

GIOVANNI TRIDENTE

EVALUATING CHURCH COMMUNICATIONS IN THE ERA OF ARTIFICIAL INTELLIGENCE

Abstract. A complex challenge has emerged within the realm of institutional church communication, induced by the rapid advancement of artificial intelligence (AI). This dynamism has undeniably enhanced numerous human capabilities but has simultaneously raised novel anthropological and ethical inquiries. This study aims to provide an overview of the reflections that have surfaced in recent years within this domain, as articulated by the ecclesiastical magisterium. Specifically, our analysis delves into the pronouncements of the last three pontiffs, subsequently giving rise to additional initiatives spearheaded by Holy See institutions, such as the Pontifical Academies, and contemplations within certain Catholic publications. This effort seeks to encapsulate plausible “guidelines” that ought to accompany the responsibilities of institutional communicators in the immediate future.

Keywords: artificial intelligence; Catholic Church; communications

INTRODUCTION

For over a year, the discourse surrounding artificial intelligence (AI), its applications, and repercussions has permeated public opinion and various social spheres, ranging from institutional domains to the realms of education and communication. Undoubtedly, we find ourselves amid a substantial technological revolution, which profoundly impacts human existence and penetrates diverse spheres of life. Consequently, a fundamental question emerges: Could the myriad “machines” surrounding us, whose prevalence in our lives is yet to increase, ever attain a semblance of a soul? Could they possess consciousness, contemplate the causality and rationale behind their “actions”, or reflect upon the consequences thereof? These attributes are inherently human prerogatives.

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These inquiries beg another question: Might it not be judicious for humans to imbue these sophisticated technological innovations with their own “soul”? To infuse the digital realm with the “humanity” that only humans can bestow, achieved through a “deliberate” development delineating what machines “can” and “should not” undertake. This might entail making them beneficial to humanity rather than evolving into invincible adversaries. The notal premise is this: humanity possesses the essence of the soul, concurrently assuming the role of architects for these machines. In constructing these entities, humans possess the capacity to “script” their destiny – an operation aligned with universal benefit. These ponderings echo perennial questions that the Church has explored throughout the centuries, as its concern lies with humanity and all facets intertwined with human existence.²

In the realm of artificial intelligence (AI), the contemplation of the pontifical magisterium finds its early roots in the pronouncements of John Paul II in the late 1980s. On several occasions, he addressed the implications of modern technologies on employment, exemplified by the advent of robots supplanting workers on assembly lines. John Paul II expressed the hope that developers and entrepreneurs would conscientiously incorporate a “soul supplement” into this revolutionary context, ensuring that humanity remained the focal point of technological progress rather than becoming its “victim”.

Benedict XVI, in turn, advocated against dismissing experimental technology outright, emphasizing the promotion of endeavours that genuinely contribute to the well-being of individuals. He underscored the importance of maintaining a balance between freedom and the capacity to comprehend the repercussions of our actions.

The most substantive interventions occurred during the papacy of Pope Francis, particularly in the epoch marked by accelerated technological advancements. Pope Francis, too, emphasized the imperative of preserving human agency, advocating for a discerning appraisal of the consequences of technological development guided by “moral conscience”. He proposed establishing universal ethical standards and regulations governing the utilization of machines.

The exploration below seeks to unravel the main themes articulated by successive pontificates in recent years. The objective is to delineate conceivable “guidelines” that should accompany the responsibilities of institutional communicators in the immediate future, a period challenged by one of the latest marvels spawned by human ingenuity.

² For a comprehensive exploration of the nexus between the Church and artificial intelligence, including pertinent reflections following from the pontifical Magisterium, present in Catholic publications, and incorporating insights from Pontifical Academies spanning recent decades, refer to my *Anima digitale. La Chiesa alla prova dell'Intelligenza Artificiale* (2022).

1. ECCLESIASTICAL PERSPECTIVES ON HUMAN VISION

Rather than delving into the essence of man, philosophers have predominantly asked the question, “Who is man?” Addressing this question is an essential step toward a nuanced understanding and judicious utilization of the manifold potentialities vested in him—an issue intricately interwoven with the teachings of the Church. The conceptual framework of the “personalist” perspective on human existence, which gained prominence with the advent of Christianity and was extensively explored by the philosopher Karol Wojtyła even prior to his papacy, aligns well with this thematic underpinning. Throughout his magisterium, Wojtyła skillfully emphasized the elucidation of this perspective.

According to Wojtyła, the person transcends mere individualized nature; rather, their completeness is rooted in uniqueness and unrepeatability. In this framework, man is defined as the “subject of existence and action” (Wojtyła, 1982), and their full dignity emanates from being “worthy of all that is due to them by nature” (Ferrari, 2022). This designation persists, highlighting the individual’s intrinsic value “in himself or herself”, independent of external considerations. Aparecida Ferrari underscores the consequential prospect that one may compromise moral dignity through an erroneous exercise of freedom, yet such transgressions do not annihilate one’s substantial dignity.

With these premises established, we can now go on to analyze the perspective of man as envisaged in the Church’s teachings and its approach over the past decades, especially concerning technology and its most sophisticated innovations.

2. THE TEACHING OF THE PONTIFFS

A document from the Second Vatican Ecumenical Council delineates with precision the Church’s role concerning its solicitude for humanity and human actions. The preamble of the Declaration *Gravissimum educationis* explicitly articulates this perspective: “Holy Mother Church, in the fulfilment of the mandate received from her divine Founder, which is to proclaim the mystery of salvation to all men and to build up all things in Christ, has the duty to concern herself with the whole of man’s life, even his earthly life” (Paul VI, 1965b). This overarching perspective spans the entire trajectory of technological advancement, underscoring

that the Church, functioning as both “mother” and “teacher”, extends its attention to the diverse dimensions of human existence.³

2.1 Defining the sample

In order to extract a sample pertaining to the magisterium of the popes in the specified domain, we utilized the Holy See’s institutional portal (www.vatican.va), where the comprehensive collection of teachings from the Roman Pontiffs is regularly updated. Our focus was specifically on delimiting the extracted material to the theme of AI. Consequently, the collection was refined, employing the internal search engine of the Vatican site, by two distinct categories of keywords: “artificial intelligence” as an exact phrase and “robotics”. Although one may contend that these terms do not necessarily convey synonymous concepts (*Directa*), within the context of the Church’s long-standing examination of these subjects over the years, they often refer to substantially similar notions – advanced technologies prioritizing the human person as their central concern and direct “interlocutor”.

From the current inquiry,⁴ a total of 19 texts associated with the first keyword and 12 linked to the second have emerged. In 5 instances, there is an overlap in results, culminating in a combined corpus of 26 texts for consideration, including speeches, messages, and letters delivered by pontiffs over the years to diverse audiences. Among these, 8 texts are ascribed to Pope John Paul II (1978-2005), 1 text to Pope Benedict XVI (2005-2013), and 17 to Pope Francis (2013-). The earliest text in this compilation dates back to January 31, 1987, while the most recent is dated March 23, 2021. These numerical and chronological facets elucidate, foremost, the absence of an extensive compilation of magisterial texts expressly tailored to “norming” the Church’s teachings on these matters. Additionally, they underscore that the examination of these topics and issues has only gained prominence within the last three decades.

³ “Mother and teacher of all peoples, the Universal Church was instituted by Jesus Christ so that, over the course of the centuries, all who come into its embrace may find the fullness of a higher life and the assurance of salvation. To this Church, the pillar and foundation of truth (cf. 1 Tim 3:15), its most holy Founder has entrusted a dual mission: to generate offspring, to educate and govern them, guiding, with maternal providence, the lives of individuals and peoples, whose great dignity it has always held in the highest respect and safeguarded with solicitude. Indeed, Christianity is the union of earth with heaven, as it embraces man in his concreteness – spirit and matter, intellect and will – and calls him to elevate his mind from the changing conditions of earthly life to the heights of eternal life, which will be an unending consummation of happiness and peace” (John XXIII, 1961).

⁴ The sample was definitively isolated, and for the last time, on April 2, 2022.

Table 1. Sample related to the scope “magisterium of the pontiffs”

	John Paul II's speeches	Benedict XVI's speeches	Pope Francis' speeches	
Lemma 1: “artificial intelligence”	4	1	14	19
Lemma 2: “robotics”	4	–	3 (+5 repeated)	7 (12)
Total	8	1	17	26

Source: own study.

2.2 John Paul II

The eight texts associated with John Paul II, which form the focal point of our sample, contain chiefly speeches. They were addressed to bishops, participants in initiatives sponsored by the Holy See, and specific groups of the faithful during visits both in Italy (Piacenza) and abroad (Detroit, United States).

The first text that the Holy See’s website returns under the heading “robotics” is an address that John Paul II delivered on January 31, 1987 to the bishops of Piedmont (Italy) on an “ad limina” visit.⁵ Instead of summarizing the meaning of the discourse (or discourses) it is of interest to identify how the discussion on the issues under study is framed, and this is the approach that will also be followed in the analyses to follow.

Returning to the Polish pontiff’s text, there is a primary fact that must be understood and it is indicative of how at the turn of the 1990s we were in the midst of a situation of transition in the technological sphere, a phenomenon that did not escape the attention of the Piedmontese bishops – coming, by the way, from one of the then most industrialized areas of Italy – who pointed out to the Pope on that occasion the need to intercept new forms to proclaim the Gospel in a manner “more sensitive to the critical mentality of our times” (John Paul II, 1987a).

⁵ “Ad limina Apostolorum” visits are gatherings of groups of bishops from dioceses around the world, organized territorially into macro areas (regional or national), and in communion with the Apostolic See. These groups converge on Rome every few years to visit the tombs of Apostles St. Peter and St. Paul and to meet with the Successor of Peter, the Bishop of Rome, the Pope. These visits are meticulously prepared in advance and involve the compilation of a quinquennial report preceding the visit. The precise significance of these bishops’ visits is “the strengthening of their responsibility as successors of the Apostles and their hierarchical communion with the Successor of St. Peter” (Congregation for Bishops, 1988).

2.2.1 *The risks of “technological unemployment”*

The first awareness, then, is that of a changing society, no longer agricultural and no longer just industrial, but becoming “more technologically advanced”, a turning point as Wojtyła reflects “whose ultimate destination and duration are uncertain” (John Paul II, 1987a). Of paramount concern to the Church, even in these early reflections, is the potential for technology to render humanity redundant, relegated to a “secondary” role in the face of telematic, computerized, and robotic innovations, ultimately resulting in *de facto* unemployment. The specter of “technological unemployment” looms, envisaging a fate for individuals who might be “supplanted by machines”, abruptly finding themselves without employment. John Paul II reiterated the gravity of these challenges and difficulties, underscoring their significance “both in the strictly economic field and, above all, in the pastoral field” in his address.

2.2.2 *Understanding, accepting and orienting our age*

What attitude to take in the face of such an awareness and this apparently irreversible situation? The Pope articulates this straightforwardly: “we must understand our age, accept it, orient it” (John Paul II, 1987a). So an entirely positive and constructive outlook, as he had already emphasized six years earlier in the Encyclical Letter *Laborem Exercens*, written 90 years after Leo XIII’s famous *Rerum Novarum*: “Technology is undoubtedly man’s ally. It facilitates his work, perfects it, accelerates it and multiplies it” (John Paul II, 1981). So the Pontiff indicates a compass of conduct in the face of the current turning point: “to educate, first of all, to accept to live in this complex and difficult society, to become its soul with vigilant training in asceticism, and with readiness of spirit of sacrifice”.

2.2.3 *A social and international responsibility*

Six months later, during his visit to the United States, addressing the residents of Detroit gathered in Hart Square – a city notably characterized as a “city of workers” – John Paul II revisits the discourse on tethered social progress and human development, a matter he designates as “everyone’s concern”. He calls for a commitment to ensuring that, in every facet of life, there is an unwavering preservation of the continual imperative for justice and peace. In contemplating technological advancements, this commitment necessitates a vigilant consideration of their genuine “social cost”, ensuring they do not culminate in “unjust deprivation for many, whether temporary or permanent”. The Polish pontiff underscores that this “social responsibility” must also be contemplated on the international stage, given the prevailing interdependence among peoples and nations (John Paul II, 1987b).

2.2.4 Proceed with healthy reason

In another meeting with workers, this time in Italy, in Piacenza's Piazza Cavalli in 1988, Wojtyła hints that "agriculture, industry, commerce and the most modern technology" complement each other, "or should complement each other, in mutual promotionality" (John Paul II, 1988b). Then he offers an initial "ethical" hint at the issue of the technological revolution "now progressively advancing": "It is absolutely necessary that biomedicine and related techniques accept the indications of sound reason, which the Magisterium of the Church reiterates in order to respect the sacredness of human life" (ibid.).

2.2.5 A "soul supplement"

Several months later, the Pope once again directed his discourse towards the bishops. On this occasion, the bishops from Valle d'Aosta joined those from Piedmont, marking a recurrence four years later. The subject addressed by the Pontiff revolves around the theme of youth, navigating the spectrum between passive attitudes and frustration, and the yearning to fulfill the profound aspirations of their souls. Against the backdrop of the remarkable advancements emerging from the "world of machines" and AI – a domain of escalating significance in our civilization – the Pope suggests that the Church's responsibility is to provide a "supplement of soul" in this environment (John Paul II, 1991a).

2.2.6 In the service of man

"The machine remains an instrument in the service of man," and "its 'intelligence' is limited, since it is not reason in the full sense of the term, that reason which enables man to think of himself as a creature, to discern what is good, true and good, to orient through voluntary act his life and to reach its end" (John Paul II, 1994a).

The Church's remarks are beginning to become more moral, especially when speaking with scientists, as is evident from this meeting of the Pontiff with all the members of the Pontifical Academy of Sciences in 1994, a body of international scope whose founding dates as far back as 1603 (Pontifical Academy of Sciences). In that speech Wojtyła further explains that the very greatness of science consists "in being at the service of those of our brothers and sisters who are in particular need of help", and that the moral goodness of all progress is measured from the "authentic good it procures for man, considered in its twofold corporal and spiritual dimensions" (John Paul II, 1994a).

2.2.7 *Morality and dignity*

John Paul II's last two speeches on these topics date from September and November 1995. The first is addressed to the leaders of the Social Weeks, a Catholic initiative that emerged in the early twentieth century to reflect on the Social Doctrine of the Church. The meeting took place at the Pontifical Palace in Castel Gandolfo, the residence where John Paul II used to spend the summer. The ethical value of choices in the economic, social, political and scientific spheres, which must "give authentic meaning to personal life" and without which one runs the risk "of falling into selfishness, into permanent conflict", is reiterated on this occasion.

In the field of AI, therefore, the "anthropological and moral" questions that these discoveries entail are becoming more pressing, the Pope points out (John Paul II, 1995a). Less than two months later, on November 8, the event for the 30th anniversary of the proclamation of the Second Vatican Council's Pastoral Constitution *Gaudium et Spes*, the one dedicated precisely to the Church's fruitful confrontation with culture and the world, though always God's work and the place where His presence is manifested, is held at the Vatican.

2.3 **Benedict XVI**

The only text that the research returns relating to Benedict XVI dates back to October 21, 2006, a few months after the beginning of his pontificate, and concerns his visit to the Pontifical Lateran University in Rome, also known as the "University of the Bishop of Rome", for the beginning of the academic year. In his address, the Pope addresses the issue of "the crisis of culture and identity" that characterizes the contemporary era and recognizes universities as "one of the most qualified places to try to find appropriate ways out of this situation" (Benedict XVI, 2006). Among other things, the younger generations expect from the world of education "a serious, challenging proposal capable of responding in new contexts to the perennial question about the meaning of their existence".

Referring explicitly to "artificial intelligence", Ratzinger hints at the risk of the contemporary context becoming "subject to experimental technique", forgetting that the task of science is to "safeguard man and promote his tension toward the authentic good" (Benedict XVI, 2006). It is about maintaining a balance so that every existence has "a solid foundation and a valid purpose", as well as aiming for "a deeper vision" of life. In short, we must not pursue the myth of freedom at all costs without also thinking about the consequences of our actions.

2.4 Pope Francis

The most extensive compilation of texts pertains to Pope Francis, a circumstance unsurprising given the notable advancements in the scrutinized field within the past decade alone. Of the 17 documents, nine are speeches, five contain messages or video messages, two are letters, and one is an encyclical. Notably, it is the encyclical, specifically Bergoglio's second circular letter titled *Laudato si*, that encapsulates what could arguably be characterized as the pontificate's most comprehensive contribution on technology, ethics, and innovation, and their implications for humanity. This document is renowned for its thematic dedication to "care for the common home", with the entire third chapter delving into the "technocratic paradigm", elucidating its role within the broader context of the "ecological crisis" (Francis, 2015a).

2.4.1 *The products of technology are not neutral*

Pope Francis assumes that humanity is now facing a crossroads imposed by the "power of technology", since on the one hand "it has remedied countless evils that afflicted and limited human beings" and is able to "produce the beautiful and make human beings, immersed in the material world, make the 'leap' into the realm of beauty" (ibid.). On the other hand, it has granted man an enormous power that cannot always be used for good. Within this vision, the Pontiff states, "It is necessary to recognize that the products of technology are not neutral, because they create a web that ends up conditioning lifestyles and orienting social possibilities in the direction of the interests of certain power groups. Certain choices that seem to be purely instrumental are actually choices pertaining to the type of social life that is intended to be developed" (Francis, 2015a).

The implication that these advances have on the rest of human existence is well understood, but often the "fragmentation of knowledge", the pope again reflects in *Laudato si*, not allow us to understand the complexity of reality. The solution might be to "slow down the march", "collect the positive and sustainable developments", then "recover the values and the great ends" (ibid.).

2.4.2 *Safeguarding employment*

In January 2016, there was in Davos-Klosters (Switzerland) the annual meeting of the World Economic Forum (WEF) on the theme "Mastering the Fourth Industrial Revolution" and Pope Francis was present through a message sent to the then Executive Chairman of the WEF, Klaus Schwab. Again, the Church's concern was for the preservation of jobs, which even then were said to be eroded

by the development of advanced technologies: “Man must lead technological development, without letting himself be dominated by them!” (Francis, 2015b). In short, it is necessary to make sure that “the effects of robotics and scientific and technological innovations do not lead to the destruction of the human person,” with the risk of it being replaced by “a soulless machine”.

At the center of all this, the Pope places the more general safeguarding of creation, as he had already argued in his second Encyclical and as he also stressed a few months later to members of the Pontifical Academy of Sciences. To scientists he reiterated that their mission is to be “at the service of a new global ecological balance,” in a task “fully oriented to the promotion of integral human development, peace, justice, dignity and freedom of the human being” (Francis, 2016b).

2.4.3 *Discerning with moral conscience*

For the 25th anniversary of the establishment of the Pontifical Academy for Life, desired by predecessor John Paul II, Pope Francis wrote a long letter to the President *pro tempore* entitled *Humana communitas*. For the issues that pertain to this publication, there is a paragraph dedicated to the “new technologies today defined as ‘emerging and converging,’ which are capable of ‘intervening very deeply in living matter” (Francis, 2019g). With respect to this situation, the Church, through the Academy for Life, must first devote itself to “understanding the epochal transformations that are announced on these new frontiers”, in order to then be able to direct them “at the service of the human person, respecting and promoting his or her intrinsic dignity”. This is undoubtedly a demanding task, which at the same time requires careful discernment that must take place “through the dynamics of the moral conscience” (ibid.).

2.4.4 *Toward a universal ethics*

But it is when meeting with participants at the Plenary Assembly of the Academy, celebrated almost two months later, that the Pope makes explicit the request to make a contribution on these issues by seeking and proposing “universally shareable operational criteria that are common points of reference for the choices of those who have the serious responsibility of making decisions on the national and international levels” (Francis, 2019b). Among other things, the pontiff thinks of human rights as the common basis “of a universal ethic”. In his speech he also recalls what he wrote at the Davos forum the year before and makes clear that at the center of believers’ action must be “the inherent dignity of every human being”.

This is the first time that such a well-defined concern has been made clear by the Magisterium, as if to indicate that it is no longer possible to procrastinate in establishing stakes that will limit the abuses of this new frontier of humanity.

2.4.5 Regulating its engagement

Not surprisingly, in the next passage of his speech, Pope Francis touches the nerve of the limitations of artificial devices “that simulate human capabilities” but in reality “lack human qualities”. Therefore, these cannot be overlooked, regulating their use and aiming for “constructive and equitable interaction between humans and the latest versions of machines” (Francis, 2019b). On the other hand, “if we are able to enforce these references in action as well, the extraordinary potential of the new findings will be able to radiate their benefits on every person and all of humanity” (ibid.), is the pontiff’s conviction.

2.4.6 An ethic of freedom, responsibility and fraternity

“A better world is possible thanks to technological progress if this is accompanied by an ethic based on a vision of the common good, an ethic of freedom, responsibility and fraternity, capable of fostering the full development of persons in relation to others and to creation” (Francis, 2019d). Another brick to the more circumstantial considerations on these issues the Pope put it in his address to the participants of the seminar “The Common Good in the Digital Age”, an initiative organized by the Vatican’s dicasteries related to Culture and the Service of Integral Human Development, which gathered experts in the field of advanced technology to debate the social, ethical and political implications of developments in the field.

These are clearly issues that “concern all of humanity and require solutions that can be extended to all of humanity”, so it is necessary, according to the Pontiff, “that we re-appropriate and re-interpret the ethical terms that others have passed on to us”. On the other hand, “if technological advances were the cause of ever-increasing inequalities, we could not consider them true progress” (ibid.).

2.4.7 Or better, an “algoretica”

Francis returns to address a group of participants at a conference – this time a Symposium on the Dignity of Children in the Digital World attended by religious leaders, in November 2019 – and referring to AI issues makes his own a neologism coined by the Franciscan friar Paolo Benanti a year earlier:

“*algorética*” (algorithethics).⁶ The Pope uses it in reference to the attitude expected of scientists and practitioners in the digital world, and more specifically of computer engineers, to engage in “ethical development of algorithms”, feeling responsible “in the first person for building the future” (Francis, 2019c).

The last two speeches of 2019 in which references to AI appear were delivered to (i) a meeting with a group of children, teachers and parents – gathered for the “I Can” World Meeting – to whom the Pope emphasizes the importance of stimulating creativity and imagination to spread human warmth within, something that “*artificial intelligence* alone is unable to give”⁷ (Francis, 2019c); (ii) the editors of the magazine *Social Updates* and the reference to AI is only related to the thematic complexity of the reality that an in-depth magazine is called upon to cover (Francis, 2019f).

2.4.8 *Ethically responsive intermediary social entities are requisite*

The theme of “algorithethics” returns preponderantly in the Magisterium’s reflections at the beginning of 2020, in an address addressed to participants at the plenary of the Pontifical Academy for Life on the sidelines of a major initiative promoted by the same Vatican Dicastery, called “Rome Call for AI Ethics”. This summit resulted in a document signed by, among others, Microsoft, IBM and FAO reiterating the importance of creating a future in which digital innovations and technological progress are at the service of human genius and creativity.

In appreciating the significant event, Francis stressed the importance of scientific interdisciplinarity as an indispensable element in addressing complex phenomena, but also the need for “broader educational action”. It is not enough, in fact, to simply rely on “the moral sensibility of those who do research and design devices and algorithms”: it is necessary to “create intermediate social bodies that ensure representation for the ethical sensibility of users and educators” and to aim for “an ever broader involvement of all those who care about the good of the human family” (Francis, 2020b).

⁶ Francalanci (2020): “The birth of the term ‘algorithethics’ is relatively recent, dating back to 2018 with the publication of the book ‘Oracoli. Tra algorética e algocrazia’ by Paolo Benanti, a Franciscan friar of the Third Regular Order and a professor of Moral Theology and Bioethics at the Pontifical Gregorian University. Algorithethics emerges in response to what is termed algocracy, or the ‘dominance of algorithms,’ a society built on the extensive application of algorithms. Therefore, there is a need for a study of the ethical issues and social (as well as political, economic, and organizational) implications arising from the increasing use of information technologies” (my translation).

⁷ Here the term “artificial intelligence” is used in connection with mobile technologies, to the extent that shortly before, the Pope remarks: “you have averted your gaze from the mobile phone screen and rolled up your sleeves to put yourselves at the service of the community” (Francis, 2019c).

Other references by the Pope to AI during 2020 are quite extemporaneous and in any case related to what has already emerged in the reflections of previous years. Speaking to a group of lay people working with French bishops on ecology issues, Francis reminded them that the sophistications of AI systems will always lack something, the “tenderness”, the “ability to caress” (Francis, 2020a) reporting a conversation he had with a scientist he met in the Vatican. He repeated the same story in a subsequent general audience in December (Francis, 2020d). While he again suggested considering the effects on “work” produced by a generalized “robotization” in a video message to the United Nations in September (Francis, 2020e).

The last speech of Pope Francis that emerged from the research dates back to March 23, 2021, and it is a message for the 150th anniversary of the proclamation of Saint Alfonso Maria de’ Liguori, patron saint of confessors and moralists, as a Doctor of the Church.⁸ The Pontiff writes to the Superior General of the Congregation of the Most Holy Redeemer and echoes the Church’s concern for the innumerable “challenges” that society is experiencing in recent times: in addition to the consequences of the COVID-19 pandemic with inevitable influences also on the world of work, of the care and defense of life, we must not forget “the inputs that come to us from artificial intelligence”.

Following the example of this evangelizer of his time, Bergoglio invites us to seek “constructive responses to the challenges of society”, knowing how to combine and “keep together the need of the Gospel and human frailties”. Also a theological and moral task, in which “the formation of consciences for good” and attention to “the dignity of the fragile” must prevail as an essential goal (Francis, 2021).

* * *

All these reflections provide an excellent starting point to closely understand the “thought” and perspective of the Church regarding the implications of artificial intelligence. They offer fundamental insights that every communicator within ecclesiastical institutions should grasp to stay abreast of the times. The AI theme will be central in the years to come and will shape the framework of humanity’s immediate future. Understanding its functioning, applying its

⁸ Distinguished as “Doctors of the Church” are those individuals who, throughout various eras, have defended the orthodoxy of the Christian faith through their writings and testimony, a role solemnly proclaimed by a pope and a council (Morganti, 2022). In the case of Saint Alfonso Maria de’ Liguori, the proclamation was made by the will of Pope Pius IX on March 23, 1871.

uses, and monitoring its effects will be the task incumbent upon each individual, especially those at the helm of the world's major moral agencies.

CONCLUSIONS:
THE CHALLENGES FOR THE INSTITUTIONAL COMMUNICATOR

In the realm of artificial intelligence, akin to any transformative discovery that reshapes cognitive habits and perspectives, we observe at least two predominant attitudes. On one hand, there is enthusiasm as individuals gain direct access – rather than mediated through external devices – to novel and sophisticated technologies, along with the potential to comprehend their functioning. On the other hand, concerns arise, stemming from the unclear impact and consequences that this highly technological innovation may impose on individual lives, both in the short and long term, challenging the understanding of human “natural intelligences”.

As is customary with historically significant advancements, two opposing dynamics recur: an excessive optimism seeking to dismiss any potential “social cost” under the mantra that revolutions or progress should not be impeded, assuring that “everything will surely be fine”. Conversely, there exists a heedless pessimism that risks oversimplifying the matter to a mere “prohibition of access” to development, ostensibly in the name of species preservation, often serving as a tactic to sidestep addressing associated problems and maintaining the status quo.

As institutional communicators representing the preeminent educational authority on a global scale we might contemplate a third approach – a judicious realism. This approach refrains from being bedazzled by disproportionate enthusiasm, preventing the reduction of the entire issue to something trivial and inconsequential, innovative merely in an economic sense. Simultaneously, it steers clear of irresponsible panic that might induce a form of abstentionism, recognizing the historical juncture humanity is traversing and acknowledging the role everyone plays in ensuring that every evolution genuinely benefits humanity.

Deliberating on the proactive and anticipatory stance of communication professionals in entities such as episcopal conferences, dioceses, educational and mission centers, this “judicious realism” can be delineated into three overarching attitudes. These attitudes are explicitly designed to place man, his fervour, and the imperative for him to guide machines at the forefront. The objective is to carve out pathways within which these machines operate, employing them to enhance human existence. It is imperative to remember that machines are a product of

human ingenuity. The more sophisticated they become, the more they underscore the sophisticated intellectual prowess achieved by their inventor and developer.

Primarily, it is imperative to rekindle the enthusiasm for *knowledge* within our stakeholders and encourage them to cultivate a discerning awareness. This involves gaining a precise comprehension of ongoing developments, the evolving global landscape, the presented opportunities, and the operational intricacies of innovative machines. Understanding their impact on daily life, their role in nurturing individual passions, their potential risks to freedoms, as well as their capacity to foster relationships and the social fabric of humanity is essential. Furthermore, we must explore how they enhance leisure time and contribute to making individuals more complete, holistic, and distinctive.

Once the dynamics of this evolving landscape are grasped, active participation in its progression necessitates the exercise of *creativity* – a virtue that involves crafting life experiences through imagination by amalgamating ideas, desires, promises, and hopes. Confronting artificial intelligence requires approaching it with a creative spirit, extracting from technologies the elements that can enhance human existence, fulfil needs, and maximize benefits. Ultimately, creativity enables the manifestation of human qualities, the utilization of natural intellect, and the development of skills to devise solutions, innovate, and genuinely be original.

Lastly, the third attitude is *responsibility*. Passivity in the face of technological advancement is not permissible; there exists a moral obligation to engage actively, take initiative, and candidly articulate what is necessary and what is detrimental for the well-being of humanity and its future. Responsibility entails constructing machines with predefined limits, preventing them from surpassing a certain threshold where individual destruction becomes a potential consequence. This approach, rooted in healthy realism with a focus on the individual, avoids pessimism while emphasizing the centrality of the person.

BIBLIOGRAPHY

- Benedict XVI (2006, October 21), *Address at the Pontifical Lateran University*, https://www.vatican.va/content/benedict-xvi/en/speeches/2006/october/documents/hf_ben-xvi_spe_20061021_lateranense.html.
- Blanco P. (2004), *Joseph Ratzinger. Una biografia*, Pamplona: Eunsa.
- Congregation for Bishops (1988, June 29), *Directory for the “ad limina” visit*, https://www.vatican.va/roman_curia/congregations/cbishops/documents/rc_con_cbishops_doc_19880629_visita-ad-limina_en.html.
- Dyrecta Lab, *Robotica e intelligenza artificiale: facciamo chiarezza*, https://www.dyrecta.com/lab/robotica_e_intelligenza_artificiale_facciamo_chiarezza [accessed: 5.02.2024].

- Ferrari, M.A. (2022), *Persona umana*, Roma: Edusc.
- Francalanci L. (2020, September 16), *Algoetica*, <https://accademiadellacrusca.it/parole-nuove/algoetica/18479>.
- Francis (2015a, May 24), *Encyclical letter "Laudato si"*, https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.
- Francis (2015b, December 30), *Message to the Executive President of the World Economic Forum on the occasion of the annual gathering in Davos-Klosters (Switzerland)*, https://www.vatican.va/content/francesco/en/messages/pont-messages/2015/documents/papa-francesco_20151230_messaggio-wef.html.
- Francis (2016a, August 15), *Chirograph of his Holiness Pope Francis by which he names H.E. Msgr. Vincenzo Paglia as the Grand Chancellor of the "John Paul II" Pontifical Institute for Studies on Marriage and Family and President of the Pontifical Academy for Life*, https://www.vatican.va/content/francesco/en/letters/2016/documents/papa-francesco_20160815_chirografo-mons-paglia.html.
- Francis (2016b, November 28), *Address to the participants in the plenary session of the Pontifical Academy of Sciences*, https://www.vatican.va/content/francesco/en/speeches/2016/november/documents/papa-francesco_20161128_pontificia-accademia-scienze.html.
- Francis (2016c, August 17), *Apostolic letter issued motu proprio "Humanam progressionem" instituting the Dicastery for Promoting Integral Human Development*, https://www.vatican.va/content/francesco/it/motu_proprio/documents/papa-francesco-motu-proprio_20160817_humanam-progressionem.html.
- Francis (2016d, October 18), *Statutes of the Pontifical Academy for Life*, https://www.vatican.va/content/francesco/en/motu_proprio/documents/papa-francesco_20161018_statuto-accademia-vita.html.
- Francis (2017a, December 16), *Address to the members of the Italian Periodical Press Union (USPI) and the Italian Federation of Catholic Weeklies (FISC)*, https://www.vatican.va/content/francesco/en/speeches/2017/december/documents/papa-francesco_20171216_stampa-italiana.html.
- Francis (2017b, February 9), *Discourse to the community of "La Civiltà Cattolica"*, <https://www.laciviltacattolica.it/articolo/discourse-of-the-holy-father-francis-to-the-community-of-la-civiltà-cattolica> [accessed: 5.02.2024].
- Francis (2017c, November 23), *Letter to the participants in the international conference "From Populorum Progressio alla Laudato si"*, https://www.vatican.va/content/francesco/en/letters/2017/documents/papa-francesco_20171123_lettera-turkson-encicliche.html.
- Francis (2018a, May 1), *Address to management and staff of the newspaper "Avvenire", with their families*, https://www.vatican.va/content/francesco/en/speeches/2018/may/documents/papa-francesco_20180501_personale-avvenire.html.
- Francis (2018b, January 12), *Message to the Executive Chairman of the "World Economic Forum" on the occasion of the annual gathering in Davos-Klosters*, https://www.vatican.va/content/francesco/en/messages/pont-messages/2018/documents/papa-francesco_20180112_messaggio-davos2018.html.
- Francis (2019a, November 14), *Address to participants in the Congress on "Child Dignity in the Digital World"*, https://www.vatican.va/content/francesco/en/speeches/2019/november/documents/papa-francesco_20191114_convegno-child%20dignity.html.
- Francis (2019b, February 25), *Address to the participants in the plenary assembly of the Pontifical Academy for Life*, https://www.vatican.va/content/francesco/en/speeches/2019/february/documents/papa-francesco_20190225_plenaria-accademia-vita.html.

- Francis (2019c, November 30), *Address to participants at the Children's Global Summit*, https://www.vatican.va/content/francesco/en/speeches/2019/november/documents/papa-francesco_20191130_progetto-yopuedo.html.
- Francis (2019d, September 27), *Address to the participants in the seminar "The Common Good in the Digital Age"*, https://www.vatican.va/content/francesco/en/speeches/2019/september/documents/papa-francesco_20190927_eradigitale.html.
- Francis (2019e, June 10), *Message to the participants in the 108th session of the International Labour Conference*, https://www.vatican.va/content/francesco/en/messages/pont-messages/2019/documents/papa-francesco_20190610_messaggio-labourconference.html.
- Francis (2019f, December 6), *Address to the editorial staff and collaborators of the journal "Aggiornamenti sociali"*, https://www.vatican.va/content/francesco/en/speeches/2019/december/documents/papa-francesco_20191206_rivista.html.
- Francis (2019g, January 6), *Letter to the President of the Pontifical Academy for Life for the 25th anniversary of the establishment of the Academy*, https://www.vatican.va/content/francesco/en/letters/2019/documents/papa-francesco_20190106_lettera-accademia-vita.html.
- Francis (2020a, September 3), *Discorso a un gruppo di esperti che collaborano con la Conferenza dei Vescovi di Francia sul tema della "Laudato si"*, <https://press.vatican.va/content/salastampa/it/bollettino/pubblico/2020/09/03/0436/01006.html>.
- Francis (2020b, February 28), *Address prepared by Pope Francis, read by H.E. Archbishop Paglia, President of the Pontifical Academy for Life*, https://www.vatican.va/content/francesco/en/speeches/2020/february/documents/papa-francesco_20200228_accademia-perlavita.html.
- Francis (2020c, October 3), *Encyclical Letter Fratelli Tutti*, https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20201003_enciclica-fratelli-tutti.html.
- Francis (2020d, December 23), *General audience*, https://www.vatican.va/content/francesco/en/audiences/2020/documents/papa-francesco_20201223_udienza-generale.html.
- Francis (2020e, September 25), *Videomessaggio in occasione della 75ª sessione dell'Assemblea Generale delle Nazioni Unite*, https://www.vatican.va/content/francesco/it/messages/pont-messages/2020/documents/papa-francesco_20200925_videomessaggio-onu.html#_ftn4.
- Francis (2021, March 23), *Message to mark the 150th anniversary of the proclamation of St. Alphonsus Maria de Liguori Doctor Ecclesiae*, https://www.vatican.va/content/francesco/en/messages/pont-messages/2021/documents/papa-francesco_20210323_messaggio-santalfonso.html.
- Francis (2022, March 19), *Apostolic Constitution "Praedicate evangelium"*, https://www.vatican.va/content/francesco/en/apost_constitutions/documents/20220319-costituzione-ap-praedicate-evangelium.html.
- John XXIII (1961, May 15), *Encyclical Letter Mater et magistra*.
- John Paul II (1981, September 14), *Encyclical Letter Laborem Exercens*, https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_14091981_laborem-exercens.html.
- John Paul II (1983, May 20), *Lettera con cui viene istituito il Pontificio Consiglio della Cultura*, https://www.vatican.va/content/john-paul-ii/it/letters/1982/documents/hf_jp-ii_let_19820520_foundation-letter.html.
- John Paul II (1987a, January 31), *Discorso ai vescovi piemontesi in visita "ad alimina apostolorum"*, https://www.vatican.va/content/john-paul-ii/it/speeches/1987/january/documents/hf_jp-ii_spe_19870131_piemontesi-ad-limina.html.

- John Paul II (1987b, September 19), *Apostolic journey to the United States of America and Canada, meeting with the people of Detroit*, https://www.vatican.va/content/john-paul-ii/en/speeches/1987/september/documents/hf_jp-ii_spe_19870919_cittadinanza-detroit.html.
- John Paul II (1988a, June 28), Apostolic constitution *Pastor Bonus*, https://www.vatican.va/content/john-paul-ii/en/apost_constitutions/documents/hf_jp-ii_apc_19880628_pastor-bonus.html.
- John Paul II (1988b, June 5), *Visita pastorale in Emilia – Incontro con il mondo del lavoro agricolo*, https://www.vatican.va/content/john-paul-ii/it/speeches/1988/june/documents/hf_jp-ii_spe_19880605_piazza-cavalli.html.
- John Paul II (1990, November 17), *Discorso in occasione della V Conferenza Internazionale su “La mente umana”*. https://www.vatican.va/content/john-paul-ii/it/speeches/1990/november/documents/hf_jp-ii_spe_19901117_mente-umana.html.
- John Paul II (1991a, February 16), *Discorso ai Vescovi del Piemonte e della Valle d’Aosta in visita “ad limina Apostolorum”*. https://www.vatican.va/content/john-paul-ii/it/speeches/1991/february/documents/hf_jp-ii_spe_19910216_piemonte-aosta-ad-limina.html [accessed: 5.02.2024].
- John Paul II (1991b, May 1), *Encyclical letter “Centesimus annus”*, https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_01051991_centesimus-annus.html.
- John Paul II (1994a, October 28), *Discorso ai partecipanti alla Plenaria della Pontificia Accademia delle Scienze*, https://www.vatican.va/content/john-paul-ii/it/speeches/1994/october/documents/hf_jp-ii_spe_19941028_accademia-scienze.html.
- John Paul II (1994b, January 1), *Lettera apostolica in forma di motu proprio “Socialium Scientiarum”*, https://www.vatican.va/content/john-paul-ii/it/motu_proprio/documents/hf_jp-ii_motu-proprio_01011994_socialium-scientiarum.html.
- John Paul II (1994c, February 11), *Lettera apostolica in forma di motu proprio “Vitae mysterium”*, https://www.vatican.va/content/john-paul-ii/it/motu_proprio/documents/hf_jp-ii_motu-proprio_19940211_vitae-mysterium.html.
- John Paul II (1995a, September 23), *Discorso ai partecipanti al primo incontro dei responsabili delle Settimane Sociali promosso dal Pontificio Consiglio della Giustizia e della Pace*, https://www.vatican.va/content/john-paul-ii/it/speeches/1995/september/documents/hf_jp-ii_spe_19950923_settimane-sociali.html.
- John Paul II (1995b, November 8), *Discorso nel XXX anniversario della Proclamazione della Costituzione pastorale “Gaudium et Spes”*, https://www.vatican.va/content/john-paul-ii/it/speeches/1995/november/documents/hf_jp-ii_spe_19951108_anniv-gaudium.html.
- John Paul II (2002, June 26), *Udienza generale*, https://www.vatican.va/content/john-paul-ii/it/audiences/2002/documents/hf_jp-ii_aud_20020626.html.
- La Bibbia di Gerusalemme* (1999), Bologna: Edizioni Dehoniane.
- Morganti L. (2022, April 5), *Dottori della Chiesa*, [https://www.treccani.it/enciclopedia/dottori-della-chiesa_\(Enciclopedia-dell-Arte-Medievale\)](https://www.treccani.it/enciclopedia/dottori-della-chiesa_(Enciclopedia-dell-Arte-Medievale)).
- Pontifical Academy of Sciences*, www.pas.va [accessed: 5.02.2024].
- Tridente G. (2009), *La morte e i funerali di Giovanni Paolo II nella stampa italiana*, Città del Vaticano: Libreria Editrice Vaticana.
- Tridente G. (2022), *Anima digitale. La Chiesa alla prova dell’Intelligenza Artificiale*, Todi: Tau editrice.

OCENA KOMUNIKOWANIA INSTYTUCJONALNEGO KOŚCIOŁA
W DOBIE SZTUCZNEJ INTELIGENCJI

Streszczenie

W sferze instytucjonalnego komunikowania Kościoła pojawiło się złożone wyzwanie, spowodowane szybkim rozwojem sztucznej inteligencji (AI). Zmiana ta bez wątpienia zwiększyła wiele ludzkich możliwości, ale jednocześnie zrodziła nowe pytania o charakterze antropologicznym i etycznym. Opracowanie ma na celu dokonanie przeglądu refleksji, które pojawiły się w ostatnich latach w tej dziedzinie, a które zostały wyrażone przez Magisterium Kościoła. Podjęta analiza uwzględnia w szczególności wypowiedzi trzech ostatnich papieży, co daje początek dodatkowym inicjatywom podejmowanym przez instytucje Stolicy Apostolskiej, takie jak Akademe Papieskie, oraz rozważaniom zawartym na łamach niektórych publikacji katolickich. Celem podjętych badań jest przedstawienie wiarygodnych „wytycznych”, które w najbliższej przyszłości powinny zostać uwzględnione przez odpowiedzialnych za procesy komunikowania instytucji Kościoła.

Słowa kluczowe: sztuczna inteligencja; Kościół katolicki; komunikowanie