

## **Putting Brakes and Ethical Guardrails on the Escalating Technological Revolution by AI - Race towards Paradise or Race Towards the Abyss?**

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### **A Bold Project of the Roman Catholic Church and a Genuine Invitation to Religious and Ethical Opinion Leaders Around the World**

The forthcoming encyclical *Magnifica Humanitas* by Pope Leo XIV may become one of the defining moral documents of the early twenty-first century. Even before its official publication at the end of May 2026, international observers already recognize that the Vatican is attempting something far larger than an internal theological reflection on technology. The Roman Catholic Church appears ready to enter the global debate on artificial intelligence not as a technical actor, nor merely as a cautious observer, but as a civilizational voice seeking to place ethical limits on the accelerating technological transformation of humanity itself.

The anticipated encyclical emerges at a moment of extraordinary tension. Artificial intelligence systems are rapidly reshaping economies, communication, warfare, education, medicine, finance, governance, and the structure of labor. Governments compete for technological dominance. Corporations race to build increasingly autonomous systems. Militaries integrate AI into strategic planning and weapons development. Meanwhile, billions of people experience growing uncertainty regarding employment, privacy, truth, democracy, and even the meaning of human creativity.

The Church's intervention therefore comes at a historic crossroads. It is guided by the conviction that the ongoing technological revolution needs a global ethical transformation of values and guardrails in order to keep humanity on the track of human values and ethical standards. Much as *Rerum Novarum* responded to the social dislocations of the Industrial Revolution in 1891, *Magnifica Humanitas* is expected to address the profound anthropological and moral disruptions emerging from the AI revolution. The comparison is neither accidental nor exaggerated. The Industrial Revolution transformed the external conditions of labour and production. Artificial intelligence now threatens to transform the internal understanding of what it means to think, to decide, to create, and ultimately to be human.

### **Beyond Technological Enthusiasm and Technological Fear**

One of the most remarkable aspects of the Vatican's developing position is its refusal to embrace either naïve technological optimism or simplistic anti-technology pessimism. The Church does not appear interested in condemning artificial intelligence as inherently evil. Nor does it accept the increasingly influential ideology that technological progress automatically constitutes moral progress.

This distinction is essential.

The modern technological imagination often treats innovation as a self-justifying force. If something can be built, commercialized, scaled, and monetized, then society is expected to adapt accordingly. Ethical reflection is postponed until after deployment. Political institutions struggle to regulate systems whose consequences are poorly understood even by their creators. In this environment, speed itself becomes a cultural value. Slowing down appears irrational. Reflection appears inefficient. Moral hesitation becomes framed as resistance to progress.

The Vatican's intervention challenges precisely this logic.

According to preliminary reports, *Magnifica Humanitas* will argue that human dignity must remain the governing principle of technological development. Artificial intelligence may serve humanity, but it must never redefine humanity according to technological standards alone. This is a profound philosophical claim. It rejects the increasingly widespread assumption that human beings are fundamentally information-processing organisms whose value can be measured through efficiency, optimization, prediction, or economic productivity.

Instead, the encyclical is expected to defend a richer understanding of the person — one rooted in moral freedom, relationality, spiritual depth, conscience, responsibility, and transcendence.

In doing so, the Church enters a conversation extending far beyond Catholic theology. The questions raised by AI are now global human questions:

- What dimensions of human life must never become automated?
- Can human judgment be replaced by algorithmic prediction?
- Should machines participate in decisions regarding war, justice, healthcare, or education?
- What happens to democracy when AI systems shape public discourse?
- How can societies preserve meaningful work in increasingly automated economies?
- What becomes of human identity when machines imitate intelligence, creativity, and emotional interaction?

These are not exclusively religious concerns. They are foundational ethical questions for civilization itself.

### **Human Work and the Crisis of Meaning**

Among the central themes expected in the encyclical is the future of human labor. This issue explains why many observers already compare *Magnifica Humanitas* to *Rerum Novarum*.

The AI revolution differs fundamentally from previous waves of automation. Earlier technological transformations primarily replaced physical labor. Artificial intelligence increasingly threatens cognitive, administrative, analytical, and even creative professions once considered uniquely human. Lawyers, teachers, translators, journalists, accountants, software developers, designers, financial analysts, and many others now confront the possibility that large portions of their work may be delegated to increasingly sophisticated systems.

The challenge is not merely economic displacement. It is existential.

For centuries, human work has served not only as a source of income but also as a source of identity, social participation, dignity, discipline, solidarity, and purpose. If technological systems gradually absorb large portions of intellectual and creative activity, societies may confront an unprecedented crisis of meaning.

The Church appears determined to insist that efficiency alone cannot become the organizing principle of civilization.

An economy optimized exclusively for productivity may still become socially and spiritually catastrophic if millions lose meaningful participation in communal life. The Vatican therefore seems likely to defend the principle that work possesses an intrinsic human value beyond market

calculations. Human beings are not disposable components within an automated system of production.

This argument may resonate far beyond Catholic circles. Many secular ethicists, sociologists, labor scholars, and political theorists increasingly warn that unregulated AI capitalism risks producing societies marked by extreme inequality, concentration of power, permanent surveillance, and widespread psychological alienation.

In this sense, the Vatican may become a welcome (for some an unexpected) ally of broader international efforts to humanize technological development.

### **The Danger of Reducing Human Beings to Data**

Another likely major theme of the encyclical concerns the reduction of human beings to quantifiable data.

Artificial intelligence systems function through massive data extraction. Human behavior becomes measurable, predictable, categorizable, and commercially exploitable. Digital platforms increasingly know what individuals buy, read, desire, fear, believe, and politically support. In some contexts, algorithmic systems already influence hiring decisions, insurance calculations, policing strategies, creditworthiness, educational opportunities, and judicial processes.

The ethical danger is obvious.

When societies increasingly rely on algorithmic systems, persons risk being understood less as moral subjects and more as behavioral profiles. Human complexity becomes compressed into datasets. Ambiguity, forgiveness, moral growth, spontaneity, and personal transformation become difficult to integrate into systems designed primarily for prediction and optimization.

Religious traditions possess unique resources for resisting such reductionism.

Christian theology, like many other spiritual traditions, insists that the human person cannot be fully captured through measurable categories. Human beings possess irreducible dignity precisely because they transcend purely functional description. They cannot be adequately understood as economic units, biological mechanisms, or computational entities.

This may become one of the encyclical's most important contributions to international ethical discourse: the defense of mystery, interiority, and transcendence in an age increasingly dominated by quantification.

### **AI, War, and the Moral Limits of Automation**

The Vatican is also expected to address military applications of artificial intelligence, an area of growing international concern.

Autonomous weapons systems, AI-assisted targeting, predictive surveillance, cyber warfare, and algorithmic military decision-making are rapidly transforming global security structures. The possibility that machines may increasingly participate in life-and-death decisions raises profound ethical and legal questions.

The Roman Catholic tradition possesses a long intellectual history concerning just war theory, proportionality, moral responsibility, and the protection of civilian life. Applied to AI warfare, these traditions may lead the Church to argue that delegating lethal decisions to autonomous systems fundamentally undermines human moral accountability.

Who bears responsibility when autonomous systems commit atrocities or errors?  
Can machines truly distinguish combatants from civilians under complex real-world conditions?  
Should any technology possess the authority to kill without direct human moral judgment?

These questions concern not only theology but international law and global governance. The Vatican's voice may therefore strengthen broader international efforts seeking restrictions or prohibitions on fully autonomous lethal weapons.

### **The Ecological Dilemma of Artificial Intelligence and the Planetary Cost of Infinite Computation**

An additional major ethical issue that *Magnifica Humanitas* is likely to raise — and one that remains insufficiently addressed in global AI debates — concerns the ecological consequences of the exponentially growing technological infrastructure behind artificial intelligence. While AI is often presented as an immaterial or “digital” phenomenon, its development depends upon vast physical systems consuming enormous quantities of electricity, water, rare earth minerals, and industrial resources. Data centers supporting advanced AI models already require energy consumption levels comparable to those of entire nations, while the race toward ever more powerful computational systems intensifies global demand for electricity at an unprecedented scale.

This raises a profound moral and ecological dilemma. Can humanity sustainably pursue unlimited computational expansion on a finite planet? The AI revolution risks accelerating environmental degradation precisely at a moment when the world already confronts climate instability, biodiversity collapse, water scarcity, and severe resource inequalities between the Global North and South. The Vatican may therefore insist that technological innovation cannot be ethically separated from ecological responsibility. A civilization that seeks to enhance machine intelligence while exhausting the Earth's ecological foundations risks undermining the very future of humanity it claims to advance. In continuity with earlier Catholic ecological teaching, especially the spirit of *Laudato Si'*, *Magnifica Humanitas* may argue that the ethical governance of artificial intelligence must include strict reflection on sustainability, moderation, intergenerational justice, and the responsible stewardship of planetary resources.

### **An Invitation to Interreligious and Global Ethical Cooperation**

Perhaps the most strategically important aspect of *Magnifica Humanitas* is that it appears designed not merely as a Catholic document but as a platform for global ethical dialogue.

Artificial intelligence transcends national, political, and religious boundaries. No single institution can regulate its development alone. Technological systems created in one country rapidly affect the entire world. Ethical fragmentation therefore becomes extremely dangerous.

The Church seems to recognize that AI governance requires broad international moral cooperation involving:

- religious communities,
- philosophers,
- scientists,
- policymakers,

- educators,
- legal scholars,
- labor organizations,
- and civil society institutions.

This may explain the Vatican's increasing engagement with AI researchers, ethicists, and international organizations. The Church is attempting to position itself not as a technophobic institution resisting modernity, but as a global moral interlocutor capable of convening difficult conversations across ideological boundaries.

Importantly, this invitation extends beyond Christianity. Jewish, Muslim, Buddhist, Hindu, and secular humanist traditions all possess ethical resources relevant to questions of technological power, human dignity, responsibility, and social justice. AI may ultimately force religious and ethical traditions into new forms of cooperation rarely seen before.

### **A Counterweight to Technological Absolutism**

At its deepest level, the forthcoming encyclical may represent a resistance movement against what could be called technological absolutism — the belief that technological capability should determine the future direction of civilization.

This ideology increasingly dominates global culture. Technological systems are often treated as historically inevitable forces beyond democratic or moral control. Citizens are encouraged to adapt rather than deliberate. Political institutions frequently appear weaker than transnational technology corporations possessing immense economic and informational power.

The Vatican's intervention challenges this fatalism.

By insisting that humanity retains the right and responsibility to place ethical limits on technological systems, the Church defends the continued possibility of moral agency in history. Technological development is not destiny. Human societies may still decide which forms of innovation serve authentic human flourishing and which threaten it.

This position may ultimately become one of the encyclical's most enduring contributions.

### **Conclusion: A Defining Moral Debate of the Twenty-First Century**

Whether one shares Catholic theology or not, the publication of *Magnifica Humanitas* is likely to become a major event in the emerging global ethics of artificial intelligence.

The encyclical arrives at a moment when humanity confronts unprecedented technological power without corresponding moral consensus. AI systems promise extraordinary benefits while simultaneously generating profound risks for democracy, labor, truth, privacy, social cohesion, and human identity itself.

The Roman Catholic Church is therefore attempting something both ambitious and necessary: to reintroduce moral reflection into a technological culture increasingly dominated by acceleration, competition, and economic imperatives.

The deeper significance of the encyclical may lie not in offering definitive technical solutions, but in reminding the world that the central question of the AI age is not simply what machines can do, but what human beings should become.

That question belongs not only to engineers and corporations, but to philosophers, religious leaders, educators, lawmakers, and citizens across the world.

In that sense, *Magnifica Humanitas* may indeed become a milestone document — not because it opposes technology, but because it insists that humanity must remain morally greater than the systems it creates.

### **The Emerging Connection with Globethics and Inclusive AI Governance**

The international discussion surrounding *Magnifica Humanitas* also intersects with broader global initiatives dedicated to inclusive and human-centered AI governance. In particular, the work of Globethics within the evolving UNESCO discourse on AI ethics reflects many of the same concerns regarding human dignity, social justice, citizen empowerment, and ethical accountability. Through its engagement in international multistakeholder dialogue — including leadership within the UNESCO Global CSO and Academic Network on AI Ethics subgroup for citizen empowerment — Globethics contributes to building bridges between religious communities, academic institutions, civil society actors, and global governance structures. The anticipated encyclical may therefore reinforce a growing international consensus that the future governance of artificial intelligence cannot remain exclusively in the hands of states and technology corporations, but must actively include citizens, ethical traditions, educational institutions, and globally diverse cultural perspectives.