Is Reshaping Human Reality* (Oxford University Press, 2014).

84 Reich, *The Work of Nations.*

85 Heidegger, *Being and Time.*

for a better future for our world surely indicates the need for a cross-disciplinary dialogue aimed at an ethical development of algorithms – an algor-ethics – in which values will shape the directions taken by new technologies' [86]

This description is very modern in emphasising the plurality of religions, opinions or cultures as a critical value to work with. In this conception, Christianity is not the only correct way of believing, but it must play an essential role in critical reflection on the contemporary world. Francis also warns against the variable of the society of men, the society of numbers. Reducing people to data[87] may be tempting, but it must be emphasised that the essence of culture is people with individually embodied, socially shaped stories. The concreteness of reality at the heart of the Easter story (John 13, Luke 22, Matthew 26 and Mark 14) must be substantially connected to the concreteness of each person's life.

A similar approach can be seen in Hefner, who emphasises the developmental aspect of human nature and the need to reflect religious experience anew in a culturally changing field. For him, spirituality is not a fixed structure but a dynamically constructed phenomenon of a specific environmental adaptation, a cultural-biological evolution.[88] Evolution is not just a biological phenomenon; it has distinctly religious implications that we must also reflect on in light of science and technology development.[89]

Technology can—in Intelligenza artificiale e pace—help improve communication and solve many of the problems of the contemporary world. Still, it is when it is designed, implemented and structured in a way that preserves the humanity of the human being. The question of humanity as a dynamic identity, as a testing of limits and constraints, constitutes the core of the process of a new humanity. A humanity integrated into society, culturally, religiously and socially sensitive. The question is not how humans are better than machines, but in the awareness of the reductionist risk. An aspect that is relatively intensely reflected in contemporary modern fiction is a particular expression of the crisis of contemporary modernity. The emphasis of the two encyclicals on the critique of performance culture is significant precisely in the perspective of a newly formed Christian humanism in the post-AI era, which is undeniably one of the themes that would deserve a broader literary and even magisterial analysis in the future.

A fundamental transformation of spirituality as such can be expected. We cannot yet decide on its exact form or forms, whether it will be more socially ritualised,[90] individualised[91] or take another form.[92] The fact is that it seems necessary to strengthen the discourses associated with thinking spirituality in a broad, not necessarily confessional sense, as one of the critical components of one's ability to live a life in which one sees meaning but also as a kind of hermeneutical key with which to enter into the process of understanding others.[93] It seems that spiritual literacy mani-

86 Francis, 'LVII Giornata Mondiale Della Pace 2024 - Intelligenza Artificiale e Pace'.
87 Latzer, 'The Digital Trinity—Controllable Human Evolution—Implicit Everyday Religion'.
88 Philip Hefner, *The Human Factor: Evolution, Culture, and Religion* (Fortress Press, 1993).
89 Jan Sokol, 'Evoluce Na Různý Způsob', *Vesmír* 90, no. 10 (2011), https://vesmir.cz/cz/casopis/archiv-casopisu/2011/cislo-10/evoluce-ruzny-zpusob.html; Jan Sokol, 'Biologická a kulturní evoluce [Online' (Jan Sokol, 2014), http://www.jansokol.cz/2014/03/biologicka-a; Jan Sokol, *Člověk jako osoba: filosofická antropologie. Třetí, rozšířené vydání* (Praha: Vyšehrad, 2016).
90 Luckmann, *The Invisible Religion*; Besecke, 'Seeing Invisible Religion: Religion as a Societal Conversation about Transcendent Meaning'.
91 Bauman, *The Individualized Society*.
92 Halík, *Odpoledne Křesťanství: Odvaha k Proměně*.
93 Maryam et al., 'A Review Study on Spiritual Intelligence, Adolescence and Spiritual Intelligence, Factors That May Contribute to Individual Differences in Spiritual Intelligence, and the Related Theories'; Åse Holmberg, Per Jensen, and Arlene Vetere, 'Spirituality – a Forgotten Dimension? Developing Spiritual Literacy in Family Therapy Practice', *Journal of Family Therapy* 43, no. 1 (2021): 78–95, https://doi.org/10.1111/1467-6427.12298; Ivo Jirásek, 'Spiritual Literacy: Non-Religious Reconceptualisation for Education in a Secular Environment', *International Journal of Children's Spirituality* 28, no. 2 (3 April 2023): 61–75, https://doi.org/10.1080/1364436X.2023.2166467; Taggart, 'Spiritual Literacy and Tacit Knowledge'.

fested in lived reflective spirituality may constitute one of the new forms of meaningful religious discourse.

According to Pope Francis, it is necessary to consider the degree of logic and bureaucratism in our society, a theme long associated in Western literature with the tendency of occidental culture to be totalitarian.[94] The documents treat logic as creating often explicitly unreflected policies and measures that reduce the possibility of creativity and a community in which difference is considered valuable.[95]

Education will play a crucial role in this newly formed society. This can be found in studies related to AI literacy,[96] as well as in papal documents. However, it is a topic of a broader nature. As Webster points out,[97] we live in a society in which theory requires the ability to think abstractly and understand broader contexts. In this respect, one can agree with Halík, who links Christianity with rational reflection on faith, identity and spirituality. Education is the way to avoid fundamentalism[98] and requires systematic work on each person's individual development.

At the same time, it appears that we cannot solve many challenges at the individual level. Just as the issue of the environmental crisis and global climate change emerged some time ago, the issue of ethics and the ethical handling of artificial intelligence is now emerging. It seems that it will be increasingly necessary to think of moral theology not just as a question of an individual discipline but to address its social characteristics.[99] Ethics at the personal level is essential but insufficient for thinking through ways of behaving and acting in a digitally transformed world.[100]

The limits of humanity as experienced cannot be understood as a disadvantage or limitation of man in any negative sense. Machines are incapable of resting. They are incapable of idleness or doing things that no one wants them to do; they are incapable of being tired or dying. These elements can be seen as a disadvantage in the job market, but they decisively define humanity as a realistically lived category. Here, the new spiritual emphasis may be related to Augustine[101] or the biblical tradition (Rom 7:20; John 8:11). Humans are—unlike the ancient gods, and we can add technology—capable of death as death; they can give meaning to their lives, Heidegger argues.[102] Jesus came to save sinners, not the righteous and perfect (Mk 2:17; Matt 9:9-13). This area of spirituality, partly mirrored, for example, in the phenomenon of digital equilibrium, still awaits more systematic reflection, however natural it may be as a continuation of the premises of Laudato si'.

The last point we can make is to emphasise the question rather than the answer. In contemporary thought discourse, we can see an intense fixation on facts, articles of faith, and particulars that are part of the intellectual endowment of the individual. Artificial intelligence may be perfectly orthodox regarding belief content, but that says nothing about its relationality. Artificial intelligence makes us rethink thinking as a mindless,[103] story—and whole-oriented constant inquiry.[104] An inquiry that can be unnerving but which constitutes the very essence of spiritual identity

94 Bauman, *Modernity and the Holocaust*; Hannah Arendt, *The Origins of Totalitarianism* (Duke University Press, 2007).
95 J. Mestenhauser and C.A. Chambers, 'Interview with Josef Mestenhauser', 1994.
96 Davy Tsz Kit Ng et al., 'Conceptualizing AI Literacy: An Exploratory Review', *Computers and Education: Artificial Intelligence* 2 (2021): 100041, https://doi.org/10.1016/j.caeai.2021.100041.
97 Webster, *Theories of the Information Society*.
98 Taggart, 'Spiritual Literacy and Tacit Knowledge'.
99 Jan Sokol, *Etika, život, instituce: pokus o praktickou filosofii* (Praha: Vyšehrad, 2014); Sokol, *Člověk jako osoba: filosofická antropologie. Třetí, rozšířené vydání*; Dutton, *Social Transformation in an Information Society: Rethinking Access to You and the World*.
100 Floridi, *The Ethics of Information*.
101 Augustine, *The Confessions of St. Augustine: Modern English Version* (Revell, 2008).
102 Martin Heidegger, *Erläuterungen zu Hölderlins Dichtung* (Klostermann, 1944).
103 Ladislav Hejdánek, *Nepředmětnost v myšlení a ve skutečnosti* (Praha: Oikoymenh, 1997).
104 Martin Heidegger, *What Is Called Thinking?* (HarperCollins, 1976).

(Heb. 11:1-7)—an identity without possession but with living.[105]
This analysis shows that the problem of artificial intelligence cannot be viewed as a limited particularity without reference to religious experience. Artificial intelligence is a phenomenon that disrupts the sense of certainty of the form of how the world works and the decadent idea of who one is.[106] It is essential to take these concerns seriously; we can neither see the potential of these tools nor how they will affect the labour market and other areas of human realisation.[107] We believe that it makes sense in the field of spiritual-theological reflection to both see the themes outlined as some essential perspectives on the issues and, at the same time, to work actively with a phenomenologically oriented methodological approach—to reflect on how authentic spirituality is possible for each person. At the same time, postmodernism offers a layered narrative of concepts and experiences that can help with the search for a new, maybe vague or unfixed, lived spirituality. Bauman[108] and Špidlík[109] are surprisingly close here.

Conclusion

In our study, we have tried to show that the development of artificial intelligence can be the subject of various theological and philosophical discussions but that it has a clear impact on the way of thinking about the Church's social doctrine. Technological changes put before us the question of the formation of a new conceptualisation of humanism as a dynamic structure of authentic humanity, integrating the limits and weaknesses of man, his failures in an environment of economy and technological change, into his most proper being. There seems to be a fundamental rejection of both 'performance Christianity' and reductionist approaches to the human person. Man is not reducible to data, nor is he a set of work results, but a being having a spirituality that takes place in concrete experience.
At the same time, however, technology and the phenomenon of the Fourth Revolution[110] as such cannot be reflected only negatively or pessimistically—new technologies open up the issue of diversity in social services and consultation, can create working conditions for new employees, including those whose geographical migration linked to work is limited for various reasons, and can make a significant contribution to the development of communication and critical thinking, which the papal documents systematically emphasise.
Latour[111] says that we need to completely change some of our perspectives and ideas about what particular phenomena and practices in the world should or should not look like. Modernity has hit its limits; we have never been truly modern,[112] and we must learn to seek humanity and spirituality anew, in a completely different way, in the context of social and technological change. We seem to be standing at the moment of a revolution in spirituality that we still cannot see but from which we cannot close ourselves off. Otherwise we will die alone and abandoned, like the parents of Gregor Samsa in Kafka's The Metamorphosis.[113]

105 Erich Fromm, *To Have or To Be?* (Open Road Media, 2013).
106 Hefner, *The Human Factor*.
107 Tyna Eloundou et al., 'GPTs Are GPTs: An Early Look at the Labor Market Impact Potential of Large Language Models' (arXiv, 21 August 2023), https://doi.org/10.48550/arXiv.2303.10130; A. Zarifhonarvar, 'Economics of Chatgpt: A Labor Market View on the Occupational Impact of Artificial Intelligence', 2023.
108 Bauman, *Liquid Modernity*.
109 Špidlík and Rupnik, *Integrální poznání*.
110 Floridi, *The Fourth Revolution: How the Infosphere Is Reshaping Human Reality*.
111 Latour, *After Lockdown*.
112 Latour, *We Have Never Been Modern*.
113 Latour, *After Lockdown*.

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