

The Revolution of AI

Resources from Church Social Teaching to Address Anthropological and Ethical Challenges

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Introduction

We are not merely living in an epoch of changes, but in an *epochal change*, as Pope Francis has often said.¹ Among the signs of this transformation is the ongoing digital revolution, with the rise of Generative Artificial Intelligence (GenAI) being one of its most recent and striking manifestations. We now have machines capable of communicating in “natural language” (and in virtually all human languages, as well as some animal “languages”). The use of quotation marks here is intentional, to signal that the term “language” may not mean the same thing when applied to humans, machines, or animals. Nevertheless, anyone who has interacted with ChatGPT (or Gemini, Claude, Grok, Perplexity, or any other AI application) cannot help but be astonished.

We are equally astonished by the current impacts—and even more so by the predicted impacts, though much debated—of this technology on our lives and societies. Work, education, war and peace, medicine, politics, entertainment, culture, and faith: no aspect of human life, institutions, or society seems untouched. Some people are enthusiastic; many are anxious. Most of us probably experience both feelings, depending on the moment or the topic.

As Christians, we are as immersed in this tsunami as anyone else. “The joys and the hopes, the griefs and the anxieties of the men and women of this age, especially those who are poor or in any way afflicted, these are the joys and hopes, the griefs and anxieties of the followers of Christ.”² The opening words of *Gaudium et Spes*, Vatican II’s Constitution on the Church in the Modern World, remain profoundly relevant. It is our duty to address the many challenges posed by artificial intelligence as followers of Christ, with a faith-based perspective. We are encouraged to do so by the substantial body of work already produced by the Vatican, which forms part of the Roman Magisterial Social Teaching of the Church. Among the most important documents are: *Rome Call for AI Ethics* (Pontifical Academy for

¹ For ex: Francis, *Address to the Participants in the Plenary Assembly of the Pontifical Academy for Life* (28 February 2020); Francis, *Christmas Greetings to the Roman Curia* (21 December 2019), www.vatican.va.

² Vatican II, *Gaudium et spes* (1965), 1. www.vatican.va.

Life, 28 February 2020); *Artificial Intelligence and Peace* (Francis, *Message for the LVII World Day of Peace*, 1 January 2024); *Artificial Intelligence and the Wisdom of the Heart: Towards a Fully Human Communication* (Francis, *Message for the LVIII World Day of Social Communications*, 24 January 2024); *Address to the G7* (Francis, 14 June 2024); and *Antiqua et nova. Note on the Relationship Between Artificial Intelligence and Human Intelligence* (Dicastery for the Doctrine of Faith and Dicastery for Culture and Education, 28 January 2025). Significantly, among the first words spoken by newly elected Pope Leo XIV were several references to AI. Explaining to the Cardinals, two days after his election, why he chose the name Leo, he referred to Pope Leo XIII and his historic encyclical *Rerum Novarum*, which addressed the social question of his time. He added: “In our own day, the Church offers to everyone the treasury of her social teaching in response to another industrial revolution and to developments in the field of artificial intelligence that pose new challenges for the defense of human dignity, justice and labor.”³

Why and what does the Church contribute to addressing the challenges related to AI? There are, of course, many ethical questions. AI is a tool, and like any tool, it can be used for good or for harm—to promote respect for human dignity and the common good, to work for justice and peace, or to do the opposite. On any moral or ethical issue, the Church can and should help shed the light of Revelation. However, the matter goes beyond ethics. What is happening with AI (and what began with the emergence of computer technologies a few decades ago, which we can call the digital revolution) affects the very way we understand ourselves as human beings, how we relate to one another, and how we envision and interact with the external world. It is not simply a matter of ethics, but of anthropology. And when it comes to anthropology, the Church has much to contribute. Again, in the words of *Gaudium et spes*: “The truth is that only in the mystery of the incarnate Word does the mystery of man take on light.”⁴ The anthropological concerns raised by the eruption of AI in our lives may benefit from being addressed in the light of Christian Revelation. This is not to say that the Church has all the definitive answers—indeed, the documents I refer to adopt a very humble approach, asking questions and offering paths for reflection rather than issuing dogmatic judgments. Rather, in this epochal change we are experiencing, and in dialogue with various scientific perspectives and lived experiences, the Christian tradition offers resources for the

³ Leo XIV, *Address to the Cardinals*, May 10th, 2025. www.vatican.va.

⁴ Vatican II, *Gaudium et spes*, 22.

necessary collective and personal discernment regarding the production and use of these new technologies.

In this presentation, I will rely on the Vatican's documents, and more specifically on *Antiqua et nova* (AN),⁵ to highlight some key landmarks useful for discerning the challenges posed by AI. First, I will address the anthropological question of intelligence and the difference between human intelligence and what is called “artificial intelligence.” Second, I will present a few general ethical reflections. Third, I will briefly explore some specific questions related to three fields of AI application: peace (and war!), communication, and education.

Human intelligence and “artificial intelligence”

What are we talking about when we speak of “artificial intelligence”? What do we mean by *intelligence*? Can the term “intelligence” be used in the same way for a human being and a smartphone application? The answer is clearly no! To begin, we can draw on philosophical and theological traditions to understand human intelligence from a Christian perspective.

Intelligence is a key feature of the human being, created in the image of God (Gn 1:27). In fact, if there is such a thing as “artificial intelligence,” it is itself a product of human intelligence—the technology was conceived and developed by human minds. This leads to a first positive consideration: AI is the fruit of a gift from God. As *Antiqua et nova* reminds us:

“As Sirach affirms, God “gave skill to human beings, that he might be glorified in his marvelous works” (Sir. 38:6). Human abilities and creativity come from God and, when used rightly, glorify God by reflecting God’s wisdom and goodness” (AN 2).

A first characteristic of human intelligence is rationality. Aquinas, understood intelligence as comprising both *ratio* and *intellectus*. *Ratio* refers to discursive and inquisitive reasoning, while *intellectus* refers to a more intuitive and inward grasp of truth. These two dimensions are deeply interconnected and cannot be separated. In this tradition, “the term ‘rational’ encompasses all the capacities of the human person, including those related to knowing and understanding, as well as those of willing, loving, choosing, and desiring; it also

⁵ Dicastery for the Doctrine of Faith and Dicastery for Culture and Education, *Antiqua et nova. Note on the Relationship Between Artificial Intelligence and Human Intelligence*, 28 January 2025. www.vatican.va.

includes all corporeal functions closely related to these abilities.” (*AN* 15). This highlights that the rational nature of the human being, created in the image of God, is broad and integrated—not reducible to mere logical or computational abilities.

A second characteristic is embodiment. Human faculties must be considered within the framework of embodiment. The mystery of the Incarnation illuminates our understanding of human nature. The human being is both spiritual and material. “The soul is not merely the immaterial ‘part’ of the person contained within the body, nor is the body an outer shell housing an intangible ‘core’” (*AN* 16). Hence, “intellectual faculties of the human person are an integral part of an anthropology that recognizes that the human person is a unity of body and soul” (*AN* 17).

A third characteristic is relationality. Human beings are social in nature and oriented toward communion with God and others. Therefore, “human intelligence is not an isolated faculty but is exercised in relationships, finding its fullest expression in dialogue, collaboration, and solidarity. We learn with others, and we learn through others” (*AN* 18).

A fourth characteristic of human intelligence is its relationship to truth. “Human intelligence is ultimately God’s gift fashioned for the assimilation of truth” (*AN* 21). Human intelligence aspires to a truth that always surpasses what the intellect can grasp – a truth open to realities that transcend the physical and created world.

A fifth characteristic highlighted in *AN* is the connection with the duty of stewardship of the world. “In a proper relationship with creation, humans, on the one hand, use their intelligence and skill to cooperate with God in guiding creation toward the purpose to which God has called it. On the other hand, creation itself, as Saint Bonaventure observes, helps the human mind to ‘ascend gradually to the supreme Principle, who is God’” (*AN* 25).

With all these characteristics, *AN* concludes:

“Human intelligence becomes more clearly understood as a faculty that forms an integral part of how the whole person engages with reality. Authentic engagement requires embracing the full scope of one’s being: spiritual, cognitive, embodied, and relational” (*AN* 26).

Human intelligence is not limited to logical and linguistic abilities. It encompasses other modes of relating to the world.

With this anthropological vision, it becomes clear that, artificial intelligence is of another nature and of a different scope. The use of the same term should not lure us. AI “operates by performing tasks, achieving goals, or making decisions based on quantitative data and computational logic” (*AN* 30). AI has a remarkable capacity to integrate data from multiple fields. It can model complex systems and develop interdisciplinary links. It can help solve problems that cannot be approached from a single perspective. However, AI remains confined to a logical-mathematical framework, which imposes limits. Automated learning differs from the development of human intelligence, which is shaped by bodily experiences and sensory stimuli. Without a physical body, AI relies on computational rationality derived from data collected by humans. “Although AI can simulate aspects of human reasoning and perform specific tasks with incredible speed and efficiency, its computational abilities represent only a fraction of the broader capacities of the human mind” (*AN* 32). AI lacks moral reasoning and the ability to form authentic relationships. It cannot integrate the physical, emotional, social, moral, and spiritual dimensions of life, as a human intellectual person does. “Human intelligence is not primarily about completing functional tasks but about understanding and actively engaging with reality in all its dimensions” (*AN* 33).

In consequence, *AN* highlights:

“Drawing an overly close equivalence between human intelligence and AI risks succumbing to a functionalist perspective, where people are valued based on the work they can perform. However, a person’s worth does not depend on possessing specific skills, cognitive and technological achievements, or individual success, but on the person’s inherent dignity, grounded in being created in the image of God” (*AN* 34).

AI should not be seen as an artificial form of human intelligence, but as a product of it.⁶

Human intelligence and “artificial intelligence” differ fundamentally. Since AI is remarkably good at imitating certain aspects of human intelligence—and is vastly more efficient at performing specific tasks—it is a major challenge to keep this distinction clear. Yet, being aware of the difference can also be a powerful stimulus to deepen our anthropological reflection. What does it mean to be human in the age of AI? What is the human vocation? What does it mean to profess that human beings are created in the image of

⁶ Cf. *AN* 35.

God, and that this is the foundation of their deepest vocation? *Antiqua et nova* opens the path to these questions and alerts us to the depth of the transformation we are undergoing.

The need for ethics

Turning now to ethics, we must recognize that the emergence of AI calls for a renewed capacity for ethical discernment. As Benedict XVI already pointed out in *Caritas in veritate* (2009):

“Technology is highly attractive because it draws us out of our physical limitations and broadens our horizon. But human freedom is authentic only when it responds to the fascination of technology with decisions that are the fruit of moral responsibility. Hence the pressing need for formation in an ethically responsible use of technology.”⁷

This is not merely a matter of how we *use* technology; the *production* and *development* of technology must also be subject to ethical evaluation. As *Antiqua et nova* reminds us, “techno-scientific activity is not neutral in character but is a human endeavor that engages the humanistic and cultural dimensions of human creativity” (AN 36). Pope Francis, addressing the heads of State of the G7 in June 2014, emphasized: “we must remember that no innovation is neutral. Technology is born for a purpose and, in its impact on human society, always represents a form of order in social relations and an arrangement of power, thus enabling certain people to perform specific actions while preventing others from performing different ones.”⁸

At the heart of any ethical discernment concerning technological development are the criteria of human dignity and the common good. Church documents on AI consistently emphasize these principles:

“In order for AI programs to be instruments for building up the good and a better tomorrow, they must always be aimed at the good of every human being.”⁹

“The ends and the means used in a given application of AI, as well as the overall vision it incorporates, must all be evaluated to ensure they respect human dignity and promote the common good” (AN 42).

⁷ Benedict XVI, *Caritas in veritate*, 2009, 70. www.vatican.va.

⁸ Francis, *Address to the G7*, June 14th 2014. www.vatican.va.

⁹ Francis, *Address to G7*.

AI is a tool, and like other tools created by human intelligence, it can be of great help to humanity—or it can be used for harm. A hammer is useful for building a house, but it can also be used to injure or even kill someone! This is also true for AI, but AI is a tool of a new generation and of a much more complex nature. As Pope Francis pointed out, “while the use of a simple tool (like a knife) is under the control of the person who uses it and its use for the good depends only on that person, artificial intelligence, on the other hand, can autonomously adapt to the task assigned to it and, if designed this way, can make choices independent of the person in order to achieve the intended goal.”¹⁰ This ability to make choices is not the same as the capacity to decide. Only someone with freedom—and therefore responsibility—can truly decide. It is therefore crucial never to leave decision-taking in the hands of a machine. Is this principle respected in the way we conceive and use AI tools today? Any person who makes decisions with the help of AI must retain full responsibility for those decisions.

Interestingly, *AN* highlights three categories of moral agents who bear responsibility in relation to AI. First, “it is crucial to be able to identify and define who bears responsibility for the processes involved in AI, particularly those capable of learning, correction, and reprogramming” (*AN* 44). The builders of AI have a moral responsibility. Second, “it is essential to identify the objectives given to AI systems” (*AN* 45). Those who manage and regulate AIs have a moral responsibility. Third, “responsibility in ethical use... is also shared by those who use [those tools].” “Those who use AI to accomplish a task and follow its results create a context in which they are ultimately responsible for the power they have delegated” (*AN* 46). The users have a moral responsibility.

Ultimately, the need for regulation becomes increasingly evident. The role of politics and the responsibility of those in positions of power cannot be ignored. At the end of his address to the G7, Pope Francis reiterated what he had written in *Fratelli tutti*:

“For many people today, politics is a distasteful word, often due to the mistakes, corruption and inefficiency of some politicians. There are also attempts to discredit politics, to replace it with economics or to twist it to one ideology or another. Yet can our world function without politics? Can there be an effective process of growth towards universal fraternity and social peace without a sound political life?”¹¹

¹⁰ Francis, Address to G7.

¹¹ Francis, *Address to the G7*, June 14th 2025; *Fratelli tutti*, 2020, 176. www.vatican.va.

His answer is clear and resolute: “No! Politics is necessary!” Indeed, “regulatory frameworks should ensure that all legal entities remain accountable for the use of AI and all its consequences, with appropriate safeguards for transparency, privacy, and accountability” (AN 46). Such frameworks are also necessary to ensure that uses of AI which violate human dignity or undermine peace are prevented. In his *Message for the World Day of Peace* (January 1st, 2024), Pope Francis called for a “binding international treaty that regulates the development and use of artificial intelligence in its many forms.”¹² We know the challenge is immense, and no regulatory framework will be 100% effective in preventing misuse. Nevertheless, in the face of strong resistance to regulation in the name of entrepreneurial freedom and technological progress, it is all the more important for those who understand the ethical stakes to remind everyone that implementing ethics requires regulation.

Specific questions

Having pointed out anthropological questions raised by the surge of AI and ethical questions at work, I now turn to three specific areas to deepen the reflection and open further debates. These areas—peace and war, communication, and education—are merely examples. *Antiqua et nova* addresses, in its final part, ten specific questions or areas of concern. The three selected here illustrate how the fundamental anthropological and ethical principles previously discussed can guide discernment on AI.

AI for peace ?

The *Message for the World Day of Peace* (January 1st, 2024) was the occasion for Pope Francis to share his first elaborated reflections on AI. This is significant. In the Church’s tradition, peace is never understood merely as the absence of war or conflict. Peace is the fruit of justice., or, to recall the words of Paul VI, “Development is the new name for peace.”¹³ Since AI affects many aspects of social life and raises hopes and concerns regarding justice and human dignity, it is natural to connect reflections on AI with the pursuit of peace. However, there are also very specific concerns related to warfare that must be addressed. Technological developments have long transformed the way war is waged. The production of increasingly sophisticated weapons brings new ethical challenges. AI takes this a step further—a huge and particularly worrying step. Let us list some key ethical concerns highlighted by the pope.

¹² Francis, *Message for the World Day of Peace*, January 1st 2025, 8. www.vatican.va.

¹³ Paul VI, *Populorum progressio*, 1967, 76-80. www.vatican.va.

First, “the ability to conduct military operations through remote control systems has led to a lessened perception of the devastation caused by those weapon systems and the burden of responsibility for their use, resulting in an even more cold and detached approach to the immense tragedy of war.”¹⁴ Second, there is the issue of autonomous lethal weapons rendered much more numerous and efficient by AI. “Autonomous weapon systems can never be morally responsible subjects. The unique human capacity for moral judgment and ethical decision-making is more than a complex collection of algorithms, and that capacity cannot be reduced to programming a machine, which as ‘intelligent’ as it may be, remains a machine. For this reason, it is imperative to ensure adequate, meaningful and consistent human oversight of weapon systems.”¹⁵ Third, we cannot “ignore the possibility of sophisticated weapons ending up in the wrong hands, facilitating, for instance, terrorist attacks or interventions aimed at destabilizing the institutions of legitimate systems of government.”¹⁶

Hence, the concluding words of *Antiqua et nova* on these matters:

“To prevent humanity from spiraling into self-destruction, there must be a clear stand against all applications of technology that inherently threaten human life and dignity. This commitment requires careful discernment about the use of AI, particularly in military defense applications, to ensure that it always respects human dignity and serves the common good. The development and deployment of AI in armaments should be subject to the highest levels of ethical scrutiny, governed by a concern for human dignity and the sanctity of life” (*AN* 103).

Communication, information and disinformation

In the field of communication and information, *Antiqua et nova* notes: “AI could be used as an aid to human dignity if it helps people understand complex concepts or directs them to sound resources that support their search for the truth” (*AN* 85). However, AI can also produce false information. This may happen “involuntarily,” due to the nature of generative AI, which relies on statistical calculations and can generate so-called “hallucinations”—plausible results that are not actually true. AI can also be used intentionally to produce falsehoods, such as in the case of fake news.

¹⁴ Francis, Message World Day of Peace, 2024, 6.

¹⁵ Ibid.

¹⁶ Ibid.

This raises the need for strong regulation. The issue is serious:

“By distorting our relationship with others and with reality, AI-generated fake media can gradually undermine the foundations of society. This issue requires careful regulation, as misinformation—especially through AI-controlled or influenced media—can spread unintentionally, fueling political polarization and social unrest. When society becomes indifferent to the truth, various groups construct their own versions of facts, weakening the reciprocal ties and mutual dependencies that underpin the fabric of social life” (AN 88)

Importantly, countering AI-driven falsehoods is not only the responsibility of technicians and experts. It is a shared responsibility. “This calls for the ongoing prudence and careful discernment of all users regarding their activity online” (AN 89).¹⁷

Education

AI is already present in many educational settings, with students often more advanced than their teachers in using it! The challenges are numerous. Drawing on *Antiqua et nova*, we can highlight some key concerns and guiding principles.

“Education is never a mere process of passing on facts and intellectual skills: rather, its aim is to contribute to the person’s holistic formation in its various aspects (intellectual, cultural, spiritual, etc.), including, for example, community life and relations within the academic community, in keeping with the nature and dignity of the human person” (AN 77). The relationship between teacher and student is therefore crucial. Physical presence fosters a relational dynamic that AI cannot replicate. On one hand, AI can offer personalized support and immediate feedback tailored to students’ needs. On the other hand, “the extensive use of AI in education could lead to the students’ increased reliance on technology, eroding their ability to perform some skills independently and worsening their dependence on screens” (AN 81). A key question is whether a particular use of AI fosters critical thinking or merely provides ready-made answers. As in other fields, “a decisive guideline is that the use of AI should always be transparent and never misrepresented.” (AN 84)

¹⁷ On these topics, it is worthwhile to read two recent documents from the Vatican: Dicastery for Communications, *Towards Full Presence: A Pastoral Reflection on Engagement with Social Media*, 28 May 2023; Francis, *Message for the LVIII World Day of Social Communications*, 24 January 2024. www.vatican.va.

As a way of concluding, let us recall the words of the French Catholic author Georges Bernanos. Writing well before the advent of AI—and even before the digital revolution began—he nonetheless captured the essence of the challenge that technological progress poses to humanity. His insight applies perfectly to our current situation:

“the danger is not in the multiplication of machines, but in the ever-increasing number of people accustomed from their childhood to desire only what machines can give.”¹⁸

This warning remains deeply relevant. The rise of artificial intelligence is not only a technical or economic issue—it is a profoundly human and spiritual one. It challenges us to reflect on what it means to be human, to live in relationship with others, and to seek truth, justice, and peace in a world increasingly shaped by machines.

As Christians, we are called to engage with these questions not from a place of fear or naïveté, but with discernment, hope, and responsibility. The Church’s social teaching, offers valuable resources for this task. It invites us to uphold the dignity of every person, to promote the common good, and to ensure that technology remains at the service of humanity—not the other way around.

¹⁸ G. Bernanos, “La révolution de la liberté” (1944), in Id., *Le Chemin de la Croix-des-Âmes*, Rocher 1987, 829. Quoted in *AN* 112.