

Leo XIV on the Age of Artificial Intelligence

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At a time when negative news is accumulating, the head of the Catholic Church has published an encyclical bearing the hope-awakening title *Magnifica Humanitas* (translated into English as "humanity in [all] its grandeur", but also implying "humaneness"). As a papal encyclical, it is addressed not to specialist theologians, but to all the faithful and, moreover, like Christianity in general, to "all people of good will".

Its subject matter, artificial intelligence, has long been a core theme of public debate, with new contributions arriving daily. In this discourse, extreme positions frequently take centre stage, as both enthusiastic proponents and fierce opponents—euphoric endorsement and prophetic warnings of an AI apocalypse—more readily attract attention than the objective alternative of knowledgeable and meticulous judgements. Yet, only the latter are rational: those reflections that consider both advantages and disadvantages, weigh them soberly, and first seek a neutral definition. Anyone reading the encyclical—whether Christian or non-Christian—can undoubtedly classify it among this type of text; indeed, one might even consider it exemplary. It not only eschews all alarmism but, crucially, operates at a deeper level than usual by asking which side, the proponents or the sceptics, bears the burden of proof. It answers with an attitude that transcends the opposing stances of trust and mistrust, consistently linking it to everyday virtues such as caution and prudence.

Even those who do not evaluate the text so positively should find it of interest for two reasons. It was authored not by just anyone, but by a person who presides over a global church of 1.4 billion members; furthermore, these reflections draw upon sources distinct from those of secular voices, such as entrepreneurs, politicians, and opinion leaders.

In a first step, I shall outline the extensive and, in many respects, intricate thematic field of the encyclical, before discussing several elements in greater detail in a second step, and finally offering a brief assessment.

I. The Broad Thematic Field

The encyclical continues the tradition of Catholic social teaching applied to a far from traditional subject: artificial intelligence. This social teaching, defined as "reflection on society, the economy, and politics" (n. 3), began with the encyclical *Rerum Novarum* (1891) by Pope Leo XIII. Through its "principles for thought, criteria... and concrete guidelines for action" (n. 3), it sought then, as it does today, to identify and address "the challenges of the present" (n. 3) "in dialogue with the human sciences" (subtitle immediately before n. 23) within a Christian spirit.

Explicitly marking the 135th anniversary of *Rerum Novarum* ("Of New Things"), the current Pope, whose chosen name Leo evokes his relevant predecessor, has published his first encyclical. Written during the second year of his pontificate, signed on 15 May 2026, and presented ten days later, the document interprets the present as the age of artificial intelligence. It calls for the preservation of the *humanum* in these times, and to this end, familiarises itself with the capabilities of AI, delineates the threats it poses, and identifies the tasks required to overcome them.

Comprising 245 paragraphs, the document is well-composed, though it could admittedly have been formulated more concisely in places. A lengthy introduction is followed by five substantial chapters and an extended concluding section. There are no fewer than 224 endnotes, whose countless references to prior socio-ethical texts demonstrate how the reflections on this new field, artificial intelligence, seamlessly integrate into the established tradition, including works by the Doctors of the Church, Augustine and Thomas Aquinas (Only five authors fall outside this category, listed in the order they appear: V. Frankl, H. Arendt, Plato, and P. de Bérulle. In the main text, additional figures are mentioned, such as Romano Guardini, Beethoven, Picasso with his painting *Guernica*, Schindler as the titular figure of the film,

and other human role models like Martin Luther King Jr. and Mother Teresa of Calcutta).

While conventional authors tend to emphasise their originality, Leo XIV explicitly rejects this approach. Despite the paramount authority and significance vested in him as Pope, an intellectual humility comes to light, which, moreover, can already be found in his predecessors and in the Second Vatican Council. This does not, of course, imply a failure to deliver an "original contribution" to the respective challenges of the time, a point which the Pope also emphasises.

The attention that the encyclical has received so far is frequently confined to specific excerpts. To counteract the inherent risk of one-sidedness, we shall present its broad thematic scope. This task is facilitated by the outline placed before the "Introduction" in the encyclical. However, this structure is not sufficiently expressive on its own to prevent one-sided interpretations.

The 16 paragraphs of the "Introduction" state that the task of every generation is "shaping its own era" (n. 1) in such a way that "the dignity of every person is safeguarded, justice is promoted, and fraternity is made possible" (n. 1). The introduction considers history to be the "place where the Gospel challenges and directs human experience" (n. 2), and views today's *res nova*—the current innovation with its rapid and profound transformation of the world—as possessing a significance no less than that of a true epochal shift. In contrast to blanket critics of the development of "digitalisation, artificial intelligence (AI), and robotics" (n. 4), the Pope asserts that technology has in fact "significantly improved the living conditions of humanity" (n. 4). However, contrary to outright proponents, he notes that it also contains an "ambiguity" (n. 4).

The Pope identifies another novelty in the shift of the relevant actors: "In the past, it was largely up to the State to guide and direct innovation. Today, however, the main drivers of develop-

ment are private, often transnational" who possess unprecedented power superior to that of many governments (n. 5). Nevertheless, as we read in mid-June 2026, a government—in this case, that of the USA—can impose strict export controls on a company specialising in artificial intelligence, Anthropic, for two of its most powerful models, Mythos 5 and Fable 5.

To the question of which direction we as humanity and as peoples should take, the Pope responds with two biblical images: the Tower of Babel, "built on pride and the claim to self-sufficiency" (n. 7), and the reconstruction of the completely destroyed Jerusalem, "through the shared responsibility of all" (n. 8).

Under the rubric "Building for the Common Good", the encyclical outlines four requirements for a world in "in all its fullness" (Jn 10:10) (n. 11): communion with God, an acknowledgment of human limitation and weakness without viewing them as flaws, and a shared responsibility. According to this responsibility, everyone—"scientists and researchers" (notably mentioned first), "entrepreneurs and workers, educators and legislators, civil society, popular movements, and", mentioned only last, "faith communities" (n. 13)—should, in contrast to "naive enthusiasm" and "unfounded fears", commit themselves to the fourth requirement: employing a language that neither demeans nor sets people against one another (n. 14).

First chapter: "A Dynamic Approach Faithful to the Gospel"

This traces in detail, through six argumentative steps, the path taken by Catholic social teaching in the "recent magisterium" of the Popes (nn. 37-44) and the "years of the Second Vatican Council" (nn. 33-36). At the outset of these 28 paragraphs, the "full autonomy" (n. 21) of both the ecclesial and the political communities is emphasised regarding the core task of developing "the contributions of philosophy and of the human and social sciences" to apply criteria of justice and peace to the "complex situations of our time" (n. 23). Social teaching, in turn, is viewed as that "process of shared discernment" which draws sustenance from the diverse cultures and traditions of the single human family (n. 27).

The subsequent outline of this

development—presumably so detailed because it is scarcely known outside specialist circles—first highlights the essential assertions of the encyclical *Rerum Novarum* (here condensed): the dignity of work and of the worker, the right to a just wage, the primacy of the human being over capital and profit, the defence of private property, and alternative forms of social cooperation to 'class struggle' (n. 30).

The next encyclical, *Quadragesimo Anno*, published in the midst of the Great Depression, denounces—according to Leo XIV—"the concentration of economic power in the hands of a few", criticises "both unlimited competition and collectivist projects that undermine . . . freedom", reaffirms the workers' right of association, and stresses "the requirement that wages be proportionate not only to performance but also to the needs of workers and their families" (n. 31). However, this raises the question of whether an employer can legitimately compensate a father of several children more highly than a childless bachelor for the exact same work. This seems to be a matter required of legislation, encompassing aspects such as child benefits, tax incentives, and pension advantages.

With John XXIII, the encyclical continues, the global dimension of social questions and the language of rights are more emphasised. The Pastoral Constitution of the Second Vatican Council, *Gaudium et Spes* ("Joy and Hope"), "addresses the major issues of marriage and the family, economic and societal life, the political community, war and peace", maintaining that "economic and institutional structures are just only to the extent that they serve the integral development of the person and promote the responsible participation of all" (n. 34).

In the encyclical *Sollicitudo Rei Socialis*, as explained by the text, Pope John Paul II laments the evils of underdevelopment and "denounced" the global economic, financial, and trade mechanisms controlled by stronger countries that suffocate weaker ones (n. 38). On the centenary of *Rerum Novarum*, he advocated—albeit not uncritically—for democracy and the market economy in light of the collapse of the Soviet system (n. 39).

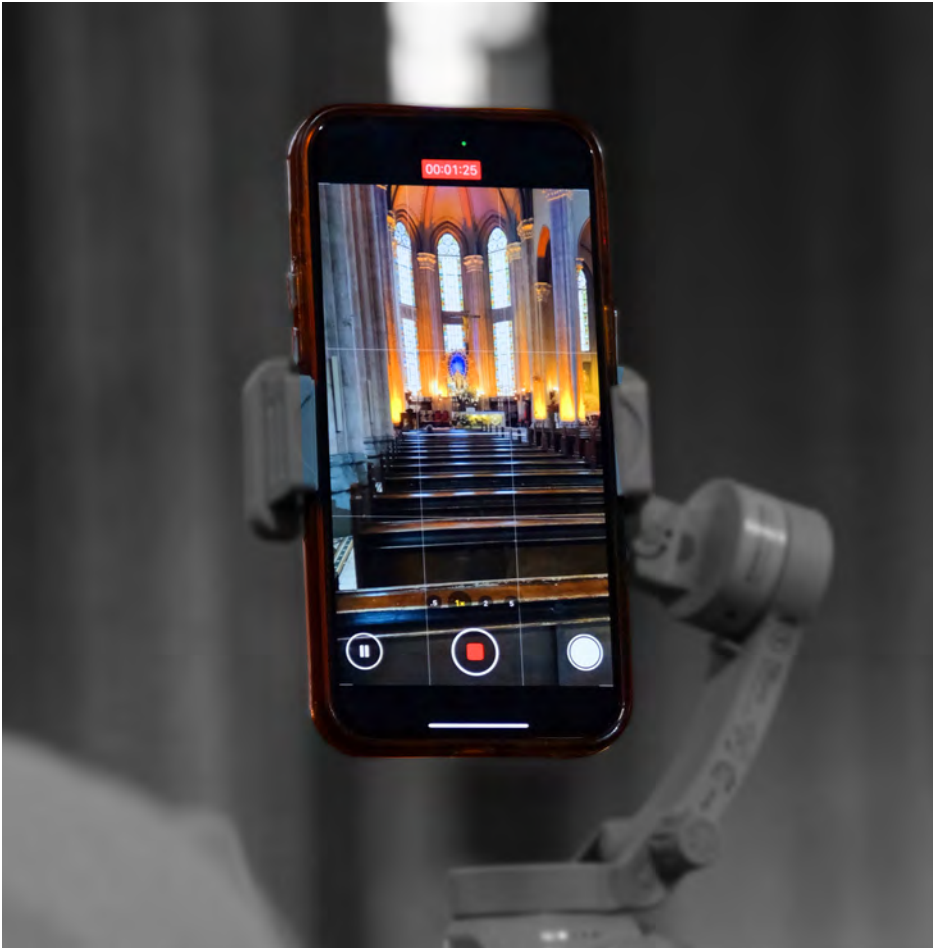
His successor, Benedict XVI, demands in *Caritas in Veritate* ("Charity in Truth") that economic progress include all nations, respect the limits of creation, and—not unproblematically for a secular constitutional state—accord a decisive role to charity in public life (n. 41). According to *Evangeliium Gaudium* ("The Joy of the Gospel") by his successor Francis, the Church must be capable of "listening to the cry of the poor, migrants, and the victims of new forms of slavery" (n. 42). In *Laudato Si'*, the demand for an "integral ecology" is added (n. 43).

Second Chapter: "Foundations and Principles of the Social Teaching of the Church"

According to the 43 paragraphs of this chapter, social teaching is primarily concerned with three perspectives: the status that undoubtedly ennobles human beings—being the image and likeness of the Triune God (though the Trinity is, of course, not mentioned in the relevant passages of Genesis); the equal "ontological" dignity of all human beings as being "willed, created, and loved by God" (n. 52); and finally, the inalienable human rights, beginning with the—unquestionably controversial—"right to life, from conception to its natural end" (n. 55), an acknowledgment with which, admittedly, both major German churches struggled for a long time.

The subsequent principles do not begin with personhood, as is frequently the case, but rather with the common good—carrying a risk, which the encyclical largely evades, of assigning greater weight to the social dimension over personal responsibility. The common good must be pursued not only within a state but also within a global framework, given that "the earth's goods—soil, water, air, natural resources—are given by God to the entire human family" (n. 65). Among the goods universally intended for all human beings, the Pope explicitly and topically includes "new forms of property": "patents, algorithms, digital platforms, technological infrastructures and data" (n. 67). Consequently, he declares that these goods must not "remain concentrated in the hands of a few, without adequate forms of sharing and access" (n. 67). How this is to be achieved, however, remains—understandably?—unspecified.

Next appears a principle that one would wish to see carry great weight in



non-ecclesial debates as well: subsidiarity. According to this, "the role of individuals, families, local communities, and intermediary organizations should not be supplanted by higher authorities" (n. 68). The encyclical—wisely?—refrains from making any concrete proposal on how to prevent novel decision-making processes, such as "in the governance of data and algorithms", from being determined solely by a few actors (n. 72).

The third principle, that of solidarity, is said to be rooted in "human and supernatural fraternal bonds" (n. 73). It silently rejects the common understanding of one-sided assistance. It states that "each person, both individually and collectively" (n. 73), within the scope of their capabilities, must assume "responsibility for the life and the wounds of the brother and sister" (n. 74) and recently—undoubtedly an important point—ensure that not only the natural environment but "also the 'digital ecosystem' can be preserved" and shared collectively, rather than being "exploited" and "monopolized" (n. 76).

This is followed by the principle of social justice—particularly popular in German debates. This concerns "not only the behavior of individuals, but also...

the structures of society", which should enable "everyone—particularly the weakest—to live a truly dignified life" (n. 77). Two areas of responsibility are highlighted here: the digital revolution (n. 80) and the situation of "migrants, refugees, and those forced to move due to poverty, violence, climate change, and environmental disasters" (n. 81).

Under the heading "An examen for the Church", the encyclical demands for the Church itself—something frequently found lacking hitherto—a "culture of transparency, accountability, and evaluation" (n. 86). In other words, it calls for the greatest possible disclosure.

The second chapter concludes with the sentence: "In this way, the Church will be able to bear credible witness to society that seeking the common good together, with shared responsibility and fraternity, is not a utopia, but a real possibility" (n. 89). Is it unfair to ask at this juncture how this comports with the male privilege of ordination to the priesthood?

The subject matter that had previously been of only concurrent significance—artificial intelligence, alongside the cognitive sciences, nanotechnology, robotics, and biotechnology—becomes the main theme in the third chapter.

Third Chapter: "Technology and Dominance. The Grandeur of Humanity in Light of the Promises of AI".

The 40 paragraphs of this chapter open with the section "The technocratic paradigm and digital power". Once again, technological progress is evaluated on the one hand as positive and "valuable" (n. 94). On the other hand, however, it is linked to the danger of advancing "without a corresponding ethical and social progress" (n. 94). Indeed, the necessary control frequently rests "not . . . with states, but with major economic and technological actors" (n. 95). These are well known to be the "Magnificent 7" (or Big Tech), without the Pope needing to name them: Apple, Microsoft, Alphabet, Amazon, Meta, Nvidia, and Tesla.

The subsequent section, "Artificial Intelligence", wisely avoids a "single, comprehensive definition", but offers a compelling description: AI "systems merely imitate certain functions of human intelligence. In doing so, they often surpass human intelligence in speed and computational capacity", which, however (condensed here), "remains entirely tied to data processing" (n. 99). The Pope rightly speaks, therefore, of only "so-called artificial intelligences". For they "do not undergo experiences, do not possess a body, do not feel joy or pain . . . and do not know from within what love, work, friendship, and responsibility mean. Nor do they have a moral conscience" (n. 99).

Furthermore, they "weaken personal creativity and judgement" (n. 100). Moreover, the omnipresent AI systems consume "enormous amounts of energy and water", thereby increasing carbon dioxide emissions, which necessitates "more sustainable technological solutions" (n. 101). Not least, AI has become a power that threatens to dominate us. "For this reason, merely regulating it is insufficient: it must be disarmed, welcoming and accessible" (n. 110). An option not mentioned here, functioning merely as an emergency brake, would be to disconnect the electricity supply.

Thereafter, the encyclical confronts two ideological currents: transhumanism, which seeks to enhance human capabilities through technology, and posthumanism, according to which "humanity surpasses itself in a new evolutionary stage" (n. 116). By contrast, authentic culture and art, the Pope explains, prevent the

normalisation of evil, citing three works of "almost prophetic significance" to illustrate this: "Beethoven's Ninth" (specifically the final chorus, "Ode to Joy") "as a desire for unity; (Picasso's) *Guernica* as a denunciation of dehumanisation; (the film) *Schindler's List* as a call not to consign the past to oblivion" (n. 122).

Towards the end of the third chapter, prominent institutions such as the Red Cross, the founding of the United Nations with the Universal Declaration of Human Rights, and the Geneva Refugee Convention are highlighted (n. 123), alongside exemplary individuals like Martin Luther King Jr., Mother Teresa of Calcutta, and Maria Montessori (n. 124). Following this, the Pope declares the true meaning of "more than human" (n. 126 & n. 127): the grace of God and a Christian humanism that "does not reject science and technology", but views them "with gratitude and realism and grounds them within a higher vocation" (n. 129).

Fourth Chapter: "Safeguarding Humanity at a Time of Transformation: Truth, Work, Freedom"

Applying what it considers to have been more general analyses up to this point, the Pope here directs a concrete gaze across 50 paragraphs at three subject areas.

Under the rubric "Truth as a Common Good", he takes a stance on current debates without needing to mention them explicitly, pleading that the power over the "collective imagination" held by digital platforms and media should "not become an instrument of excessive distraction, homogenization or dominance, but rather a setting within which inner freedom and critical thought can mature" (n. 136). We must establish norms, "so that the decision-making behind the content selection and dissemination" should be made more transparent, serious journalism strengthened, and the capacity to synthesize knowledge and verify facts cultivated within universities (n. 137). Injustice and abuse within the Church must also be brought to light (n. 138). Finally, the school is "not called to follow the pace of the digital world, but to offer that which the digital sphere by itself cannot provide, namely a shared time for learning and developing trustworthy relationships" (n. 147).

In the second area, "The dignity of

work at a time of digital transformation", work is not "merely a source of income", but must also be recognised as "a crucial sphere in which identity is formed, friendships and relationships are forged, practical responsibilities are learned, and one's vocation is discerned" (n. 167). Because of this significance, the "pursuit of greater profits cannot justify choices that systematically sacrifice jobs" (n. 152).

Regarding the financial sector, it is stated that it must not exist "for its own sake", but must rather stand "aimed at the development, creation and evolution of work" (n. 160). While one certainly need not contest this demand, a legitimate core function—the provision of an efficient credit system—is overlooked in this formulation.

According to the third main section,



The actual state of affairs regarding this matter is contested today. Proponents point to many newly created jobs, whereas critics fear that the net loss of employment will be greater. The Pope contents himself with an unquestionably sensible criterion: any introduction of automation and AI should "be accompanied by verifiable measures to protect the employment, retraining and participation of workers" (n. 156). Furthermore, "continuous training and professional transitions" are required (n. 156).

"Protecting freedom from dependencies and commercialization", there is an "urgent need" for the following for the sake of "inner freedom": "education in digital sobriety and the protection of minors, thus countering models that exploit vulnerability" (n. 170). To prevent new technologies from "business models that thrive on human weakness", there is a need for "clear rules, transparency, the possibility of recourse, and proportionate limits on the use of intrusive technologies" (n. 171).

Thereafter, the Pope engages once more in ecclesial self-criticism: slavery was condemned too slowly. "It was only in the nineteenth century that a formal, absolute, and universal condemnation of slavery was clearly articulated" (n. 176). In addition, he denounces a new form of colonialism. In doing so, he aptly speaks of "new 'rare earths' of power", referring to "health data, epidemiological profiles, genetic maps, and demographic information" (n. 178).

Fifth Chapter: "The Culture of Power and the Civilization of Love"

This title alludes again to the antithesis between the Tower of Babel, with its principle of power, and the reconstruction of Jerusalem, governed by the principle of love. The Pope laments a "troubling revival of war as an instrument of international politics" (n. 190), visible, for instance, in the "growth of the military-industrial complex" (n. 193). Here, however, one notes the absence of a distinction between armaments serving self-defence and those in the service of aggression.

By contrast, unreserved agreement is merited by the observation: "In an increasingly interdependent world, peace is not simply one issue among others, but a prerequisite for the universal common good and a test of the moral maturity of peoples, especially of those who bear responsibility for governing" (n. 182). No less compelling is the statement: "The digital revolution is changing the nature of conflict. Alongside conventional warfare, there are hybrid forms such as cyberattacks, information manipulation, campaigns of influence, and the automation of strategic decisions" (n. 183).

The Pope regards the 2021 Treaty on the Prohibition of Nuclear Weapons as "an important step", yet is realistic enough to deem it "largely symbolic", since "the major nuclear powers have not agreed to it" (n. 194). With equal openness to reality, he points to "new armed operatives, such as jihadist groups, private militias and criminal networks", interpreting them as marking "the end of the state monopoly on violence" (n. 196).

For rational judgement-forming in an age shaped by AI, he designates three "concrete criteria": (1) The "decision to strike" must not be automated; rather, the "chain of responsibility must be identifiable and verifiable"; (2) "For irre-

versible decisions", speed and efficiency must "never be the supreme motivating force"; (3) The "identification and protection of civilians" (n. 199).

In the subsequent area, the significance of AI does not—yet?—seem to play the major role ascribed to it by the encyclical: "[c]ooperation for development, disarmament, conflict prevention, and the establishment of mutual trust are neglected in the name of power politics" (n. 203). This lesser significance may also apply where the Pope warns against a "historical nihilism" that indulges in the illusion that the atrocities of the 20th century could not recur, and finally, where he fears new, even more dangerous wars that no longer recognise ethical boundaries, as hospitals, schools, or vital infrastructure are bombarded (n. 204).

Against a "world in a state of perpetual conflict" (n. 210), which the Pope fears, he advocates for that "civilisation of love" spoken of in the title of this chapter which does not naively deny evil, but offers active resistance. He rightly declares that it is not only rulers, but rather everyone who can make a contribution here. An important element in this consists of a "culture of negotiation" to "gradually lead humanity away from the cycle of violence" (n. 221).

In the extended "Conclusion", the encyclical reaffirms several of its core insights and demands: in keeping with its title, "The Grandeur of Humanity", in the age of AI "we are called to cooperate in the work of creation, rather than be disinterested observers of technological processes that limit our freedom and responsibility" (n. 233). The Pope concedes that "machines excel in efficiency", but continues: "a human face that asks to be gazed upon remains the center of history" (n. 233). The corresponding world has "our relationship with God at its center. Our rule must be the acceptance of human limitations as a natural and positive reality, and should be characterised by shared responsibility and a language characterized by the Gospel", which is pre-eminently a language of love directed not least towards justice and peace (n. 236).

At the end, the encyclical outlines a four-part "program for a Christian life" (n. 243). In accordance with the familiar three theological virtues, it begins with faith in God, continues in the love "whi-

ch unites us into one ecclesial body", and the "hope which sustains our actions in the world" (n. 243). To this, it appends prayer—"so that", in the final words of the encyclical, "we may bear witness to the grandeur of humanity in which God has made his dwelling" (n. 245).

II. Particular Themes

For a closer evaluation of the encyclical, one theme shall be selected from each chapter, the introduction, and the conclusion respectively; however, a prior question must be posed: if one were to synthesize all passages of the documents appearing in the text and delimited in the endnotes into a single programme within Catholic social teaching, and combine them with the thematic field of Artificial Intelligence, could the encyclical have been composed artificially—for instance, with ChatGPT—without the assistance of the author, Pope Leo XIV? In the event of a positive answer, ought one to admire the AI or rather be alarmed by its capabilities? Or is the answer negative because, as the Pope repeatedly points out, it lacks the human capacity for judgement indispensable for intelligent texts?

The Pope is not parsimonious in showing high esteem for artificial intelligence. While some might have anticipated an underlying tone of scepticism, he comprehensively and thoroughly delineates its great possibilities and its potential to improve human living conditions. Yet, he also emphasises that AI, rather than being invariably beneficial, can also bring about the opposite.

The Introduction elucidates this ambivalence via two images drawn from the Bible: the Tower of Babel and the collective reconstruction of the destroyed Jerusalem. Why the first image corresponds to the wrong path is not immediately self-evident. For why should it be a flaw that, as the relevant passage in Genesis (Ch. 11) states, "the whole earth had one language and the same words"? ¹As noted, one could see in this the symbol of a globally shared international law—hence, a rational institution. Furthermore, the continuation of the biblical passage—deciding to build a tower "to make a name for ourselves"—need not in itself constitute an offence. This occurs only because "its top may reach unto heaven", resulting in the license to do or omit whatever one pleases. To prevent this—humanity exalting itself above all

obligations—God decides to go down and "confuse their language there, so that they will not understand the speech of one another" (Gen 11:7).² According to the encyclical, the wrong path thus corresponds to the "pride and the claim to self-sufficiency" (n. 7) that dominates the building of the Tower of Babel, whereas the correct path lies in the reconstruction of a destroyed city undertaken through the shared responsibility of a people.

Later, this alternative is also interpreted as the antithesis between a culture of power and a civilisation of love. Applied to artificial intelligence, the Pope welcomes AI as forward-looking progress—provided that it does not develop the dangerous independent existence designated as a "culture of power", but instead submits to a control serving the common good of humanity, ambitiously termed the "civilization of love".

In the social teaching developed in the first chapter, the combination of self-assurance and self-limitation is striking. That "full autonomy" (n. 21) is conceded to both the ecclesial and the political communities does not imply that the Church must content itself with a gaze fixed on the hereafter, cultivate exclusively its specific features like liturgy and spirituality, and renounce all socio-ethical reflections on AI. Rather, it means that Church and politics may each pursue their own path, while being called to dialogue with one another.

The "autonomy of earthly realities" (n. 18), which the Pope emphatically acknowledges, undoubtedly encompasses the invention of AI and its continuous further development, as well as its consequences for the economy, society, and politics—such as the partly positive, partly negative transformation of the world of work. The autonomy of the Church, by contrast, consists in the right to examine artificial intelligence according to its own criteria, evaluating the extent to which it satisfies the guiding principle of humanity and the principles of the common good, subsidiarity, solidarity, and social justice.

From the second chapter, on the "Foundations and Principles of the Social Teaching of the Church", we highlight the core concept of the human being as the image and likeness of God. At first glance, this notion may appear difficult for non-believers to grasp; however, upon closer explanation, this is no longer the

case: the unique dignity of the human person, it is stated, does not depend—meaning it must not depend—"on a person's abilities, wealth, or position in life, nor on the right or wrong choices made" (n. 50).

This requirement aligns with key declarations of the United Nations and thus amounts to a globally recognised concept: that of inviolable human dignity and the human rights derived from it. Whether the corresponding documents, such as the constitution of Germany (its Basic Law), are religiously inspired or have a purely secular background, a fundamental consensus emerges here in which humanity ought to rejoice: regardless of other differences and the sometimes fierce controversies surrounding them, there is, encouragingly, a basic commonality.

It is self-evident that the Pope invokes "his" tradition, the (Judeo-)Christian one, in this context. He is, after all, primarily responsible for it, and addresses his encyclical to the members of "his" Church. On the other hand, he does not restrict the significance of his reflections to "his" audience, namely Catholics. Rather, since its inception, Catholic social teaching has addressed all Christians and, far beyond them, the whole of humanity. For this purpose, while the Pope takes biblical language as his starting point, he additionally invokes universally recognised principles by referencing human dignity and human rights.

Their more precise significance for artificial intelligence and its neighbouring developments—"cognitive sciences, nanotechnology, robotics, and biotechnology" (n. 93)—is examined in the third chapter: "Technology and Dominance". As the subtitle puts it, the crux of the matter is to recognise and acknowledge "the grandeur of the human person in light of the promises of AI". This task has two facets: human beings appears great—indeed, magnificent, in keeping with the title of the encyclical—because, with the digital revolution, they once again demonstrate their supreme creativity. Yet, the revolution also harbours excessive dangers, which human beings—constituting the second facet of their greatness and magnificence—are capable first of discerning, and subsequently of overcoming.

This discernment begins with an insight into the limits of capability, owing to which—though the Pope does not state

it so explicitly—artificial intelligence is not intelligence in the full sense of the word, but, at best, intelligence in inverted commas. In essence, it is nothing other than data processing, albeit in a form magnified to a near-monstrous degree. To cite just three examples, it can defeat chess grandmasters, solve mathematical problems that have hitherto baffled the greatest mathematicians, or compose so-called opinion pieces in national daily newspapers—a practice for which those responsible have, however, been sharply criticised.

Yet, AI lacks the capacity to experience, to feel joy and pain, and, possessing no conscience, to distinguish between good and evil. To take a recent example: certain companies promise that humanoid robots will soon be deployed in care homes. Whether this can be deemed humane is, however, highly open to doubt; for these supposedly human-like devices lack much of what characterises human beings and what those in need of care unquestionably require: a human face, in which one can, hopefully, discern understanding and compassion; human hands to press, stroke, or embrace someone depending on the situation; a human ear that listens; a human voice that offers comfort; and a human spirit that perceives and fulfils these and other tasks.

As is well known, monopoly-like conditions prevail among the corporations driving AI. The "Magnificent 7" (or Big Tech), as they are called—Apple, Microsoft, Alphabet, Amazon, Meta, Nvidia, and Tesla—possess an economic and, de facto, political power that a global community committed to legal rules and their effective enforcement cannot simply accept. However, it currently possesses scarcely any effective means of control (at most, as stated above, a government can prohibit the export of powerful AI programmes). The Pope perceives this problem. Without naming the Magnificent 7 explicitly, he emphatically denounces the contemporary world, "where data, computational resources and regulatory power remain in the hands of a few" (n. 109). This "new epistemic, economic, and political asymmetry" (n. 109) must first be exposed and subsequently—herein lies the second facet of human greatness—be effectively overcome in accordance with the principles of the common good, subsidiarity, solidarity, and social justice.

The fourth chapter, "Preserving the Human in Times of Change", refers to three factors for this purpose: "Truth, Work, Freedom". Of these, let us select the middle factor. Work has formed a core theme in Catholic social teaching since *Rerum Novarum*, being considered the key to understanding the social question, which, in the present day admittedly, manifests itself in a new guise.

The Pope's diagnosis in this regard is compelling. It concedes that "the convergence of automation, robotics and AI is rapidly transforming the very structure of work itself" (n. 150). Yet, it doubts the improvement for employees that is often promised. By taking over routine tasks, AI can in fact "de-skill workers, subject them to automated surveillance and relegate them to rigid and repetitive tasks". The consequence is grave: "workers' sense of *agency*" is undermined (n. 150). Critics add that artificial intelligence exerts pressure on wage income in many sectors, thereby jeopardising the financial foundations of the welfare state.

In the meantime, these consequences have been recognised even by groups hitherto considered unconditional proponents of these developments. It is customary for top universities in the USA to invite leading entrepreneurs, particularly from the AI sector, to graduation ceremonies. Whereas in the past they were thanked for their future visions with standing ovations, they have recently received vehement booing.

While with the rounds of layoffs in Silicon Valley, corporations support the widespread view of AI as a job killer, American labour market statistics do not. According to the latter, despite the negative economic consequences of the Iran war, numerous additional jobs were created, for instance, in May 2026—in many cases thanks to artificial intelligence. A realistic assessment of AI, therefore, remains open to both evidence and counter-evidence.

According to current experience, formal qualifications are losing significance, whilst AI competencies are becoming more important—a shift that results in a new gender inequality, given that men use AI significantly more frequently and intensively than women. Artificial intelligence can be deployed with particular success in certain tasks, such as interpreting, translation, text composition, and the distribution of services,

but, as anticipated, scarcely at all in the construction industry.

The fifth chapter demonstrates the encyclical's broad awareness of problems, being dedicated to a theme that is scarcely present in public debates: under the alternatives of "The Culture of Power and the Civilization of Love", it discusses the even more dramatic consequences of AI for warfare. The first three pieces of evidence referred to at the outset are by now familiar: "cyberattacks, information manipulation, influence campaigns". The fourth, however, is not yet so: "the automation of strategic decisions", for which AI is said to be an "accelerating factor". Here, however, scepticism arises.

The latest examples of warlike events—Putin's invasion of Ukraine and its defence, Hamas's terrorist attack on Israel and its offensive response, and the US attack on Iran and its counter-strikes—are manifestly underpinned by political decisions. Thus, the automation of strategic decisions constitutes a future danger rather than a contemporary reality.

Conversely, the continuation of the text is plausible. It wisely perceives not merely the negative but also the positive facet of AI, with which the Pope even begins: "While AI can enhance the defence and protection of civilians, it can also lower the threshold for the use of force, shield people from responsibility, and foster a culture in which the enemy is reduced to a statistic and the victim to 'collateral damage'" (n. 183). However, if one considers the command posts that Hamas has positioned beneath hospitals and schools, or the aggressive behaviour of Israeli settlers against Palestinians, these situations too appear to concern genuine political decisions rather than AI-driven or AI-supported ones.

Regardless of whether the "culture of power" outlined belongs already to the present or only to the future, the therapy proposed against it is convincing. To be sure, in accordance with ecclesial tradition, it may be termed the "civilisation of love". It would be sensible, however, to disentangle the two guiding concepts that the Pope considers here to be "intertwined": justice and charity (n. 186).

Both individual States and any potential international legal order are coercive institutions. Their coercion can be justified only if it is more advantageous for every individual and for nations than that coercion-free ("masterless") coe-

xistence in which, however, no one—especially the vulnerable, upon whom the Pope repeatedly places emphasis—is protected from the violent encroachments of others. To guarantee this, not under fortunate circumstances but as a matter of principle, democratic constitutional States are established with the task that is also extremely important to the Pope: the protection of human dignity and of fundamental and human rights.

Charity goes significantly beyond this. According to the New Testament, it demands, for example, loving even one's enemies and blessing those who persecute you. Such behaviour may be honourable, perhaps even exemplary, but it can hardly be demanded of every human being and their States. This does not, of course, preclude the task of "transforming mere armed coexistence into a community with a shared future" (n. 186), as the encyclical puts it. A first step in this direction—for some, even the only realistic step—amounts, to mention this institution once more, to international law, especially if it is increasingly and effectively enforced.

Drawing a balance is frequently difficult, but in this case it is hardly so. Irrespective of doubts that may arise here and there, one must credit the encyclical *Magnifica Humanitas* with addressing, in accordance with its title's claim, one of the most pressing contemporary problem areas: the "age of artificial intelligence". Above all, it discusses this theme far more comprehensively and with a greater awareness of the problems than most contemporary contributions. Thus, regarding AI, it perceives not only its technical aspect and its current state, but also points to its near-limitless dynamism. In particular, it attends to the economic, social, and political consequences, guarding against both an excess of fear and pure euphoria. It recognises both sides—the opportunities and the dangers—and finally demonstrates, in a very detailed and thorough manner, how a humanity that is therefore to be esteemed as magnificent can master the digital revolution in a manner consistent with human dignity.

NOTES

1. Translation taken from the New Revised Standard Version.
2. Translation taken from the New Revised Standard Version.